



SURFACE SOLUTIONS

INDUSTRIAL APPLICATIONS



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Steel wool

436

MARKET SOLUTIONS

Norton delivers innovative solutions across many industries where abrasives are an integral part of manufacture and repair processes. From cutting concrete, to grinding metal, to sanding composite materials, Norton abrasives addresses the needs of many markets, including:



METAL FABRICATION

At Norton, we offer abrasive solutions for rust, weld, coating and paint removal, surface blending, finishing and polishing with excellent cut rate and life. All Norton products excel in fabrication, welding, maintenance and repair operations, keeping operating cost and downtime to a minimum.



TOOLING

For precision grinding and sharpening of essential implements such as shank tools, milling tools, knives and saw blades. High quality Norton diamond and cBN cups and wheels are the ultimate performance solutions to deal with the most demanding materials.



STEEL INDUSTRY

Norton abrasives for use in steel conditioning, cutting and grinding sheets, slabs, billets, bars, rounds, rolls, sheets and tubes have been designed to keep your productivity levels high and costs low. All Norton abrasives are manufactured and safety tested in accordance with the most stringent European safety standards, EN12413, ISO and oSa.



BEARING & GEARS

Norton has a full range of solutions to ensure bearings and gears are produced to the very highest standards. High performance grinding wheels with the latest innovation in bond technology; maximise efficiency and part quality. Norton profile dressers deliver a complete solution for continuous gear generation, profile grinding, bevel gear grinding, power honing.



TRANSPORT

From grinding and shaping to edge breaking, de-burring and finishing wings and airframes, Norton can be relied upon to deliver the highest performance. On the ground, Norton reduces operational costs and increases quality and throughput in the production of engine and body components for motorcycles, cars, trucks and trains, and for rail and track maintenance. On water, the marine industry relies on our specialist abrasives for bodywork operations.



MEDICAL

Norton abrasives produce exceptional results, helping to manufacture quality products to the most stringent requirements of the optical, medical and metallurgical industries. Highly engineered abrasive cut-off wheels, abrasive belts, non-woven de-burring / finishing wheels and belts, bonded grinding wheels and diamond and CBN tools are used throughout the production process to produce knee and hip joints, prosthetics and medical instruments.



ENERGY

The Norton range is ideal for use in the manufacture and repair of upstream, midstream and downstream components, shipbuilding, oil rigs and pipelines. In addition, Norton offers complete solutions for the manufacture and maintenance of land and offshore wind turbines for OD and ID grinding, to portable cutting and finishing operations of gears and bearings, blades, vanes, seals and casings.



BUILDING & CONSTRUCTION

Norton Clipper is a one-stop shop for all cutting, drilling, grinding and sanding jobs within the building and industrial construction markets. We can equip you with the safest and highest performing construction blades, machines and abrasives that help to improve your personal comfort and contribute to a greener environment and improve our habitat.



WOOD & COMPOSITES

Whether you're a carpenter, joiner, floor liner or furniture manufacturer or restorer, Norton has a complete offering for calibration, tool sharpening, sanding and finishing applications.



ABRASIVE SAFETY STARTS WITH US. YOUR SAFETY IS OUR FIRST PRIORITY SO ALL NORTON PRODUCTS ARE MANUFACTURED IN ACCORDANCE WITH THE MOST RIGOROUS EUROPEAN AND INTERNATIONAL HEALTH, SAFETY AND ENVIRONMENTAL NORMS.

FEPA

As a member of the Federation of European Producers of Abrasives (FEPA), we're always up to date with the latest technical, legal and scientific regulatory frameworks, meaning we're always one step ahead. Together with oSa, FEPA pursues the objective of supporting both the currently attained safety standards and further future developments.

oSa®

As a member of the Organisation for the Safety of Abrasives (oSa), we position ourselves amongst quality manufacturers with the highest safety levels and we're proud to carry the trademark. Through a stringent monitoring and audit system year after year, we maintain our reputation as a reliably safe and responsible producer of quality abrasives. We conform to European and International standards, EN12413, EN13236 and EN13743 for bonded, diamond and coated products and ISO 9001, 14001 and OHSAS 18001 for our manufacturing sites. This is not just because it's a legal requirement, it's also because we care. Opt for the oSa® trademark; tested quality products of the highest safety level.

DIFFERENTIATION IN THE RANGE

We have one of the widest selections of abrasive products to meet every customer requirement. The range is classified into four quality-tiers (good/better/best/Innovation) to help you choose the right product for your specific application.

INNOVATION

Norton's innovative abrasive solutions offer outstanding productivity and versatility.

G00D +++

Our **good** tier products promise great value with great performance you'd expect from Norton, at a competitive price.

BETTER

Our **better** tier products are the right fit when you can't easily measure the value of a best tier product, but still have higher expectations for performance.

BEST ++++

Our **best** tier products are top-of-the-range solutions with an impressive, measurable impact on reduced process cost.



SUPPORTING SUSTAINABILITY IN THE ABRASIVES INDUSTRY

Saint-Gobain Abrasives is proud to be an active member of SEAM - Sustainable European Abrasive Manufacturers. An initiative from FEPA, the SEAM program guarantees that member organisations from within the abrasive supply chain, manufacture and distribute products according to new standards, to support sustainable growth in production and distribution.



Sustainable European Abrasive Manufacturers

The aim is to balance environmental efficiency, production performance and labour safety by meeting a series of requirements related to three pillars: environment, labour and economy.







Saint-Gobain Abrasives is committed to preserving the environment and resources, reducing inequalities and improving daily life for all. It's more than an expectation, making a positive contribution has become a requirement for all our stakeholders. We all have a part to play in ensuring our processes, products and the health and safety of our employees is maintained and allows our industry to operate sustainably now and in the future.

For more information, visit: www.nortonabrasives.com

HELPING YOU OPTIMISE YOUR RESOURCES

By using Norton abrasives, you improve efficiency, work faster, save energy and labour cost, waste less time, materials and money, optimising resources.



TAKE BACK THE POWER

High performance abrasives, even at lower RPM or on battery powered machines give maximum results thanks to innovative solutions like Norton's Quantum3 Light Comfort Grinding discs.



LESS WASTE

Reworking poor results is a thing of the past thanks to Norton's high performance solutions which get it right first time, every time. Eradicate costly mistakes and unnecessary rework, to reduce turnaround time.



SAVE TIME AND MONEY

Get more from one product - more cuts, more material removal or more pieces finished per product. There's no need to have one product for every application, flexible solutions like Blaze Rapid Strip mean one product can do multiple jobs, no more wasting time or money.



RESOURCE SAVING

Thanks to constant evaluation of our processes and systems, we're able to provide products that enable users to optimise resources and maximise output at every stage.

NORTON SAINT-GORAIN

MERCHANDISING SOLUTIONS

We have a complete set of Norton branded displays to help showcase our products in all environments, plus off the shelf point-of-sale graphics that can also be tailored to customer requirements whether that's for cutting, grinding, stock removal, or surface preparation and finishing.



NORTON DISPLAY SYSTEM

- Your customers can quickly and easily find the best abrasive for their job
- Encourage the sale of other products through cross selling
- Reduce the workload on your sales team, let the display do the selling for you
- Integrated solution with optional corner fitting fits almost any space
- Free standing, space saving option also available
- Optional additional graphic information system tailored to you helps your customers select the right product.

To find out more about the Display System, contact your Norton representative today.

DISPLAY KITS

- The complete kit comes with all components needed to create a full display for any product range.
- Kit contains: Base x1, pegboards x4, header x1, shelf x1, display bar with 5 pins x1, legs x2, pegs x35
- Accessories can be ordered separately if required.

DISPLAY KIT TYPES	PK QTY	NORTON	CLIPPER
Kit with light	1	410076979	410048416
Kit with light (UK plug)	1	410058121	410050915
Kit without light	1	410076980	410048415

PORTABLE DISPLAY FOR CUTTING DISCS & GRINDING WHEELS

- Kit contains: Unit x1, header x1, pins x22, side panels x2
- H: 1740mm x W: 380mm x D: 580mm

DESCRIPTION	PK QTY	ART NO.
Portable stand	1	410090016

ACCESSORIED	PK QTY	NORTON	CLIPPER			
Header with light	1					
Header without light	1					
Shelf	1	MTO	MTO			
Drill motor hooks x2	1	MIO	MIO			
Euro hooks x35	1					
Core Drill hook	1					

SURFACE PREPARATION & FINISHING



MATERIAL REMOVAL



CUTTING & GRINDING



POINT-OF-SALE GRAPHICS

Graphic templates can be adapted to suit your requirements. Attaches using magnetic strips so you can easily change the information on display. For information about tailored designs please contact your local sales representative



With MyAbrasives, the ordering process is simple:









MAKING ORDERING EASIER:

- Detailed product information and specifications, including images and videos
- Access to order confirmations, product availability and delivery lead times
- 3. Available from smartphones, tablets and PCs 24/7
- Automatically creates a list of most frequently ordered products for ease of future ordering
- 5. Save favourite lists to make ordering quicker and

REGISTER TODAY

To register call your local customer service team and start using MyAbrasives today.

MYABRASIVES FEATURES AND SERVICES INCLUDE:

- Product search: search by UPC, name, category, EAN number and filter and sort search results
- Order history and reordering: see your past orders across all platforms (EDI, ABx, phone and fax). Invoices, debit/credit notes and shipping status will also be visible in the 'Order History' section
- Quotes: request and track quotes directly
- Saved orders: save orders for future reference by putting multiple items in your cart and saving. You can also add a note to indicate future order frequency
- Bulk orders: upload a CSV file directly into the system rather than having to search for each product individually
- Recommended for you: shows related products you may like to order
- Extra support: navigate the system with FAQs and how-to videos or contact our dedicated helpline



SAINT-GOBAIN

PASSING OUR KNOWLEDGE ONTO YOU















www.nortonabrasives.com

With over 130 years of practical experience, Norton offers expertise, knowledge, understanding and advice and with the Norton website all of this is just a few clicks away. Whether you're searching for a product, distributor, or looking for tips, either on a computer, phone or portable device, Norton is always by your side to offer support. Filled with articles, user guides brochures and videos, we're always keeping you up to date with the latest news and information.



YouTube

To find us on YouTube, just search 'Norton Abrasives EMEA'. With over 200 videos on the channel, by clicking the 'Metal Fabrication' playlist, you can get answers to real life problems, learn how to select the best product for an application, how to correctly and safely use our latest products like the Light Comfort Grinding wheel or the EasyTrim, trimmable flap disc. Hit 'subscribe' to be notified of the latest video releases and never miss a video again!



Social Media

One of the easiest ways to keep up to date with what's happening here at Norton is via our social media platforms. Find us on Facebook, Instagram and LinkedIn and connect with us to become part of the Norton family. Share your creations with us using the hashtag #Nortonabrasives you never know, you might get featured on one of our pages!











SERVICE & SUPPORT WITH YOU IN MIND

At Norton, we're not just focused on providing great value products, but on adding value through great service. Our customers are at the heart of what we do, so we offer many support packages designed to add value to everyday processes.

TEST EXPERT

The 'Test Expert' platform is a digital comparison tool, designed to measure efficiency improvements gained by using Norton abrasives. Our sales teams are always available to perform comparative tests with you at end-user level, quantifying savings and providing real life and real time evidence of the benefits Norton offers. We're always at your side to provide the highest level of satisfaction.

CLOSER TO YOU

With manufacturing sites located in almost every European country and centrally located distribution centres with a wide shipping network, we offer a local service on a global scale, always close to you. Combine this with highly specialised sales and customer service teams, offering you support, handling enquiries and providing technical knowledge, we're always pushing to drive business together.

TRAINING

Thanks to many years' practical experience in the field, our application engineering team are able to pass on their knowledge and expertise through 'hands-on' training or virtual sessions designed to educate your teams and enrich their skills to help them work with your customers and find the best abrasive solutions.

Whether you're a newcomer or an experienced player in a highly specialised industry, the Norton training service provides specialised and practical knowledge on how to safely use abrasive products and get the maximum performance every time.

Thanks to our dedicated network of engineers, we're able to visit you at your preferred location or alternatively, we have a number of training facilities across Europe where you're welcome to visit.



CUTTING DISCS & GRINDING WHEELS

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CUTTING DISCS & GRINDING WHEELS FOR METAL FABRICATION & WELDING

INTRODUCTION

The Norton range of Cutting Discs and Grinding Wheels for portable and fixed machines provide superior performance in the most stringent working environment. The product range includes state-of-the-art solutions for Cutting-off, Grinding, and Surface Finishing operations on any materials related to industrial fabrication markets.

UNDERSTANDING THE PRODUCT

- Best quality tier
- 2 Application material
- 3 Diameter x Thickness x Hole
- 4 Product specification
- 5 Maximum peripheral speed
- Machine cutting or grinding
- 7 Product code
- 8 OSA certification
- 9 EN12413



PRODUCT SELECTION GUIDE

CUTTING DISCS FOR ANGLE AND STRAIGHT GRINDERS

Highly recommended ✓	C	1	6	C A		(=)	121	ALL Uhm	MUL	7
MATERIALS	NORTON QUANTUM3	X-TREME PRO	X-TREME	VULCAN	FOUNDRY X	RAIL	STARLINE	1-2-3	ALU	MULTI MATERIAL
	INNOVATION	+++++	+++++	++++	++++	++++	+++			
Steel / construction steel	✓	✓	√		√	✓	√	✓		√
Low alloy	✓	✓	✓	1	1	✓	1	✓		✓
High alloy	✓	✓	✓					✓		
Thin sheets, plates, profiles	✓	✓	✓	✓			✓	✓		✓
Stainless steel / inox	1	1	✓	✓				✓		1
Cast iron					✓					
Non ferrous									✓	✓
Titanium	✓								✓	✓
Stone concrete										✓
Tiles / ceramics										/
Rail hard grade						✓				
Rail medium grade						✓				
Rail soft grade						✓				
Glass ceramics PVC										✓



PRODUCT SELECTION GUIDE

GRINDING WHEELS FOR ANGLE GRINDERS

Highly recommended ✓	8	5			C	C us.		
MATERIALS	NORTON QUANTUM3	X-TREME	VULCAN	FOUNDRY X	STARLINE	1-2-3	ALU	MULTI MATERIAL
	INNOVATION	+++++	++++	++++	+++			
Steel / construction steel	✓	✓	✓	✓	✓	✓		✓
Low alloy	✓	✓	✓	✓	✓	✓		✓
High alloy	✓	✓						
Thin sheets, plates, profiles	✓	✓	✓		✓			✓
Stainless steel / inox	✓	✓	✓			✓		✓
Cast iron				✓				
Non ferrous							✓	✓
Titanium	✓		✓				✓	✓
Stone concrete			✓					✓
Tiles / ceramics			✓					✓
Glass ceramics PVC			1					✓





CUTTING DISCS & GRINDING WHEELS FOR METAL FABRICATION & WELDING

The use of abrasives in secondary steel industries is vast; from ship building and production of domestic appliances, automotive and construction components, special profiles, pipes and electrical goods to maintenance and repair of equipment, tools and machines.

NORTON QUANTUM3 INNOVATION

CUTTING DISCS

- Cutting performance taken to a new level in comfort, life and speed
- For precision, speed and the most accurate cut with reduced vibration levels, helping you to cut more comfortably for longer
- 1,3mm thickness is ideal for pipe cutting
- Ceramic grains give this wheel it's unique character. 1,0mm for ultimate speed and comfort. 1,6mm for absolute stability and longest life
- Delivers best in class performance on steel and stainless steel









	TYPE	DIA (mm)	TxB (mm)	SPEC	PK QTY	ART NO.
CUTTING DISCS						
		115	1.0x22.23*	NQ 60 ZZ	25	66253371347
No.			1.3x22.23*	NQ 60 ZZ	25	66253371348
	TYPE 41		1.6x22.23*	NQ 46 ZZ	25	66253371349
a la		125	1.0x22.23*	NQ 60 ZZ	25	66253371350
Canada San			1.3x22.23*	NQ 60 ZZ	25	66253371351
			1.6x22.23*	NQ 46 ZZ	25	66253371352
12/30	TYPE 42	115	0.8x22.23	NQ 60 ZZ	25	66252846642
		125	0.8x22.23	NQ 60 ZZ	25	66252846643

* X-TEND included



AIRTIGHT PACKAGING

Stops atmosphere and weather elements eroding product performance

DESICCANT POUCH

Holds thousands of tiny pores that absorb and trap moisture in

X-TEND PERFORMANCE



NORTON QUANTUM3 INNOVATION

CUTTING DISCS

- Greater wheel thickness for a more robust cut
- Ceramic grain provides a fast, sharp cut time and time again
- Incomparable speed in rough cutting applications on black steel

• Ideal for large steel projects, shipyards, steel construction and general engineering





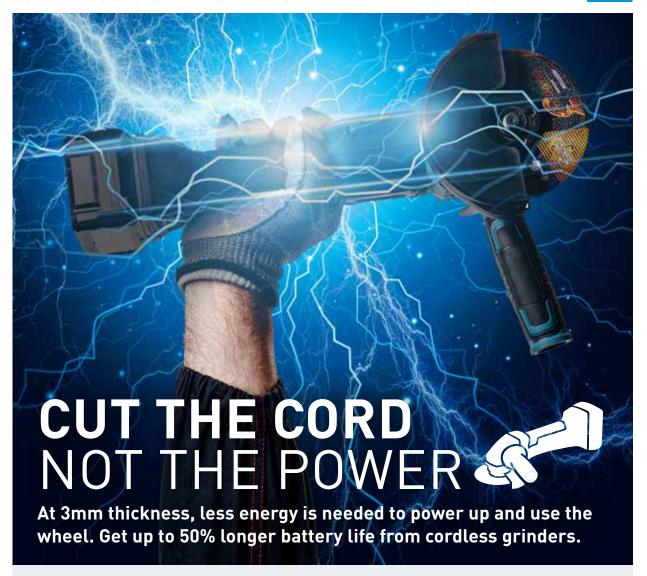




	TYPE	DIA (mm)	TxB (mm)	SPEC	PK QTY	ART NO.
CUTTING DISCS						
OLIANTIA T		125	2.0x22.23	NQ 36 Y	25	66252848856
	TYPE 41		2.5x22.23	NQ 24 P	25	66252845954
1+++++		150	2.5x22.23	NQ 24 P	25	66252846123
		230	2.5x22.23	NQ 24 P	25	66252846173
market men menter men Mer E v 2018		125	2.5x22.23	NQ 24 P	25	66252832258
######################################	TYPE 42	150	2.5x22.23	NQ 24 P	25	66252846125
		180	2.5x22.23	NQ 24 P	25	66252845041
		230	2.5x22.23	NQ 24 P	25	66252846174



CUTTING DISCS & GRINDING WHEELS FOR METAL FABRICATION & WELDING



NORTON QUANTUM3 INNOVATION



LIGHT COMFORT GRINDING

- Ideal for light grinding on thin walled workpieces
- Combines speed and precision in grinding, deburring and bevelling
- At 3mm thickness, less energy is needed to power up and use the wheel
- Boost the amperage on cordless grinders due to light weight / fast cutting
- Self-sharpening ceramic grain technology for fast material removal resulting in less grinding time











	TYPE	DIA (mm)	TxB (mm)	SPEC	PK QTY	ART NO.
GRINDING WHEELS						
730	TYPE 27	115	3.0x22.23	NQ 30 S	10	66252846608
	~	125	3.0x22.23	NQ 30 S	10	66252846609



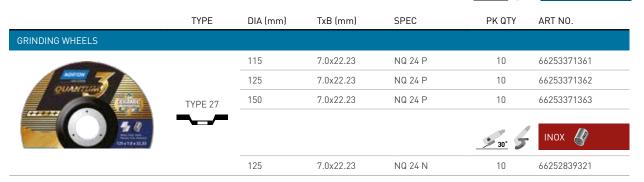
NORTON QUANTUM3 INNOVATION



GRINDING WHEELS

- Self sharpening ceramic grain technology for high material removal and less grinding time
- More comfortable to use with reduced hand fatigue from less cutting vibration
- Longer wheel life means less downtime and waste, fewer wheels needed
- Offers true savings in grinding processes





NORTON QUANTUM3 INNOVATION



HIGH FREQUENCY GRINDING WHEELS

- Optimised wheel for use on high frequency machines under high pressure, extra safe in all working conditions
- Self sharpening ceramic grain technology for high material removal and less grinding time
- More comfortable to use with reduced hand fatigue from less cutting vibration
- Longer wheel life means less downtime and waste, fewer wheels needed







	TYPE	DIA (mm)	TxB (mm)	SPEC	PK QTY	ART NO.
GRINDING WHEELS						
		180	7.0x22.23	NQ 24 P	10	66253371364
OUANTUIAN		230	7.0x22.23	NQ 24 P	10	66253371365
	TYPE 27					
OUT TO SERVICE OF THE				H	30,	INOX 🚱
		230	7.0x22.23	NQ 24 N	10	66252839322



High Frequency machines will not reduce in revolutions when grinding pressure is increased. When using high pressure on standard or non-reinforced wheels and machines, the risk of wheel breakage is high. Also, under low pressure, non-reinforced wheels can show cracks due to fatigue within the abrasive running at high revolutions. High Frequency reinforced grinding wheels ensure safe working conditions in all circumstances.

CUTTING DISCS & GRINDING WHEELS FOR METAL FABRICATION & WELDING

NORTON QUANTUM3 INNOVATION

COMBINATION CUTTING & GRINDING WHEEL

- Fast grinding formula, gets the job done quickly Smoother feel, reduced fatique and
- Improved grinding control ensures precision and accuracy
- Easy access in hard-to-grind areas, corners and inside tight grooves
- improved operator comfort
- Boost the amperage on cordless grinders due to light weight / fast cutting
- Ideal for pipe cutting

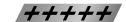




	TYPE	DIA (mm)	TxB (mm)	SPEC	PK QTY	ART NO.
COMBINATION WHEELS						
NAME OF THE PARTY		115	4.2x22.23	NQ 24 R	20	66253371356*
	TYPE 27 150	125	4.2x22.23	NQ 24 R	20	66253371357
		150	4.2x22.23	NQ 24 R	20	66253371358
40		180	4.2x22.23	NQ 24 R	20	66253371359
DIE CONTROL OF THE PARTY OF THE		230	4.2x22.23	NQ 24 R	20	66253371360

^{*} Made-to-order

NEW X-TREME PRO +++++



- Long life reduces overall process cost, with more cuts per disc
- · Fast, straight, clean and burr free cutting reduces the need for rework
- Choose Norton X-treme Pro for jobs that require that extra cutting performance







	TYPE	DIA (mm)	TxB (mm)	SPEC	PK QTY	ART NO.
CUTTING DISCS						
		115	1.0x22.23	ZA60X	25	66252846978
		125	1.0x22.23	ZA60X	25	66252846979
			1.6x22.23	ZA46X	25	66252846980
57	TYPE 41		2.0x22.23	ZA36X	25	66252846981
*****		150	1.6x22.23	ZA46X	25	66252846982
		180	1.6x22.23	ZA46X	25	66252846983
27-12-15		230	1.9x22.23	ZA46X	25	66252846984







nm) TxB (mm)	SPEC	PK QTY	ART NO.
4.2x22.23	A30V	25	66252846985
7.0x22.23	A30V	25	66252846986
7.0x22.23	A30V	25	66252846987
4.2x22.23	A30V	25	66252846988
7.0x22.23	A30V	25	66252846989
7.0x22.23	A30V	25	66252846990
	4.2x22.23 7.0x22.23 7.0x22.23 4.2x22.23 7.0x22.23	4.2x22.23 A30V 7.0x22.23 A30V 7.0x22.23 A30V 4.2x22.23 A30V 7.0x22.23 A30V	4.2x22.23 A30V 25 7.0x22.23 A30V 25 7.0x22.23 A30V 25 4.2x22.23 A30V 25 7.0x22.23 A30V 25 7.0x22.23 A30V 25



X-TREME

- High performance aluminium oxide grain for fast and high material removal
- Superior bond system holds the grain for long wheel life, resulting in less wheel erosion
- Ideal for heavy industrial use on all hard steel types and alloys



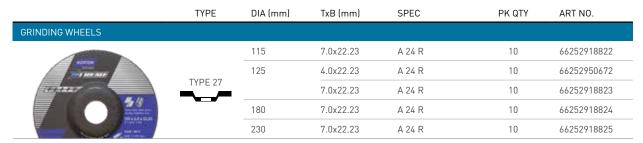




	TYPE	DIA (mm)	TxB (mm)	SPEC	PK QTY	ART NO.
CUTTING DISCS						
		115	1.0x22.23	A 60 V	25	66252919427
			1.6x22.23	A 46 V	25	66252920339
12000			2.0x22.23	A 36 V	25	66252920340
40"			2.5x22.23	A 36 V	25	66252921564
		125	1.0x22.23	A 60 V	25	66252920341
			1.6x22.23	A 46 V	25	66252920342
			2.0x22.23	A 36 V	25	66252920343
	TYPE 41		2.5x22.23	A 36 V	25	66252920350
		150	1.6x22.23	A 46 V	25	66252920344
			2.5x22.23	A 46 V	25	66252848817
		180	1.6x22.23	A 46 V	25	66252920345
			2.0x22.23	A 36 V	25	66252920346
		230	1.9x22.23	A 36 V	25	66252920348
			2.0x22.23	A 36 W	25	66252920360
			2.5x22.23	A 36 V	25	66252920349
		115	2.5x22.23	A 36 V	25	66252921567
	TYPE 42	125	2.5x22.23	A 36 V	25	66252918816
		180	3.2x22.23	A 24 R	25	66252918820
		230	2.5x22.23	A 36 V	25	66252918818







CUTTING DISCS & GRINDING WHEELS FOR METAL FABRICATION & WELDING

VULCAN

• Great price versus performance ratio

• The general purpose range of cutting discs and grinding wheels







	TYPE	DIA (mm)	TxB (mm)	SPEC	PK QTY	ART NO.
CUTTING DISCS						
		115	1.0x22.23	A 60 S	25	66252925431
JURCAN			1.6x22.23	A 46 S	25	66252925432
			2.0x22.23	A 30 S	25	66252925437
54			2.5x22.23	A 30 S	25	66252925442
115,223,2721			3.0x22.23	A 30 S	25	66252925447
H. A. STATE		125	1.0x22.23	A 60 S	25	66252925433
00000000			1.6x22.23	A 46 S	25	66252925434
Section.			2.0x22.23	A 30 S	25	66252925438
			2.5x22.23	A 30 S	25	66252925443
			3.0x22.23	A 30 S	25	66252925448
	TYPE 41	150	2.0x22.23	A 30 S	25	66252925439
			2.5x22.23	A 30 S	25	66252925444
		180	1.6x22.23	A 46 S	25	66252925435
			2.0x22.23	A 30 S	25	66252925440
			2.5x22.23	A 30 S	25	66252925445
			3.0x22.23	A 30 S	25	66252925449
		230	1.9x22.23	A 46 S	25	66252925436
			2.0x22.23	A 30 S	25	66252925441
			2.5x22.23	A 30 S	25	66252925446
			3.0x22.23	A 30 R	25	66252840202
			3.0x22.23	A 30 S	25	66252925450
		100	3.2x22.23	A 30 S	25	66252835417*
		115	2.5x22.23	A 30 S	25	66252925490
			3.2x22.23	A 30 S	25	66252925494
		125	2.5x22.23	A 30 S	25	66252925491
	TYPE 42		3.2x22.23	A 30 S	25	66252925495
		150	3.2x22.23	A 30 S	25	66252925496
		180	2.5x22.23	A 30 S	25	66252925492
			3.2x22.23	A 30 S	25	66252925497
		230	2.5x22.23	A 30 S	25	66252925493
			3.2x22.23	A 30 S	25	66252925498

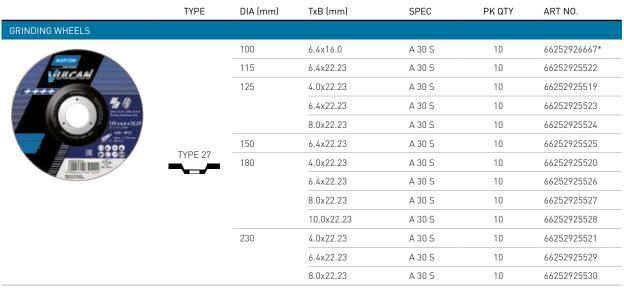
^{*} Made-to-order











^{*} Made-to-order

VULCAN FAST CUT



- For use on low and medium power machines
- Hard steel types

	1	METAL	4
30°	7	INUX	

	TYPE	DIA (mm)	TxB (mm)	SPEC	PK QTY	ART NO.
GRINDING WHEELS						
VINCAN		115	6.4x22.23	A 30 P	10	66252830803
	TYPE 27	125	6.4x22.23	A 30 P	10	66252830804
		180	6.4x22.23	A 30 P	10	66252830805
54		230	6.4x22.23	A 30 P	10	66252830807

VULCAN

• Dedicated for stainless steel







	TYPE	DIA (mm)	TxB (mm)	SPEC	PK QTY	ART NO.
CUTTING DISCS						
		115	1.0x22.23	A 60 T Inox	25	66252833400
MINICAN			1.6x22.23	A 46 T Inox	25	66252833401
		125	1.0x22.23	A 60 T Inox	25	66252833402
- V			1.6x22.23	A 46 T Inox	25	66252833403
mattian	TYPE 41		2.5x22.23	A 30 S Inox	25	66252833409*
0.00		150	1.6x22.23	A 46 T Inox	25	66252833404
III III S		180	1.6x22.23	A 46 T Inox	25	66252833405*
Section.		230	1.9x22.23	A 46 T Inox	25	66252833406
_			2.5x22.23	A 30 S Inox	25	66252925427
		115	2.5x22.23	A 30 S Inox	25	66252925486
	TYPE 42	125	2.5x22.23	A 30 S Inox	25	66252925487
		230	2.5x22.23	A 30 S Inox	25	66252925489

^{*} Made-to-order

CUTTING DISCS & GRINDING WHEELS FOR METAL FABRICATION & WELDING





	TYPE	DIA (mm)	TxB (mm)	SPEC	PK QTY	ART NO.
GRINDING WHEELS						
		115	6.4x22.23	A 30 S Inox	10	66252925513
MINICAN	TYPE 27	125	6.4x22.23	A 30 S Inox	10	66252925514
		180	6.4x22.23	A 30 S Inox	10	66252925516
		230	6.4x22.23	A 30 S Inox	10	66252925517





	TYPE	DIA (mm)	TxB (mm)	SPEC	PK QTY	ART NO.
CUTTING DISCS						
		115	3.0x22.23	C 30 R	25	66252925452*
VIIICAN	TYPE 41	125	3.0x22.23	C 30 R	25	66252925453*
****		230	3.0x22.23	C 30 R	25	66252925456*
	TYPE 42	115	3.2x22.23	C 30 R	25	66252925500
TO SEAL SEAD		125	3.2x22.23	C 30 R	25	66252925501
04.00		230	3.2x22.23	C 30 R	25	66252925503

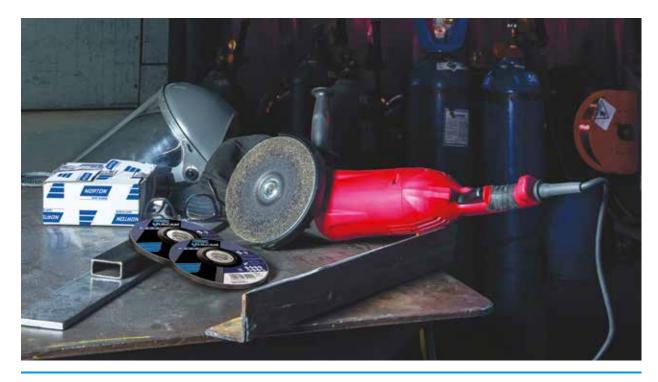
^{*} Made-to-order







	TYPE	DIA (mm)	TxB (mm)	SPEC	PK QTY	ART NO.
GRINDING WHEELS						
		115	6.4x22.23	C 30 R	10	66252925533
VIIICAN	TYPE 27	125	6.4x22.23	C 30 R	10	66252925534
		180	6.4x22.23	C 30 R	10	66252925535
The state of the s		230	6.4x22.23	C 30 R	10	66252925537





STARLINE



- Good material removal and cut rate
- For general trade and general usage



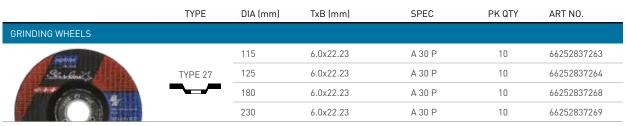


	TYPE	DIA (mm)	TxB (mm)	SPEC	PK QTY	ART NO.
CUTTING DISCS - ANGLE GRINDER						
		115	1.0x22.23	A 60 R	25	66252837243
			1.6x22.23	A 60 R	25	66252837244
Steeling			2.5x22.23	A 24 R	25	66252837249
20		125	1.0x22.23	A 60 R	25	66252837245
125 + 1.6 + 22.22	TYPE 41		1.6x22.23	A 60 R	25	66252837246
20000130			2.5x22.23	A 24 R	25	66252837250
		180	2.5x22.23	A 24 R	25	66252837277
and the same of th		230	2.0x22.23	A 36 R	25	66252843278
			2.5x22.23	A 24 R	25	66252837253
		115	3.2x22.23	A 30 S	25	66252837275
		125	3.2x22.23	A 30 S	25	66252837276
	TYPE 42	180	2.5x22.23	A 24 R	25	66252837251
			3.0x22.23	A 30 S	25	66252837277
		230	3.0x22.23	A 30 S	25	66252837278



LARGE DIAMETER CUTTIN	G DISCS			
300	300x3.5x25.4	A 30 S PETROL SAW 80m/s	25	66252925457
TYPE 41	300x3.5x25.4	A 30 S STATIONARY 80m/s	25	66252925467
350	350x3.0x25.4	A 30 S CHOP SAW 80m/s	25	66252925462
	350x3.0x25.4	A 30 S STATIONARY 80m/s	25	66252925469







MULTI MATERIAL

LIGHT COMFORT GRINDING

- Ceramic grain removes material quickly on a variety of different materials, one disc replaces many
- At 3mm thick, the lightweight wheel ensures precision and accuracy during grinding
- Easy access to hard to grind areas, corners and tight grooves
- Smoother feel, reduced fatigue and improved operator comfort







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TYPE 27	115	3.0x22.23	C 30 S	10	66252846610
_ /	125	3.0x22.23	C 30 S	10	66252846611
	(A17)			100	
C		HE C			
		HE C	שאט		
	OTM		$\bigcap M/ \square$		

At 3mm thickness, less energy is needed to power up and use the wheel. Get up to 50% longer battery life from cordless grinders.

MULTI MATERIAL

CUTTING

- One wheel for all materials
- The easy choice in general trade
- No lost time due to wheel changing
- Quick, comfortable and versatile



	TYPE	DIA (mm)	TxB (mm)	SPEC	PK QTY	ART NO.
CUTTING DISCS						
NORTON TYPE 41 125mm		115	1.0x22.23	C 60 T	25	66252833258
			1.6x22.23	C 46 T	25	66252828951
	TYPE 41	125	1.0x22.23	C 60 T	25	66252918924
			1.6x22.23	C 46 T	25	66252828952
		180	1.6x22.23	C 46 T	25	66252926730
Wils Use II, Diese III, Diese III and		230	1.9x22.23	C 46 T	25	66252918925



1-2-3

THE ALL IN ONE SOLUTION

- Cut, grind and finish with one wheel
- Fine grit for a good, uniform finish when used at 15 degrees
- No lost time due to wheel changing
- Three layers of reinforcement for maximum safety in use



	TYPE	DIA (mm)	TxB (mm)	SPEC	PK QTY	ART NO.
COMBINATION WHEELS						
	TYPE 27	115	2.2x22.23	A 46 S	25	66252829704
12211		125	2.2x22.23	A 46 S	25	66252921592
12.00						

ALU

- Specially developed grain and bond system, designed to cut through aluminium and non-ferrous metals without clogging
- Counteracts loading and wheel glazing for fast, easy and free cutting action on all non ferrous material







	TYPE	DIA (mm)	TxB (mm)	SPEC	PK QTY	ART NO.
CUTTING DISCS						
		115	1.0x22.23	A 60 Q	25	66252828236
ALU 125 mm			1.6x22.23	A 46 Q	25	66252828233
		125	1.0x22.23	A 60 Q	25	66252828237
			1.6x22.23	A 46 N	25	66252839270
	TYPE 41		1.6x22.23	A 46 Q	25	66252828234
AAOO- BF41			2.5x22.23	A 36 Q	25	66252828227
800000000		180	2.5x22.23	A 36 Q	25	66252828229
45 Million Million		230	1.9x22.23	A 46 N	25	66252839271
			1.9x22.23	A 46 Q	25	66252828235
	TYPE 42	230	3.0x22.23	A 36 Q	25	66252828231

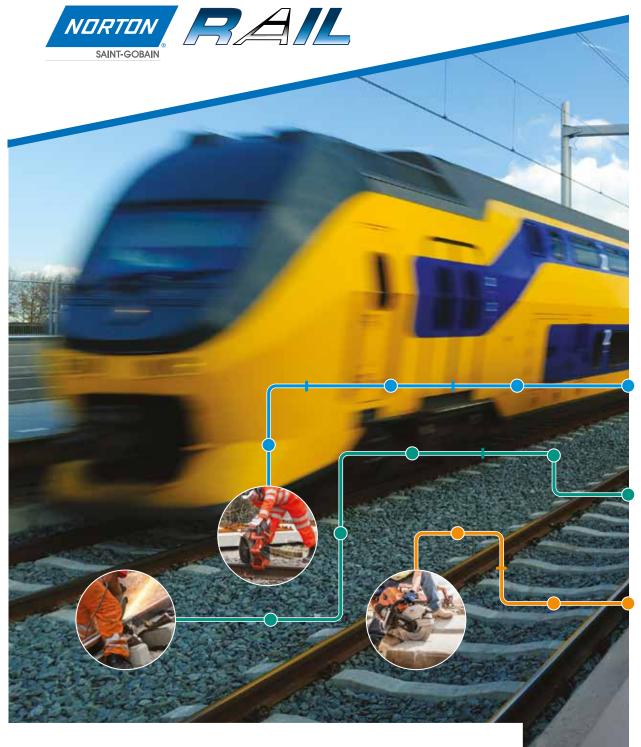






TYPE	DIA (mm)	IXB (mm)	SPEC	PKUIY	ART NU.
TYPE 27	125	7.0x22.23	A 36 Q	10	66252828228
TIPE 27	180	7.0x22.23	A 36 Q	10	66252828230
	230	7.0x22.23	A 36 Q	10	66252828232

NOTES			



CUTTING DISCS FOR RAIL

The Norton Rail range provides high performance wheels for demanding operations. Rail cutting requires precision, speed and power and Norton Rail is a complete program of cutting wheels suitable for any rail type (subway, tram, train) and any rail cutting machine with a clamping device (electrical and petrol).

AS RAIL TRACK TECHNOLOGY CONTINUES TO
MAKE MAJOR ADVANCES, NORTON IS GENERATING
POWERFUL, INNOVATIVE, USER FRIENDLY SOLUTIONS
TO CUT, SHAPE AND GRIND HEAVY DUTY STEELS

CUTTING DISCS FOR RAIL

TECHNICAL **INFORMATION**

BF 41

FLAT CUTTING-OFF WHEELS

Rail cutting-off wheels are available in 300mm for clamped rail cutting machines that operate at 80m/s. For clamped rail cutting machines that operate on 100m/s wheels are available in 350mm and 400mm.

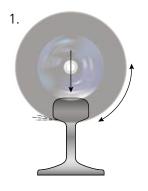
Bore dimensions of the cutting wheel can be adjusted using reduction rings that come with the original machine.

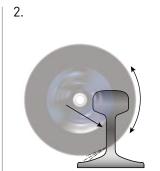
UNDERSTANDING THE PRODUCT

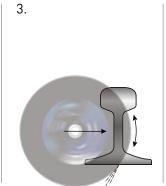
- Product code
- Application material
 - Diameter x Thickness x Hole
 - Product specification
- Maximum peripheral speed
- Machine cutting
- Safety pictograms
- OSA certification
- EN standard



CUTTING-OFF
Arrange the workpiece so that a uniform section can be cut





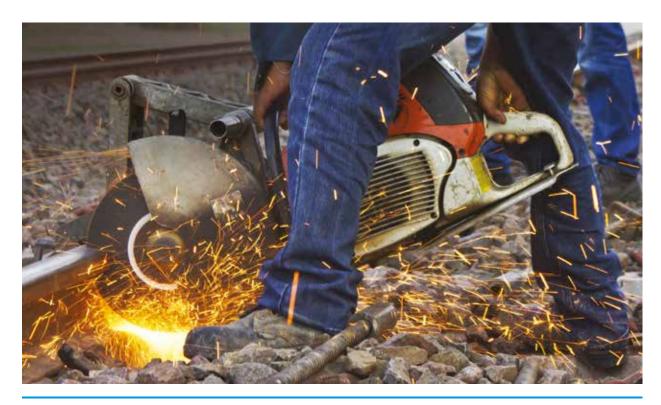


KEY:

Direction of cut



Oscillate the wheel, swing the machine for quickest and cleanest cut





NORTON QUANTUM3 RAIL INNOVATION









- Long product life reduces the number of replacement discs, reducing total abrasive cost
- High speed cutting makes the overall rail repair process more efficient
- The wheel does the work and less vibrations are felt through the machine reducing the risk of white finger



	TYPE	DIA (mm)	TxB (mm)	SPEC	PK QTY	ART NO.
CUTTING DISCS						
		356	4.0x22.23	NQ 24 Q	10	66252845405
	TYPE 41		4.0x25.4	NQ 24 Q	10	66252845406
		406	4.0x25.4	NQ 24 Q	10	66252846183
A CONTRACT AND ADDRESS OF THE PARTY OF THE P						

Don't just take our word for it, see what our customers have to say....

"The Norton Quantum3 really speeds up the cutting process - I can get through 3 cuts per wheel now, maybe even more, instead of struggling to get through one with the wheels I was using before. And it's not just that, it's much easier to use, kind of glides through the rail piece with ease. I'll definitely be switching over to Norton Quantum3"

INNOVATION BOND TECHNOLOGY



COMBINATION OF SHARP PREMIUM ABRASIVE GRAINS



FAST CUTTING LONGER LIFE

CUTTING DISCS FOR RAIL

RAIL

- For a precise, straight and fast cut on rail, tram and subway track
- Low vibration, consistent performance throughout wheel life
- Hard, medium and soft wheels available
- High quality cut to help generate a perfect weld





	TYPE	DIA (mm)	TxB (mm)	SPEC	PK QTY	ART NO.
CUTTING DISCS						
	TYPE 41	356	4.0x25.4	ZA 24 Q Zirconia	10	66252830924
		406	4.0x25.4	ZA 24 Q Zirconia	10	66252833665
A STATE OF THE REAL PROPERTY AND ADDRESS OF THE PARTY AND ADDRESS OF TH						

RAIL





	TYPE	DIA (mm)	TxB (mm)	SPEC	PK QTY	ART NO.
CUTTING DISCS						
TYPE 41		350	4.0x25.4	ZA 24 T Zirconia	10	66252832744
			4.0x25.4	A 24 T Hard	10	66252829588
	TYPE 41		4.0x25.4	A 24 P Soft	10	66252828620
			4.0x25.4	A 24 Q Medium	10	66252833554
		400	4.0x25.4	A 24 P Soft	10	66252919130





WHEELS FOR FOUNDRY

Cast iron used in foundry applications requires a specific type of cutting and grinding wheel to achieve a guick and clean cut. Norton Foundry X has been designed to remove the maximum material in the shortest time. Premium zirconia grains and heavy reinforcements ensure that Norton Foundry X performs on the most powerful machines and under pressure in the toughest circumstances.

FOUNDRY X

- Coarse zirconia grain for rough applications in the toughest environment
- Comfortable to use thanks to reduced vibration, a highly stable wheel
- The quickest way to cut castings on both electrical and high frequency grinders







	TYPE	DIA (mm)	TxB (mm)	SPEC	PK QTY	ART NO.
CUTTING DISCS						
Paragraph Control of the Control of		230	2.5x22.23	ZA24R FOUNDRY X	25	66252839355*
	TYPE 41		2.5x22.23	ZAC24S FOUNDRY X	25	
			3.4x22.23	ZAC24S FOUNDRY X	25	66252839351*
		125	3.4x22.23	ZA30S FOUNDRY X	25	66252839391*
230×7.0×22,23		230	2.5x22.23	ZA24R FOUNDRY X	25	66252839356
000000	TYPE 42		3.4x22.23	ZA20T FOUNDRY X Hard	25	66252839347*
Hilli 2			3.4x22.23	ZA30S FOUNDRY X Medium	25	66252839348*
			3.4x22.23	ZA24R FOUNDRY X Soft	25	66252839349*

* Made-to-order





	TYPE	DIA (mm)	TxB (mm)	SPEC	PK QTY	ART NO.
COMBINATION WHEELS						
	TYPE 27	230	4.2x22.23	ZA30S FOUNDRY X	25	66252839352
			4.5x22.23	ZA30S FOUNDRY X	25	66252839354

CUTTING DISCS & GRINDING WHEELS FOR FOUNDRY

FOUNDRY X

- New 180mm and 230mm Foundry X wheels are made with 4 layers of reinforcement to work under the highest side pressure without the risk of breakage
- For use on High Frequency machines for use in enduring applications in the toughest environments



	TYPE	DIA (mm)	TxB (mm)	SPEC	PK QTY	ART NO.
GRINDING WHEELS						
FAUTONI A CONTROL OF THE PROPERTY OF THE PROPE	TYPE 27	125	7.0x22.23	ZA24T LONG LIFE	10	66253371176
		180	7.0x22.23	ZA24T LONG LIFE	10	66253371162
			7.0x22.23	ZA20R COMFORT	10	66253370493
		230	7.0x22.23	AC24Q FOUNDRY X	10	66252839353*
			7.0x22.23	ZA24T LONG LIFE	10	66253371175
			7.0x22.23	ZA20R COMFORT	10	66252842546

* Made-to-order



High Frequency machines will not reduce in revolutions when grinding pressure is increased. When using high pressure on standard or non-reinforced wheels and machines, the risk of wheel breakage is high. Also, under low pressure, non-reinforced wheels can show cracks due to fatigue within the abrasive running at high revolutions. High Frequency reinforced grinding wheels ensure safe working conditions in all circumstances.



Norton's cutting wheels for petrol saws provide high value and high performance in construction and demolition.

VULCAN

• General purpose cutting discs for all steel petrol saw applications

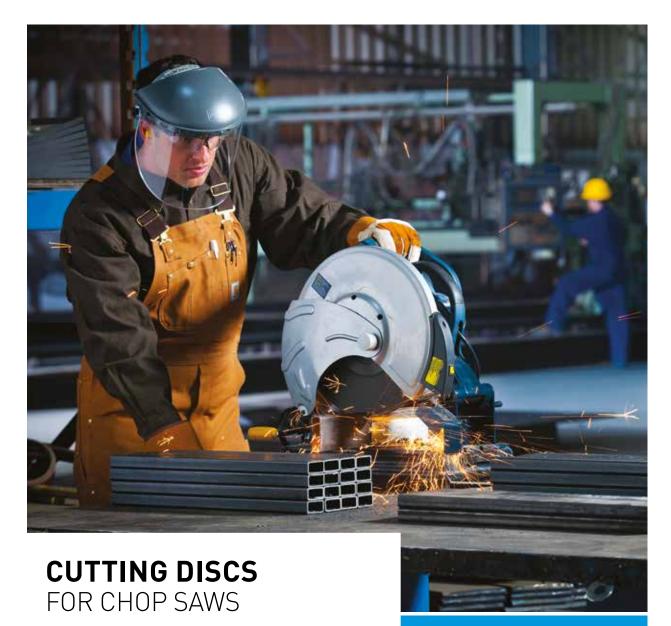
• Straight, fast cutting throughout long wheel life





	TYPE	DIA (mm)	TxB (mm)	SPEC	PK QTY	ART NO.
CUTTING DISCS						
		300	3.5x20.0	A 30 S	10	66252925457
	TYPE 41		3.5x22.23	A 30 S	10	66252925458
			3.5x25.4	A 30 S	10	66252925459*
						* \ \ \ - \ \ - \ \ - \ \ - \ \ - \ \ - \ \ - \ \ - \ \ - \ \ - \ \ - \ \ \ - \

* Made-to-order



Norton's cutting wheels for chop saws provide high value and high performance in construction, fabrication, foundry and maintenance industries.

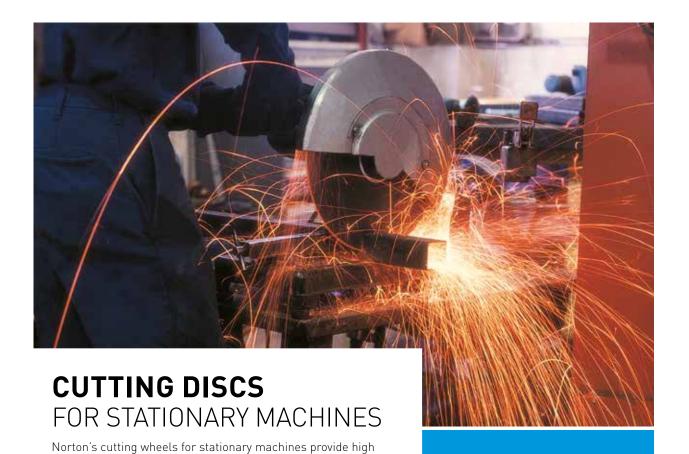
VULCAN

- Clean and straight cutting on portable chop saws and fixed machines
- Mechanical reinforcement for cutting metal and inox safely





	TYPE	DIA (mm)	TxB (mm)	SPEC	PK QTY	ART NO.
CUTTING DISCS						
VACAN ST STATE OF THE STATE OF	TYPE 41	300	2.8x25.4	A 30 S	10	66252925460
		350	3.0x25.4	A 30 S	10	66252925462
			3.0x32.0	A 30 S	10	66252925463
		400	3.2x25.4	A 30 S	10	66252925464
			3.2x32.0	A 30 S	10	66252925465
Many 2						



VULCAN

foundry industries.

• Long wheel life with quick and free cutting • Double, full external mechanical

value and high performance in construction, fabrication and

- Cuts without burning, blueing or splintering the metal
- Use under constant power in heavy cut-off applications
- reinforcement for excellent safety and stability





	TYPE	DIA (mm)	TxB (mm)	SPEC	PK QTY	ART NO.
CUTTING DISCS						
		350	4.0x32.0	C 30 R	10	66252925483
		400	4.5x32.0	C 30 R	10	66252925484
VARCAN INC.					90°	METAL #
		300	3.0x32.0	A 30 S	10	66252925466
			3.0x32.0	A 30 S	10	66252925475*
	TYPE 41		3.5x32.0	A 30 S	10	66252925468
		350	3.5x25.4	A 30 S	10	66252925469
			3.5x32.0	A 30 S	10	66252925470
VARCEN		400	4.0x25.4	A 30 S	10	66252925472
			4.0x25.4	A 30 S	10	66252925477*
MINISTER OF THE PARTY OF THE PA			4.0x32.0	A 30 S	10	66252925473
			4.0x32.0	A 30 S	10	66252925478*
			4.5x32.0	A 30 S	10	66252925474
						* Max RPM 100m/s

CUTTING DISCS & GRINDING WHEELS TECHNICAL INFORMATION

TECHNICAL INFORMATION

SHAPE SPECIFICATION SYSTEM

BF 27

BF 41

BF 42

DEPRESSED CENTRE GRINDING WHEELS

Available in diameters 76-230mm for hand-held machines.

Application: grinding

FLAT CUTTING DISCS

Available in diameters 50-400mm for hand-held machines & 250-400mm for stationary machines.

Application: cutting-off

DEPRESSED CENTRE CUTTING DISCS

Available in diameters 76-230mm for hand-held machines.

Application: cutting-off

METAL RING WITH VALIDITY DATE

V = VALIDITY DATE (PRODUCTION QUARTER + 3 YEAR)



V01	V04	V07	V10
1st quarter	2nd quarter	3rd quarter	4th quarter

EXAMPLE:

V04/2024 indicates production in the 2nd quarter of 2021 and advised usage before the 2nd quarter of 2024

PERSONAL PROTECTION

Safety goggles, ear defenders, safety gloves, dust masks and, if conditions are severe, additional face protection. Leather aprons and safety shoes must be worn.



(ISO 7010)



Wear protective gloves (ISO 7010)



protection (ISO 7010)



protection (ISO 7010)



Refer to instruction manual/ booklet (ISO 7010)



Only permitted for grinding at an angle greater than 10°



Only suitable for totally enclosed machines



Do not use if damaged



Do not use for face grinding (ISO 7010)



Do not use for wet grinding (ISO 7010)



Do not use with hand-held grinding machine (ISO 7010)



GENERAL PRECAUTIONS

Safety instructions provided by the machine manufacturers must be followed. All guards, covers and hoods must be in place on the machine during grinding, and should not be modified in any way. Abrasives should not be used near inflammable material.



Sparks should be directed away from the face and body, if possible towards the floor. Dust extraction equipment must be used whenever it is available. The instructions for use given by the abrasive manufacturer must be followed e.g. 'Not to be used without a support', or 'Not to be used for wet grinding'. The workpiece must be firmly fixed before grinding starts. Check all abrasives visually before use and make certain that the product is suitable for the application. No modifications should be made to abrasive products after delivery.

When using a portable grinder always switch it off and allow the spindle to stop completely before putting the tool down.

OPERATING SPEEDS

Norton products are designed and tested for certain applications and operating speeds. Choose a wheel suitable for the application material. Suitable materials are indicated on the wheel label. Before mounting the grinding or cutting disc on the machine, ensure that the operating speed of the machine does not exceed the maximum operating speed as it is marked on the product.

	SPEED CONVERSION FOLLOWING EN 12413		
WHEEL DIAMETER (mm)		MUM OPERATING SPEED (RPM) and grinding wheels in handheld and stationary operations	
	80	100	
50/51	30600	38200	
63/65	24300	30250	
76	20150	25150	
100/102	15300	19100	
115	13300	16650	
125	12250	15300	
150/152	10200	12700	
180	8500	10650	
230	6650	8350	
300/305	5100	6400	
350/356	4400	5500	
400/406	3850	4800	

CUTTING DISCS & GRINDING WHEELS TECHNICAL INFORMATION

SAFFTY ADVICE

D₀s

Always handle and store wheels carefully. Cutting discs should be stacked horizontally and flat, preferably on a steel base plate. Depressed centre wheels should be placed on top of each other or stored in the original packaging

Always visually inspect all wheels before mounting for possible damage in transit

Always use a safety guard and ensure that it is correctly positioned and securely fitted. It should cover at least one half of the wheel and protect the operator in the unlikely event of a wheel breakage. NON-REINFORCED CUTTING DISCS SHOULD ONLY BE USED ON FIXED MACHINES AND SHOULD BE CORRECTLY GUARDED.

Always switch 'OFF' the power at supply source &/or remove the plug from the socket before changing the wheel

Always ensure that the spindle speed of the machine does not exceed the operating speed marked on the wheel

Always use the correct wheel mounting flanges and ensure that they are undamaged, clean and free from burrs

SEE EN 12413

Allow newly mounted wheels to run at operating speed, with the guard in place, for a reasonable time before cutting or grinding

Always wear EYE PROTECTION

Always wear appropriate safety clothing such as DUST MASK, GLOVES, EAR PROTECTION, OVERALLS AND SAFETY SHOES

Always have machine speeds checked regularly, especially after maintenance or repair. Machines fitted with speed control devices (Governors), must be properly maintained at all times

Check tension of driving belts, where fitted, on a regular basis. Belts must be kept tight to ensure full power transmission.

Always secure the workpiece firmly while it is being cut or ground

Put portable machines in suitable cradles, when not being used, to avoid damage to the wheel

Always use a portable machine in a comfortable position, where the workpiece is well balanced and the machine is well supported

Grind at an angle above 30 degrees to the workpiece with a depressed centre grinding wheel

Keep the working area around cutting and grinding operations clear. It is very dangerous if an operator trips and falls with an operating machine in his hands

DON'Ts

Handle wheels roughly

Use non-reinforced cutting discs on portable machines

Store wheels in a damp atmosphere or in extreme temperatures

Mount a damaged wheel

Tighten the mounting nut or locking flange excessively. To do so can distort the flanges

Force a wheel onto a machine spindle

Use mounting flanges which are incorrect, damaged, dirty or burred

Use blotters with depressed centre wheels less than or equal to 406mm (EN 12413)

Use a machine which is not in good mechanical condition

Use a machine without a wheel guard

Use wheels without proper ventilation or dust protection equipment

Apply side pressure to cutting discs. You should not bend the wheel

Stop the wheel by applying pressure to the periphery or face. Always switch the machine off and allow the wheel to stop revolving

Allow the wheel to be trapped or pinched in the cut

Apply excessive pressure onto the wheel so that the driving motor slows down

Grind on the side of cutting discs or depressed centre wheels below 4,0mm thickness

Drop or lower a portable machine by the cable or airline onto the floor. A wheel can be easily cracked, if it is put down hard, by the weight of the machine. This is a common cause of wheel breakage

Grind with a depressed centre grinding wheel at an angle below 30 degrees to the workpiece

Use a machine in a position where you do not have full control of the machine and you are not well balanced



COATED ABRASIVES

reels 110 re wheels 131 rip wheels 136 end unitised wheels 138 ength discs 140 143-158 folls 144 cloth rolls 148 MeshPower 153 rolls 154
boam rolls 156 & SPONGES 159-172 ets 160 MeshPower 161 a hand pads 165 sheets & hand pads 169 sponges 171 173-200
e M& & & & & & & & & & & & & & & & & & &

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SEMI-FLEXIBLE DISCS



RAPID STRIP DISCS



RAPID BLEND DISCS



RAPID PREP DISCS



POLISHING DISCS

DISCS FOR MINI ANGLE GRINDERS



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HIGH STRENGTH DISCS

ROLLS



HANDY ROLLS



PAPER & CLOTH ROLLS



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[†] To help better describe the abrasive fixing system we have changed the name from 'NorGrip' to 'Self-Grip'.

INTRODUCTION

The Norton coated abrasive and Beartex product offering encompasses a complete range of belts, discs, rolls, sheets and flap wheels for all your polishing, welding, maintenance and repair operation needs.

This extensive product range includes products designed for all types of applications, including heavy stock removal, dimensioning, grinding, deburring, cleaning, blending, polishing and finishing operations.

UNDERSTANDING THE PRODUCT

R	9	2	9
BACKING	PRINCIPAL ABRASIVE	COATED	RANDOM
BACKING A - Light Paper F - Fibre G - Heavy Paper H - Heavy Paper K - Cloth Q - Various (e.g. Screenback & Film) R - Cloth S - Combination T - Waterproof Paper U - Norax	PRINCIPAL ABRASIVE 1 - Aluminium Oxide 2 - Aluminium Oxide 3 - Aluminium Oxide 4 - Silicon Carbide 6 - Emery 7 - Flint 8 - Zirconia Alumina 9 - SG - Ceramic Aluminium Oxide	COATED Odd Number - Open coat Even number - Closed coat	RANDOM Differentiates different products within the same product group

BACKING TYPES

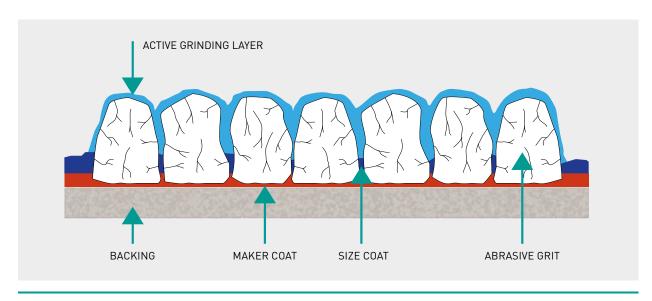
Whether paper, cloth, vulcanised fibre or polyester film, the backing must be smooth enough for uniform adhesive coating, strong enough to withstand grinding pressures and flexible enough to conform to contours if necessary.

ABRASIVE TYPES

The ideal abrasive grain offers maximum resistance to point wear, yet fractures before serious dulling occurs, thereby satisfying both stock removal and finishing requirements.

ABRASIVE BONDS

There are two main types of adhesives in use, one based on animal glue, and the more common based on synthetic heat hardened resins. The adhesive is applied with a minimum of two bonding applications. The first, or maker coat, adheres the abrasive grain to the backing ensuring proper anchoring and orientation. After drying, or curing, the second, or size coat is applied. The sizer adhesive, united with the maker bond, provides final grain anchoring and the proper total adhesive level for the finished product.





ABRASIVE GRAIN DISTRIBUTION

There are two types of abrasive grain coverage on the backing:

- Openly spaced distribution where between 30% and 60% of the backing is covered leaving large spaces between each abrasive grain. It is used in operations where the grinding swarf would otherwise 'load' or clog the surface, reducing cutting efficiency and shortening the coated abrasive life
- Closely packed grain distribution is where the grain completely covers the backing. The greater number of abrading points in a given area leads to faster stock removal. It is recommended where loading is not a problem and where smoother surface finishes are desired



OPEN COAT (1/3 LESS GRAIN THAN CLOSED)



CLOSED COAT

SPECIAL COATED SURFACE TREATMENT NO-FIL TREATMENT

In order to provide even further resistance to loading, some open coat paper products are given a special surface treatment of zinc stearate after the sizing operation. Such products are ideal for sanding between sealer coats on furniture, sanding after primer coats on automobiles,

removing varnish from wood, and numerous other operations where conventional abrasive products fail prematurely due to loading.

Norton's trademark for products utilising this treatment is No-Fil.

ABRASIVE GRAIN TYPES

GRAIN TYPE	BOND / TOUGHNESS	STRUCTURE	PROPERTIES / WEAR PROPERTIES
SILICONE CARBIDE (SIC)	Very hard / less tough	Crystalline	Sharp-edged, brittle, highly friable / micro wear
ALUMINIUM OXIDE	Hard / tough	Crystalline, irregular	Wedge-shaped, block grain, even wear
			A A A A A A
ZIRCONIA ALUMINA	Hard / very tough	Crystalline, even	Wedge-shaped, block, drop formed grit / micro wear, self-sharpening
CERAMIC ALUMINIUM OXIDE	Hard / very tough	Micro crystalline	Sharp-edged, pointed grit / micro wear, self-sharpening

COATED ABRASIVES

NATURAL ABRASIVES

Emery is a natural composite of corundum and iron oxide. The particles are blocky in shape and tend to cut slowly, thereby producing a polishing action on the material being abraded. Used for general maintenance

and polishing of metals and in very fine grits for highly technical polishing, such as preparing metallurgical specimens requiring very close tolerances. Emery products are black in colour.

SYNTHETIC ABRASIVES

- Aluminium oxide is tough and well adapted to grinding high tensile materials, such as carbon steel, alloy steels, tough bronze and hard woods. When toughness (ability to resist fracturing) is the main consideration, aluminium oxide out performs all other coated abrasive grains
- Silicon carbide is the hardest and sharpest of the minerals used in coated abrasives. Its hardness and sharpness makes it the ideal abrasive for sanding nonferrous metals (aluminium, brass, bronze, magnesium, titanium, etc.), rubber, glass, plastics, fibrous woods, enamel and other relatively soft materials. Silicon carbide is superior to any other abrasive in its ability to penetrate and cut faster under light pressure
- Zirconia alumina has a unique self-sharpening characteristic which gives it long life on rugged stock removal operations. Zirconia alumina is well suited for heavy grinding of metals and planing wood, because the controlled fracturing of the grain continuously produces sharp, new abrading points
- Ceramic aluminium oxide is a long-lasting, tough, dense abrasive due to its micro structure.
 The extremely small micron size particles break off during grinding, producing multiple new cutting edges.
 As it stays sharp, especially when used in medium and high pressure operations, it cuts at a higher rate than other abrasives. Recommended for use on forged and carbon steels, high nickel and cobalt alloys





BACKING TYPES

Whether paper, cloth, vulcanised fibre, a combination or polyester film, the backing must be smooth enough for uniform adhesive coating, strong enough to withstand grinding pressures and flexible enough to conform to contours (if necessary). For reasons of economy, the least expensive backing compatible with the job requirements should be selected.

PAPER

The standard paper weights used in coated abrasives are indicated by a letter code which appears immediately after the grit size on the finished product backing. Briefly stated, the lighter the backing, the greater the degree of flexibility; the heavier the backing, the greater the resistance to tearing.

A-WEIGHT (70gms)

Light and flexible, A-weight is used primarily for hand finishing operations both wet and dry.

Grits 80 and finer.

C-WEIGHT (120gms)

Stronger and less flexible than A-weight. This backing is chosen for hand sanding, dry or wet, and for use on small portable power sanders. Intermediate through fine sanding. Grits 60 through 180.

D-WEIGHT (150gms)

Stronger and less flexible than C-weight. This backing is also chosen for hand sanding and for use on small portable power sanders. Coarse through intermediate sanding. Grits 36 through 80.

E-WEIGHT (220gms)

Stronger and less flexible than D-weight, this backing is used primarily on roll, belt and disc applications where high resistance to tearing is needed.

F-WEIGHT (300gms)

The strongest, least flexible paper backing utilised. Used for crankshaft lapping rolls, tannery industry belts and rolls, and NorZon belts only.

FIBRE

Fibre backings, made of multiple layers of impregnated paper, are very hard and strong, yet provide sufficient flexibility for the intended applications. 0,8mm thick fibre has the greatest strength of any backing used for coated abrasives. This backing is used on resin bonded fibre discs designed for heavy duty portable grinding applications.

COMBINATION

Combination backing, constructed by laminating light cloth and stiff E-weight paper, is used where resistance to tearing and breaking is a requirement. Primarily utilised on products designed for chipboard/MDF sanding.

CLOTH

Cloth backings are more durable than paper, offer greater resistance to tearing, and tolerate continual bending and flexing during use. Norton use traditional woven cloth in the manufacture of their coated abrasives. The backing has construction and finishing characteristics designed to make it ideally suited to a specific application. The standard cloth weights used in coated abrasives are indicated by a letter code which appears immediately after the grit size on the finished product backing.

J-WEIGHT

The lightest and most flexible cloth backing, this backing is used where finish and uniformity of the surface are more important than stock removal. Ideal for finishing, blending and where flexibility and conformity are required, such as contour work or curved surfaces.

X-WEIGHT

Stronger and relatively stiff when compared to J-weight, this backing is used on products designed for coarse grit stock removal applications through fine grit finishing and polishing. Consistent productivity, relatively good finishes and long product life are characteristics of products made on X-weight backings.

Y-WEIGHT

Stronger and more resistant to longitudinal splitting than regular drills cloth, Y-weight backing is used on products designed for severe applications, such as narrow belt grinding of hand tools and wide belts sanding of lumber and particleboard dimensioning.

FILM

Polyester is used as the backing media for Norton's range of precision graded microfinishing products. Film backings can be used wet or dry and have excellent resistance to chemical attack, while being tear resistant and durable.

INTRODUCTION TO BEARTEX NON-WOVEN PRODUCTS

Beartex consists of a backing in "non-woven" nylon fibres evenly impregnated with abrasive granules through the binding action of synthetic resins. This structure forms a "three-dimensional" abrasive material. Since this product was created as a finishing tool for operations where no material need be removed, it is particularly suitable for buffing-up purposes or to reduce the roughness of a

surface: BearTex begins to act when other abrasive tools have terminated their work. In all those situations where a buffing, cleaning or finishing operation is required, the BearTex product is decidedly a must.

UNDERSTANDING THE NON-WOVEN CAP CODE SYSTEM

RapidFinish Convolute S/C (Silicon Carbide) FINE		С	4	4	15
MARKETING PRODUCT NAME	MARKETING CAP CODE FAMILY	TYPE OF MATERIAL	GRAIN	GRADE	INTERNAL DIFFERENTIATION
BearTex	Flat Stock	F	0 - No Grain	0 - No Grit	Consecutive
Rapid Blend-Unified	Utitised / Unified	U	1 - A/O White	1 - Extra Coarse	numbers used for internal
Rapid Strip	Rapid Strip	R	2 - A/O Brown	2 - Coarse	differentiation
Rapid Prep-Surface Conditioning	SCM Surface Conditioning Material / Blending	S	4 - S/C	3 - Med.	
Rapid Finish-Convolute	Convolute	С	5 - Garnet	4 - Fine	
Floor pads	Floor Maintenance	JF	7 - Diamond	5 - Very Fine	
			9 - Ceramic	6 - Ultra Fine	
				7 - Super Fine	
				8 - Micro Fine	

USED WET OR DRY, BEARTEX PRODUCTS OFFER THE FOLLOWING ADVANTAGES:

- A predictably consistent, uniform finish
- Minimum smearing and discolouration of the workpiece as heat is dissipated through the open mesh of the product
- Increased productivity through savings in time
- Ability to automate operations
- · Reduced operator training
- Less maintenance required
- Greater safety than other methods
- Conformability to irregular surfaces

These advantages make BearTex products an excellent alternative to bristle brushes, set-up wheels, greaseless compounds, and steel wool. Operators quickly learn the techniques of using BearTex products to produce eye catching finishes.

BEARTEX PRODUCTS CAN BE USED ON A WIDE VARIETY OF SURFACES

- Aluminium
- Brass

- Copper
- Nickel

- Chromium
- Stainless Steel
- ZincGlass
- Titanium

- TantalumFibreglass
- CeramicsWood
- GlassPlywood
- Plastic

- APPLICATIONS INCLUDE
- DeburringBlending
- Cleaning
- D I' I '
- Polishing
- Dulling laminates
- Scrubbing
- Highlighting
- Imparting satin
- Scouring
- Deflashing plastics

Removing raised wood fibres

· Defuzzing plywood

• Decorative finishes



DISCS FOR ANGLE GRINDERS

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Fibre discs	51	Rapid Blend
Flap discs	57	Rapid Prep
Semi-flexible discs	64	Polishing discs



COATED ABRASIVE DISCS FOR ANGLE GRINDERS

Norton has a complete range of high performance Flap and Fibre discs available in premium performance Norton SG ceramic aluminium oxide, zirconia alumina, silicon carbide, and aluminium oxide abrasives. For everything from heavy-to-medium stock removal, to fine finishing, to light blending and polishing, coated abrasive Flap and Fibre discs are available in many shapes, abrasive grains, specialty coatings and backing configurations to meet many application needs.

From within our range you will find the perfect coated disc for every performance/price level, supported by a wide range of accessories to optimise your choice.

We have provided selection guides and charts to help you find the right product for your needs and don't forget our new Innovations highlighted throughout this powerful range. We also included SPEC CHECKS to provide you with helpful hints and tips when using the products.

WHY CHOOSE FLAP DISCS?

Flap discs are versatile abrasive tools that can be used for applications ranging from stock removal to blending.

FLAP DISCS VS. GRINDING WHEELS

- Faster stock removal
- Smoother finish, no gouging
- Cooler cutting, less glazing
- Lightweight, easier to control
- Less vibration, less operator fatigue
- Reduced noise

FLAP DISCS VS. FIBER DISCS

- 20X longer life, reduced abrasive cost
- Fewer disc changes, reduced labour cost
- More consistent finish
- No back-up pad required
- Easier storage, no curling
- Reduced loading
- Use flap discs one grit size coarser than fibre discs, except in 40 grit



NON-WOVEN DISCS FOR ANGLE GRINDERS

Non-woven discs for angle grinders have three components: strong synthetic fibre mesh and quality abrasives, bonded together by a smear-resistant adhesive. Rapid Strip discs have an open web construction that enables aggressive cutting action while maintaining a cool, non-loading surface. Rapid Blend discs have a unitised construction with varying weave – from open to tighter – for deburring and finishing. Rapid Prep discs have a more open weave that excels in surface preparation and cleaning. Each product provides excellent cutting action while improving surface finish.

WHY CHOOSE NON-WOVEN DEPRESSED CENTRE DISCS?

NON-WOVEN RIGHT ANGLE DISCS VERSUS FIBRE DISCS, WIRE BRUSHES AND DEPRESSED CENTRE WHEELS

- Deburring, blending and finishing with one product to reduce the number of steps
- Provides a controlled, sustained finish
- · Prevents undercutting and gouging
- Provides a cooler grinding action to lessen the chance of warping or discolouration
- Ideal when loading is an issue, on fibreglass, adhesives and soft metals
- For stripping coatings and paint off of hard materials like concrete, cement and stone
- Less vibration and quieter for high operator acceptance
- Provides an alternative to wire brushes

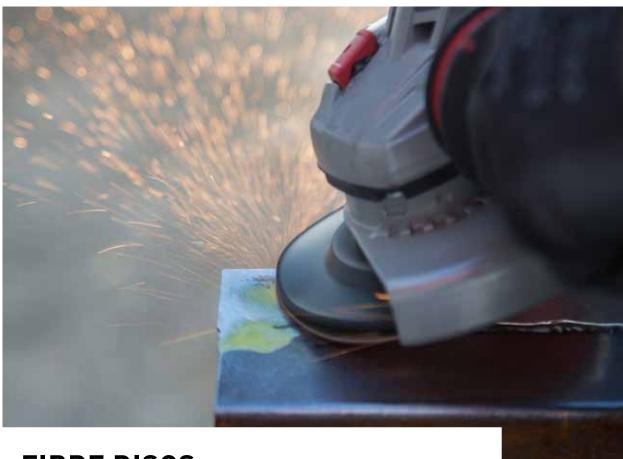
RECOMMENDATION GUIDE FOR NON-WOVEN DISCS ON ANGLE GRINDER

Removing coatings, epoxy/glue, paint Removing rust, oxidation, corrosion and residue Removing parting lines and seams on fibreglass parts Removing weld marks and weld spatter Removing small flashings and parting lines Removing small flashings and parting lines Removing paint/graffiti from concrete/stone Removing weld marks and weld spatter Removing weld marks and weld spatter Stainless steel deburring and cleaning Removing small flashings and parting lines Removing small flashings and parting lines Surface preparation before coatings/plating Light cleaning Cleaning and preparing welds Removing blemishes after welding Removing blemishes after welding Removing blemishes after welding Removing blemishes after welding Removing blemishes steel welding and finishing all metal parts Creating decorative finishes on Sinal finishing and polishing Removing decorative finishes on Final finishing/polishing where high Cleaning and polishing where high Removing blemishes definishes on Removing blemishes need to worter Rapid Prep A/O wery fine Repaid Blend NEX ZSF Rapid Blend NEX ZSF	APPLICATION	HIGHEST PRODUCTIVITY. LOWEST TOTAL COST	OF PERFORMANCE & PRICE	PERFORMANCE. LOW INITIAL PRICE
Removing coatings, epoxy/glue, paint Removing rust, oxidation, corrosion and residue Removing parting lines and seams on fibreglass parts Removing paint/graffiti from concrete/stone Removing weld marks and weld spatter -		++++	++++	+++
Removing rust, oxidation, corrosion and residue Removing parting lines and seams on fibreglass parts Removing paint/graffiti from concrete/stone Removing weld marks and weld spatter Removing weld marks and weld spatter Stainless steel deburring and cleaning - Surface preparation before coatings/plating - Light cleaning Cleaning and preparing welds Removing blemishes after welding stainless steel Blending and finishing all metal parts Creating decorative finishes on stainless steel Final finishing and polishing Rapid Strip S/C extra coarse Rapid Prep A/O coarse - Rapid Prep A/O coarse Rapid Prep A/O coarse Rapid Prep A/O medium Portex Rapid Prep A/O medium A/O medium A/O medium A/O medium A/O medium A/O fine Removing blemishes after welding A/O fine Removing blemishes after welding A/O fine A/O fine A/O fine Removing blemishes on stainless steel Creating decorative finishes on Stainless steel Final finishing and polishing A/O very fine A/O ver	Removing scale and coarse welding marks		-	
Removing parting lines and seams on fibreglass parts Removing paint/graffiti from concrete/stone Removing weld marks and weld spatter Removing sately deburring and cleaning Removing small flashings and parting lines Surface preparation before coatings/plating Pure A/O coarse Surface preparation before coatings/plating Removing delaming Removing weld marks and weld spatter Removing small flashings and parting lines Surface preparation before coatings/plating Removing blemishes after welding Removing blemishes on the first worth of the particular of the particu	Removing coatings, epoxy/glue, paint		-	
Removing paint/graffiti from concrete/stone Removing weld marks and weld spatter - Vortex Rapid Blend 5A medium - Vortex Rapid Prep A/O coarse Surface preparation before coatings/plating - Vortex Rapid Prep A/O medium Light cleaning - Vortex Rapid Prep A/O medium Cleaning and preparing welds - Vortex Rapid Prep A/O fine Removing blemishes after welding stainless steel - Vortex Rapid Prep A/O fine Rapid Prep A/O fine Removing blemishes after welding stainless steel - Vortex Rapid Prep A/O fine Rapid Prep A/O fine Rapid Prep A/O fine Rapid Prep A/O fine Vortex Rapid Prep A/O fine Rapid Prep A/O fine Vortex Rapid Prep A/O fine Rapid Blend NEX 2SF Final finishing and polishing - Vortex Rapid Prep A/O very fine NEX 2SF Final finishing/polishing where high	Removing rust, oxidation, corrosion and residue		-	
Removing weld marks and weld spatter - Vortex Rapid Blend 5A medium Rapid Prep A/O coarse Removing small flashings and parting lines - Vortex Rapid Prep A/O coarse Rapid Prep A/O coarse Rapid Prep A/O coarse Rapid Prep A/O coarse Surface preparation before coatings/plating - Vortex Rapid Prep A/O medium Light cleaning - Vortex Rapid Prep A/O medium Light cleaning - Vortex Rapid Prep A/O medium Cleaning and preparing welds - Vortex Rapid Prep A/O fine Removing blemishes after welding stainless steel - Vortex Rapid Prep A/O fine Rapid Prep A/O fine Vortex Rapid Prep A/O fine Vortex Rapid Prep A/O fine Rapid Prep A/O fine Vortex Rapid Prep A/O fine Vortex Rapid Prep A/O fine Rapid Blend NEX 2SF Final finishing and polishing - Vortex Rapid Prep A/O very fine Rapid Blend NEX 2SF Rapid Blend NEX 2SF Final finishing/polishing where high			-	
Stainless steel deburring and cleaning - Vortex Rapid Blend 5A medium Rapid Prep A/O coarse Removing small flashings and parting lines - Vortex Rapid Prep A/O coarse Surface preparation before coatings/plating - Vortex Rapid Prep A/O medium Light cleaning - Vortex Rapid Prep A/O medium Cleaning and preparing welds - Vortex Rapid Prep A/O medium Cleaning and preparing welds - Vortex Rapid Prep A/O fine Removing blemishes after welding - Vortex Rapid Prep A/O fine Blending and finishing all metal parts - Vortex Rapid Prep A/O fine NEX 2SF Final finishing and polishing - Vortex Rapid Prep A/O very fine NEX 2SF Rapid Blend NEX 2SF Final finishing and polishing where high	Removing paint/graffiti from concrete/stone		-	
Removing small flashings and parting lines - Vortex Rapid Prep A/O coarse Surface preparation before coatings/plating - Vortex Rapid Prep A/O medium Light cleaning - Vortex Rapid Prep A/O medium Light cleaning - Vortex Rapid Prep A/O medium - Vortex Rapid Prep A/O medium Cleaning and preparing welds - Vortex Rapid Prep A/O fine Removing blemishes after welding A/O fine Blending and finishing all metal parts - Vortex Rapid Prep A/O fine Rapid Prep A/O fine Blending and finishing all metal parts - Vortex Rapid Prep A/O fine NEX 2SF Creating decorative finishes on Stainless steel Final finishing and polishing - Vortex Rapid Prep A/O very fine NEX 2SF Rapid Blend NEX 2SF Rapid Blend NEX 2SF Final finishing holishing where high	Removing weld marks and weld spatter	-		
Surface preparation before coatings/plating - Vortex Rapid Prep A/O medium Light cleaning - Vortex Rapid Prep A/O medium - Vortex Rapid Prep A/O medium Cleaning and preparing welds - Vortex Rapid Prep A/O fine Removing blemishes after welding A/O fine Removing blemishes after welding A/O fine Blending and finishing all metal parts - Vortex Rapid Prep A/O fine Rapid Prep A/O fine Vortex Rapid Prep A/O fine Rapid Prep A/O fine Vortex Rapid Prep A/O fine Vortex Rapid Prep A/O fine Rapid Blend NEX 2SF Creating decorative finishes on stainless steel - Vortex Rapid Prep A/O very fine Rapid Blend NEX 2SF Final finishing and polishing - Vortex Rapid Prep A/O very fine Rapid Blend NEX 2SF	Stainless steel deburring and cleaning	-		
Light cleaning - Vortex Rapid Prep A/O medium Cleaning and preparing welds - Vortex Rapid Prep A/O fine Removing blemishes after welding stainless steel - Vortex Rapid Prep A/O fine Rapid Prep A/O fine Rapid Prep A/O fine - Vortex Rapid Prep A/O fine Rapid Prep A/O fine Rapid Prep A/O fine - Vortex Rapid Prep A/O fine Rapid Blend NEX 2SF Creating decorative finishes on stainless steel - Vortex Rapid Prep A/O very fine - Vortex Rapid Prep A/O very fine Rapid Blend NEX 2SF Final finishing and polishing - Vortex Rapid Prep A/O very fine Rapid Blend NEX 2SF	Removing small flashings and parting lines	-		
Cleaning and preparing welds - Vortex Rapid Prep A/O fine Removing blemishes after welding Stainless steel - Vortex Rapid Prep A/O fine Removing blemishes after welding Stainless Steel - Vortex Rapid Prep A/O fine Rapid Prep A/O fine - Vortex Rapid Prep A/O fine Rapid Blend NEX 2SF Creating decorative finishes on Stainless Steel - Vortex Rapid Prep A/O very fine - Vortex Rapid Prep Rapid Blend NEX 2SF Final finishing and polishing - Vortex Rapid Prep A/O very fine - Rapid Blend NEX 2SF Rapid Blend NEX 2SF Final finishing/polishing where high	Surface preparation before coatings/plating	-	Vortex Rapid Prep A/O medium	
Removing blemishes after welding stainless steel - Vortex Rapid Prep A/O fine - A/O fine	Light cleaning	-	Vortex Rapid Prep A/O medium	
stainless steel A/O fine A/O very fine NEX 2SF Final finishing and polishing A/O very fine A/O very	Cleaning and preparing welds	-		
Creating decorative finishes on stainless steel Creating decorative finishes Steel Creating decoration finishes Steel Creating decorative finishes Steel Creating decorative		-	Vortex Rapid Prep A/O fine	
stainless steel - A/0 very fine NEX 2SF Final finishing and polishing - Vortex Rapid Prep A/0 very fine NEX 2SF Final finishing/polishing where high Rapid Blend Rapid Blend	Blending and finishing all metal parts	-		
Final finishing/polishing where high A/O very fine NEX 2SF Rapid Blend		-		
	Final finishing and polishing	-		
		-	-	

EXCELLENT BLEND

CONSISTENT





FIBRE DISCS FOR ANGLE GRINDERS

From rapid weld grinding to blending and finishing, Norton has a complete range of high performance fibre discs available in premium performance Norton SG ceramic aluminium oxide, zirconia alumina and aluminium oxide abrasives.

PRODUCT SELECTION GUIDE

Highly recommended 🗸 🗸



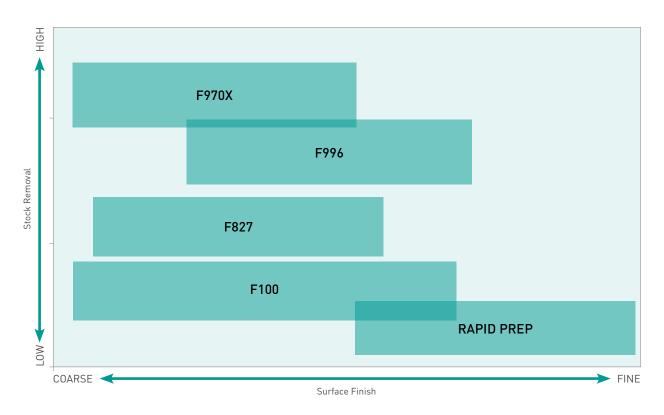






MATERIALS	NORTON QUANTUM F996	NEW BLAZE X F970X	NORZON F827	METAL F100
	++++	++++	++++	+++
Stainless steel, inox	/ /	✓		
Titanium, inconel & super alloys	//	✓		
Carbon, construction & mild steel	✓	11	✓	/
Cast iron	✓	✓	✓	1
Non-ferrous metal (brass/aluminium)			✓	1
Hard wood			✓	1

PRODUCT COMPARISON CHART



NORTON QUANTUM F996 #++++



- Ideal for cool grinding on stainless steel and heat-resistant steels
- Exceptionally high material removal and long life
- Especially suitable for heavy duty applications

CORDLESS

• Generates an excellent surface finish

ong mo		COMPATIBLE		METAL 7
	SIZE (mm)	GRIT	PK QTY	ART NO.
	115x22	36	25	66623327494
		50	25	66623327496
		60	25	66623327497
ATTICLE THE PARTY OF THE PARTY		80	25	66623327499
		120	25	66623327500
	125x22	36	25	66623327501
		50	25	66623327502
		60	25	66623327503
		80	25	66623327504
		120	25	66623327505
V SPEC	150x22	36	25	66623381328
- CHECK		60	25	66623399637
Grinding on stainless generates a considerable amount of heat; always		80	25	66261138545
use a Norton Quantum disc with	180x22	36	25	66623327506
'supersize' layer, a grinding aid added to the disc to reduce heat generation and improve cut and finish quality. Typically, a coarse grit disc is used when grinding MIG welds and a finer grit disc is used when grinding TIG welds.		50	25	66623327507
		60	25	66623327508
		80	25	66623327509
		120	25	66623327510



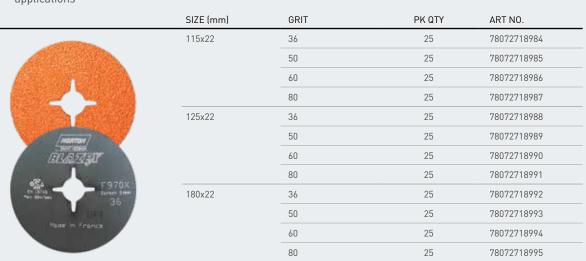


NEW BLAZE X STEEL F970X +++++

FOR CARBON STEEL

- Ceramic micro-fracturing grain constantly selfsharpens, exposing new sharp edges, for a better cut rate and longer disc life
- Stronger fibre backing provides better face-to-surface grinding, but also resists tearing in heavy-duty applications
- Specially designed for use on carbon steel, indicated on the back of every disc, for easy disc identification.

METAL





Using a supersized disc is not necessary on carbon steel due to less heat generated than that produced on stainless steel. BlazeX F970X is the best choice for carbon steel.

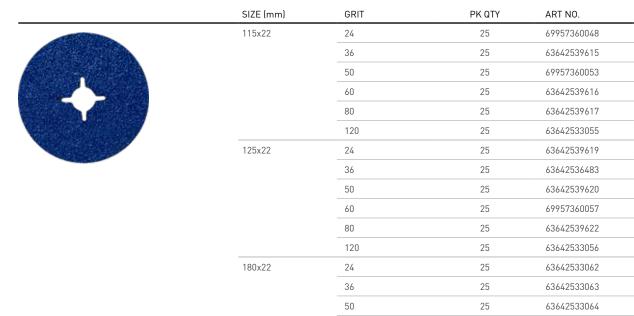
FIBRE DISCS FOR ANGLE GRINDERS

NORZON F827



- High stock removal rate for rough grinding and deburring of steel and stainless steel
- High and regular cut rate at medium pressures
- Norzon abrasive with self-sharpening effect
- Excellent price-performance ratio





60 80

120

F100 METAL

- Versatile abrasive fibre discs for processing steel and metal alloys
- Increased stock removal rate for rough grinding and deburring
- Tough and versatile aluminium oxide abrasive
- Wide selection of grit sizes and diameters





25

25

25





63642533065

63642533066

63642533068



SIZE (mm)	GRIT	PK QTY	ART NO.
115 x 22	16	25	66623385735
	24	25	66623385738
	36	25	66623385741
	40	25	66623385745
	50	25	66623385747
	60	25	66623385748
	80	25	66623385750
	100	25	66623385751
	120	25	66623385757
125 x 22	16	25	66623385761
-	24	25	66623385764
	36	25	66623385768
	40	25	66623385770



SIZE (mm)	GRIT	PK QTY	ART NO.
125 x 22	50	25	66623385773
	60	25	66623385775
	80	25	66623385776
	100	25	66623385778
	120	25	66623385779
180 x 22	16	25	66623385755
	24	25	66623385758
	36	25	66623385760
	40	25	66623385752
	50	25	66623385793
	60	25	66623385749
	80	25	66623385746
	100	25	66623385744
	120	25	66623385739

NYLON FIBREGLASS REINFORCED BACK-UP PADS

- The curved ribs keep the pad and abrasive cooler while retaining a level of flexibility across the pad
- For tougher grinding operations
- Conforms ISO 15636
- Grits 36+ and finer

SIZE (mm)	THREAD	DENSITY	MAX. RPM	PK QTY	ART NO.
115	M14	Rigid	13300	5	66623376727
125	M14	Rigid	12200	5	66623376821
	5/8	Rigid	12200	5	66623377068
150	M14	Rigid	10200	5	69957309184
180	M14	Rigid	8500	5	66623376822
	5/8	Rigid	8500	5	66623377069





NYLON BACK-UP PADS

- For universal use
- Grits 60+ and finer
- Conforms to ISO 15636

SIZE (mm)	THREAD	DENSITY	MAX. RPM	PK QTY	ART NO.
115	M14	Hard	13300	5	69957382828
	M14	Medium	13300	5	69957382825
125	M14	Hard	12200	5	69957382829
_	M14	Medium	12200	5	69957382826
180	M14	Hard	8500	5	69957382830
_	5/8	Medium	8500	5	63642588345
_	M14	Medium	8500	5	69957382827



FIBRE DISC BACK-UP PAD DENSITY GUIDE







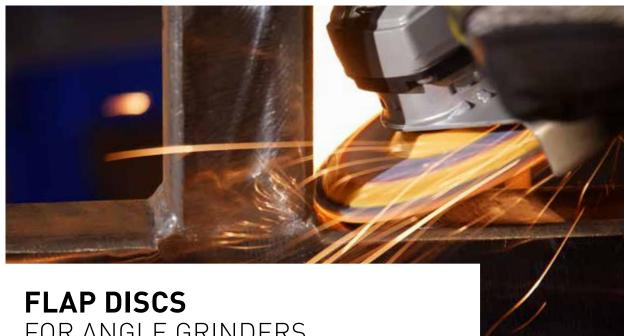


HARD DENSITY suitable for coarse applications and higher stock removal such us chamfering, welded seam or deburring work



MEDIUM DENSITY suitable for medium/ fine applications such as edge rounding or surface grinding.





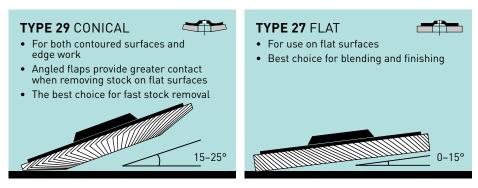
FOR ANGLE GRINDERS

Norton flap discs are engineered for light stock removal, edge chamfering, deburring, blending and finishing, reducing processing time and lowering total abrasive costs. Flap discs cut faster and provide a better finish than fibre discs while having the added benefit of longer life thanks to the flap construction.

PRODUCT SELECTION GUIDE



DISC SHAPES





X-TREME PRO R928 +++++



- X-Treme Pro R928 pink high performance flap discs, with polycotton cloth backing and ceramic grain, provide an improved cut rate and product life compared to both premium zirconium discs and ceramic products in the market, thanks to its high density configuration
- These discs also feature an additional supersize layer for cooler cutting, reducing heat generation during use for better part quality first and every time
- X-Treme Pro R928 is ideal for fast grinding when used at medium pressure on stainless steel or harder metals





For heavy and fast material removal, has long life



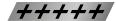
Perfect for fast edge chamfering and de-burring



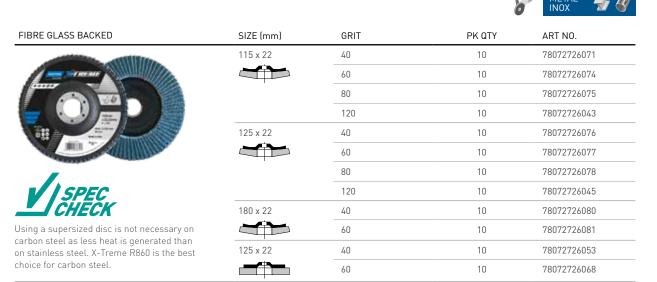
Supersize layer for a cooler cut and reduced heat generation during use, providing better part quality and no burn marks



NEW X-TREME R860 +++++



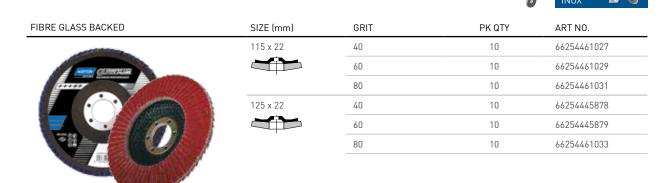
- 100% sharp Norzon grain for a faster cut from the very beginning
- Tough polyester backing for excellent product life and more material removal with one disc
- Ideal on medium to high pressure applications on carbon steel and hard metals



NORTON QUANTUM R996 +++++



- Ideal for cool grinding on stainless steel
- · Extremely aggressive ceramic grain for noticeably faster cut rate
- Strong polyester backing for demanding work on edges
- Especially suitable for high pressure applications on high power angle grinders





Flap discs with polyester backing will give the best performance when used with high power machines.

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NORTON EASYTRIM R842



- Trimmable backing pad extends product life, so fewer discs are needed
- Backing plate is colour coded by grit so product identification and selection is easy
- Sharp zirconia grain, grinds material away quickly in all applications
- Create flexible flaps by trimming the pad for easy access to T-joins, corners and curves













VULCAN R842



- Versatile product for rough grinding and deburring on steel and stainless steel
- Self-sharpening zirconium abrasive grain
- High and regular cut rate at medium and low pressures



FIBRE GLASS BACKED	SIZE (mm)	GRIT	PK QTY	ART NO.
VIII.CAN	115 x 22	40	10	63642502311
		60	10	63642502312
		80	10	63642502313
		120	10	63642502314
	125 x 22	40	10	63642502315
		60	10	63642502317
		80	10	63642502318
		120	10	63642502326
28/11/22	150 x 22	40	10	63642502327
		60	10	63642502328
		80	10	63642502329
	180 x 22	40	10	63642502341
		60	10	63642502343
		80	10	63642502345
	115 x 22	40	10	63642502331
		60	10	63642502332
	125 x 22	40	10	63642502335
		60	10	63642502336

STARLINE

- Multipurpose flap discs for processing steel, metal alloys or soft materials like wood
- Good stock removal in rough grinding and deburring
- Hard and versatile Zirconia Alumina abrasive
- Wide selection of grit sizes and diameters

FERR. & NON FERR.

• Best price-performance ratio

FIBRE GLASS BACKED	SIZE (mm)	GRIT	PK QTY	ART NO.
	115x22	40	10	66254492267
- Carry		60	10	66254492268
		80	10	66254492270
7 7 7 7 7 7 7 7 7 7		120	10	66254492269
	125x22	40	10	66254492271
		60	10	66254492272
		80	10	66254492273
		120	10	66254492274



For an equivalent finish, always use a flap disc one grit size coarser than with a fibre disc

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KIT CONTENTS	ITEM ART NO.	PK QTY	KIT ART NO.
Norton Quantum3 cut-off wheel NQ60ZZ-115x1.3x22.23-T41	66253371348	25	
Blaze Rapid Strip disc 115x22 R9101 AOXC	66623303783	10	
NorZon Fibre disc 115x22 P36	63642539615	25	— 78072707703
Vulcan Zirconia Flap discs 115x22 P60	63642502312	10	— /8U/2/U//U3
Nylon fibreglass reinforced back-up pad for fibre discs 115 M14	66623376727	5	
Norton professional tool bag: Polybag 600D 38x23x28cm	00310518514	1	

WELD PREPARATION AND FINISHING IN 4 STEPS (CARBON STEEL)





STEP 1 CUTTING-OFF

Norton Quantum3 cuttingoff wheels are easy to use, easy to steer and deliver consistent results. Reduced dust and odours when cutting, makes the process more comfortable..

Norton Quantum3 is a very comfortable disc to use, offering an impressive lifespan.



STEP 2 CLEANING

best used at a 10-15° angle to quickly eliminate unwanted coatings and corrosion, with minimal stock removal. It's a truly versatile product, as you can achieve a more aggressive action as you increase the pressure. It's comfortable to use without damaging or gouging components.



STEP 3 **BEVELLING**

Norton Norzon F827 fibre discs in P36 combined with a hard serrated back-up pad is the best option. It'll remove material quickly, and the flat contact area makes it easy to control and help generate the required angle.



STEP 4 **WELD SEAM REMOVAL**

After welding, use a Norton Vulcan R842 in grit P60 to quickly remove the weld seam and generate a finish ready for paint or other surface coatings.



KIT CONTENTS	ITEM ART NO.	PK QTY	KIT ART NO.
Quantum flap discs 125x22 P60	66254445879	10	
Rapid Prep discs 125x22 Coarse	66623378975	25	
Rapid Blend discs 125x12x22 Fine	66254496320	10	69957366033
Medium plain non-woven back-up pad 125 M14	69957382841	1	
Norton professional tool bag: Polybag 600D 38x23x28cm	78072710141	1	

WELD REMOVAL TO A COMMERCIAL FINISH IN 3 STEPS (STAINLESS STEEL)





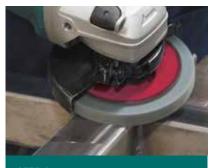
STOCK REMOVAL

Norton Quantum flap disc in grit P60 is ideal for weld and stock removal. Flap discs are particularly suited to this application as the constant erosion of the backing allows new, sharper grain to be exposed during use, offering longer product life. As the backing is softer than that of a fibre disc, the surface finish will be better, reducing the number of further steps.



BLENDING & REFINING

comfortable to use with finer finishing capabilities. Discs are best used at an angle of 10-15° preventing scratch patterns. A coarse grade disc is used to enable us to refine the finish from step 2.



STEP 3 FINISHING

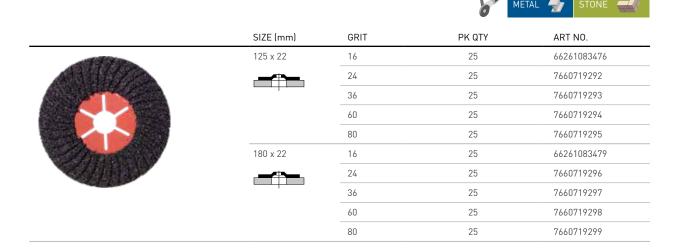
Rapid Blend NEX-2SF has excellent final finishing capabilities and imparts an extremely fine, bright and shiny surface. It's best used at a 10-15° angle and needs to be moved slowly across the workpiece, using just the weight of the angle grinder for pressure. Also try NEX-3SF spec for more durability when flexibility and comfortability is less of a concern. For best results and to avoid burn use at 6000 to 7000 rpm.



Semi-flexible discs are made by coating heavy duty fibre with multiple layers of a special resin bonded abrasive. They are commonly used to clean stone, the hulls of ships and boats, to remove rust from large surfaces and coatings and removing glue or mastic.

CP FLEX

- Semi flexible black silicon carbide discs for use on marble, granite, concrete, fibreglass and cast iron
- Ideal for use in construction markets for aggressive grinding, levelling and cleaning of surface perfections



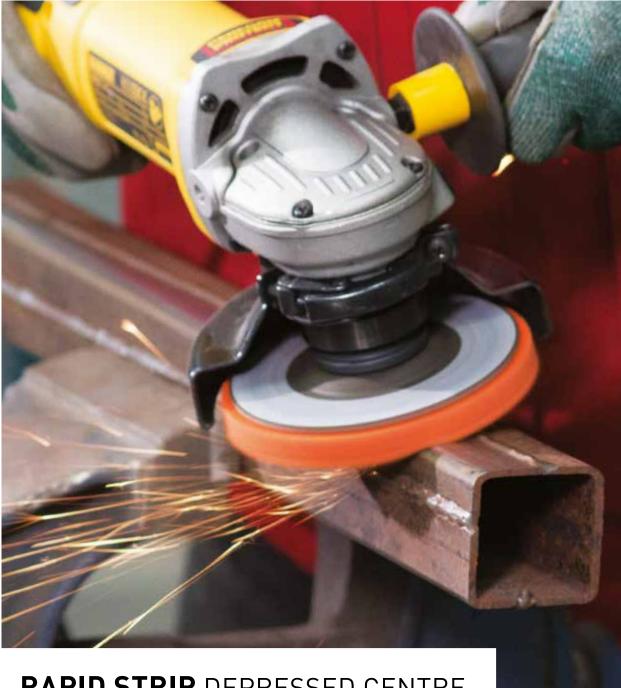
NYLON BACK-UP PADS

• For universal use

• Conforms to ISO 15636

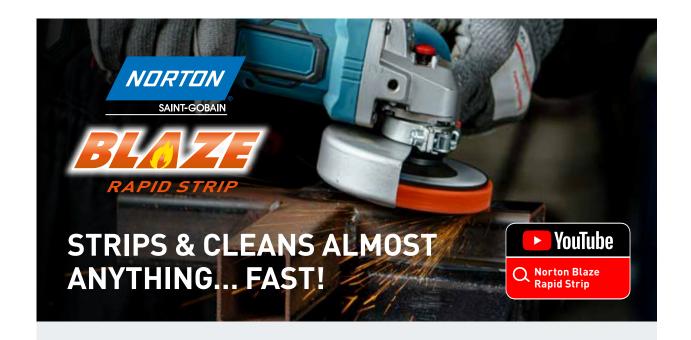
SIZE (mm)	THREAD	DENSITY	MAX. RPM	PK QTY	ART NO.
125	M14	Hard	12200	5	69957382829
180	M14	Hard	8500	5	69957382830





RAPID STRIP DEPRESSED CENTRE DISCS FOR ANGLE GRINDERS

Non-woven discs have three components: strong synthetic fibre mesh, quality abrasive, and a smear-resistant adhesive. Rapid Strip discs have an open web construction for aggressive cutting action while maintaining a cool, non-loading surface. The thick, strong synthetic fibres and extra coarse silicon carbide grain make light work of removing rust, weld spatter, scale and other surface contaminants. Use before and after welding for preparing and cleaning the surface.



BLAZE RAPID STRIP +++++



DPC TYPE 27 & TYPE 29 CONICAL

- Best choice for removal of surface rust and residue, corrosion, light weld spatter, dirt, mill scale and other similar surface contaminants
- Blaze lasts up to twice as long as other ceramic discs thanks to the Norton SG grain
- Leaves a thoroughly cleaned surface that ensures excellent adhesion for subsequent processes such as coating, painting and soldering
- Extremely versatile; stiff enough to withstand aggressive use, soft enough to prevent gouging and rework. Apply pressure to strip or remove coatings; use lighter pressure to finish like a surface finishing disc



SHAPE	DIAxH (mm)	CAP CODE	PK QTY	MAX RPM	ART NO.
	115x22	R9101	10	12000	66623303783
	125x22	R9101	10	11000	66623303916
	178x22	R9101	10	8000	66623303920
	125x22	R9101	10	12000	66261118630

RAPID STRIP



DPC TYPE 27

- of materials
- Nylon fibres, flexible resin technology and extra coarse abrasive grain for aggressive cut and long life
- A general purpose disc for removing coatings on a variety Effective cleaning, ensuring excellent adhesion in subsequent processes such as coating, painting and soldering
 - Will not load on sticky coatings, adhesives, and soft metals, or snag and shed like a fibre disc



	DIAxH (mm)	CAP CODE	PK QTY	MAX RPM	ART NO.
STRIPPA	115x22	R4104	5	11000	63642585732
R4104 S	125x22	R4104	5	8500	63642585749
RAPID STRIP R4101 H	115x22	R4101	10	12000	66261009649
	125x22	R4101	10	12000	66261030655



RAPID BLEND DEPRESSED CENTRE DISCS FOR ANGLE GRINDERS

Non-woven discs have three components: strong synthetic fibre mesh, quality abrasive and a smear-resistant adhesive. Rapid Blend discs have a unitised construction with varying weave, from open to tighter, for deburring to finishing applications. Can be used in sequence with fibre and flap discs to blend and impart a good finish in one or two operations.

BLAZE RAPID BLEND

DPC TYPE 27 (OPEN)

• Blaze ceramic grain for Increased cutting power and life, with ability to remove process steps





• Versatile thin web product with aggressive cutting on



SHAPE	DIAxTxH (mm)	CAP CODE	GRADE	PK QTY	MAX RPM	ART NO.
	125x6x22	U9101	EXTRA COARSE	10	12000	77696067121

RAPID BLEND DEPRESSED CENTRE DISCS FOR ANGLE GRINDERS.

VORTEX RAPID BLEND

DPC TYPE 27 & TYPE 29 CONICAL

- For light weld bead and weld spatter removal, heavy deburring and finishing applications
- 2-in-1 action: can cut like an 80 grit flap disc and finishes similar to a Rapid Blend (NEX 2SF) disc
- High-performance engineered grain provides aggressive, fast stock removal, reduced cycle times and increased part quality
- Twice the wheel life of conventional unified wheels, with minimal shedding

 Can be used in place of, or in sequence with, fibre and flap discs for improved part quality. Undersized backing plate gives longer usable diameter



	SHAPE	DIM DIAxTxH (mm)	CAP CODE	GRADE	PK QTY	MAX RPM	ART NO.
		115x12x22	U2305	VORTEX 5AM	10	12000	66254429268
		125x12x22	U2305	VORTEX 5AM	10	12000	66254496323
		115x12x22	U2305	VORTEX 3AM	10	7500	66623392701
		125x12x22	U2305	VORTEX 3AM	10	7500	66623392718
		125x6x22	U2305	VORTEX 5AM	10	12000	77696067103
		125x6x22	U2305	VORTEX 3AM	10	12000	77696067110
		125x12x22	U2305	VORTEX 5AM	10	12000	63642531710
		TZUXTZXZZ	U2305	VORTEX 3AM	10	7500	63642531717

RAPID BLEND

NEX DPC TYPE 27 & TYPE 29 CONICAL

- A unitised construction with varying weave from open structure for deburring to tighter for finishing
- Fine silicon carbide and flexible density unitised construction for a smooth, controlled blending/finishing application
- Cuts more freely and with less heat than competitor products
- Fast finish achieved with a wide range of products to suit a variety of finish requirements
- Undersized backing plate gives longer usable diameter



	SHAPE	DIAxTxB (mm)	CAP CODE	GRADE	PK QTY	MAX RPM	ART NO.
			U4401	NEX2SF	10	12000	66261020546
			U4401	NEX3SF	10	12000	66254461726
		115x12x22	U2401	NEX2AF	10	12000	66261020547
			U2301	NEX2AM	10	12000	66261020548
			F2303	HSMA	10	12000	66261020549
		125x12x22	U4401	NEX2SF	10	12000	66254496320
	'		U4401	NEX3SF	10	12000	77696067125
			F2303	HIGH STRENGTH HSMA	10	12000	78072702394
		105 / 00	U4401	NEX2SF	10	12000	77696067118
		125x6x22	U4401	NEX3SF	10	12000	77696067119
		1051000	U4401	NEX2SF	10	12000	63642531722
		125x12x22	U4401	NEX3SF	10	12000	63642531723

HMSA = High Strength Disc



RAPID PREP DISCS FOR ANGLE GRINDERS

Non-woven discs have three components: strong synthetic fibre mesh, quality abrasives, and a smear-resistant adhesive. Rapid Prep discs have an open weave that excels in surface preparation and cleaning applications, thanks to a coating system that reduces smearing and resists loading. Each disc combines the cutting speed of a coarse grit with the finish of a fine and so provides the lowest total cost of consumable tooling per workpiece. The thick layer of grain throughout the product extends the life of the disc.

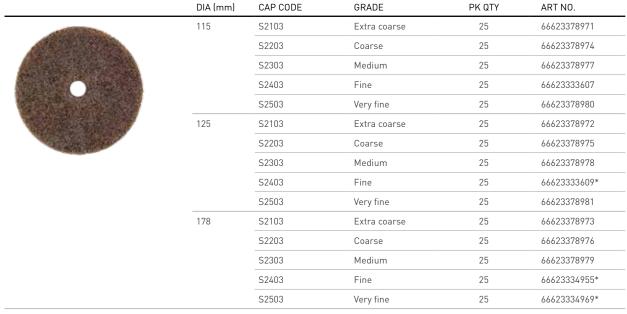
VORTEX RAPID PREP

SCM SELF-GRIP WITH REMOVABLE 22mm CENTRE HOLE



- Vortex grain technology combines the cutting speed of coarse grits with the finish of fine grits
- Durable product for blending, finishing, cleaning, and light deburring
- Most consistent cutting and finishing surface conditioning products on the market
- Clean Bond technology smear-free, does not load on aluminium or soft metals
- Achieve a burr-free, paintable finish in fewer steps without damaging the base material





* Made-to-order

RAPID PREP SURFACE BLENDING DISCS FOR ANGLE GRINDER

VORTEX RAPID PREP

SCM FLAP DISCS

- Layers of Surface Conditioning Material (SCM) in a variety of grades for quick blending and finishing
- Longer life and durability with smear free cut and finish with one disc
- Three dimensional non-woven abrasive fabric layers containing high performance Vortex grain with Clean Bond™ technology

Ideal for cleaning, light deburring and processing TIG welded seams on stainless steel



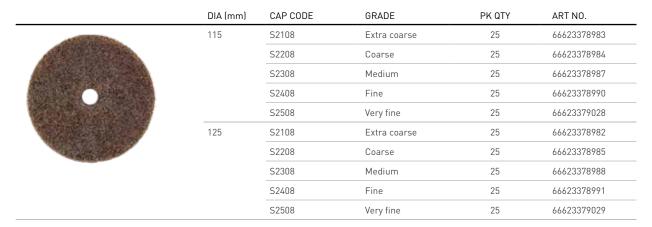
BLENDING	DIM DIAxTxH (mm)	CAP CODE	GRADE	PK QTY	MAX RPM	ART NO.
	115x22	S2203	Coarse	10	12200	66261130726
		S2303	Medium	10	12200	66261130773
		S2403	Fine	10	12200	66261130776
		S2503	Very fine	10	12200	66261130777
	125x22	S2203	Coarse	10	12200	66261130779
		S2303	Medium	10	12200	66261130780
		S2403	Fine	10	12200	66261130781
		S2503	Very fine	10	12200	66261130782

RAPID PREP +++

SCM (A0) SELF-GRIP WITH REMOVABLE 22mm CENTRE HOLE

- Achieve a burr-free, ready to paint finish in fewer steps without damaging the base material
- General purpose product for blending, finishing, cleaning, and light deburring
- Use with self-grip back up pads with locating centre pin







SURFACE BLENDING DISCS

FIBRE BACKED

• Fibre backing provides greater durability and life on demanding applications including edge work



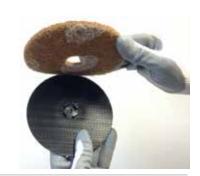
DIA (mm)	CAP CODE	GRADE	TYPE	PK QTY	ART NO.
115	S2211	Coarse FB*	DSB	20	63642557510
125	S2211	Coarse FB*	DSB	20	63642557721
150	S2211	Coarse FB*	DSB	10	63642557727

FB* = Fibre backed and with 22mm hole (for a stiffer, higher performing disc)

BACK-UP PADS (SELF-GRIP) WITH LOCATING CENTRE PIN

• Easy location of disc onto centre pin reduces vibration

DIA (mm)	DENSITY	ATTACHMENT	PK QTY	ART NO.
115	Medium	M14	1	77696076935
125	Medium	M14	1	77696076941
178	Medium	M14	1	63642575296



BACK-UP PADS (SELF-GRIP)

DIA (mm)	DENSITY	ATTACHMENT	PK QTY	ART NO.
115	Medium	M14	1	69957382846
	Medium	5/8	1	63642595937
125	Medium	M14	1	69957382841
	Medium	5/8	1	63642595938
150	Medium	M14	1	69957382843
	Medium	5/8	1	63642595939
178	Medium	M14	1	69957382844
	Medium	5/8	1	63642595940





POLISHING DISCS FOR ANGLE GRINDERS

Final scratch removal and imparting a high quality shine are often the last stages in a fabrication process and polishing is easy with Norton BearTex and Rapid Polish discs. Whether you're working on aluminium or stainless steel, Norton has a solution for you.

BEARTEX FLAP DISC



- BearTex fleece discs with open mesh construction
- Two types available, plain and interleaved
- Conforms easily to surface contours and shapes
- For use on a number of metals



DIAxB (mm)	CAP CODE	GRADE	TYPE	PK QTY	MAX RPM	ART NO.
445.00	F2504	Very fine A	XFLD (Plain)	10	4900	66254481898
115x22	F2504	Very fine A with P120	XIFD (Mixed)	10	4900	66623311000

Optimum performance when run at slower speeds on a variable speed power tool.

RAPID POLISH

- Type 29 felt wool polishing pad
- Use with or without polishing compound
- Smooth, scratch-free result
- For a professional, mirror shine



DIAxB (mm)	CAP CODE	GRADE	TYPE	PK QTY	MAX RPM	ART NO.
115x22	F0005	Felt	XFLD (Plain)	5	8500	66254481899
125x22	F0005	Felt	XFLD (Plain)	5	7700	63642573692

Optimum performance when run at slower speeds on a variable speed power tool.

INDUSTRIAL POLISHING COMPOUND BLOCKS

	OLOUR	(mm)	FINISH	GUIDE	PK QTY	ART NO.
Br	rown	55x160x38	Pre-polishing	Cleaning very dirty material (alu & non ferrous)	1	7660739107
Great Great	reen	55x160x38	Gloss	Aluminium & stainless steel	1	7660739108
Wh	hite	55x160x38	Super high gloss	Polishing stainless steel, alu & non-ferrous	1	7660739109
Blu	lue	55x160x38	General high gloss	All metals & hard plastics	1	7660739112



DISCS FOR MINI ANGLE GRINDERS

Speedlok discs
Mini Flap Discs
Non-Woven Speedlok Discs
Rapid Strip Speedlok Discs

4	Rapid I	Blend Speedlok Discs
0	D : - I I	D C

Rapid Pre	p Speedlo	k Discs	
Speedlok	Buffing &	Polishing	Disc

8	6
8	2

Speedlok	Buf	fing	&	Polishing	Discs



SPEEDLOK DISCS FOR MINI ANGLE GRINDERS

The tool-free fastening system enables quick disc changes to maximise productivity and minimise downtime. Ideal for light to medium pressure grinding, blending and finishing on small or difficult to access areas including tool and mould construction, automotive, aeronautical and aerospace industry and equipment and pressure vessel construction. The SpeedLok fastener makes it quick and easy to change. Disc locks securely to back-up pad, no slipping or release caused by heat. The two button attachment systems (TR or TS) ensures the disc is properly centred and vibration free. These discs optimise stock removal, surface finish, thermal load of the workpiece and tool wear. SpeedLok discs achieve their best performance at a recommended speed of 15-35m/s.

PRODUCT SELECTION GUIDE

Highly recommended 🗸 🗸 Recommended













MATERIALS	BLAZE R980P	RED HEAT R983	NORZON R884P	NORZON + R801	R422*	METAL ARY/ARX19
	+++++	++++	++++	++++	++++	+++
Stainless steel, inox	//	//		✓		
Titanium, inconel and super alloys	11	//		✓		
Carbon, construction and mild steel	//	//	11	//		✓
Cast iron	✓	✓	//	//		✓
Non-ferrous metal (brass/aluminium)			✓			✓
Hard wood			//	//	//	✓
Soft wood					✓	✓
Composite materials					//	✓
Stone, concrete					11	✓
Glass, plastic					11	✓

*Available on request

QUICK CHANGE DISC ATTACHMENTS & TIPS





TS ATTACHMENT



TR ATTACHMENT Twist on and twist off in 2½ turns.

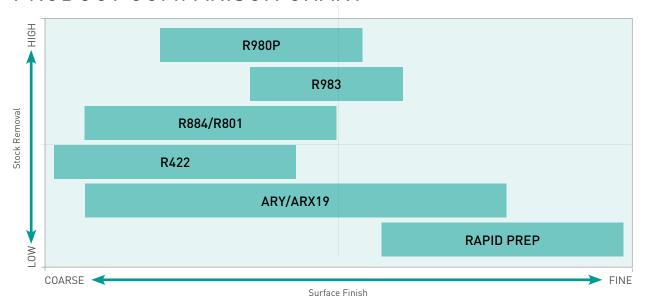


TIP Avoid gouging on contours by using a smaller size holder than the diameter of the discs, such as





PRODUCT COMPARISON CHART





- The best choice for part cut and finish on stainless steel, inconels, chromium cobalt, titanium and extremely hard materials
- Aggressive disc removes all defects quickly
- Provides the coolest cut and significantly faster cut rates
- For the greatest durability, longest life, and edge-fray resistance on tough applications and stainless steel

						METAL INOX
	SIZE (mm)	GRIT	RECOMMENDED RPM	PK QTY	TR ATTACHMENT PRICE £ PER 100	TS ATTACHMENT PRICE £ PER 100
	25	36	11500 - 26800	100	66261094895	-
		50	11500 - 26800	100	66254402096	-
		60	11500 - 26800	100	66261038811	-
	38	36	7600 - 17600	50	63642597033	69957390693
		50	7600 - 17600	50	63642597034	69957390694
		60	7600 - 17600	50	63642597037	69957390695
		80	7600 - 17600	50	63642597038	69957390696
	50	36	5700 - 13400	50	63642597039	69957390698
V SPEC CHECK		50	5700 - 13400	50	63642597045	69957390699
Grinding on stainless		60	5700 - 13400	50	63642597050	69957390700
generates a considerable		80	5700 - 13400	50	63642597052	69957390701
amount of heat; always use a Norton Blaze disc with a		120	5700 - 13400	50	66261136868	66261136986
supersize layer to reduce	75	36	3800 - 8900	50	63642597053	69957390702
heat build-up and improve cut quality. Typically, a		50	3800 - 8900	50	63642597057	69957390703
coarse grit disc is used when grinding MIG welds and a finer grit disc is used		60	3800 - 8900	50	63642597060	69957390704
		80	3800 - 8900	50	63642597062	69957390705
when grinding TIG welds.		120	3800 - 8900	50	66261136980	-

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SPEEDLOK DISCS FOR MINI ANGLE GRINDERS

BLAZE F980 FIBRE +++++



- The best choice for very tough applications
- Heaviest fibre backing for greater stock removal, longer life and edge-fray resistance

	SIZE (mm)	GRIT	RECOMMENDED RPM	PK QTY	TR ATTACHMENT PRICE £ PER 100
	50	36	5700 - 13400	25	66261058704
		50	5700 - 13400	25	66261058705
		60	5700 - 13400	25	66261058706
	75	36	3800 - 8900	25	66261058708
		50	3800 - 8900	25	66261058709
		60	3800 - 8900	25	66261058711



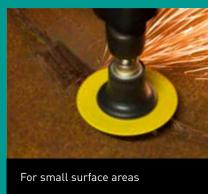
- High performance ceramic discs, laminate free for extra flexibility when working on curves and contours
- For use in medium pressure applications
- New advanced grain formulation and improved backing for excellent cut rate and longer life

							METAL INOX
	SIZE (mm)	GRIT	RECOMMENDED RPM	PK QTY	TR ATTACHMENT PRICE £ PER 100	٨	TS ATTACHMENT PRICE £ PER 100
	50	36	5700 - 13400	50	66261151081		66261151028
		50	5700 - 13400	50	66261151082		66261151036
		60	5700 - 13400	50	66261151083		66261151038
		80	5700 - 13400	50	66261148410		66261151044
		120	5700 - 13400	50	66261151084		66261151046
	75	36	3800 - 8900	50	66261151085		-
		50	3800 - 8900	50	66261151086		-
		60	3800 - 8900	50	66261151087		-
		80	3800 - 8900	50	66261151088		-
		120	3800 - 8900	50	66261151089		-

BENEFITS OF USING A QUICK CHANGE DISC









NORZON R884P



- The better choice for use on hard steels, carbon steel, welds and wood
- Versatile, self-sharpening zirconia alumina plus grain for high stock removal rate on rough grinding and deburring of steel and stainless steel
- Provides aggressive cut and longer life than competitor zirconia alumina discs
- Advanced grain coating results in longer life and faster cut rate

or steet and staintess steet			CC	ORDLESS OMPATIBLE		FERR. NON FERROUS, INOX
	SIZE (mm)	GRIT	RECOMMENDED RPM	PK QTY	TR ATTACHMENT PRICE £ PER 100	TS ATTACHMENT PRICE £ PER 100
96 3	38	36	7600 - 17600	50	-	63642549604
3		50	7600 - 17600	50	-	66261138622
建设建设		60	7600 - 17600	50	-	63642549607
		80	7600 - 17600	50	-	63642549606
	50	36	5700 - 13400	50	63642560882	63642549747
		50	5700 - 13400	50	69957389455	69957360306
		60	5700 - 13400	50	63642556396	63642549748
		80	5700 - 13400	50	63642560884	63642549749
		120	5700 - 13400	50	63642560885	66261115917
	75	36	3800 - 8900	50	63642560886	63642549605
		50	3800 - 8900	50	69957389465	69957360307
		60	3800 - 8900	50	63642560887	63642539858
		80	3800 - 8900	50	63642560888	69957360313
		120	3800 - 8900	50	66261137003	66261137005

Formerly X-Treme R884P

METAL _____

NORZON+ R801



- For demanding grinding applications, the supersize grinding aid facilitates a cooler cut on stainless steel, titanium and other exotic alloys, improving part quality
- Heavy Y-weight polyester backing provides excellent durability and grain adhesion
- Premium, self-sharpening zirconia alumina plus grain ensures the disc remains sharper for longer, increasing usage time and driving down overall process cost
- High removal rate when used on stainless steel

					INOX
	SIZE (mm)	GRIT	RECOMMENDED RPM	PK QTY	TR ATTACHMENT PRICE £ PER 100
	50	36	5700 - 13400	50	63642556405
		50	5700 - 13400	50	63642587202
		60	5700 - 13400	50	63642556407
		80	5700 - 13400	50	63642587207
		120	5700 - 13400	50	63642587208
	75	36	3800 - 8900	50	63642587245
		50	3800 - 8900	50	63642587246
		60	3800 - 8900	50	63642556411
		80	3800 - 8900	50	63642587247
		120	3800 - 8900	50	63642587248

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SPEEDLOK DISCS FOR MINI ANGLE GRINDERS

METAL ARY19



- For hard to grind materials that require an economical
- Aggressive cut and longer life than other aluminium oxide discs
- Good cut rate and improved life on moderatelydemanding applications
- Resistant to edge wear and fraying

					FERR. N WOOD	NON FERR. 🚽 🥼
	SIZE (mm)	GRIT	RECOMMENDED RPM	PK QTY	TR ATTACHMENT PRICE £ PER 100	TS ATTACHMENT PRICE £ PER 100
24.20	38	60	7600 - 17600	50	63642586628	63642586596
0		80	7600 - 17600	50	63642586629	63642586607
		120	7600 - 17600	50	63642586631	63642586608
		180	7600 - 17600	50	63642586633	63642586609
		320	7600 - 17600	50	66261137058	63642586617
	50	36	5700 - 13400	50	63642586683	63642586651
		60	5700 - 13400	50	69957389332	63642586656
		80	5700 - 13400	50	63642586687	63642586660
		120	5700 - 13400	50	63642586689	63642586671
_		180	5700 - 13400	50	63642586691	63642586675
I I SPEC		320	5700 - 13400	50	63642586695	63642586681
CHECK	75	60	3800 - 8900	50	63642586731	63642586699
Our most versatile SpeedLok		80	3800 - 8900	50	63642586733	63642586705
disc. Traditional aluminium		120	3800 - 8900	50	63642586735	63642586708
oxide discs are a good starting specification for general		180	3800 - 8900	50	63642586738	63642586712
purpose grinding.		320	3800 - 8900	50	66261137060	63642586718

Price per 100 Formerly BDX ARY19

MADE-TO-ORDER PRODUCT AVAILABILITY

CAP CODE	GRAIN / GRIT	24	36	40	50	60	80	100	120	150	180	240	320
Blaze R980P	Ceramic with supersize	•	•	•	•	•	•	•	•				
Red Heat R983	Ceramic		•		•	•	•		•				
Norzon R884P	Zirconia	•	•		•	•	•		•				
Norzon+ R801	Zirconia with supersize		•	•	•	•	•	•	•				
R422*	Silicon carbide		•	•	•	•	•	•	•	•			
Metal ARY19	Aluminium oxide	•	•	•	•	•	•	•	•	•	•	•	•

^{*} Available on request

MINIMUM ORDER QUANTITY

SIZE (mm)	MINIMUM ORDER QUANTITY	SIZE (mm)	MINIMUM ORDER QUANTITY
25	500 pieces	50	250 pieces
38	500 pieces	75	250 pieces



Ideal for weld dressing on small and difficult to access areas as well as general stock removal, deburring, flashing, blending and finishing. Mini flap discs have long life and minimise downtime by increasing productivity.

The SpeedLok fastener makes it quick and easy to change discs by locking securely to the back-up pad, so no slipping or release is caused by heat build-up. The TR button attachment systems ensure the disc is properly centred and vibration free. Best performance is achieved at a recommended speed of 30-40m/s. This optimises stock removal, surface finish, thermal load of the workpiece and tool wear.

PRODUCT SELECTION GUIDE

Highly recommended ✓✓
Recommended ✓✓

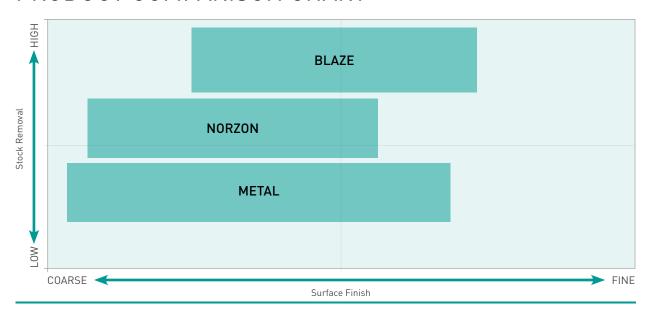






	BLAZE	NORZON	METAL
	++++	++++	+++
Stainless steel, inox and duplex	//	✓	
Inconel, titanium and super alloys	//	✓	
Carbon steel, construction steel and mild steel	11	//	✓
Cast iron	✓	//	✓
Non-ferrous metal (brass/aluminium)		√ √	✓
Hard and soft wood		//	✓

PRODUCT COMPARISON CHART



MINI FLAP DISCS FOR MINI ANGLE GRINDERS

BLAZE R980P



- For stainless steel and super alloys
- Provides longer life compared to any mini flap disc when used on stainless, titanium and super alloys
- Extremely aggressive ceramic grain for noticeably faster cut rate

 Supersize layer for a cooler cut and reduced heat generation during use, providing better part quality and no burn marks

				COM ANDLE		IIIOX
	SIZE (mm)	GRIT	RECOMMENDED RPM	PK QTY	TR ATTACHMENT PRICE £ EACH	BACK-UP PAD
800	50	40	11500 - 15000	10	66261120104	_
		60	11500 - 15000	10	66261120109	63642556629
		80	11500 - 15000	10	66261120110	
	75	40	7500 - 10000	10	66261120112	
		60	7500 - 10000	10	66261120116	63642556629
		80	7500 - 10000	10	66261120117	



Grinding on stainless steel generates a considerable amount of heat; always use a Norton Blaze mini-flap disc with supersize layer (cooling aid) to reduce heat generation and improve cut and finish.

NORZON R828



- Ideal for carbon steel and welds
- Strong zirconia alumina plus for high stock removal rate on rough grinding and deburring of steel and stainless steel
- Delivers aggressive cut rate and longer life on carbon steel and welds
- Prevents loading on aluminium and other soft materials

	SIZE (mm)	GRIT	RECOMMENDED RPM	PK QTY	TR ATTACHMENT PRICE £ EACH	BACK-UP PAD	
A COLOR OF THE PARTY OF THE PAR	50	40	11500 - 15000	10	66261180892		
FP ?		60	11500 - 15000	10	66261180893	63642556629	
		80	11500 - 15000	10	66261180894		
	75	40	7500 - 10000	10	63642527476		
		60	7502 - 10000	10	66261180904	63642556629	
		80	7503 - 10000	10	63642527482		

Formerly XTreme R828



FLEXI FLAP

Also available in mini flexi-flap disc, which adapts to contours and corners. The flexible cloth and disc construction is ideal for an improved finish and operator comfort during use.

50	40	11500 - 15000	10	66261180889	
	60	11500 - 15000	10	66261180890	63642556629
	80	11500 - 15000	10	66261180891	



FERR. NON FERROUS



- A good choice for aluminium, carbon steel and difficult-to- For longer life and faster cut rate on moderately grind materials that require an economical option
- For aggressive cut and longer life than competitor aluminium oxide discs
- demanding applications

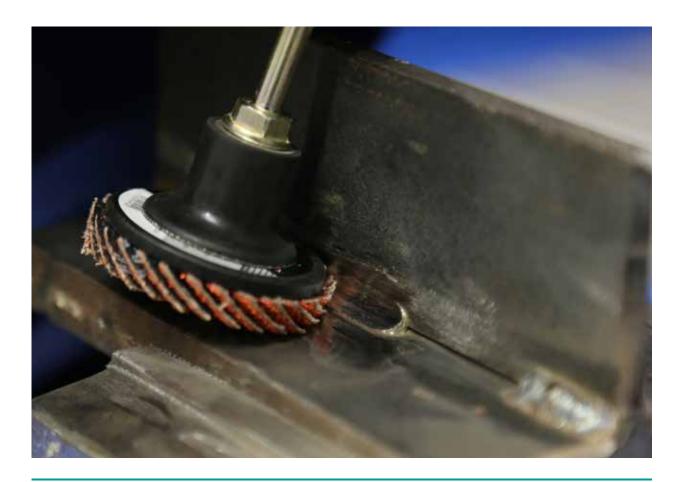
					FER	RUUS M
	SIZE (mm)	GRIT	RECOMMENDED RPM	PK QTY	TR ATTACHMENT PRICE £ EACH	BACK-UP PAD
	50	40	11500 - 15000	10	66261119970	
		60	11500 - 15000	10	66261119973	63642556629
		80	11500 - 15000	10	66261119975	
William .	75	40	7500 - 10000	10	66261119979	
		60	7500 - 10000	10	66261119980	63642556629
		80	7500 - 10000	10	66261119981	

Formerly BDX R766

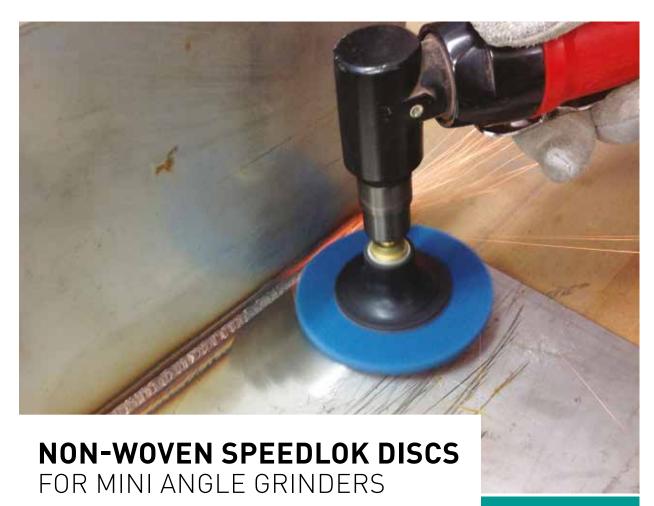
MADE-TO-ORDER PRODUCT AVAILABILITY

CAP CODE	GRAIN / GRIT	36	40	50	60	80	120
Blaze R980P	Ceramic with supersize	•	•	•	•	•	
Norzon R828	Zirconia	•	•		•	•	
Metal R766	Aluminium oxide	•	•		•	•	•

Available



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Norton non-woven SpeedLok quick-change discs are a combination of strong synthetic mesh and quality abrasives, bonded together by a smear-resistant adhesive. The open construction of the non-woven material enables aggressive cutting action and improved surface finish while maintaining its non-loading properties.

PRODUCT SELECTION GUIDE

Highly recommended // Recommended /











	RAPID STRIP	VORTEX RAPID BLEND	VORTEX RAPID PREP	RAPID PREP	RAPID BLEND NEX
	++++	++++	++++	+++	+++
Scale	11				
Stock removal	11	✓			
Heavy deburring	✓	//			
Light deburring		//	✓		
Light finishing			11	1	/ /
Blending			11	1	✓
Finishing			✓	11	/ /

MOST AGGRESSIVE LEAST CONFORMABLE LEAST AGGRESSIVE MOST CONFORMABLE



An open web construction for an aggressive cut without loading. The thick, strong synthetic fibres and extra coarse silicon carbide grain make light work of removing rust, weld spatter and scale. Use before and after welding for preparing and cleaning the surface.





8000

- Ideal for removing coatings on a variety of surfaces
- With ceramic alumina grain, disc lasts 2x longer than competitor
- · Cleans surface thoroughly for excellent adhesion of coatings, painting and soldering
- Withstands aggressive use whilst preventing gouging





5

Use with TR+ Holder

66623303921

RAPID STRIP



X Coarse SG

R9101

- General purpose, for removing coatings
- Cleans surface thoroughly for excellent adhesion of coatings, painting and soldering

100

R4101

X Coarse SG

100

- Extra-coarse abrasive grain for aggressive performance
- · Anti-loading even on sticky coatings, adhesives, and soft metals



DIA (mm)	CAP CODE	GRADE	MAX. RPM	PK QTY	TR RAPID STRIP PRICE £ EACH	3	TR STRIPPA PRICE £ EACH	٨
50	R4101	X Coarse S	20000	10	63642588173		-	
	R4104	X Coarse S	20000	10	-		63642556605	
75	R4101	X Coarse S	15000	10	63642588175		-	
	R4104	X Coarse S	15000	10	-		63642556624	
Use wit	h TR+ Hold	ler			TR+ RAPID STRIP PRICE £ EACH			

63642585751

www.nortonabrasives.com Coated Abrasives / 83

8000



FOR MINI ANGLE GRINDERS

From material removal to final smear-free finish with just one disc! With their uniquely compact design, Rapid Blend discs are ideal for quick deburring, edge breaking, blending, cleaning and polishing. Can be used in sequence with fibre discs and flap discs when removing surface defects, conditioning grinding marks and general light stock removal.

VORTEX RAPID BLEND OPEN STRUCTURE



• Soft and open density of nylon fibre, impregnated with patented grain technology and advanced resin system prevents loading, even on aluminium



• Longer life than other surface blending discs (up to 8x) means fewer disc changes for less downtime and increased productivity



DIAxT (mm)	CAP CODE	GRADE	MAX. RPM	PK QTY	TR ATTACHMENT
25x6	U2311	Medium	35100	100	66254497806
38x6	U2311	Medium	30100	80	66254497807
50x6	U2311	Medium	22000	25	66254497067
75x6	U2311	Medium	18000	25	66254497068

smearing



VORTEX RAPID BLEND CLOSED STRUCTURE



- Closely closed structure of grain and bond provides fast stock removal, reduced cycle time and excellent part quality
- Thick nylon web holds the grain in place to provide the most consistent performance for the whole life of the disc
- Special curing process ensures the disc will not break down in heavy deburring applications
- Discs maintain form holding for use on all surfaces, shapes and contours



	DIAxT (mm)	CAP CODE	GRADE	MAX. RPM	PK QTY	TR ATTACHMENT
	50x6	U2305	ЗАМ	22000	60	66254428237
		U2305	5AM	22000	60	66254413660
		U2305	7AM	22000	60	66254433510
	75x3	U2305	5AM	18000	40	66261093556
		U2305	7AM	18000	40	66261090909
	75x6	U2305	ЗАМ	18000	40	66254428238
		U2305	5AM	18000	40	66254413661
		U2305	7AM	18000	40	66254406395

RAPID BLEND NEX



- Strong mesh, abrasive and smear resistant adhesive provides aggressive cut and good surface finish without loading
- Abrasive is distributed through the entire disc (top, bottom and sides) so all three faces can be used
- Versatile, comfortable and easy to use without risk of change to workpiece geometry
- Excellent for light deburring of flashing and threads, blending alloys, polishing and finishing. Can be preformed. Holds shape
- Bright finish on stainless steel with improved 2SF and 3SF specification



DIA (mm)	CAP CODE	GRADE	MAX. RPM	PK QTY	TR ATTACHMENT
50	U2301	2 A Medium	22000	10	63642585684
	U2301	6 A Medium	22000	10	63642585725
	U4401	2 S Fine	22000	10	63642585677
	U4401	3 S Fine	22000	10	66254473613
	U2401	4 A Fine	22000	10	63642585679
75	U2301	2 A Medium	18000	10	63642585697
U440	U2301	6 A Medium	18000	10	63642585726
	U4401	2 S Fine	15000	10	63642585691
	U4401	3 S Fine	15000	10	66254473614
	U2401	4 A Fine	15000	10	63642585695
	50	50 U2301 U2301 U4401 U4401 U2401 75 U2301 U2301 U4401 U4401	50 U2301 2 A Medium U2301 6 A Medium U4401 2 S Fine U4401 3 S Fine U2401 4 A Fine 75 U2301 2 A Medium U2301 6 A Medium U4401 2 S Fine U4401 3 S Fine U4401 3 S Fine	50 U2301 2 A Medium 22000 U2301 6 A Medium 22000 U4401 2 S Fine 22000 U4401 3 S Fine 22000 U2401 4 A Fine 22000 75 U2301 2 A Medium 18000 U2301 6 A Medium 18000 U4401 2 S Fine 15000 U4401 3 S Fine 15000	50 U2301 2 A Medium 22000 10 U2301 6 A Medium 22000 10 U4401 2 S Fine 22000 10 U2401 4 A Fine 22000 10 75 U2301 2 A Medium 18000 10 U2301 6 A Medium 18000 10 U4401 2 S Fine 15000 10 U4401 3 S Fine 15000 10

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Non-woven discs have three components: strong synthetic fibre mesh, quality abrasives, and a smear-resistant adhesive. Rapid Prep discs have an open weave that excels in surface preparation and cleaning applications, thanks to a coating system that reduces smearing and resists loading. Each disc combines the cutting speed of a coarse grit with the finish of a fine and so provides the lowest total cost of consumable tooling per workpiece. The thick layer of grain throughout the product extends the life of the disc.

VORTEX RAPID PREP SCM



- For cleaning and conditioning, gain higher material removal, longer life and consistent, smear-free finishes, even on high nickel content alloys
- Proprietary engineered Vortex aluminium oxide abrasive grain and coating method combine maximum cutting speed with the consistent finish of finer grades to reduce process times by 50%+ by combining multiple grit sequences into one step
- Up to 4x longer life than competitor products, material removal level is maintained throughout disc life, reducing the need for rework and reducing total consumable cost
- The Clean Bond[™] resin system ensures surfaces stay smear-free, even on alloys with high nickel content, aluminium and soft metals, loading is prevented



	DIA (mm)	CAP CODE	GRADE	PK QTY	TR ATTACHMENT
	50	S2103	Extra coarse	50	66623378336
Service Control		S2203	Coarse	50	66623378340
		S2303	Medium	50	66623378342
		S2403	Fine	50	66623378345
		S2503	Very fine	50	66623378347
	75	S2103	Extra coarse	25	66623378337
		S2203	Coarse	25	66623378341
		S2303	Medium	25	66623378343
		S2403	Fine	25	66623378346
		S2503	Very fine	25	66623378348

Other smaller sizes e.g. 19, 25 and 38mm available on a fast MTO basis $\,$



RAPID PREP A/O SCM



- For general purpose cleaning and conditioning, gain high material removal, long life and consistent, smear-free finishes, even on high nickel content alloys
- The layer of grain throughout the product extends life as the grain does not sit on top of fibres
- Flexible backing enables the disc to conform to contours
- The Clean Bond $^{\text{TM}}$ resin system ensures surfaces stay smear-free, even on alloys with high nickel content, aluminium and soft metals, loading is prevented



	DIA (mm)	CAP CODE	GRADE	PK QTY	TR ATTACHMENT
AND SESSION	50	S2108	Extra coarse	50	66623378355
		S2208	Coarse	50	66623378359
		S2308	Medium	50	66623378363
		S2408	Fine	50	66623378366
		S2508	Very fine	50	66623378372
	75	S2108	Extra coarse	25	66623378356
		S2208	Coarse	25	66623378360
		S2308	Medium	25	66623378364
		S2408	Fine	25	66623378382
		S2508	Very fine	25	66623378373
					· · · · · · · · · · · · · · · · · · ·

Other smaller sizes e.g. 19, 25 and 38mm available on a fast MTO basis

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SPEEDLOK BUFFING & POLISHING DISCS FOR MINI ANGLE GRINDERS

Final scratch removal and imparting a high quality shine are often the last stages in a fabrication process and polishing is easy with Norton BearTex buffing discs and Rapid Polish discs. Whether you're working on aluminium or stainless steel, in intricate or hard to reach areas Norton has a solution for you.

HIGH STRENGTH BUFFING DISC +++



- Tough, yet conformable, resists tearing on burrs and sharp edges
- Follows contours and awkward profiles easily
- Premium aluminium oxide grain for aggressive blending and cleaning without smearing
- Ideal for rust/oxide or coating removal, pipe ID and OD polishing, casting cleaning, highlighting (antiquing), contaminant removal, removal of handling marks, gasket removal, cleaning and blending of surface imperfections, prepping prior to soldering, removal of filling materials, cleaning angles and odd shapes
- Will not stretch or shed





DIA (mm)	CAP CODE	GRADE	PK QTY	TR ATTACHMENT
50	F2303	Medium A	50	63642585924
	F2506	Very Fine A	50	08834163987
75	F2303	Medium A	50	08834164065
	F2506	Very Fine A	50	63642585932

RAPID POLISH



- Polishing is the final stage in the process, to achieve a glossy, high shine finish
- Use on all metals including stainless steel and aluminium
- · Removes fine scratches
- Impart a high quality mirror shine



DIA (mm)	GRADE	PK QTY	TR ATTACHMENT 🍮
50	Medium A	50	63642587165
75	Medium A	50	63642587167









RUBBER BACK-UP PADS FOR MINI ANGLE GRINDER

6mm SPINDLE

SIZE (mm)	DENSITY	MAX. RPM	PK QTY	TR ATTACHMENT	TS ATTACHMENT
25	Medium	38100	1	63642556628	7660718963
38	Medium	25100	1	63642556629	7660707032
50	Medium	19000	1	7660717817	63642501157
	Hard	19000	1	63642586931	63642586926
75	Medium	12800	1	63642556631	7660707384
	Hard	12800	1	66254401460	63642586932

PLASTIC BACK-UP PADS FOR MINI ANGLE GRINDER

TR+ ATTACHMENT (TR+ - SL4)

• Plastic back-up pad with 6mm spindle for 100mm Speedlok TR+ discs

SIZE (mm)	DENSITY	MAX. RPM	PK QTY	TR+ ATTACHMENT	0
100	Hard	15000	1	63642586196	



Medium density suitable for medium/fine applications such as edge rounding or surface grinding. **Hard density** suitable for coarse applications and higher stock removal such us chamfering, welded seam or deburring work.

SPEEDLOK BUFFING & POLISHING DISCS FOR MINI ANGLE GRINDERS.

BACK-UP PADS FOR ANGLE GRINDERS TRATTACHMENT (TYPE 3-SL3)

• Back-up pad with M14 thread

SIZE (mm)	DENSITY	MAX. RPM	PK QTY	TR ATTACHMENT
75	Medium	11200	1	63642587305
	Hard	11200	1	63642557133



ANGLE GRINDER ADAPTOR

 Adapts the standard quick change back-up pac for use on an angle grinder

DENSITY

• Adapts the standard quick change back-up pad • Suitable for use with rubber back-up pads

ART NO.

• Female M14, male thread 1/4 - 20 UNC

PK QTY





M14 Adaptor Metal 12000 1 63642587997

MAX. RPM

To use a standard rubber back-up pad on an angle grinder, unscrew the 6mm shaft and insert the adaptor M14 - 1/4"

HOW TO USE A MINI DISC ADAPTOR ON AN ANGLE GRINDER





A single backing pad can be fitted to an angle grinder. We supply an adaptor with a backing pad that can fit either on an angle grinder or die grinder.



Adapt your 3/8" - 24 or 5/8" - 11 right angle grinder to a Type II or Type III back-up pad.



MINI RIGHT ANGLE GRINDER GRINDING TOOLS AND KITS

Norton offers mini tools for grinding and sanding to make life easier in detailed, hard to reach applications. Use with Norton SpeedLok discs for surface preparation and defect removal on curves, contours and tight areas.



MINI RIGHT ANGLE GRINDER

50mm (2") MAX RPM 22.000 (0,45 HP)

- Designed for use with the quick-change back-up pad and SpeedLok and mini flap discs
- Use with 38mm and 50mm quick change sanding discs and spindle mounted sanding specialties only.
 The accessories must have a rated speed greater than the speed marked on the tool



EXHAUST DIRECTION	THROTTLE TYPE	HORSEPOWER	AIR CONSUMPTION (L/MIN)	COLLET CHUNK	TOOL WEIGHT	ART NO.
Rear	Level	0.45	85	6mm	0.74 kg	66261177765





Air tools require regular lubrication throughout the life of the tool. The air motor and bearing use compressed air to power the tool. Because moisture in compressed air will rust the air motor, it must be lubricated daily.

An inline oiling device is recommended

Before using the machine add 1-2 drops of oil in the machine air inlet.



This in an UNGUARDED tool and should NEVER be used with cut-off discs or other bonded abrasive grinding wheels. Never use any product that has a MAX RPM rating less that the RPM marked on the tool.

MINI RIGHT ANGLE GRINDER GRINDING TOOLS AND KITS

NORTON MINI RIGHT ANGLE GRINDER **STARTER KIT**

COMPATIBLE WITH 50mm (2") DISCS MAX RPM 22.000 (0,45 HP)

 An assortment of 45 abrasive SpeedLok discs, of the most popular grades for stripping, deburring and surface blending, and the new Norton mini right angle die grinder



KIT CONTENTS	ITEM ART NO.	PK QTY	KIT ART NO.
50mm (2") NORTON MINI RIGHT ANGLE DIE GRINDER: MAX RPM 22.000 (0,45 HP)	66261177765	1	
NORTON TOOL BAG SIZE: 56x31x45cm	-	1	
Blaze Rapid Strip SpeedLok disc 50mm R9101 AOXC SL3	66623303912	10	69957300298
Blaze Fibre SpeedLok disc 50mm C36 SL3	66261058704	25	
Rapid Prep SpeedLok disc 50mm Medium SL3	66623378342	10	
Rubber back-up pad 50x6 SL3	63642586931	1	

NORTON MINI RIGHT ANGLE GRINDER & SPEEDLOK DISCS PROFESSIONAL KIT

COMPATIBLE WITH 50mm (2") DISCS MAX RPM 22.000 (0,45 HP)

- A complete assortment of our product SpeedLok disc range complete with mini angle grinder
- Includes samples of the most popular abrasive SpeedLok discs for all application stages from cleaning, deburring, blending up to surface preparation



KIT CONTENTS	ITEM ART NO.	PK QTY	KIT ART NO.
50mm (2") NORTON MINI RIGHT ANGLE DIE GRINDER: MAX RPM 22.000 (0,45 HP)	66261177765	1	
NORTON TOOL BAG SIZE: 56x31x45cm	-	1	
Blaze Rapid Strip SpeedLok disc 50mm R9101 AOXC SL3	66623303912	5	
Blaze Fibre SpeedLok disc 50mm C36 SL3	66261058704	5	
Blaze SpeedLok disc 50mm C50 SL3	63642597045	5	
Blaze SpeedLok disc 50mm C80 SL3	63642597052	5	69957300300
Blaze SpeedLok mini flap disc 50mm C40 SL3	66261120104	5	
Rapid Prep SpeedLok disc 50mm Medium SL3	66623378342	5	
Rapid Prep SpeedLok disc 50mm VFine SL3	66623378347	5	
Rapid Blend SpeedLok disc 50 Fine SL3	63642585677	5	
Rubber back-up pad 38x6 SL3	63642556629	1	
Rubber back-up pad 50x6 SL3	63642586931	1	



DISCS FOR ORBITAL MACHINE

Norton MeshPower Discs Self-Grip & Beartex Discs 94 Screenback Discs

96 Plain Discs Beartex Floor Pads 104 105

100



NORTON MESHPOWER DISCS

An alternative to traditional perforated paper discs, Norton MeshPower is a multifunctional abrasive, designed with thousands of holes, created by the unique mesh matrix structure.

The mesh hole structure allows dust extraction in any application.

- Mesh backing enables excellent dust extraction, for a cleaner working environment and less clean-up time
- No-fil® technology prevents clogging for longer product life
- Can be used wet or dry
- Self-grip backing for a quick and easy disc change
- Can be used on many materials, flat and contoured surfaces, by hand or machine
- No defined hole pattern for fast, easy alignment with the back-up pad
- Easy to identify product type by grain colour





Sanding Dust



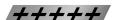
Dust extraction channels

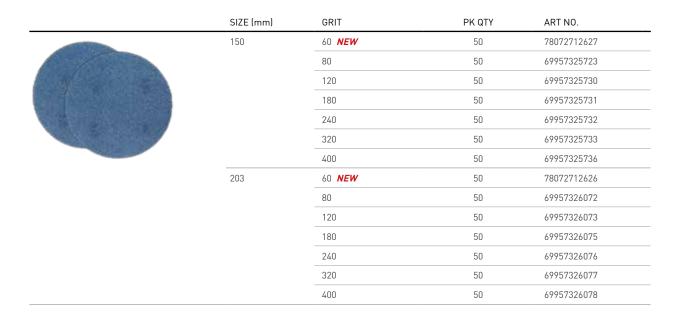
CERAMIC ADVANTAGE

Ceramic grain provides the ultimate material removal, best productivity, longer life and finest finish.



NEW MESHPOWER DISCS CERAMIC #++++





NEW MESHPOWER DISCS ALUMINIUM OXIDE #++++



	SIZE (mm)	GRIT	PK QTY	ART NO.
1	150	80	50	69957326274
		120	50	69957326275
		180	50	69957326276
1 1		240	50	69957326277
		320	50	69957326278
2 1		400	50	69957326279
	225	80	25	78072703555
		120	25	78072703556
		180	25	78072703557
		240	25	78072703558
		320	25	78072703559

PAD SAVER

SIZE (mm)	TYPE / GRADE	PK QTY	ART NO.
150	Multi-Air	1	69957328425
	14+1 holes	1	69957328430

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SELF-GRIP & BEARTEX DISCS

Self-Grip discs have a quick release backing that allows fast and easy disc changing, increasing performance by minimising downtime. Made with premium abrasive grains for excellent cutting action providing a very homogenous and high quality finish. Depending on the grit size, Norton self-grip discs are ideal for preparing primed and painted surfaces, stripping primer, varnish and paint, sanding plastic and fibreglass, light weld blending and deburring and sanding bare wood.

PRODUCT SELECTION GUIDE

Highly recommended ✓✓
Recommended ✓
Suitable ○



MATERIALS	APPLICATIONS	NORTON PRO PLUS A975	BLUE FIRE NORZON H835F	NORTON PRO A275	H231	NORTON PRO FILM Q275	H425*
		+++++	++++	++++	++++	++++	++++
Metal	Coarse sanding		//		✓		
	Finishing		11		✓		
Hard wood	Coarse sanding		11	0	1		✓
	Finishing	11	✓	✓	11	✓	✓
Soft wood	Coarse sanding		✓	✓	11		✓
	Finishing	11	✓	✓	1	✓	✓
Filler	Aluminium / metal	✓	//	✓		✓	
	Polyester	11	✓				
Varnish /	Coarse sanding		✓	11	✓		
paint / primer	Finishing	11	✓	✓	0	✓	
Composites /	Ероху		//		✓		
coatings	Acrylic	11		✓			
	Fibre glass		11		1		
	Finishing	11		✓		✓	
Plaster	Coarse sanding				1		0
	Finishing			11	0		
Stone & glass	Coarse sanding				0		11
	Finishing				0		11

*Available as MTO only



HOLE PATTERNS

Discs are available with different hole patterns for improved dust extraction.

The most popular hole patterns available stock are shown below, other hole patterns available on request, check the MTO offering for more information.



without holes



ø150mm without holes



with 8 holes ø10mm on hole circle ø65mm



with 15 holes ø9mm on hole circle ø120mm;

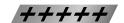
6 holes ø9mm on hole circle ø80mm + 1 centre hole ø17mm



with 17 holes 8 holes ø10 mm on hole circle ø120mm;

8 holes ø8mm on hole circle ø65mm + 1 centre hole ø10mm

NORTON PRO PLUS A975 +++++



- Norton SG ceramic grain blended with premium heat-treated
 No-Fil® treatment reduces clogging during use and extends aluminium oxide abrasive for higher and faster cut rate with uniform scratch pattern
- Fibre reinforced latex paper is flexible yet tear resistant
- the life of the disc
- Also available with soft-touch foam backing









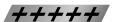
	DIAxH (mm)	GRIT	PK QTY	BOX QTY	ART NO.
		80	100	400	63642523303
ASSESSED NO.	150	120	100	400	63642524766
		150	100	400	63642557521
		180	100	400	63642591994
		240	100	400	63642591990
		80	100	400	66254477881
ALC: NO.		120	100	400	66254477879
		150	100	400	66254477882
		180	100	400	66254477883
	150	220	100	400	66254477884
		240	100	400	66254477885
		280	100	400	66254477886
	15 holes	320	100	400	66254477887
		400	100	400	66254477888
		500	100	400	66254476601
		600	100	400	63642532659
		800	100	400	66254479091

See the Norton Automotive Aftermarket catalogue for the extended range of A975 Multi-Air self-grip & Multi-Air Soft Touch discs

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SELF-GRIP & BEARTEX DISCS

BLUE FIRE NORZON H835 +++++



- Latest Norzon grain design with self-sharpening grain for great cut rate and extended product life
- Prevents premature clogging due to open grain distribution
- The best option for coarse sanding and finishing on hard materials
- High strength paper backing with excellent tear resistance and reduced curling and edge chipping





DIAxH (mm)	GRIT	PK QTY	ART NO.
150	40	50	69957390933
	60	50	69957390940
	80	50	69957391248
	120	100	69957391249
150	40	50	66254444904
A	60	50	66254444905
	80	50	66254444908
15 holes	120	100	66254444909
	150	150 60 80 120 150 40 60 80	150

See the Norton Automotive Aftermarket catalogue for the extended range of H835 MultiAir self-grip discs





NORTON PRO A275



- Heat treated aluminium oxide abrasive for faster cut rate and consistent scratch pattern for consistently good surface finish
- Can be used univerally on different surfaces
- No-Fil® coating prevents premature clogging for a longer
- Fibre reinforced latex paper is flexible yet tear resistant







 DIAxH (mm)	GRIT	PK QTY	BOX QTY	ART NO.
	80	50	100	63642585133
	120	50	100	63642585145
	150	50	100	63642585148
76	180	50	100	63642585150
	220	50	100	63642585153
	240	50	100	63642585156
_	320	50	100	63642569699
	400	50	100	63642585169
	500	50	100	69957391303
	800	50	100	63642585172
	80	100	100	63642585184
	100	100	100	63642585186
	120	100	100	63642569701
	150	100	100	63642569702
	180	100	100	63642585190
150	220	100	100	63642585194
	240	100	100	63642585197
	280	100	100	63642585199
	320	100	100	63642569704
	400	100	100	63642585214
	500	100	100	63642585217
	600	100	100	63642585220
	800	100	100	63642585223
	80	100	400	66254405540
	100	100	400	66254405542
	120	100	400	66254405528
	150	100	400	66254405530
	180	100	400	66254405546
150	220	100	400	66254405548
	240	100	400	66254405549
	280	100	400	66254405550
15 holes	320	100	400	66254405539
	360	100	400	66254405551
	400	100	400	66254405552
	500	100	400	66254405553
	600	100	400	66254405554
	800	100	400	66254405555

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SELF-GRIP & BEARTEX DISCS

H231 ++++

- Aluminium oxide abrasive for roughing, intermediate sanding and finishing of solid wood on floor and furniture applications
- Semi-open / open coat (depending on grit size) reduces clogging on the disc for longer life
- Finer grits are ideal for polishing metal, plastic and leather, smoothing filler and sanding primer, within vehicle repair markets
- Anti-static properties of the disc enable excellent surface quality









	DIAxH (mm)	GRIT	PK QTY	BOX QTY	ART NO.
		36	100	50	66261176734
	125	60	100	100	63642516174
		80	100	100	63642516175
《 图 图 图 图 图 图 图 图 图 图 图 图 图 图 图 图 图 图 图		120	100	100	63642516176
		180	100	100	63642537389
	8 holes	240	100	100	69957360184
		320	100	100	63642537390
		36	100	50	63642551458
		40	100	100	63642531875
		50	100	100	69957360119
	150	60	100	100	63642519158
	150	80	100	100	63642546787
		100	100	100	63642531872
		120	100	100	63642531871
		150	100	100	69957360170
		180	100	100	63642536755
		240	100	100	63642546797

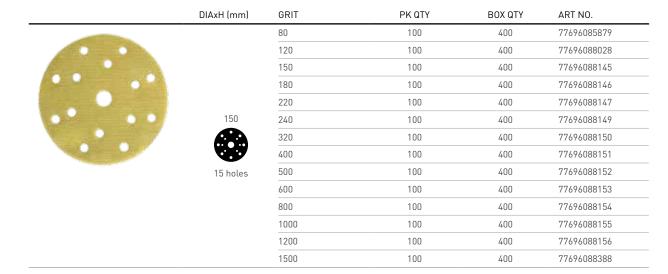
NORTON PRO FILM Q275



- Heat-treated aluminium oxide grain for fast material removal and excellent performance on paint, varnish and fillers
- Flexible film backing is resistant to tearing and provides a consistent scratch pattern which reduces rework
- No-Fil® layer on the abrasive prevents dust build-up during sanding for significantly longer disc life
- Self-grip system for quick and easy disc changing, reducing process time









BEARTEX

- Three-dimensional disc that conforms to work surface and provides a uniform finish
- Non-loading and ideal for finishing solid surface materials
- Gentle action that easily removes burrs without affecting the dimension of the workpiece
- In Self Grip and Plain backing



	DIAxH (mm)	GRADE	CAP CODE	PK QTY	ART NO.				
and the second	150	BEARTEX SE	LF-GRIP DUST HOLE DISCS						
		F2560	Very fine A	10	69957383151				
	•	F4802	Ultra fine S	10	69957383158				
	7 holes	F2801	Micro fine A	10	69957383162				
		BEARTEX SE	LF-GRIP PLAIN DISCS						
	150	F2560	Very fine A	10	63642574240				
	150	F4660	Ultra fine S	10	63642581769				
		BEARTEX PLAIN DISCS (WITHOUT SELF-GRIP)							
		F2560	Very fine A	10	63642557497				
		F4807	Ultra fine S	10	63642557498				
-									
		NFW	BEARTEX 💪	++++	7				
	150	BEARTEX SE	LF-GRIP PLAIN DISCS						
		F2316	Medium A Heavy duty	20	66261121312				

SELF-GRIP BACK-UP PADS

PRODUCT SELECTION GUIDE BACK-UP PADS

APPLICATION	DENSITY
Heavy duty sanding, best for flattening surfaces or dimensioning	HARD Blue Rubber
Scruffing, shaping, sanding and finishing For use on filler, primer, paint, clear coat, wood, plaster, composites and metal	MEDIUM Black Rubber
Final sanding, to obtain the best finishes	SOFT Orange Foam / Rubber
MACHINE	ATTACHMENT TYPE
Electrical angle grinder	M14
Electrical and pneumatic grinders (US tools)	5/8
Festool orbital sander	M8
Other orbital sanders	5/16

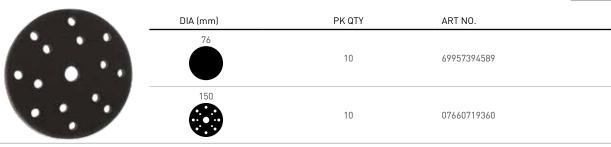
Packed in clear individual display box including: safety recommendations, product information, mounting instructions, versatile attachment system (Festool M8 and standard 5/16) and Allen wrench.

SELF-GRIP & BEARTEX DISCS

	DIM DIAxH (mm)	THREAD	DENSITY	PK QTY	ART NO.
Self-Grip standard	76 No holes	5/16"	Medium	6	63642567810*
	125 8 holes	5/16"	Medium	3	69957350739
_	125	M14	Medium	3	69957350744
*The 76mm back-up pad is a universal attachment system for both Self-Grip and self-adhesive discs. It provides the maximum flexibility and optimal finishing results. The	No holes No holes	5/16 & M8	Medium	1	66623338436
finishing results. The Self-Grip DUO combines an innovative design of gripping structures in the shape of flat- top mushrooms which	No holes	M14	Medium	3	63642567812
provides a highly uniform — finish while allowing both	150	5/16 & M8	Hard	1	66623338451
self-adhesive and Self- Grip discs to be used on			Medium	1	66623338450
this unique system	15 holes		Soft	1	66623338452

FOAM INTERFACE BACK-UP PADS SELF-GRIP





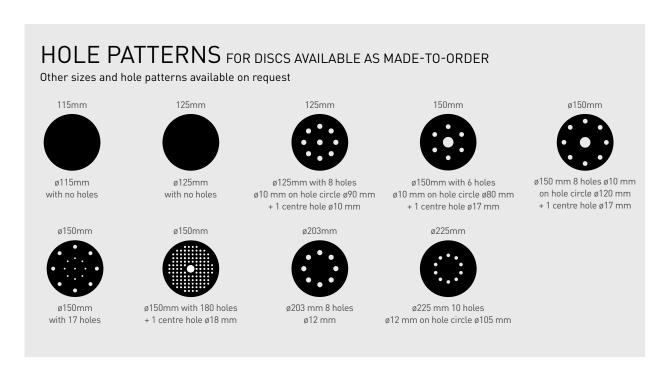
Dimensions Key: DIM = Dimensions, DIA = Diameter



Specially designed to give optimum results with very fine grit abrasives, the Norton foam interface easily conforms to contours. The interfaces are specifically developed for finishing operations to reduce risk of scratching the workpiece. Use the foam interface between the Norton self-grip back-up pad and the self-grip abrasive disc.







MADE-TO-ORDER PRODUCT AVAILABILITY

FOR SELF-GRIP DISCS

PRODUCT / GRIT	36	40	60	80	120	150	180	220	240	280	320	400	500	600	800	1000	1200	1500
Norton Pro Plus A975				•	•	•	•	•	•	•	•	•	•	•	•			
Blue Fire Norzon H835F		•	•	•	•		•											
Norton Pro A275				•	•	•	•	•	•	•	•	•	•	•	•			
H231	•	•	•	•	•	•	•		•		•							
Norton Pro Film Q275				•	•	•	•	•	•		•	•	•	•	•	•	•	•
H425*	•	•	•	•	•			•			•	•		•	•			

^{*} Available only as MTO

MINIMUM ORDER QUANTITY

DIAMETER (mm)	MINIMUM ORDER QUANTITY
Up to 50mm	4000 pieces
51 up to 90mm	2500 pieces
91 up to 125mm	2000 pieces
126 up to 200mm	1000 pieces
201 up to 420mm	200 pieces
Over 421mm	25 pieces

Norton offers a variety of discs, including the Multi-Air family, featuring Norton Cyclonic, the latest generation of discs for all applications from sanding to polishing. For more information, see the Norton Automotive Catalogue, or contact your local sales representative.



PRODUCT SELECTION GUIDE

Highly recommended 🗸 Recommended /





MATERIALS	APPLICATIONS	Q43N	Q421
		+++	+++
Wall and ceiling sanding	Surface preparation	//	✓
Wood floor sanding	Surface preparation	✓	/ /
	Between coats	✓	//

Q43N +++

- Sharp silicon carbide grain for aggressive and fast cut • Open-mesh structure for reduced clogging and longer life
- Ideal for wall and ceiling surface preparation
- Open self-grip backing can be used on machines with dust extraction to reduce dust generation when sanding plaster

Q421 /+++

- Silicon carbide abrasive for aggressive and fast cut
- Open-mesh backing to reduce clogging and loading
- Designed for wood floor sanding
- Can be used for wet or dry applications



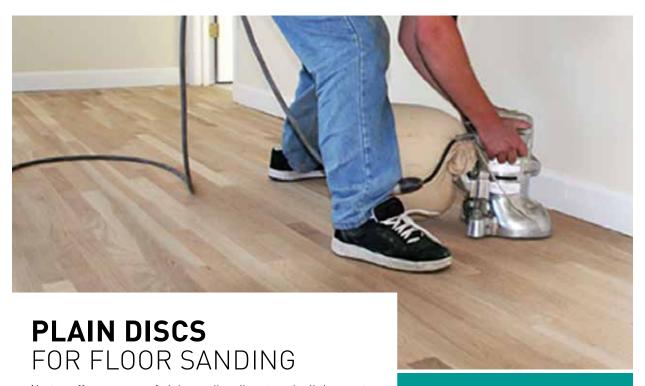


DIAxH (mm)	GRIT	PK QTY	ART NO.
	60	25	66623332303
225	80	25	66623332310
225	100	25	66623332311
	120	25	66623332313
	150	25	66623332318
	220	25	66623332322

Dimensions Key: DIM = Dimensions, DIA = Diameter

66623332310	
66623332311	406
66623332313	
66623332318	
66623332322	

GRIT	PK QTY	ART NO.
60	10	66261120519
80	10	63642536521
100	10	66261120517
120	10	66261120516
150	10	63642536524
180	10	63642515105
220	10	63642552254
	60 80 100 120 150 180	GRIT QTY 60 10 80 10 100 10 120 10 150 10 180 10



Norton offers a range of plain sanding discs to suit all the most commonly encountered applications.

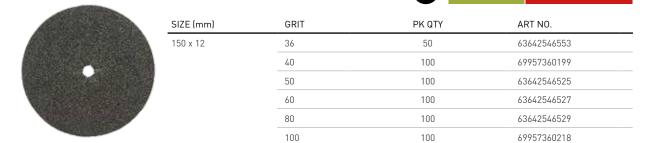
PRODUCT SELECTION GUIDE

Highly recommended 🗸 Recommended 🗸 MATERIAL / APPLICATIONS H425 H231 ++++ ++++ / 11 Surface preparation Wood (floor sanding) Coarse sanding 11 Stone Finishing 11

H425

- Sharp silicon carbide abrasive grain for aggressive and high cut rate
- Strong E-weight paper ideal for use on stone surfaces

• For dry applications only



H231

- High performance aluminium oxide abrasive with anti-static properties for longer life and excellent surface quality
- Semi-open / open coat (depending on grit size) to improve resistance to clogging
- Ideal for roughing, intermediate sanding and finishing of solid wood on floor



	•			
SIZE (mm)	GRIT	PK QTY	ART NO.	
350 x 40	40	10	63642540076	
	50	10	63642540078	
	60	10	63642540079	
	80	10	63642540080	

Dimensions Key: DIM = Dimensions, DIA = Diameter, H = Hole



To remove swirl marks left from edging, consider sanding the edges with an orbital sander. For best results and to avoid halos, use the same grit on the orbital sander as you previously used on the edger. The super sharp ceramic alumina grain will easily remove edger marks and produce a scratch free finish. See section self-grip discs for further information about range.

MADE-TO-ORDER PRODUCT AVAILABILITY

PRODUCT / GRIT	24	36	40	60	80	120	150	180	220	240	280	320	400	600	800	1000
H425	•	•	•	•	•	•			•	•	•	•	•	•	•	
H231		•	•	•	•	•	•	•	•	•	•	•	•			

Hole patterns for discs available as MTO, other sizes and hole patterns available on request

Available



- ø 115mm with 22,23mm slotted hole
- ø 125mm with 22,23mm slotted hole

MINIMUM ORDER QUANTITY

DIAMETER (mm)	MINIMUM ORDER QUANTITY
Up to 125mm	2000 pieces
126 up to 200mm	1000 pieces
201 up to 420mm	200 pieces
Over 421mm	25 pieces

AVAILABLE ON REQUEST DOUBLE SIDED ABRASIVE DISCS

Available on request a full range of 100% silicon carbide abrasive coated discs with abrasive on both sides for twice the life, quick switch, no PSA contamination, increased tear resistance.

Contact your local sales representative.



Beartex offers a wide range of floor pads from stripping right through to mirror gloss finishing. For general scrubbing and cleaning applications Beartex offers two pads that will remove surface dirt and grime to get the floor back in shape before recoating or buffing.

BEARTEX FLOOR PADS

DIA (mm)	CAP CODE	GRADE	PK QTY	ART NO.
STANDARD FL	OOR PADS 25mr	m THICK		
406	JF175	White Super Gloss	5	63642585892
	JF176	Red Buffer	5	63642585890
	JF177	Beige / White	5	63642585873
	JF178	Black Super Strip	5	63642585841
	JF180	Green Super Scrub	5	63642585877
	JF181	Blue Super Clean	5	63642585868
All standard floo	or pads come with	n an 89mm removable centrepiece		
THIN LINE FL	OOR PADS 15mm	THICK		
406	JU014	Black	10	63642585895
	JF068	Green	10	63642585899
	JF040	Beige	10	63642585903
	JF175	White	10	63642585904

PRODUCT SELECTION

Black Super Strip	A thick pad that is aggressive, durable and consistent, for wet stripping applications
Green Super Scrub	A heavy duty wet scrubbing pad that will remove the toughest scuff marks in heavily soiled traffic areas
Blue Super Clean	For general duty scrubbing or heavy spray cleaning jobs
Beige / White	For buffing and polishing, good for light traffic areas
Red Buffer	Generally used where a high gloss finish is desired when dry or spray buffing. It can also be used for light cleaning applications
White Super Gloss	A non-abrasive polishing/buffing pad, used dry or with a fine mist to yield a mirror gloss shine

PRODUCT SELECTION GUIDE

MATERIALS / APPLICATIONS	HIGHLY RECOMMENDED	RECOMMENDED	SUITABLE
Wood - floor sanding	JF178	JF181	JF177

NOTES	



WHEELS

Flap wheels Convolute wheels Rapid Strip wheels

10	Rapid Blend unitised wheels
31	High strength discs



Flap wheels conform to intricate shapes and contours. Designed to deliver a consistent finish with a uniform rate of cut, they wear away evenly and without

residue, continually exposing fresh abrasives.

Wheels are designed with a 3 or 6mm steel shank which runs through the wheel creating better balance, a reduction of chatter, and reduced operator fatigue. They also permit quick changes on air tools when using other

Flap wheels with shaft achieve their best performance at a recommended speed of 15-25m/s, which optimises stock removal, surface finish, thermal load of the workpiece and toll wear.

PRODUCT SELECTION GUIDE

Highly recommended 🗸 🗸

abrasive products.









MATERIALS	NORTON QUANTUM	NORZON R822	R427*	METAL R207Plus
	++++	++++	++++	+++
Stainless steel, inox and duplex	//	✓		
Inconel, titanium and super alloys	11	✓		
Carbon steel, construction steel and mild steel	√ √	/ /		//
Cast iron	✓	//		//
Non-ferrous metal (brass /aluminium)			//	11
Hard and soft wood		//	✓	✓
Composite materials			//	✓
Stone, concrete			//	✓
Glass, plastic			//	✓

^{*} Made to order



NORTON QUANTUM +++++

HIGH PERFORMANCE

- The best choice for use on stainless steel, inconels, chromium cobalt, titanium and extremely hard materials
- Aggressive cut removes defects quickly and effectively
- Additional supersize layer minimises heat build-up on the workpiece for a cooler cut and longer life
- CERAMIC ALUMINIUM OXIDE grain for greatest durability, longest life on tough applications and stainless steel







Dimensions Key: DIM = Dimensions, DIA = Diameter, W = Width, S = Spindle

FLAP WHEELS WITH SPINDLE

NORZON R822

- Self-sharpening zirconia alumina grain for use on stainless steel and resistant alloys
- Ideal for grinding, shaping, blending, edge breaking and weld removal
- Aggressive cutting action means a faster finish per part, maximising throughput
- Achieves a good linear finish thanks to load resistance for a regular cut rate







	DIM DIAxWxS (mm)	GRIT	PK QTY	ART NO.	RECOMMENDED SPEED (RPM)
ASSISTED VIEW	30x20x6	40	10	66261033325	9500 -15900
		60	10	66261139984	
		80	10	66261139986	
	40x20x6	40	10	69957300004	7100 - 12000
Sall Market State		60	10	69957300006	
All Mary		80	10	69957300007	
I CPEC	60x30x6	40	10	63642539952	4800 - 7900
V SPEC CHECK		60	10	63642536547	
Reducing the working		80	10	63642539953	
pressure and the peripheral	80x30x6	40	10	63642539954	3600 - 6000
speeds of the abrasive wheel, results in reduced heat generation on the workpiece and the tool, eliminating burn marks and improving finish.		60	10	63642539955	
		80	10	63642536548	
	80x50x6	40	10	69957300015	3600 - 6000
		60	10	63642578253	
		80	10	69957300019	

Formerly X-Treme R822

METAL R207Plus



- Excellent cut rate even at low-pressure when used for finishing operations
- A universal product which achieves a good finish on steel and stainless steel
- New generation of premium aluminium oxide grain provides an aggressive cut yet long product life
- Conforms to the workpiece thanks to the flexible cotton backing





	DIM DIAxWxS (mm)	GRIT	PK QTY	ART NO.	RECOMMENDED SPEED (RPM)
3mm SHAFT					
	15x15x3	60	10	66261139936	19000 - 31800
ANN COLOR		80	10	66261139944	
		120	10	66261139945	
		180	10	66261139947	
	30x10x3	60	10	66261139974	9500 - 15900
+25% PERFORMANCE		80	10	63642536733	
UPGRADE		120	10	66261139976	
† +25% performance upgrade		180	10	66261139978	



n SHAFT	00.40.			FF (0 (6 = 1 = 1 = 1	4/000 0000
ANNIE III.	20x10x6	40	10	77696007699	14300 - 23900
		60	10	66261193703	
		80	10	66623329045	
		120	10	66261137904	
	25x20x6	40	10	66261100608	11500 - 19000
-		60	10	66261106190	
		80	10	77696086608	
		120	10	66261137918	
	30x10x6	40	10	66261138103	9500 - 15900
		60	10	63642545207	
		80	10	63642537371	
		120	10	63642552728	
	30x15x6	40	10	66261056890	9500 - 15900
		60	10	63642513148	
		80	10	63642561466	
		120	10	63642551593	
		180	10	66261138106	
		240	10	63642547341	
	30x30x6	40	10	66261138108	9500 - 15900
		60	10	66254410858	
		80	10	66261063210	
		120	10	66261138109	
	40x15x6	40	10	63642539937	7100 - 12000
		60	10	63642533099	
		80	10	63642533098	
		120	10	63642533094	
	40x20x6	40	10	63642539938	7100 - 12000
		60	10	63642546771	
		80	10	63642546768	
		120	10	63642546760	
	50x20x6	40	10	63642546774	5700 - 9500
		60	10	63642531870	
		80	10	63642533097	
		120	10	63642546759	
	50x30x6	40	10	63642539943	5700 - 9500
		60	10	63642534251	
		80	10	63642561879	
		120	10	63642531863	
	60x15x6	40	10	63642546773	4800 - 7900
		60	10	69957360901	
		80	10	63642546767	
25% RMANCE		120	10	63642546758	
RADE		180	10	66261138277	
performance upgrade		240	10	69957360903	

FLAP WHEELS WITH SPINDLE

	DIM DIAxWxS (mm)	GRIT	PK QTY	ART NO.	RECOMMENDED SPEED (RPM)
6mm SHAFT					
and Ille	60x20x6	40	10	63642536738	4800 - 7900
		60	10	63642531869	
		80	10	63642531866	
		120	10	63642531862	
	60x30x6	40	10	63642536737	7100 - 12000
William .		60	10	63642531868	
		80	10	63642531865	
		120	10	63642531861	
		180	10	66261090663	
		240	10	63642546694	
		320	10	63642546727	
	80x30x6	40	10	69957360911	5700 - 9500
		60	10	63642531867	
		80	10	63642533096	
		120	10	63642534250	
	80x50x6	40	10	69957360914	5700 - 9500
+25% PERFORMANCE UPGRADE		60	10	63642559718	
		80	10	69957360916	
⁺ +25% performance upgrade		120	10	69957360917	



To prevent unnecessary tool wear, use a coarser grit size instead of increasing contact pressure. For a finer surface finish, increase the cutting speed. Using the same grit size, the finish will be rougher on softer materials.





METAL R207PLUS - SLOTTED FLAP WHEELS



- A universal product which achieves a good finish The aluminium oxide grain provides an on steel and stainless steel
- The slotted flaps improve flexibility and ease of use, conforming easily to contours and hard to reach areas
- aggressive cut yet long product life
- Good cut rate on low-pressure finishing operations with ability to leave a very good finish

	DIM DIAxWxS (mm)	GRIT	PK QTY	ART NO.	RECOMMENDED SPEED (RPM)
SLOTTED FLAP WHEELS					
	30x15x6	40	10	66261135702	9500 - 15900
		80	10	66261135714	
	60x30x6	40	10	66261135790	4800 - 7900
		80	10	66261135792	
	80x50x6	40	10	66261135797	3600 - 6000
+25% PERFORMANCE		80	10	66261135799	
		120	10	66261135801	
UPGRADE		240	10	66261135803	
† +25% performance upgrade		320	10	66261135804	

Dimensions Key: DIM = Dimensions, DIA = Diameter, W = Width, S = Spindle Formerly BDX R207Plus

MADE-TO-ORDER PRODUCT AVAILABILITY

PRODUCT / GRIT	36	40	60	80	120	150	180	240	320
NORTON QUANTUM R928		•	•	•	•				
NORZON R822	•	•	•	•	•	•			
R427	•	•	•	•	•	•	•	•	
METAL R207		•	•	•	•	•	•	•	•

MINIMUM ORDER QUANTITY

MINIMUM ORDER QUANTITY
250 pieces

Coated Abrasives / 115 www.nortonabrasives.com



BEARTEX SPINDLE MOUNTED FLAP WHEELS

Non-woven surface finishing flap wheels are an ideal choice for a variety of blending and finishing applications common in the metal fabrication, welding and polishing industries. Flap wheels conform to intricate shapes and contours. Designed to deliver a consistent finish with a uniform rate of cut, they wear away continually, exposing fresh abrasives.

There are two types of non-woven flap wheels: those made with only non-woven flaps, where finishing is the primary application, and interleaved wheels, made with coated abrasive and non-woven flaps. The interleaved wheels are less conformable but more rigid for higher stock removal and must always be run in the direction indicated by the arrow on the product label.

FLAP WHEEL TYPES

Mounted on a 6mm diameter spindle, for use on straight line die grinders for removal of oxidation, paint, corrosion and generating grain finishes.

BEARTEX NON-WOVEN FLAP WHEELS

- Non-woven only abrasive flaps
- Ideal for finishing large and awkward components
- Can be used for metals, wood, composite and plastics
- Less aggressive than conventional coated abrasive flap wheels

BEARTEX INTERLEAVED FLAP WHEELS

- BearTex non-woven abrasive interleaved with coated abrasive
- Soft yet aggressive, creating a "firmer" wheel that provides a higher rate of cut
- The ratio of coated abrasive to non-woven flaps can be altered to suit particular applications
- Ideal for deburring and grain finishing on stainless steel







APPLICATION GUIDE

	COARSE (GRI	FINE (FINISHING					
COATED GRIT	40	60	80	120	180	240	320
NON-WOVEN GRADE	COARSE		MEDIUM		FINE	VERY FINE	
Preparing metal for painting		•	•				
Blending out medium machine marks		•	•				
Blending metal surfaces			•	•			
Applying light scratch pattern			•	•	•		
Fine blending and cleaning				•	•	•	
Metal finishing and polishing						•	•

COATED / INTERLEAF FLAP WHEELS

BEARTEX FLAP WHEELS HEAVY DUTY



- Durable, heavy duty wheel for blending and finishing with up to 2x longer life
- Enhanced Clean Bond™ resin coverage for consistent uniform surface finish, with no smearing
- · Premium aluminium oxide grain for improved cut rate



NON-WOVEN FLAP WHEEL



DIM DIAxWxS (mm)	GRADE	CAP CODE	PK QTY	ART NO.
60x30x6	Medium A	F2316	10	66261117932
80x40x6	Medium A	F2316	10	66261117934
100x50x6	Medium A	F2316	10	66261117936

Dimensions Key: DIM = Dimensions, DIA = Diameter, W = Width, S = Spindle

BEARTEX FLAP WHEELS

DIM

- Provides a gentle cushioning action for use on contoured and shaped surfaces
- Consistent and uniform finish with no risk of gouging
- Vibration free for a consistent finish without smearing or component discolouration





	DIAxWxS (mm)	GRADE	INTERLEAVED GRIT	CODE	PK QTY	ART NO.
	30x20x6	Medium A	-	F2300	10	66261032155
		Fine A	-	F2401	10	66261032160
And the second	40x20x6	Medium A	-	F2300	10	66261032156
		Fine A	-	F2401	10	66261032161
		Very Fine A	-	F2501	10	66261032165

Dimensions Key: DIM = Dimensions, DIA = Diameter, W = Width, S = Spindle

 $C\Delta P$

Coated Abrasives / 117 www.nortonabrasives.com

BEARTEX SPINDLE MOUNTED FLAP WHEELS

DIM DIAxWxS	(mm) GRADE	INTERLEAVED GRIT	CAP CODE	PK QTY	ART NO.
60x30x6	Fine A Interleaved	60	F2401	10	63642549639
	Fine A Interleaved	100	F2401	10	63642549640
	Fine A Interleaved	150	F2401	10	63642549641
	Coarse	-	F2202	10	66261032167
	Medium A	-	F2300	10	66261032157
	Medium S	-	F4300	10	66261053048
	Fine A	-	F2401	10	63642549650
	Fine S	-	F4401	10	63642515902
	Very Fine A	-	F2501	10	63642515905
80x50x6	Fine A Interleaved	60	F2401	10	7660705179
	Fine A Interleaved	100	F2401	10	63642515544
	Fine A Interleaved	150	F2401	10	63642515545
	Coarse	-	F2202	10	63642586113
	Medium S	-	F4300	10	66261053053
	Fine A	-	F2401	10	63642515583
	Fine S	-	F4401	10	63642515614
	Very Fine A	-	F2501	10	63642515628
100x50x6	Fine A Interleaved	60	F2401	10	63642515907
	Fine A Interleaved	100	F2401	10	63642515908
	Fine A Interleaved	150	F2401	10	63642515909
	Fine A	-	F2401	10	63642515903
	Fine S	-	F4401	10	63642515904
	Very Fine A	-	F2501	10	63642515906

Other specifications are available MTO. Please contact your local sales or customer service representative for more information.

BEARTEX FLAP WHEELS TR+ MOUNTED



• Perfect for quick change facilities, where continuous production and operation are important







DIM DIAxWxS (mm) GRADE		CAP CODE			ART NO.	
60x30xTR	Medium A	F2316	10	66261124072		

Dimensions Key: DIM = Dimensions, DIA/D = Diameter, W = Width, S = Spindle

Use with TR+ holder for quick change capability. Also available in interleaved and TR+ in large and small diameter wheels.

BACK-UP PADS TR+ ATTACHMENT (TR+ - SL4)





TYPE	DENSITY	MAX RPM	PK QTY	ART NO.
Plastic back-up pad with 6mm spindle	Hard	15000	1	63642586196

For 100mm Speedlok TR+ discs



GRINDING TOOLS AND KITS

Our new Norton pneumatic die grinder quickly and comfortably accomplishes many portable applications without changing machines – including jobs for abrasive specialties (cartridge and spiral rolls...), small diameter flap wheels, mounted points, and carbide burrs. Equip your new die grinder with the complete line of Norton die-grinding abrasive products and it will run longer, at peak efficiency.

PNEUMATIC DIE GRINDER

WITH 6MM COLLET, MAX RPM 25000 (0,9 HP)

- Extremely versatile and productivityenhancing; includes a 6mm collet to accommodate numerous abrasive products: specialties (including cartridge and spiral rolls, spirabands, cones), mounted flap wheels, mounted points, and carbide burrs
- Excellent value proposition: this is a solid tool sold at a GOOD-tier price
- Achieve better tool handling, along with reduced fatigue, from the ergonomic and streamlined non-slip grip
- Their small size also enhances control and finishes while their light weight provides additional control, less vibration for operator comfort, and the ability to get into small parts
- Double-bearing spindle generates superb concentricity, reducing vibrations and allowing longer use, while producing finer finishes



COLLET DIAMETER (mm)	HORSEPOWER	TOOL WEIGHT	AIR CONSUMPTION (l/min)	RECOMMENDED OPERATING PRESSURE:	ART NO.
6	0.9	0.65 kg	85	6.2 bar	69957341008





Air tools require regular lubrication throughout the life of the tool. The air motor and bearing use compressed air to power the tool. Because moisture in compressed air will rust the air motor, it must be lubricated daily.

An inline oiling device is recommended.

Before using the machine add 1-2 drops of oil in the machine air inlet



This in an UNGUARDED tool and should NEVER be used with cut-off discs. Never use any product that has a MAX RPM rating less that the RPM marked on the tool.

PNEUMATIC DIE GRINDER GRINDING TOOLS AND KITS

NORTON PNEUMATIC DIE GRINDER **PROFESSIONAL KIT**

GRINDING TOOLS AND KITS

Our new Norton pneumatic die grinder, quickly and comfortably accomplishes many portable applications without changing machines - including jobs for abrasive specialties (cartridge and spiral rolls...), small diameter flap wheels, mounted points, and carbide burrs. Equip your new die grinder with the complete line of Norton die-grinding abrasive products and it will run longer, at peak efficiency.



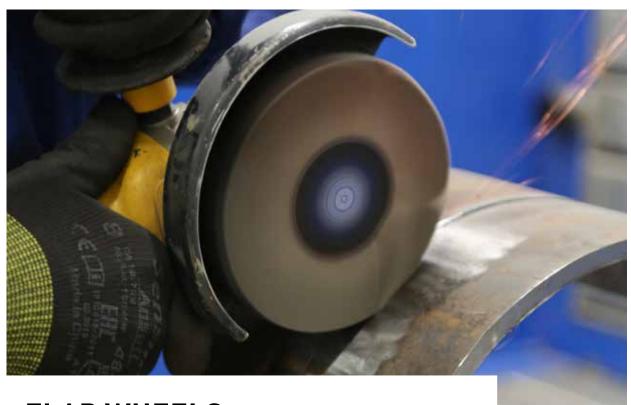
PNEUMATIC DIE GRINDER



COMPATIBLE WITH 6MM SHAFTS TOOLS. MAX RPM 25000 (0,9 HP)

• A complete assortment of our premium specialties (including cartridge, spirabands, cones), mounted flap wheels, mounted points, and carbide burrs, complete with pneumatic die grinder machine

(IT CONTENTS	ITEM ART NO.	PK QTY	KIT ART NO.
Norton pneumatic die grinder (6mm) 25000 RPM	69957341008	1	,
Norton professional tool bag: 38x23x28cm	78072710141	1	
Norton Metal carbide burr Shape A12,7x25mm CUT D 60L70	66261146497	1	
Norton Metal carbide burr Shape F12,7x25mm CUT D 60L70	66261146540	1	
Mounted point shape A21 25x25mm 3NQ P80 0 VS	61463688956	10	
Mounted point shape A38 25x25mm 86A P60 O VS	66253054946	10	
Norton Quantum flap wheel 30x15x6mm P60	66261154300	10	
Norton Metal flap wheel 30x15x6mm P120	63642551593	10	
BearTex flap wheel 30x20x6mm AOME	66261032155	5	69957366029
Small unitised wheels 25x25x6mm Fine	66261014883	10	
mm threaded mandrel for unitised wheel	66261077832	1	
Blaze spiraband 15x30mm P60	66623331569	10	
Rubber expanding mandrel for spirabands 15x30x6	7660705182	1	
Norzon abrasive cone 20x15x63mm P50	66261176657	10	
Rubber expanding mandrel for cones 20x14x63 150x30x6mm	7660740439	1	
Blaze cartridge roll 6x38x3mm C80	66261128986	25	
Steel mandrel for cartridge rolls 3x25x6mm	63642556791	1	_



FLAP WHEELS WITH INTERNAL M14 THREAD

Norton flap wheels with internal M14 thread are ideal for sanding contours and uneven surfaces, while delivering a uniform cut rate for a consistent finish when blending, deburring, and finishing in metal fabrication and welding industries. Flap wheels conform to intricate shapes and contours and are easy to operate; no adjustments, dressing or preparation is required before or during the operation.

Norton flap wheels are more forgiving than other abrasives, reducing the risk of flattening, gouging or surface deformation, meaning fewer rejected parts, and better long term productivity.

NORTON QUANTUM HIGH PERFORMANCE +++++



- Excellent results on stainless steel, inconels. chromium cobalt, titanium and extremely hard materials
- Aggressive cut removes defects quickly and effectively
- Additional supersize layer minimises heat build-up on the workpiece for a cooler cut and longer life
- Ceramic aluminium oxide grain provides the longest life even in tough applications





	DIAxWxTH (mm)	GRIT	PK QTY	ART NO.	SPEED (RPM)
	115x20 M14	40	5	69957307345	6700 - 8300
		60	5	69957307350	
		80	5	69957307353	
PAG		120	5	69957307354	
Van de la companya de	125x20 M14	40	5	69957307355	6700 - 8300
		60	5	69957307356	
		80	5	69957307359	
		120	5	69957307360	

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FLAP WHEELS WITH INTERNAL M14 THREAD

METAL R207Plus



- A universal wheel for use on steel and stainless steel, can also be used for paint removal and on plastic or wood
- Excellent cut rate in low-pressure finishing operations, leaves a very good finish
- The new generation of premium aluminium oxide grain provides an aggressive cut yet long product life
- Quick and easy to mount on an angle grinder





	DIM DIAxWxTH (mm)	GRIT	PK QTY	ART NO.	RECOMMENDED SPEED (RPM)
	115x20 M14	40	5	66261121351	6700 - 8300
- METAL		60	5	66261121353	
		80	5	66261121411	
		120	5	66261121415	
To Paylone Name (Paylone)	125x20 M14	40	5	66261121426	6700 - 8300
+25% PERFORMANCE		60	5	66261121427	
		80	5	66261121428	
		120	5	66261121429	
+ +25% performance up	grade	180	5	66261121432	

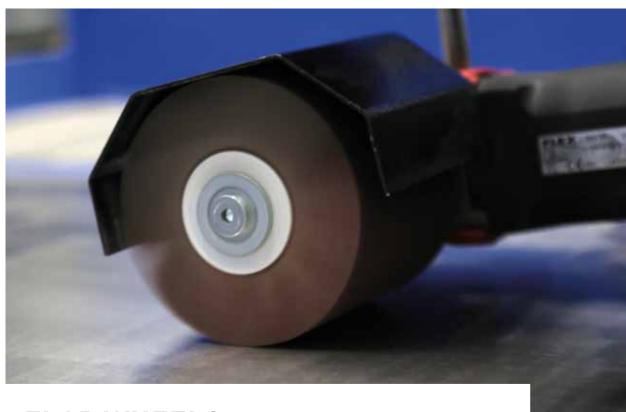
Dimensions Key: DIM = Dimensions, DIA = Diameter, W = Width, TH = Thread Formerly BDX R207Plus



To prevent unnecessary tool wear, use a coarser grit size instead of increasing contact pressure. For a finer surface finish, increase the cutting speed. Using the same grit







FLAP WHEELS FOR SATINEX MACHINES

These versatile wheels are used on portable machines and are compatible with the most commonly used systems. Satinex wheels consist of a core of radially bonded strips of abrasive flaps, ideal for fine grinding work on large areas and uneven surfaces, delivering a consistent finish with a uniform rate of cut in blending, deburring and finishing applications in metal fabrication, welding and polishing industries. They can also be used for decorative finishing, thanks to the product structure of abrasive flaps anchored by a resin core at the centre, which provides excellent flexibility and very smooth surface finish.

Flange mounted flap wheels perform best at a recommended speed of 15-30m/s. At this speed, abrasive flaps stand up straight due to the centrifugal force, with only the edges in contact with the workpiece, optimising stock removal and surface finish whilst avoiding thermal load of the workpiece and tool wear.

NORZON R822



- Self-sharpening zirconia alumina grain for use on stainless steel and resistant alloys
- Ideal for grinding, shaping, blending, edge breaking and weld removal
- · Aggressive cutting action means a faster finish per part, maximising throughput
- Achieves a good linear finish thanks to load resistance for a regular cut rate







DIM DIAxWxS (mm)	GRIT	PK QTY	ART NO.	RECOMMENDED SPEED (RPM)	
100x100x19.1	40	1	66261139934	2900 - 5800	
	60	1	66261138390		
	80	1	66261138391		

Dimensions Key: DIM = Dimensions, DIA = Diameter, W = Width, S = Spindle Formerly X-Treme R822

FLAP WHEELS FOR SATINEX MACHINES

METAL R207Plus +++



- An excellent choice where superior finish is required, or for low-pressure applications
- A universal wheel for use on steel and stainless steel, can also be used for paint removal and on plastic or wood
- The new generation of premium aluminium oxide grain provides an aggressive cut yet long product life
- Conforms easily to the workpiece









DIM DIAxWxS (mm)	GRIT	PK QTY	ART NO.	RECOMMENDED SPEED (RPM)
100x100x19.1	40	5	66261139847	2900 - 5800
	60	5	66261138377	
	80	5	66261138378	

Dimensions Key: DIM = Dimensions, DIA = Diameter, W = Width, S = Spindle

Formerly BDX R207Plus





Beartex Satinex wheels provide a cushioned abrasive action which not only works well on flat areas, but is also ideal for use in finishing operations on uneven surfaces. These versatile wheels are used on portable machines.

BEARTEX

- For use on portable, variable speed machines
- Wide range of different grades
- For applications from rust removal to a satin finish
- Flap wheel construction ensures a perfect linear finish for repair and touch-up jobs



APPLICATION GUIDE

INDUSTRY	APPLICATION	PRODUCTS
Stainless steel fabricators	Grain finishing on sheets, removing imperfections	Satinex non-woven Medium A
Architectural hardware	Finishing brass aluminium and steel, satin finishing	Satinex non-woven fine and very fine for bright linear finishes
Metal working	Cleaning and removing scales, oxide and rust	Satinex RapidStrip
Food processing	Weld blending, satin finishing with extended life	Satinex polyurethane

BEARTEX WHEELS FOR SATINEX MACHINES

SATINEX NON WOVEN





APPLICATION	DxTxB (mm)	CAP CODE	GRADE	MAX RPM	PK QTY	ART NO.
Blending / 1 satin finishing	110x100x19	F2200	Coarse A	5700	1	63642557218
		F2316	Medium A Heavy Duty	5700	1	66261124068
		F2300	Medium A	5700	1	63642557404
		F2400	Fine A	5700	1	63642557405
		F2504	Very Fine A	5700	1	63642557406
		F4306	Medium S	5700	1	63642556878

SATINEX INTERLEAVED

APPLICATION	DIM DxTxB (mm)	CAP CODE	GRADE	MAX RPM	PK QTY	ART NO.
Blending /	110x100x19	F2200	Coarse A + P80	5700	1	63642557407
fine graining		F2309	Medium A + P80	5700	1	07660707431
		F2300	Medium A + P150	5700	1	63642557408
		F4402	Fine S + P150	5700	1	63642556741

SATINEX POLYURETHANE

APPLICATION	DIM DxTxB (mm)	CAP CODE	GRADE	MAX RPM	PK QTY	ART NO.
Blending / satin finishing	110x100x19	P2W01	Coarse	5700	1	63642557410

SATINEX RAPID STRIP

APPLICATION	DIM DxTxB (mm)	CAP CODE	GRADE	MAX RPM	PK QTY	ART NO.
Cleaning / corrosion removal	110x100x19	R4101	Extra Coarse (SiC)	5700	1	63642557184

SATINEX NON WOVEN

APPLICATION	DIM DxTxB (mm)	CAP CODE	GRADE	MAX RPM	PK QTY	ART NO.
Cleaning /	110x50x19	F2200	Coarse A	5700	2	69957336455
blending / finishing		F2316	Medium A Heavy Duty	5700	2	66261124067

SATINEX INTERLEAVED

APPLICATION	DIM DxTxB (mm)	CAP CODE	GRADE	MAX RPM	PK QTY	ART NO.
Blending / fine graining	110x50x19	F2200	Coarse A + P60	5700	2	66261180082

Dimensions Key: DIM = Dimensions, D = Diameter, T = Thickness, B = Bore Other configurations and sizes are available



FLANGE MOUNTED FLAP WHEELS

Flange mounted flap wheels have a continual rate of wear as they constantly expose new abrasive grains when in use. Ideal for sanding contours and uneven surfaces as they conform well to intricate shapes thanks to the flap construction. The product structure; abrasive flaps anchored by a resin core at the centre, provides great flexibility and very smooth surface finish. A consistent finish is always maintained due to the uniform cut rate, especially on aluminium and stainless steel parts where they can be used for blending, deburring, finishing applications in metal fabrication, welding and polishing.

Flange mounted flap wheels perform best at a recommended speed of 38-42m/s. At this speed, the abrasive flaps stand up straight due to the centrifugal force, where only the edges are in contact with the workpiece, optimising stock removal and surface finish whilst avoiding thermal load of the workpiece and tool wear.

METAL R207Plus +++



- The ultimate choice where superior finish is required or for low-pressure applications
- For universal use on steel and stainless steel, can also be used for paint removal and on plastic or wood
- Excellent cut rate, imparting a good finish on curves and contours
- The new generation of premium aluminium oxide grain provides aggressive cut and longer life







DIM DIAxWxB (mm)	GRIT	PK QTY	ART NO.	RECOMMENDED SPEED (RPM)
150x25x25	80	2	63642546728	4800-5400
	120	2	63642546740	
150x50x25	40	1	66261140555	4800 - 5400
	60	1	63642546712	
	80	1	63642546729	
	120	1	66261140556	
	80	1 1 1	63642546729	

Formerly BDX R207Plus

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FLANGE MOUNTED FLAP WHEELS

	DIM DIAxWxB (mm)	GRIT	PK QTY	ART NO.	RECOMMENDED SPEED (RPM)
	165x25x32	40	2	63642547170	4300 - 4900
		60	2	63642546711	
		80	2	63642546730	
		120	2	63642546742	
	165x50x32	40	1	66261140608	4300 - 4900
		60	1	63642561961	
		80	1	63642546731	
A STATE OF THE STA		120	1	63642546743	
	200x25x35	80	1	63642547175	3600 - 4000
		120	1	66261140611	
	200x50x35	80	1	63642546732	3600-4000
		120	1	66261140614	
	250x50x35	80	1	63642546733	2900-3200
		120	1	63642546745	

Dimensions Key: DIM = Dimensions, DIA = Diameter, W = Width, B = Bore

MADE-TO-ORDER PRODUCT AVAILABILITY

FLW DIAMETER (mm)	25	30	40	50	80	100	Minimum order quantity
150	•	•	•	•	•	•	10pcs
165	•	•	•	•	•	•	10pcs
200	•	•	•	•	•	•	10pcs
250	•	•	•	•	•	•	10pcs
300	•	•	•	•	•	•	10pcs
355	•	•	•	•	•	•	10pcs



Formed by mounting sheets of Beartex around a centre core. The tightly packed piece forms the spokes of a wheel. This construction makes flap wheels the most conformable of all Beartex wheels providing a cushioning action which is ideal for use on uneven or irregular surfaces, as well as flat areas.

BEARTEX FLAP WHEEL TYPES

- 1. NON-WOVEN FLAP WHEELS (standard for stock)
- 2. INTERLEAVED FLAP WHEELS (made-to-order)

Both in variable sizes with widths from 10 to 2000mm. Available in a wide range of abrasive types, grits and densities for metal and woodworking.

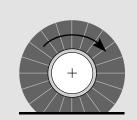
INTERLEAVED FLAP WHEELS

Interleaved wheels are more aggressive than standard Beartex, due to the coated abrasive flaps found inside the wheel. This creates a "firmer" wheel that provides a higher rate of cut. The ratio of coated flaps to non-woven flaps can be altered to suit particular applications.

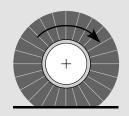
Ideal for deburring and grain finishing on stainless steel. Available in both spindle and flange mounted versions. Flange mounted interleaved wheels can be shaped to match the profile, e.g. a wood moulding.

DENSITIES

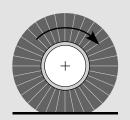
The different densities facilitate a versatility ranging from soft cushioning pads to hard cleaning and finishing tools. The density of a wheel can be increased (hardened) by adding more flaps, as shown below:



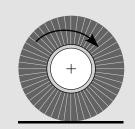
SD: Soft density



MD: Medium density



HD: Hard density



HDEX: Extra Hard density

BEARTEX FLANGE MOUNTED FLAP WHEELS

BEARTEX FLAP WHEEL APPLICATION GUIDE

SGA MCC	GRADE	MD	OLD QUALITY NAME	GRAIN TYPE	APPLICATION
F2212	Coarse A	DAB01	-	Aluminium Oxide	Aggressive, very durable cutting capacityConstant removal of material and corrosion
F2301/ F2312	Medium A	D0005	D05/DIS	Aluminium Oxide	Specially made for stainless steel and aluminiumMatt satin finish
F2305	Medium A Heavy Duty	-	-	Aluminium Oxide	 Works faster with a coarser finish than F2301 Higher durability with ability to withstand sharp edges Specially engineered to avoid smearing
F2401/ F2412	Fine A	D0097	D97	Aluminium Oxide	Fine matte satin finish on stainless steelDefuzzing wood, scuffing paints and varnishes
F2402	Fine A	D0002	D02	Aluminium Oxide	 Use for all metals Contains anti-smearing resin to reduce rework
F2501/ F2519	Very Fine A	D0091	D91	Aluminium Oxide	Finishing all metalsCleaning and removing oxide on soft metals
F4301	Medium S	D0054	D54	Silicon Carbide	Semi bright satin finish on stainless steelSurface preparation on aluminium before anodising
F4401	Fine S	D0071	D71	Silicon Carbide	 For stainless steel, aluminium and brass Weld surface preparation Wood, sanding of primer, scuffing paints and varnishes
F4501	Very Fine S	D0089	D89	Silicon Carbide	Semi bright satin finish on aluminium, brass and precious metalsWood, uniform finish, scuffing varnishes
F4601/ F4612	Ultra Fine S	D0098	D98	Silicon Carbide	Light cleaning on metalsLight finishing on precious metals, scuffing varnishes
F4801	Micro Fine S	D0075	D75	Silicon Carbide	Super finishing

BEARTEX FLANGE MOUNTED FLAP WHEELS



MEDIUM DENSITY

- The most conformable of all BearTex wheels. Suitable for a wide range of applications Ideal for use on contoured surfaces and parts with awkward geometry
- Gentle cushioning action achieves a consistent and uniform finish with no risk of gouging
- including corrosion removal, cleaning and surface finishing







	DIM DxWxB (mm)	GRADE	CAP CODE	PK QTY	ART NO.
	150x50x50	Coarse A	F2212	1	66261083026
		Medium A	F2312	1	66261082061
		Med A Heavy Duty	F2316	1	66261083074
		Fine A	F2412	1	66261083078
		Very Fine A	F2519	1	66261083082*
		Ultra Fine S	F4612	1	66261083084*
	200x50x76	Coarse A	F2212	1	66261083027
		Medium A	F2301	1	63642588131
		Med A Heavy Duty	F2316	1	66261083075
		Fine A	F2412	1	66261083079
		Very Fine A	F2504	1	63642588137
		Very Fine S	F4501	1	63642588145

^{*}Made-to-order. More sizes available Made-to-order.

Refer to accessories section at the back of this catalogue for information on metal bushings. The catalogue includes details of all stock products but other options are available in various sizes, grades and densities using Norton's made to order facility. Please contact your local sales or customer service representative for more information.

Dimensions Key: DIM = Dimensions, DIA = Diameter, W = Width, B = Bore



RAPID FINISH CONVOLUTE WHEELSFOR BENCH & PEDESTAL GRINDERS

Convolute wheels are formed by wrapping non-woven web material around a centre core and bonding the layers together to create an abrasive wheel. Wheels are available in different diameters, grades and densities for burr, flash and rust removal, reducing surface roughness, blending welds and scratch patterns on stainless steel, polishing welds and applying decorative finishes.

MADE-TO-ORDER SOLUTIONS



VORTEX RAPID FINISH

- Aggressive, fast-cutting stock removal with excellent form holding
- Proprietary Vortex engineered grain and bond ensures a uniform finish throughout the entire wheel life
- Ideal for deburring, blending and finishing automotive gears and turbine engine components
- Provides a decorative finish on plumbing fixtures and can be used for metal finishing and weld blending during fabrication
- All Vortex convolute wheels are made to order



RAPID FINISH GP A/O & S/C

- For general deburring, blending and finishing on metals, wood and glass
- Clean Bond $\mbox{\it TM}$ resin technology prevents smearing and loading, even on soft metals
- Wheels have 10%-30% longer life and finish faster thanks to the new grain/bond configuration, reducing the need for wheel changes and increasing productivity
- Wheels can be used wet or dry

CONVOLUTE WHEELS FOR BENCH & PEDESTAL GRINDERS

RAPID FINISH DCS (OPEN MESH)



- Open mesh construction for blending, rust removal and applying decorative contrast finishes in low to moderate speed applications
- Silicon carbide abrasive for fine finishing with light pressure



DxWxB(mm)	GRADE	MCC	PK QTY	ART NO.	
150x50x25	Fine	C4401	2	63642549645	
	Medium	C4301	2	66261058510	

RAPID FINISH DMA RED



- For light deburring, blending and final/decorative finishing
- Generates uniform satin and antique finishes
- Ideal for blending and finishing as well as surface preparation before buffing, polishing and applying decorative finishes



DxWxB (mm)	GRADE	MCC	DENSITY	PK QTY	ART NO.
150x25x25	Medium	C2303	5	3	66261007936
150x50x25	Medium	C2303	5	2	66261007957
200x25x76	Medium	C2303	5	3	66261007831
200x50x76	Medium	C2303	5	2	66261007904

RAPID FINISH LIGHT FINISHING



- For light deburring, blending, fine finishing and polishing applications
- Ideal for finishing parts with tight tolerances, without altering geometry
- Substantial extended wheel life in a soft, conformable wheel



DxWxB (mm)	REF CODE	ABR TYPE	GRADE	мсс	DENSITY	PK QTY	ART NO.
150x25x25	D16	SiC	Fine	C4411	6	3	66254403708
	D17	SiC	Fine	C4411	7	3	66254403709
	D18	SiC	Fine	C4411	8	3	66254421573
200x25x76	D16	SiC	Fine	C4411	6	3	66261095702
	D17	SiC	Fine	C4411	7	3	66254409924
	D18	SiC	Fine	C4411	8	3	66254421577*

Dimensions Key: D = Diameter, W = Width, B = Bore, T = Thickness, S = Spindle

* Made to order



PK QTY

ART NO.

RAPID FINISH SERIES 1000 LONG LIFE



ABRASIVE

TYPE

GRADE

- Ideal for general deburring, blending, finishing and polishing applications
- Starting point for deburring, blending, polishing and finishing applications

DxWxB

(mm)

REF

CODE

• Durable, long life construction with versatile application range, consistent cut rate and shed resistance

DENSITY

• Smear proof and cool cutting on light deburring applications

мсс



	(mm)	CODE	TYPE	GRADE	MCC	DENSITY	QIY	ART NU.
	150x10x25	D17	SiC	Fine	C4408	7	4	63642549767
	150x12x25	D17	SiC	Fine	C4408	7	4	66261018628
		D17	Alox	Medium	C2308	7	4	66261018857
		D17	SiC	Medium	C4408	7	4	69957397880
		D18	SiC	Fine	C4408	8	4	66261018773
		D18	Alox	Medium	C2308	8	4	66261018789*
		D19	SiC	Fine	C4408	9	4	66261094584*
	150x25x25	D16	Alox	Fine	C2406	6	3	66261055204
			Alox	Medium	C2308	6	3	66261055205*
			SiC	Medium	C4308	6	3	66261055202
	150x25x25	D17	SiC	Fine	C4408	7	3	66261055223
		D18	SiC	Fine	C4408	8	3	66261018774
		D18	SiC	Medium	C4308	8	3	66261096033*
		D19	SiC	Fine	C4408	9	3	07660705227
		D19	SiC	Medium	C4308	9	3	66261055371
	150x50x25	D17	Alox	Fine	C2406	7	2	66261008897*
	200x20x76	D19	SiC	Medium	C4408	9	3	66261023567
	200x25x76	D16	SiC	Fine	C4408	6	3	66261019693
				Medium	C4308	6	3	66261055208
		D17	Alox	Fine	C2406	7	3	69957352389
			SiC	Fine	C4408	7	3	66261018639
			Alox	Medium	C2308	7	3	66261055232
			SiC	Medium	C4308	7	3	69957394610
		D18	SiC	Fine	C4408	8	8	66261018775
	200x25x76	D18	Alox	Medium	C2308	8	3	66261018855
		D18	SiC	Medium	C4308	8	3	66261018673
		D19	SiC	Fine	C4408	9	3	66261018641
		D19	SiC	Medium	C4308	9	3	66261018997
	200x50x76	D16	SiC	Medium	C4308	6	2	66261055211
		D16	Alox	Fine	C2406	6	2	66261009252
			SiC	Fine	C4408	7	2	66261018877
			Alox	Medium	C2308	7	2	66261055235
		D18	SiC	Fine	C4408	8	2	66261019629
		D19	SiC	Fine	C4408	9	2	66261055276
	250x12x127	D17	SiC	Fine	C4408	7	4	69957352396
		D18	SiC	Fine	C4408	8	4	66261019221*
			Alox	Medium	C2308	8	4	69957352395*
			SiC	Medium	C4308	8	4	66261019005
		D19	SiC	Fine	C4408	9	4	66261019222*
	250x25x127	D18	Alox	Medium	C2308	8	4	69957352402

* Made to order

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CONVOLUTE WHEELS FOR BENCH & PEDESTAL GRINDERS

RAPID FINISH SERIES 4000



- lines on exotic metals
- For heavy deburring, edge breaking and removing parting The product of choice when edge and form holding are of primary importance



DxWxB (mm)	REF CODE	ABRASIVE TYPE	GRADE	MCC	DENSITY	PK QTY	ART NO.
150x12x25	D49	SiC	Fine	C4406	9	4	66261004021
150x25x25	D48	SiC	Fine	C4406	8	3	66261008658
		Alox	Medium	C2306	8	3	66261004208
200x25x76	D48	SiC	Fine	C4406	8	3	66261004123
		Alox	Medium	C2306	8	3	66261004165

BORE HOLE REDUCTION BUSHINGS

25	5	10			
		10	100 to 150	2	66261080522*
		13	-	2	66261080523
		16	-	2	66261080524*
		20	-	2	66261080525*
		22	-	2	66261080526*
50)	13	150 to 200	2	66261082442*
50)	13	150	2	66261080527*
		16	-	2	66261080528
		25	-	2	66261080529*
		32	-	2	66261080530*
76	5	25	200	2	66261080531
		32	-	2	66261080532
		50	-	2	66261080514*
12	25	32	-	2	66261080534

Dimensions Key: D = Diameter, W = Width, B = Bore, T = Thickness, S = Spindle

^{*} Made to order



UNDERSTANDING THE PRODUCT

FAMILY NAME	PRODUCT REFERENCE	DENSITY	ABRASIVE TYPE	GRADE	CAP CODE
VORTEX	VTX	7,8,9	Alox	Medium	C2312
GENERAL PURPOSE	GP	5,6,7,8,9	Alox	Medium	C2315
	GP	5,6,7,8,9	Alox	Fine	C2408
	GP	5,6,7,8,9	SiC	Medium	C4315
	GP	5,6,7,8,9	SiC	Fine	C4415
	GP	5,6,7,8,9	SiC	Very fine	C4515
DCS	DCS	4	SiC	Very fine	C4501
	DCS	4	SiC	Fine	C4401
	DCS	4	SiC	Medium	C4301
DSS	DSS	4	SiC	Medium	C4302
DSA	DSA	4	Alox	Medium	C2302
METAL FINISHING	DMA	5	Alox	Medium	C2303
SERIES 1000 LONG LIFE	D1 6 A LL	6,7,8,9	Alox	Medium	C2308
	D1 7 A LL	6,7,8,9	Alox	Medium	C2308
	D1 8 A LL	6,7,8,9	Alox	Medium	C2308
	D1 9 A LL	6,7,8,9	Alox	Medium	C2308
	D16SLL	6,7,8,9	SiC	Fine	C4408
	D1 7 S LL	6,7,8,9	SiC	Fine	C4408
	D18SLL	6,7,8,9	SiC	Medium	C4308
	D19SLL	6,7,8,9	SiC	Medium	C4308
SERIES 4000	D4 8 A	8,9	Alox	Medium	C2306
	D48S	8,9	SiC	Fine	C4406
	D4 9 S	8,9	SiC	Fine	C4406



RAPID STRIP WHEELSFOR DIE GRINDERS

With their thick, strong synthetic fibres, extra coarse silicon carbide abrasive grain and open web construction, Rapid Strip wheels strip and clean fast, don't load or shred and last up to twice as long as other stripping products.

BLAZE RAPID STRIP WHEELS



- The best choice for removal of surface rust and residue, corrosion, light weld spatter, dirt, mill scale and other similar surface contaminants
- Blaze lasts 2x longer than competitor products thanks to the ceramic alumina long-lasting grain





•	Leaves a thoroughly cleaned surface for subsequen
	processes such as coating, painting and soldering

- Extremely versatile; can withstand aggressive use, but soft enough to prevent gouging and rework
- Apply pressure to strip or remove coatings; use lighter pressure to finish like a surface finishing wheel

DxWxB (mm)	CAP CODE	PK QTY	MAX RPM	ART NO.
STANDARD				
100x13x12	R9101	25	8000	66623304856
150x13x12	R9101	15	8000	66261099378
200x13x12	R9102	5	4500	66623393517
SPINDLE MOUNTED WHEELS				
100x13x6	R9101	5	8000	66623378059
150x13x8	R9101	10	5500	66623334482

Dimensions Key: D = Diameter, W = Width, B = Bore, T = Thickness, S = Spindle



RAPID STRIP



- General purpose wheels for removing coatings such as varnish on wood, metal and plastics
- Nylon fibre, flexible resin and extra coarse grain combine to provide aggressive performance, long life and improved
- Leaves a thoroughly cleaned surface, ready for the next stage of the process; coating, painting or soldering
- Will not load on sticky coatings, adhesives, soft metals, will not snag or shed



DxWxB (mm)	CAP CODE	PK QTY	MAX RPM	ART NO.			
STANDARD							
100x13x12	R4101	25	8000	63642585700			
150x13x12	R4101	15	5500	63642585703			
200x13x12	R4101	5	4500	63642585704			
SPINDLE MOUNTED - STANDARD (1 WHEEL)							
75x13x6	R4101	10	10000	63642557741			
100x13x6	R4101	10	8000	63642557742			
150x13x8	R4101	10	6000	63642557743			
SPINDLE MOUNTED - LARGE	AREA (2 WHEELS G	SANGED)					
75x25x6	R4101	5	10000	63642557744*			
100x25x6	R4101	5	8000	63642557745*			
150x25x8	R4101	5	6000	63642557746*			









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FOR DIE GRINDERS

Unitised wheels are made from compressed and bonded layers of non-woven abrasive for maintenance operations where an efficient, cost effective solution is needed for deburring, polishing, cleaning and finishing composites. The uniform construction maintains part tolerance and prevents cutting and gouging. Rapid Blend can be used on a variety of shapes and contours; wheels hold their shape well and don't need to be dressed as often. Wheels are also non-metallic so won't contaminate the workpiece.

VORTEX RAPID BLEND CLOSED



- For light weld bead and weld spatter removal, heavy deburring and finishing applications
- Proprietary engineered Vortex aluminium oxide aggregate grain provides aggressive, fast, stock removal, reduced cycle times, and increased part quality
- Reduces heat build-up on the workpiece which increases cut rate and helps the disc last up to 2x longer without shredding
- Special resin chemistry makes Vortex Rapid Blend ideal for deburring, even on sharp edges, without shedding or smearing





DxWxB (mm)	CAP CODE	GRADE	PK QTY	RPM	ART NO.
STANDARD					
50x6x6	U2305	VOR-7AM	60	22100	66261080270
75x3x6	U2305	VOR-5AM	40	18000	66261093448
	U2305	VOR-7AM	40	18000	66261191445
75x6x6	U2305	VOR-5AM	40	18000	66254414832
	U2305	VOR-7AM	40	18000	66261199696
75x13x6	U2305	VOR-7AM	20	18000	66261080267
125x6x22	U2305	VOR-5AM	20	9000	66254488602
150x6x25	U2305	VOR-5AM	8	7500	66254414167
	U2305	VOR-7AM	8	7500	66254407225
SPINDLE MOUNTED V	VHEELS				
150x13x8	U2305	ЗАМ	10	8000	66623375067

Dimensions Key: D = Diameter, W = Width, B = Bore, T = Thickness, S = Spindle



RAPID BLEND NEX



- Good choice for light deburring and blending
- Can be easily pre-formed for use on a wide variety of shapes/contours
- Imparts a bright finish on stainless steel with improved 2SF and 3SF light/soft density formulation
- Fine silicon carbide and flexible density unitised construction for a smooth controlled blending/finishing experience

• Excellent, consistent, smear-free finish



DxWxB (mm)	CAP CODE	GRADE	PK QTY	RPM	ART NO.
50x6x6	U4401	NEX-2SF	20	18000	63642585756
	U2401	NEX-4AF	20	22100	63642585755*
75x3x6	U2301	NEX-8AM	20	18100	63642585831
75x6x6	U2301	NEX-2AM	10	12100	63642585763*
	U4401	NEX-2SF	10	12100	63642585768
	U4401	NEX-3SF	10	12100	63642571113
	U2401	NEX-6AF	10	18100	63642585771
	U2301	NEX-6AM	10	18100	66261081929*
	U2301	NEX-8AM	10	18100	63642585774
125x6x22	U4401	NEX-2SF	20	6000	66254488603
	U4401	NEX-3SF	20	6000	66254489419
150x6x13	U2301	NEX-2AM	10	4500	66261019412
	U4401	NEX-2SF	10	7500	66261019416
	U4401	NEX-3SF	8	7500	66261016691
	U2301	NEX-6AM	10	7500	66261019414
150x6x25	U4401	NEX-2SF	8	7500	66261017050
	U4401	NEX-3SF	8	7500	66254489421
150x13x13	U2301	NEX-2AM	5	4500	63642585818
	U4401	NEX-2SF	5	7500	63642585812
	U4401	NEX-3SF	4	7500	66261015826
	U2401	NEX-4AF	5	7500	63642585815
	U2301	NEX-8AM	5	7500	63642585824
150x25x13	U2301	NEX-2AM	5	4500	69957350267
	U4401	NEX-2SF	5	5000	69957350272
	U2401	NEX-4AF	5	7500	69957350269
150x25x25	U2301	NEX-2AM	5	4500	63642585789*
	U4401	NEX-2SF	5	5000	63642585795
	U2401	NEX-4AF	5	7500	63642585792
200x25x25	U2301	NEX-2AM	5	3500	63642585796
	U4401	NEX-2SF	5	4000	63642585797

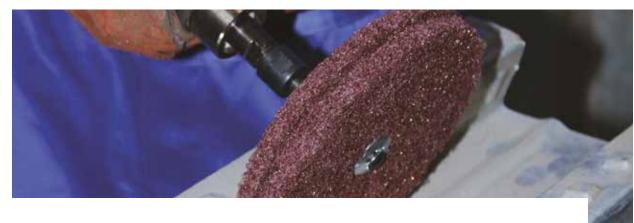
* Made to order

SMALL UNITISED WHEELS / BOBS



DxWxB (mm)	CAP CODE	GRADE	PK QTY	ART NO.
25x25x5	U4401	NEX 2SF	50	66261014883
25x25x5	U2301	NEX 6AM	50	66261014908
Use with threaded mandrel	-	-	1	66261077832

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HIGH STRENGTH DISCS FOR DIE GRINDERS

Made of a strong nylon web impregnated with abrasive grain and resin, BearTex high strength discs are designed for demanding applications on a wide range of materials. A general purpose product which produces a light satin finish.

Applications include rust/oxide or coating removal, pipe ID and OD polishing, casting cleaning, highlighting (antiquing), contaminant removal, removal of handling marks, gasket removal, cleaning and blending of surface imperfections, prepping prior to soldering, removal of filling materials, cleaning angles and odd shapes. Will not stretch or shed.

BEARTEX HIGH STRENGTH DISCS



- The new, improved specification means discs last longer and have better resistance to tearing when used on burrs and sharp edges
- Can be combined with multiple wheels to form a very flexible, durable wheel for use on bench or straight grinders
- Strong, smear-proof resin binders help produce light satin finishes
- Different sizes are available for mounting on bench grinders or portable die grinders using a mandrel



DxB (mm)	CAP CODE	GRADE	PK QTY	ART NO.
100x8	F2303	Medium	10	66254429562
150x12	F2303	Medium	10	77696087534
	F2506	Very fine	10	77696087535
200x12	F2303	Medium	10	77696087536
	F2506	Very fine	10	77696087537

BEARTEX LAP MOPS



- Ideal for hard-to-reach areas and intricate shaped components
- Use with a mandrel



D (mm)	CAP CODE	GRADE	PK QTY	MAX RPM	ART NO.	
150	F2520	Very fine	5	4000	07660707529*	

Dimensions Key: D = Diameter, W = Width, B = Bore, T = Thickness, S = Spindle

* Made to order



HIGH-STRENGTH CROSS BUFFS



- Ideal for use on internal pipes and tubes
- For quick deburring and cleaning

DxT (mm)	GRADE	PK QTY	MAX RPM	ART NO.
38x13	Medium	100	18000 - 23000	08834189308
38x13	Very fine	100	18000 - 23000	08834189307
Mandrel MM32-4**	-	1	18000 - 23000	63642587136*



* Made to order

MANDRELS FOR DIE GRINDERS

	LxSxW (mm)	FOR USE WITH WHEEL DIA (mm)	MAX USABLE WHEEL WIDTH (mm)	BORE HOLE DIA (mm)	PK QTY	ART NO.
MANDRELS WITH WASHERS						
RapidStrip/Plain discs	55x6x40	Up to 150	13	10 to 12	1	07660707022
RapidStrip/Plain discs/large dia Unitised wheels >150mm	55x8x38	Up to 200	13	10 to 13	1	07660707023
MANDRELS						
Unitised wheels	60x6	Up to 75	6	6 & 10	1	63642586234
Unitised wheels	75x6	Up to 75	6 to 12	6 & 10	1	63642586236
Unitised wheels	85x6	Up to 150	12 to 25	6	1	63642586239
THREADED MANDREL						
Unitised wheels/bobs	25x6	25	25	5	1	66261077832







Dimensions Key: L = Length, W = Width, B = Bore, S = Spindle

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^{**} Use Mandrel MM32-4 to mount 38mm Cross Buffs

NOTES			

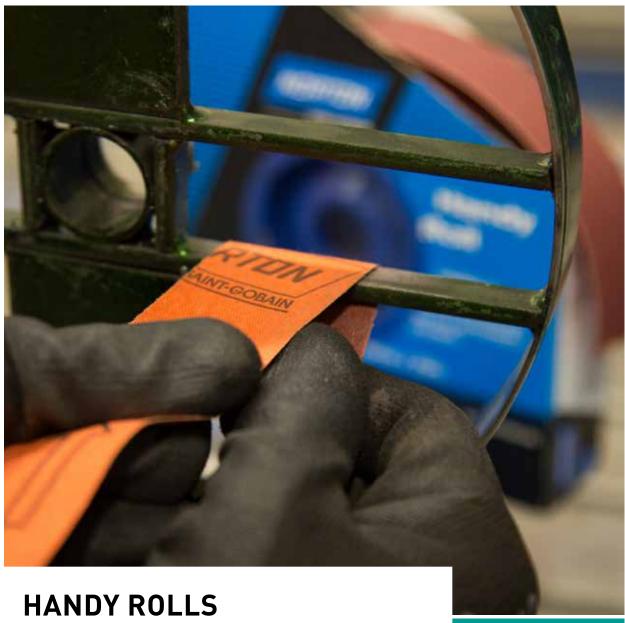


ROLLS

Handy rolls
Paper & cloth rolls
Norton MeshPower roll

144	Beartex rolls
148	Rotolo Foam rolls

	54
1	56



Engineered for flexibility and fast cutting, cloth handy rolls tear cleanly and straight without shedding and are packed in a protective dispenser to eliminate waste and damage.

PRODUCT SELECTION GUIDE

Highly recommended ✓✓ Recommended ✓ Suitable ○







MATERIALS / APPLICATIONS	R222	F2316	K20N
	++++	++++	+++
General purpose (metal, wood, etc.)	//	✓	0
Scouring and light deburring	//	11	✓
Scale and rust removal	✓	✓	//
Blending and fine sanding	✓	11	✓
Polishing lathe turnings, rolls and cylinders, and blending machine tool marks	✓	//	0



R222 ++++

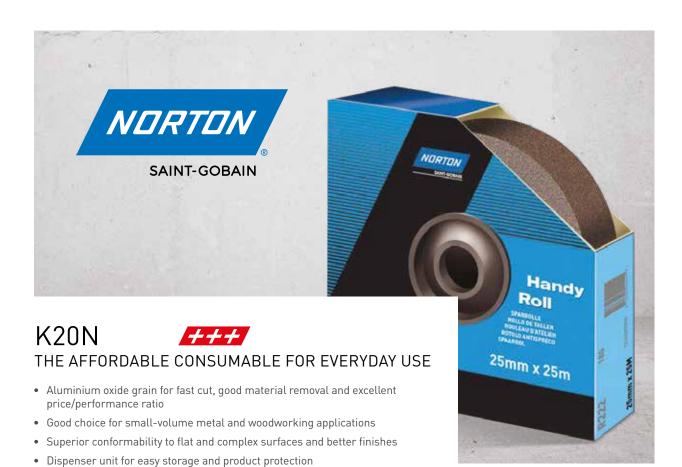
- Versatile aluminium oxide abrasive for hand sanding of wood and metal
- For general purpose maintenance applications, offers extra durability and even wear
- Flexible cotton backing ideal for sanding profiled surfaces and round steel parts
- Dispenser unit for easy storage and product protection





	DIM WxL (mm/m)	GRIT	PK QTY	ART NO.
	38mmx25m	40	1	63642531828
		50	1	63642531826
		60	1	63642531824
		80	1	63642531821
Marrie of		100	1	63642531817
		120	1	63642531812
Homes 7km		150	1	63642531809
		180	1	63642531806
		220	1	63642531803
-/		240	1	63642531800
V SPEC		280	1	63642536425
- CHECK		320	1	63642531797
R222 handy rolls are designed		400	1	63642531794
for manual applications.		600	1	63642539150
The high flexibility of the cloth in combination with the wide	50mmx25m	40	1	63642531829
grit range, from coarse to		50	1	63642531827
fine, provides an excellent tool		60	1	63642531825
for a variety of applications including deburring, rust		80	1	63642534758
removal and finishing metal.		100	1	63642531818
Ç .		120	1	63642531814
		150	1	63642531810
		180	1	63642531807
		220	1	63642531804
		240	1	63642531801
		280	1	63642536426
		320	1	63642531798
		400	1	63642531795
		600	1	63642534757

Dimensions Key: DIM = Dimensions, W = Width, L = Length















DIM WxL	GRIT	PK QTY	ART NO.
25mm x 50m	60	1	78072748684
	80	1	77696092902
	120	1	78072748683
	220	1	78072748681
38mm x 25m	40	1	69957393819
	50	1	69957375534
	60	1	69957377802
	80	1	69957374796
	100	1	69957375075
	120	1	69957375074
	150	1	66261159485
	180	1	69957393824
	220	1	69957375532
	240	1	66261153914
50mm x 25m	40	1	69957378214
	50	1	69957372295
	60	1	69957373478
	80	1	69957375076
	100	1	69957374797
	120	1	69957393823
	150	1	69957377808
	180	1	66261153913
	220	1	69957377801
	240	1	69957375077

Dimensions Key: DIM = Dimensions, W = Width, L = Length

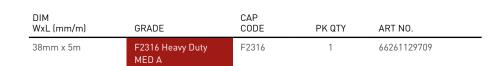


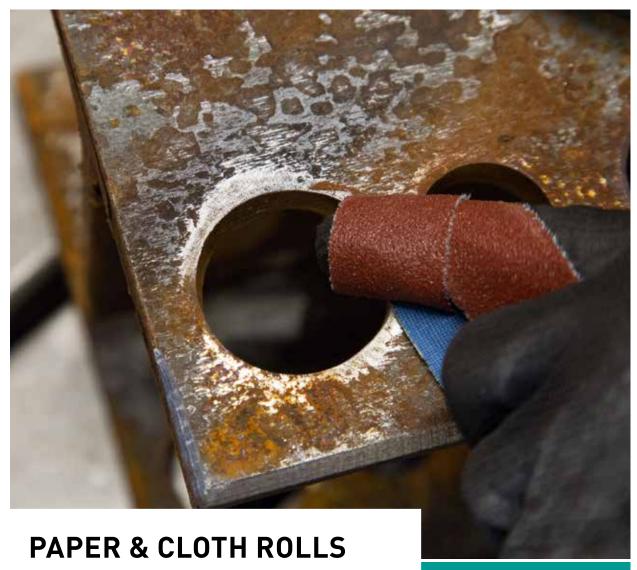
FERR. & NON FERR.

NON-WOVEN F2316

- Flexible 3D handpad material in roll form for for hand and machine use
- Complementary to R222 and K20N handy rolls, for finishing
- Premium aluminium oxide grain gives a performance boost, cleaning, blending deburring and finishing in record time
- Ideal to access awkward corners and recesses







Coated abrasive rolls are ideal for fast easy sanding, light deburring and polishing of wood, paint, metal and plaster, rust and scale. They can be torn to exact lengths as needed.

PRODUCT SELECTION GUIDE

Highly recommended ✓✓ Recommended ✓ Suitable ○	0		5		
		PAPER ROLLS		CLOTH	ROLLS
MATERIALS / APPLICATIONS	H231 Strong F-Weight paper	A275 Fibre-reinforced latex, B-weight paper	G131F E-weight backing	R222 Flexible J-weight cotton cloth	K20N J-weight cotton cloth
	+++++	++++	+++	++++	+++
Metal	✓			11	0
Wood	//	✓	0		
Primer / paint / varnish	1	11	0		



H231 +++++

- Aluminium oxide grain for long life
- Open grain distribution and anti-static properties help reduce clogging
- Premium product for all types of wood and also suitable for surface finishing on metal
- Minimise dust when used with an appropriate extraction system













DIM WxL (mm/m)	GRIT	PK QTY	ART NO.	
120mm x 50m	60	1	63642539189	
	80	1	63642539187	
	120	1	63642539183	
	150	1	63642539181	
	180	1	63642546049	



Grinding non-conductive materials, such as wood, creates electrical charges in the abrasive that causes adhesion of the grinding dust to the abrasive. The anti-static properties of H231 ground the electrical charge though the coated abrasive and the machine preventing this adhesion, reducing clogging and longer product life.

NORTON PRO A275



- Premium heat-treated aluminium oxide abrasive blend for long life and fast cut rate
- Suitable for use on primer, paint filler and coating sanding (for automotive and transport applications) and wood
- Tear resistant fibre-reinforced latex for wet or dry sanding
- No-Fil® anti-loading third layer for better finish, loading resistance and extended life













DIM WxL (mm/m)	GRIT	PK QTY	ART NO.
100mm x 50m	80	2	63642591122
	120	2	63642591123
	150	2	69957391073
	180	2	63642591124
	220	2	63642590924
	240	2	63642590927
	320	2	63642591649
115mm x 50m	80	2	69957380739
	120	2	69957380761
	150	2	69957380765
	180	2	69957380767
	220	2	69957380769
	240	2	69957380777
	280	2	69957380778
	320	2	69957380779
	400	2	69957380781
	500	2	69957396696

G131F

- Aluminium oxide grain for fast cut, good material removal and excellent price/ performance ratio
- Versatile product for wood and plaster sanding
- Responsibly sourced, made with FSC mix certified paper backing
- Wide make-to-order availability







	DIM WxL (mm/m)	GRIT	PK QTY	ART NO.
	93mm x 50m	60	2	66623372547
		80	2	66623372548
		100	2	66623372549
		120	2	66623372550
	100mm x 50m	40	2	66623372536
		60	2	66623372537
		80	2	66623372538
		100	2	66623372539
		120	2	66623372540
	115mm x 50m	40	2	66623372551
		60	2	66623372204
		80	2	66623372535
		100	2	66623372552
		120	2	66623372545
		150	2	66623372205
		180	2	66623372558
		220	2	66623372554
	120mm x 50m	40	2	66623372542
		60	2	66623372543
		80	2	66623372553
		100	2	66623372541
1.3		120	2	66623372544

150

180

Dimensions Key: DIM = Dimensions, W = Width, L = Length

2

66623372556

66623372559



FSC® CERTIFICATION

Utilising responsibly sourced material and preserving natural resources is a high priority, look out for the FSC $^{\circ}$ logo next to products manufactured using FSC $^{\circ}$ certified paper.



R222 ++++

- Versatile aluminium oxide abrasive for hand sanding and handheld machine sanding
- For general purpose maintenance applications, offers extra durability and even wear
- Flexible cotton backing ideal for sanding profiled surfaces and round steel parts
- Long life in wood and metal applications







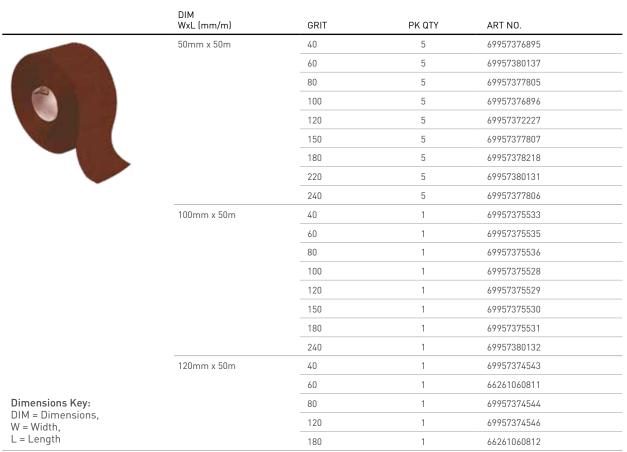


50mm x 50m	40	5	
	10		63642512909
	60	5	63642540086
	80	5	63642539135
	100	5	63642539136
	120	5	63642559727
	150	5	63642539208
	180	5	63642539137
	220	5	63642512916
	240	5	63642512917
	320	5	63642512918
	400	5	63642512919
100mm x 50m	40	1	63642536559
	60	1	63642560979
	80	1	63642531852
	100	1	63642531854
	120	1	63642531855
	150	1	63642545861
	180	1	63642531856
	240	1	63642531857
	320	1	63642545865
	400	1	63642545867
430mm x 50m	60	1	63642539142
	80	1	63642539143
	120	1	63642539145
	150	1	63642539146
	180	1	63642539147

K20N

- Aluminium oxide grain for fast cut, good material removal and excellent price/ performance ratio
- Ideal for general purpose maintenance applications





MADE-TO-ORDER PRODUCT AVAILABILITY

PRODUCT	BACKING	24	36	40	60	80	100	120	150	180	220	240	280	320	400	600	800
R222	Flexible J-weight cotton cloth		•	•	•	•	•	•	•	•	•	•	•	•	•	•	
R309*	Super flexible cotton cloth				•	•	•	•	•	•	•	•	•	•	•		
H231	Strong F-Weight paper		•	•	•	•	•	•	•	•	•	•	•	•	•		
R817*	Heavy polyester cloth	•	•	•	•	•	•										
A275	Fibre-reinforced latex, B-weight paper					•	•	•	•	•	•	•	•	•	•	•	•
K20N	J-weight cotton cloth			•	•	•	•	•	•	•	•	•					
G131F	E-weight backing			•	•	•	•	•	•	•	•						

*Made to order

MINIMUM ORDER QUANTITIES FOR MADE TO ORDER ITEMS (50m LONG)

DIMENSIONS (mm)	MINIMUM ORDER QUANTITY
Up to 25mm	20 pieces
26 up to 50mm	12 pieces
51 up to100mm	4 pieces
101 up to 200mm	2 pieces
Over 201mm	1 piece



NORTON MESHPOWER ROLLS

Norton MeshPower is a multifunctional abrasive, designed with thousands of holes, created by the unique mesh matrix structure. This hole structure allows dust extraction in any application.

- · Mesh backing enables excellent dust extraction, for a cleaner working environment and less clean up time
- No-Fil® technology prevents clogging for longer product life
- Can be used wet or dry
- Self-grip backing for a quick and easy change
- Can be used on many materials, flat and contoured surfaces, by hand or machine
- No defined hole pattern for fast, easy alignment with the back-up pad
- Easy to identify product type by grain colour

NEW MESHPOWER ROLLS CERAMIC #++++







CERAMIC ADVANTAGE

Ceramic grain provides the ultimate material removal, best productivity, longest life and finest finish.



BEARTEX ROLLS

BearTex non-woven rolls are ideal for a broad range of applications from cleaning and finishing to deburring and light polishing operations. The flexibility of BearTex products ensures constant contact with the surface and prevents cutting or gouging when working.

Rolls can be cut to the required size and folded to suit any application.

BEARTEX SLIT ROLLS

- Flexible 3D handpad material in roll form for hand and machine use
- Conforms to contours of work surface and provides a uniform finish
- Long life with resilient construction
- Ideal for blending and finishing applications on a variety of substrates

	DIM WxL (mm x m)	GRADE	CAP CODE	PK QTY	ART NO.
	100mm x 10m	Medium A	F2300	2	63642557499
		NEW Heavy Duty MED A	F2316	2	66261106168
		Fine A	F2401	2	66261018300
		Very Fine A	F2560	2	63642557738
		Very Fine A Long Life	F2504	2	66261018301
		Micro Fine A	F2801	2	63642557500
		Ultra Fine S	F4660	2	63642557501
	115mm x 10m	Very Fine A	F2560	2	63642557739
		Very Fine A Long Life	F2504	2	63642587694
		Ultra Fine S	F4660	2	63642557503
	120mm x 10m	General Purpose	F2568	2	63642515571



DIM WxL (mm x m)	GRADE	CAP CODE	PK QTY	ART NO.
125mm x 10m	Medium A	F2300	2	63642557504
	Fine A	F2401	2	66261018307
	Very Fine A	F2560	2	63642557740
	Very Fine A Long Life	F2504	2	66261018308
	Micro Fine A	F2801	2	63642557505*
	Ultra Fine S	F4660	2	63642557506
150mm x 10m	Medium A	F2300	2	63642557507
	<i>NEW</i> Heavy Duty MED A	F2316	2	66261106011
	Very Fine A	F2504	2	66261018312
	Ultra Fine S	F4660	2	63642557508*

*Made-to-order

BEARTEX ROTOLO ROLLS PRE-CUT

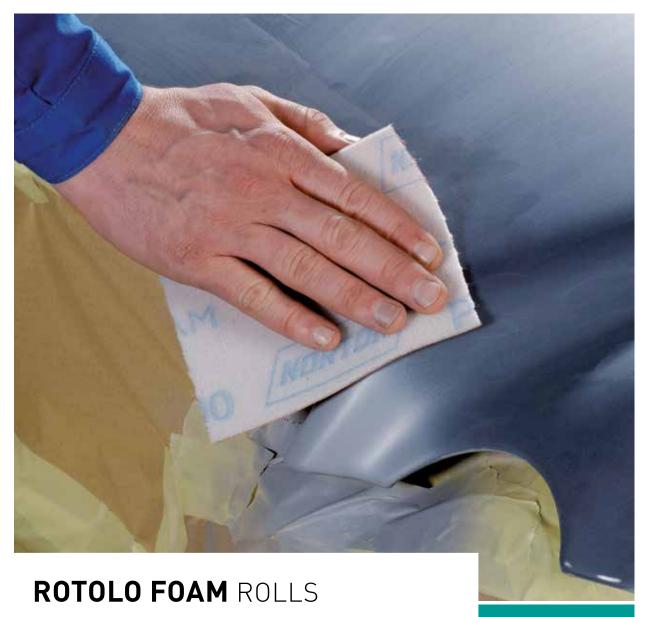
- Ideal storage and space saver with self dispensing function
- Rotolo rolls pre-cut every 150mm for easy pad size use
- Thinner web (Thinflex version) cuts faster, saves time, with no added effort from the user. Product can be scrunched, rolled and saves shelf space



DIM WxL (mm x m)	GRADE	CAP CODE	PK QTY	ART NO.
BEARTEX				
115mm x 10m	Very Fine A	F2504	1	77696009598
	Ultra Fine S	F4807	1	77696042071
	NEW Micro Fine A	F2802	1	66261124481
	NEW White	F0001	1	66261124480
THINFLEX				
115mm x 10m	Very Fine A	F2504	1	77696042073
	Ultra Fine S	F4807	1	77696042075

Dimensions Key: DIM = Dimensions, DIA = Diameter, W = Width





The special flexible and conforming foam backing allows a very good distribution of sanding pressure preventing over sanding and are ideal for fine sanding on round edges, contours and curves, providing an outstanding finish on primers and top coats. Rotolo Foam rolls are pre-perforated for easy handling by tearing cut sheets out of dispenser box.

PRODUCT SELECTION GUIDE

Highly recommended 🗸 🗸 Recommended 🗸		
MATERIALS	NORTON PRO A275	GOLD RESERVE A296
	++++	+++
Metal - fine sanding	√ √	✓
Wood - fine sanding	//	✓
Filler	//	✓
Varnish / paint / primer	//	✓
Composites /coatings	//	✓

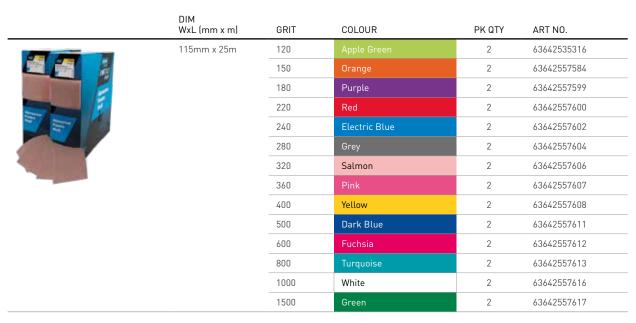


NORTON PRO A275



- Premium aluminium oxide foam rolls are water-resistant, for dry or wet sanding. Washable
- 25m long roll of pre-cut sheets, easy to use and economic
- Excellent for fine sanding with high finishing level
- Ideal for use on round edges, contours and curves without breaking through the paint surface





GOLD RESERVE A296



- Tough aluminium oxide grain produces a quick and cool cut
- Strong B weight latex / paper backing resists tearing
- · Conformable and flexible
- Water-based, non-loading stearate, resists loading

FERR. & NON FERR	5 4	PAINT/VARN. & HARD WOOD	

WxL (mm x m)	GRIT	PK QTY	ART NO.	
115mm x 25m	240	2	66261097596	
	280	2	66261097597	
	320	2	66261097598	
	400	2	66261097599	
	500	2	66261097600	
	600	2	66261097601	
	800	2	66261097602	
	WxL (mm x m)	WxL (mm x m) GRIT 115mm x 25m 240 280 320 400 500 600	WxL (mm x m) GRIT PK QTY 115mm x 25m 240 2 280 2 320 2 400 2 500 2 600 2	WxL (mm x m) GRIT PK QTY ART NO. 115mm x 25m 240 2 66261097596 280 2 66261097597 320 2 66261097598 400 2 66261097599 500 2 66261097600 600 2 66261097601

See the Norton Automotive Aftermarket catalogue for extended offer of A296 Rotolo Foam rolls

ΠІМ

Dimensions Key: DIM = Dimensions, W = Width, L = Length



Box labels are colour coded by grit size for easy product recognition. The colour-coding follows the Norton Pro grit colour-coding system

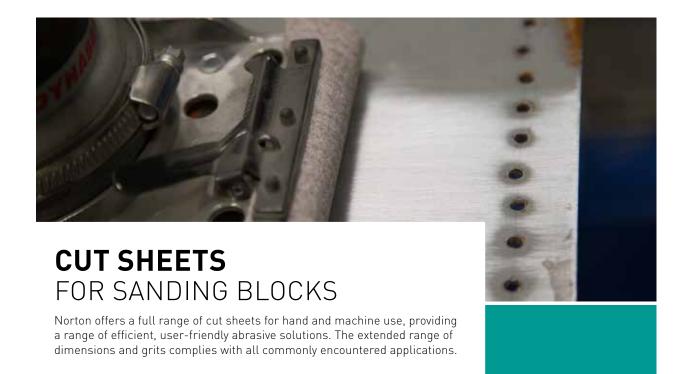
NOTES			



SHEETS & SPONGES

Cut sheets Sheets and hand pads Norton MeshPowerBeartex sheets and hand pads Abrasive sponges 161

169 171



PRODUCT SELECTION GUIDE CUT SHEETS

Highly recommended 🗸 Recommended 🗸 Suitable O NORTON NORTON **MESHPOWER** NORTON PRO NORTON PRO **ESHPOWER** MATERIAL **APPLICATION** G131F CERAMIC M920 ALOX M220 PLUS A975 Metal Coarse sanding 0 Finishing 0 Hard Wood Coarse sanding 11 0 / 11 / / Finishing 11 Soft Wood / 11 Coarse sanding // 11 / / Finishing Filler Aluminium/Metal 11 / 0 // / // 0 Polyester Varnish / Paint / Coarse sanding 11 0 11 Finishing 11 11 0 Composites / Coatings Sanding // 11 0 0 11 11 / Finishing // 11 Plaster Coarse sanding Finishing 11 // /

HOLE PATTERNS FOR CUT SHEETS

Norton offers a range of cut sheets with different hole patterns for dust extraction. Other hole patterns available on request.







70 × 125mm MeshPower

8 holes ø 10mm

115 × 280mm with no holes

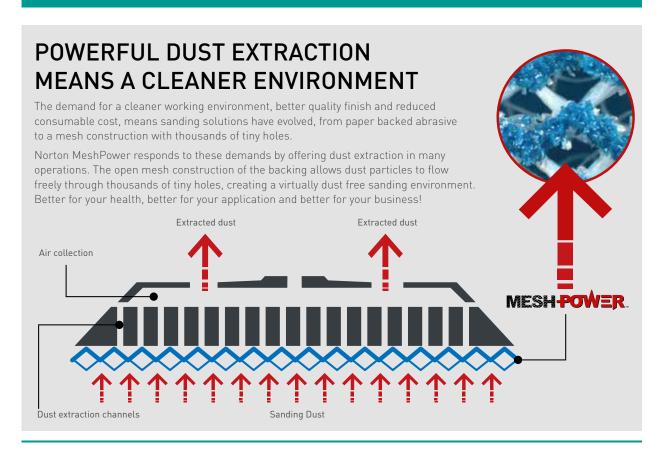


NORTON MESHPOWER SHEETS

An alternative to traditional perforated paper sheets, Norton MeshPower is a multifunctional abrasive, designed with thousands of holes, created by the unique mesh matrix structure. This hole structure allows dust extraction in any application.

- Mesh backing enables excellent dust extraction, for a cleaner working environment and less clean up time
- No-Fil® technology prevents clogging for longer product life
- Can be used wet or dry
- Self-grip backing for a quick and easy sheet change
- Can be used on many materials, flat and contoured surfaces, by hand or machine
- No defined hole pattern for fast, easy alignment with the back-up pad
- Easy to identify product type by grain colour





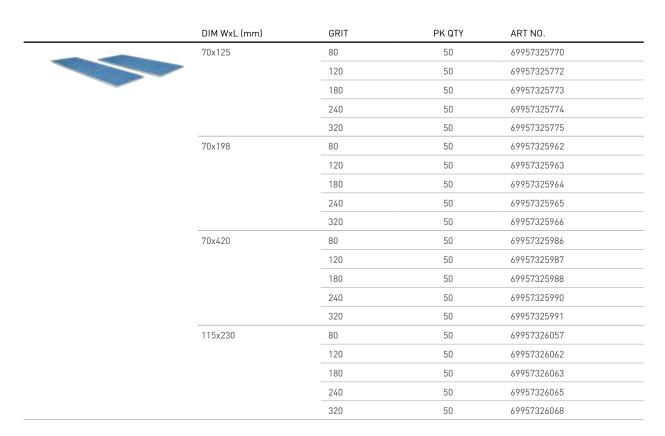


CERAMIC ADVANTAGE

Ceramic grain provides the ultimate material removal, best productivity, longest life and finest finish.

NEW MESHPOWER CUT SHEETS M920 CERAMIC





NEW MESHPOWER CUT SHEETS M220 ALUMINIUM OXIDE



	DIM WxL (mm)	GRIT	PK QTY	ART NO.
	70x198	80	50	69957326280
		120	50	69957326281
		180	50	69957326283
		240	50	69957326285
		320	50	69957326286
	70x420	80	50	69957326288
		120	50	69957326289
		180	50	69957326291
		240	50	69957326292
		320	50	69957326294



NORTON PRO PLUS A975 ++++



- Norton SG ceramic grain blended with heat treated aluminium oxide abrasive for the highest cut rate
- Extra durability and even wear, ideal for large surface areas
- Higher and faster cut rate with uniform scratch pattern
- Resists clogging during use thanks to the No-Fil® stearate layer

			NON FERR	PAINT/VARN, HARD WOOD
	DIM WxL (mm)	GRIT	PK QTY	ART NO.
	80 x 133	80	25	66261087406
	• • • •	120	25	66261087411
		180	25	66261187577
		240	25	66254478608
		320	25	66254478614
		400	25	66254478617

NORTON PRO A275



- Premium, heat-treated aluminium oxide abrasive for fast cut rate and improved performance
- The water based No-Fil® resists loading
- Universal cut sheet for multiple applications
- Unique fibre-reinforced latex paper for additional flexibility and tear resistance

DIM WxL (mm)	GRIT	PK QTY	ART NO.	
70 x 125	80	50	63642558002	
	100	50	63642585263	
	120	50	63642585272	
	150	50	63642558005	
	180	50	63642585274	
	220	50	63642585281	
	240	50	63642585284	
	320	50	63642558006	
		70 x 125 80 100 120 150 180 220 240	DIM WxL (mm) GRIT PK QTY 70 x 125 80 50 100 50 120 50 150 50 180 50 220 50 240 50	DIM WxL (mm) GRIT PK QTY ART NO. 70 x 125 80 50 63642558002 100 50 63642585263 120 50 63642585272 150 50 6364258005 180 50 63642585274 220 50 63642585281 240 50 63642585284

Dimensions Key: DIM = Dimensions, W = Width, L = Length

G131F

- Aluminium oxide grain for fast cut, good material removal and excellent price/ performance ratio
- Versatile product for wood and plaster sanding
- Made with FSC mix certified paper backing
- Wide made-to-order availability



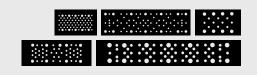


 DIM W x L (mm)	GRII	PKQIY	ART NO.
115 x 280	40	50	66623372533
	80	50	66623372576
	120	50	66623372581
	180	50	66623372579

Dimensions Key: DIM = Dimensions, W = Width, L = Length

SEE THE NORTON AUTOMOTIVE AFTERMARKET CATALOGUE FOR **A975 & H835 MULTIAIR CUT SHEETS**

Other sizes available on request.



MADE-TO-ORDER PRODUCT AVAILABILITY

PRODUCT / GRIT	36	40	60	80	120	150	180	220	240	280	320	400	500	600	800
MESHPOWER M920 CERAMIC				•	•		•		•		•				
MESHPOWER M220 ALOX				•	•		•		•		•				
NORTON PRO PLUS A975				•	•	•	•	•	•	•	•	•	•	•	•
BLUE FIRE NORZON H835F*		•	•	•	•		•								
NORTON PRO A275				•	•	•	•	•	•	•	•	•	•	•	•
H231*	•	•	•	•	•	•	•		•		•				
G131F		•	•	•	•	•	•								

• Available as make to order

HOLE PATTERNS FOR CUT SHEETS AVAILABLE AS MTO

Other sizes and hole patterns available on request



115 × 280mm 14 holes ø 10mm



93 × 180mm 8 holes ø 10mm



93 × 230mm 8 holes ø 10 mm



70 x 125mm



115 × 230mm 10 holes ø 10mm



93 × 230mm 8 holes ø 10 mr



115 × 280mm 10 holes ø 10mm



Delta 98 x 148 mm 7 holes ø 10 mm



Delta ø 96 mm 6 holes ø 8 mm on hole circle ø 52 mm

MINIMUM ORDER QUANTITY

DIAMETER (mm)	MINIMUM ORDER QUANTITY
80 x 133	1000 pieces
93 x 180	1000 pieces
93 x 230	1000 pieces
115 x 230	1000 pieces
115 x 280	1000 pieces
Delta 96mm	2000 pieces
Delta 98 x 148	1000 pieces



FSC® CERTIFICATION

Utilising responsibly sourced material and preserving natural resources is a high priority, look out for the FSC® logo next to products manufactured using FSC® certified paper.



PRODUCT SELECTION GUIDE

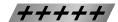
encountered industrial applications.

Highly recommen Recommended 🗸	• •	CLOTH	SHEETS	PAPER SHEETS	WATERPRO	OOF SHEETS
MATERIAL	APPLICATION	R222	K20N	NORTON PRO A275	T489	T100
		++++	+++	++++	++++	+++
Metal	Wet sanding				11	✓
	Dry sanding	11	✓			
Hard wood	Coarse sanding	11	✓			
	Light sanding & finishing			11		
Varnish /	Wet sanding				11	1
paint / primer	Dry sanding			11		

More products available in the Norton Automotive Aftermarket catalogue

SHEETS & HAND PADS FOR HAND SANDING

R222 CLOTH SHEETS



- Aluminium oxide abrasive
- Highly flexible J-weight cloth backing for use on curves and contours
- High quality universal product
- Tears cleanly and easily

FERR.& NON FERR.	4	PAINT/VARN, PLASTER & FILLER, HARD WOOD & SOFT WOOD	4	4





DIM WxL (mm)

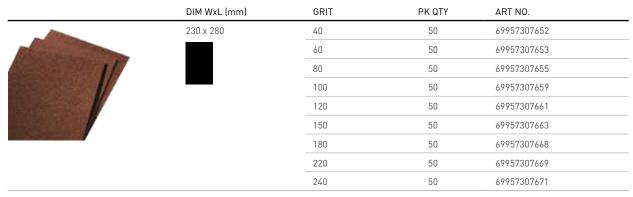
GRIT	PK QTY	ART NO.
40	25	63642531776
50	25	63642531777
60	25	63642531778
80	50	63642531779
100	50	63642531780
120	50	63642531781
150	50	63642531782
180	50	63642531783
220	50	63642531785
240	50	63642531786
280	50	63642531788
320	50	63642531789
400	50	63642531790
600	50	63642534613

K20N CLOTH SHEETS +++



- Aluminium oxide abrasive for aggressive cutting action on all dry sanding applications
- Heavy and light duty hand sanding depending on grit
- For use on wood and metal (rust removal to light finishing)
- Excellent price / performance ratio





Dimensions Key: DIM = Dimensions, W = Width, L = Length

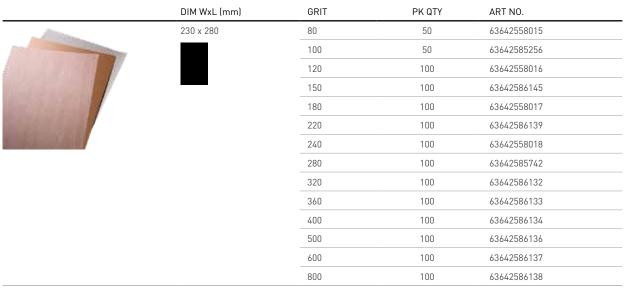


NORTON PRO A275 PAPER SHEETS



- Premium, aluminium oxide abrasive for fast cut rate and improved performance
- The water based No-Fil® improves resistance to clogging
- Faster cut rate and longer life
- Unique fibre-reinforced latex paper for additional flexibility and tear resistance





Dimensions Key: DIM = Dimensions, W = Width, L = Length

T489 WATERPROOF SHEETS



- Extremely sharp silicon carbide grain for hard and tough surfaces
- · Flexible backing for improved conformability to workpiece
- For use on lacquer, paint, metal, glass, stone, marble and plastic
- Waterproof paper backing for wet and dry sanding

			FERR. & NON FERR.	PAINT/ STONE STONE
	DIM WxL (mm)	GRIT	PK QTY	ART NO.
	230 x 280	60	50	63642532956
		80	50	63642532988
		100	50	63642532989
		120	50	63642532990
		150	50	63642532991
		180	50	63642532957
		220	50	63642532992
		240	50	63642532993
		280	50	63642532994
		320	50	63642532995
		360	50	63642532996
		400	50	63642532997
		500	50	63642532998
		600	50	63642532999
		800	50	63642533000
		1000	50	63642533001
		1200	50	63642533002

Coated Abrasives / 167 www.nortonabrasives.com

SHEETS & HAND PADS FOR HAND SANDING

T100 WATERPROOF SHEETS



- Aluminium oxide abrasive
- Waterproof paper backing for wet and dry sanding
- Multi-purpose product
- Excellent price / performance ratio







GRIT	PK QTY	ART NO.	
60	50	77696081101	
80	50	77696069788	
100	50	77696081102	
120	50	77696081103	
150	50	77696081104	
180	50	77696081105	
220	50	77696069787	
240	50	77696081106	
280	50	77696081107	
320	50	77696069784	
360	50	77696081108	
400	50	77696081109	
500	50	77696081110	
600	50	77696081111	
800	50	77696081112	
1000	50	77696081113	
1200	50	77696081114	
1500	50	63642531009	





Hand pads are ideal for a broad range of applications from cleaning and finishing to deburring and light polishing operations. The flexibility of Beartex products ensures constant contact with the surface and prevents cutting or gouging when working. Can be folded to suit hand / shape. Perforated pads for clean and easy tearing also available. These perforations allow for smooth, shred free split to create two smaller, easy to use 115mm x 150mm pads



BEARTEX HAND PADS

- Open mesh construction resists clogging
- Flexible, conforms to curves, contours and tight spaces easily, will not break
- Waterproof, washable and reusable
- Lasts longer than standard sandpaper and will not gouge the workpiece when used

	DIM W x L (mm)	GRADE	CAP CODE	PK QTY	ART NO.
HAND PADS					
	150x230	Extra Cut A	F2302	20	63642557491
		Heavy Duty	F2316	20	63642577268
		Medium A	F2300	20	63642557493
		Fine A	F2401	20	66261018286
		Very Fine A Long Life	F2504	20	66261018287
		Gen. Purpose Clean & Scour A	F2568	20	63642574103
		Medium S	F4300	20	66261039806
		Ultra Fine S	F4807	20	77696046252
		Micro Fine A	F2801	20	63642557277
		White Cleaning (Non Abrasive)	F0001	20	66261018283
	230x280	Very Fine A Long Life	F2504	20	66261018291
		Ultra Fine S	F4807	20	66261018292
PERFORATED HAND PADS (PRE-CUT)					
	150x230	Very Fine A Long Life	F2504	20	66261018293
		Ultra Fine S	F4807	20	66261018294

Coated Abrasives / 169 www.nortonabrasives.com

SHEETS & HAND PADS FOR HAND SANDING

THIN FLEX HAND PADS

- Thinner special coated web design cuts fast and saves time
- Ultra flexible so conforms even better to contoured surfaces for an ultra consistent scratch pattern
- Ideal for getting into tight spaces as pads can be scrunched and rolled
- Advanced web formation provides superior grain adhesion, durability and product life
- Ideal for woodworking, metalworking, maintenance operations as well as car body repair

 DIM WxL (mm)	GRADE	CAP CODE	PK QTY	ART NO.
115x230	Very fine A long life	F2543	4x25	63642506166
	Ultra fine S	F4614	4x25	63642506167
	Micro fine A	F2804	10x10	66261113519

Dimensions Key: DIM = Dimensions, W = Width, L = Length

PRODUCT SELECTION GUIDE

CAP CODE	GRADE	ABRASIVE	TARGET MATERIAL	APPLICATION	BENEFITS
HAND F	PADS (IN O	RDER OF DE	CREASING AGGR	ESSIVENESS)	
F2316	Extra cut	Aluminium oxide	Stainless steel	Rust removalBlendingDeburringBluing removal	Aggressive and durable Long life Ideal replacement for coated abrasive steel wool and wire brushes
F2300	Medium	Aluminium oxide	Metals and ceramics	Cleaning, deburring Rust removal Coating removal	 Strong and open construction Resists loading Long life Ideal for achieving a matte satin finish
F2401	Fine	Aluminium oxide	Wood and plastics	Cleaning and Intermediate finishing of ferrous and non-ferrous metals Defuzzing wood, denibbing lacquers, paints and plastic	Coarser and stiffer than very fine pad Ideal for achieving a matte satin finish
F2560/ F2529	Very fine	Aluminium oxide	General purpose	Rust removal Automotive primer keying Defuzzing wood, denibbing plastic	Conforms well to contoured surfaces Excellent finish on a wide variety of surfaces
F2504	Very fine (long life)	Aluminium oxide	General purpose	Rust removal Automotive primer keying Defuzzing wood, denibbing plastic, Light sanding of old paint and new primers	Moderate flexibility Fast initial cut Long life No colour blend when used with solvents
F2568	Gen. purpose clean & scour	Alumina silicate	Metals and plastics	General purpose cleaning, surface preparation prior to painting Removal of light stains and oxide marks on metal surfaces	Low cost pad Good performance at an economical price
F4300	Medium (SiC)	Silicon carbide	Stainless steel	Satin finishing aluminium, cleaning glass moulds Grain finishing, removal of weld bluing on stainless steel	Resiliant Conforms well to surface contours
F4660/ F4807/ F4605	Ultra fine	Silicon carbide	General purpose	 Keying clear coat, finishing metal, deburring plastics, finishing aluminium Doors and window frames, blending paint, scuffing varnishes and keying acrylic coatings 	Can be used wet or dry with prepping compounds
F2801/ F2829	Micro fine	Calcined alumina	Precious metals, varnished wood, car body work	Keying clear coatPolishing	 Produces an extremely high quality surface finish Ideal for cleaning precious metals and finishing varnished wood
F0001	White cleaning	None	All surfaces	 Light cleaning, polishing Rubbing down primer and highlighting wood 	 Highly conformable Tear resistant Ideal for use with liquid detergent



Abrasive sanding sponges are designed for use on wood, paint and metal. Their flexible nature means they can be used on curved, contoured and flat surfaces.

PRODUCT SELECTION GUIDE

APPLICATION	GRIT
	++++
Rough sanding	60
Semi-finishing	100
Finishing	180 +
	Rough sanding Semi-finishing

ABRASIVE SPONGES APPLICATION GUIDE

GRADE	GRIT	FINISH GENERATED	APPLICATIONS
Medium	60	180/120	Scuffing, shaping filler
Fine	100	400/320	Feather edging, scuffing primer, and new parts before painting
Super fine	180	600/500	Preparing panel for base coat
Ultra fine	220	1000/800	Sanding base coat, removing clear coat defects
Micro fine	280	1500/1200	Clear coat sanding, removing minor defects

SPONGES

- Multi-purpose, can be used for wet or dry sanding
- Easy to reach areas inaccessible to sandpaper sheets
- Conforms to surface shapes and contours, providing a uniform finish
- Washable and robust can be reused, extending product life

ONE SIDED ABRASIVE



 DIM WxLxH (mm)	GRADE	GRIT	FINISH GENERATED	APPLICATIONS	PK QTY	ART NO.
140x115x6	Medium	60	180/120	Scuffing, shaping filler	20	63642550599
	Fine	100	400/320	Feather edging, scuffing primer & new parts before painting	20	63642550601
	Super fine	180	600/500	Preparing panel for base coat	20	63642550602
	Ultra fine	220	1000/800	Sanding base coat, removing clear coat defects	20	63642550603
	Micro fine	280	1500/1200	Clear coat sanding, removing minor defects	20	63642550604

TWO SIDED ABRASIVE

	DIM WxLxH (mm)	GRIT	PK QTY	ART NO.	
	123x98x12,5	60	60	77696093995	
		100	60	77696094014	
		180	60	77696094091	
	123x98x12,5	60	250	77696094102	
		100	250	77696094099	
		180	250	77696094100	

FOUR SIDED ABRASIVE

	DIM WxLxH (mm)	GRIT	PK QTY	ART NO.
Alleran	100x66x26	60	60	77696098472
		100	60	77696094093
		180	60	77696094095
	100x66x26	100	250	77696094104
		180	250	77696094105

Dimensions Key: DIM = Dimensions, W = Width, L = Length, H = Height



Abrasive sponges generate a finer finish than conventional coated abrasive products. The sponges are washable and can be reused, giving greater product life.





REASONS TO CHOOSE A SPONGE VS CONVENTIONAL SHEET

ELIMINATE CLOGGING

- The combination of flexible foam backing material and abrasive grit adhesion continually releases sanded material
- Any clogging can be washed out

PRESSURE CONTROL

- Foam backing optimum pressure distribution to prevent sanding through surfaces
- Pressure spots are eliminated providing even surface pattern

ADAPT TO CONTOURS

- Flexible foam allows adaptability to contours, shapes or areas of limited access
- No folding or buckling results in an even pattern without scratching



BELTS

File belts	174	Narrow belts	18
Portable belts	181	Rapid Prep belts	19



Norton offers a wide range of file belts designed to deliver outstanding performance on intricate shapes and contours. Portable file belt sanders have replaced tedious hand filing and sanding. First introduced in pneumatic, they are now also available in electric. Increasingly, tool manufacturers are introducing additional fixtures for additional applications. The belts listed are popular stock sizes, but additional sizes, specifications, backing materials, and edge scallops are available made-to-order.

PRODUCT SELECTION GUIDE

Highly recommended Recommended Satisfactory			D	A			
	VIKING R996	SG R929	RAPIDPREP	NORZON R822	NORZON R817	R445	R230
	+++++	+++++	+++++	++++	++++	+++	+++
Stainless steel, inox and duplex	11	11	11	✓			
Inconel, titanium and super alloys	11	11	//	✓			
Carbon, construction and mild steels		11	//	✓			
Cast iron		✓	✓	11			
Non-ferrous metal (brass/aluminium)					//	0	0
Hard and soft wood					//		✓
Composite materials						11	0
Stone, concrete						11	
Glass, plastic						11	
Rubber, plastic					//		0
Leather					11		0



NEW PNEUMATIC FILE BELT

${\sf SANDER}$ 10x330mm, free speed 18000 RPM, 0,5 HP

- The new Norton pneumatic file belt sander makes life easier when used in hard to reach and awkward applications and areas
- Use with Norton file belts for stock removal, deburring or surface preparation and defect removal on corners, contours and tight areas
- Small but powerful file belt sander with 0,5 hp motor, for a mighty output
- Ergonomic soft grip improves manoeuvrability and reduces operator fatigue
- Small size and light weight improves control and finish as well as reduced vibration for better operator comfort and the ability to get into small parts



DESCRIPTION	BELT SIZE	HORSEPOWER	FREE SPEED	RECOMMENDED OPERATING PRESSURE	TOOL WEIGHT	ART NO.
Pneumatic file belt sander	10x330mm	0.5	18000rpm	6.2 bar	0.82 kg	77696091766

NEW PNEUMATIC FILE BELT KIT

- · For stock removal to finishing
- The kit contains a wide assortment of premium ceramic and non-woven file belts, complete with pneumatic file belt sander
- The ultimate solution for all applications from removal of rust and corrosion, deburring, blending to finishing of panels and car body
- Machine is 10x330mm. All belts are 10x300mm to fit the machine



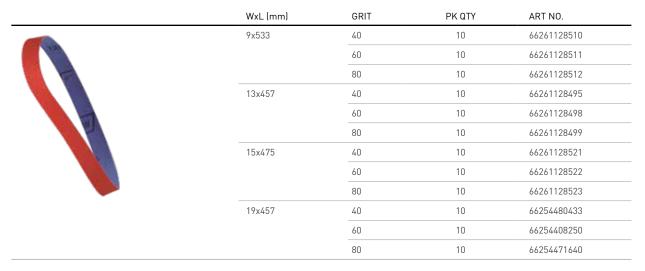
KIT CONTENTS	ITEM ART NO.	PK QTY	ART NO.
File belt machine	77696091766	1	
Ceramic File belt 10x330mm P60	66261144369	20	
Ceramic File belt 10x330mm P80	66623303270	20	
Rapid Prep File belt 10x330mm Coarse	69957360172	10	78072707299
Rapid Prep File belt 10x330mm Medium	63642578004	10	
Rapid Prep File belt 10x330mm Very Fine	69957360176	10	
NORTON TOOL BAG SIZE: 56x31x45cm	69957343696	1	

FILE BELTS FOR FILE BELT MACHINES



- The best choice for use on stainless steel, inconels, chromium cobalt, titanium and extremely hard materials
- Maximum performance for lowest overall grinding cost on the most difficult-to-grind materials
- Heavy duty applications with the highest stock removal, reduced heat, loading and glazing
- Advanced "supersize" grinding aid for fast and consistent cut rate with less off hand pressure required to cut

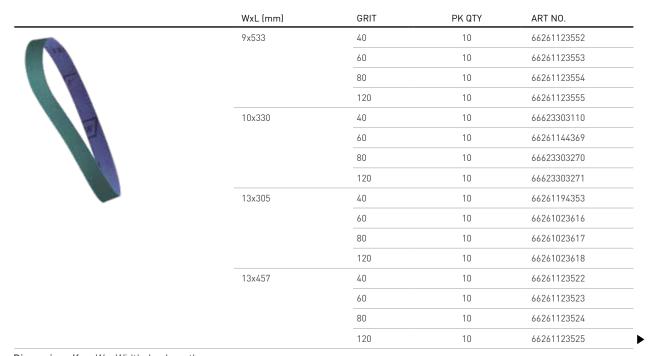






- Made with premium SG abrasive grain, perfect for heat sensitive metals
- High content of active filler for cool cut, no burn marks on the metal part
- Excellent performance at low and medium pressure
- X-weight polyester cloth, extremely durable even on aggressive applications







	WxL (mm)	GRIT	PK QTY	ART NO.
	13x610	40	10	66261123636
		60	10	66261123638
		80	10	66261123639
		120	10	66261123640
	15x475	40	10	66261123646
		60	10	66261123647
		80	10	66261123648
		120	10	66261123649
	19x457	40	10	66254487679
		60	10	66254480427
		80	10	66254481839
		120	10	66254481840
	20x520	40	10	66623303272
		60	10	66261029755
		80	10	66623303275
		120	10	66623303276

RAPID PREP SURFACE CONDITIONING FILE BELTS

- Strong synthetic mesh and aluminium oxide abrasive bonded together with a smear resistant adhesive
- Open construction of non-woven material for tough cutting action without clogging or loading
- Ideal for removing paint, rust, adhesives, coatings and sealant corrosion in hard to access areas





Dimensions Key: W = Width, L = Length

FILE BELTS FOR FILE BELT MACHINES

NORZON R822



- Norzon grain continually exposes new cutting surfaces for long belt life even at high pressure
- Extremely durable for use in all demanding applications
- X-weight cotton backing for moderate to light pressure applications



	WxL (mm)	GRIT	PK QTY	ART NO.
	10x330	40	10	66261144347
		60	10	66261144348
		80	10	66261144349
		120	10	66261144350
	13x305	40	10	66261194351
		60	10	63642552143
		80	10	63642524376
		120	10	69957308462
	13x457	40	10	66261141253
		60	10	66261141254
		80	10	66261141255
		120	10	66261141256
	13x610	40	10	66261141257
		60	10	63642539830
		80	10	66261141260
		120	10	66261141261
	15x475	40	10	66261141262
		60	10	66261141263
		80	10	66261141264
		120	10	66261141265
	19x457	40	10	66623330766
		60	10	63642539828
		80	10	63642539836
		120	10	63642539843
	20x520	40	10	66261141266
		60	10	66261141267
		80	10	66261141269
		120	10	66261141270
	30x533	40	10	63642538962
		60	10	63642538963
		80	10	63642538964
	35x440	40	10	77696087694
		60	10	66261032676
		80	10	63642510293
		120	10	77696087695

Dimensions Key: W = Width, L = Length



NORZON R817



- Norzon grain continually exposes new cutting surfaces for long belt life even at high pressure
- Heavy polyester cloth, stiff tear resistant for tough applications
- Ideal for grinding skis

- High-performance resin bond provides strong grain adhesion, extending belt life
- Open grain distribution, recommended for grinding soft materials like aluminium, plastic, rubber or leather



	WxL (mm)	GRIT	PK QTY	ART NO.
30x533		24	10	69957383624
		36	10	63642571575
		40	10	63642556322
	34x435	24	10	63642545273
		36	10	63642568989
		40	10	63642549470

R445 +++

- Hard and sharp silicon carbide grains for medium duty applications
- Can be used for dry or wet due to polyester backing
- For high initial cut on non-ferrous and soft-loading materials such as glass, titanium, masonry, composites, plastic and rubber



	WxL (mm)	GRIT	PK QTY	ART NO.
	15x475	60	50	63642547214
		80	50	63642539677
		120	50	63642539678
	20x520	60	50	66254425393
		80	50	63642567304
		120	50	63642547790
	30x533	60	50	63642519009
		80	50	69957379493
		120	50	69957371884

Dimensions Key: W = Width, L = Length

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FILE BELTS FOR FILE BELT MACHINES

R230

- Hard aluminium oxide abrasive for good product life
- Open grain distribution for reduced clogging and loading material such as wood and aluminium
- Ideal for sanding wood and grinding metal
- Good cut rate on low-pressure finishing operations with ability to leave a very good finish



	WxL (mm)	GRIT	PK QTY	ART NO.
	10x330		10	69957385707
		60	10	66261114049
		80	10	63642515415
		120	10	69957380686
	20x520	40	10	69957396131
		60	10	66261034453
		80	10	66261106250
		120	10	66623327675
	30x533	40	10	63642546483
		60	10	63642546477
		80	10	63642546478
		120	10	63642546482

Dimensions Key: DIM = Dimensions, W = Width, L = Length

MADE-TO-ORDER PRODUCT AVAILABILITY

CAP CODE	GRAIN / GRIT	24	36	40	60	80	100	120	150	180	220	240	280	320	400
Viking R996	New SG supersize, YY/Y-polyester	•	•	•	•	•									
SG R929	SG, X-polyester		•	•	•	•	•	•							
R895	NZ, YY-polyester	•	•	•	•	•	•	•	•	•	•				
Norzon R822	Norzon, X-cotton	•	•	•	•	•	•	•	•						
Norzon R817	Norzon, Y-polyester	•	•	•	•	•	•	•							
R445	Silicon carbide, X/Y-polyester				•	•	•	•	•	•	•	•			
R293	Blend aluminium oxide, X/Y-polyester	•	•	•	•	•	•	•	•	•	•	•	•	•	•
R230	Aluminium oxide, X-cotton		•	•	•	•	•	•	•	•					

MINIMUM ORDER QUANTITIES

FOR MADE-TO-ORDER PRODUCTS

SIZE (mm)	MINIMUM ORDER QUANTITY
All file belts	200 pieces



PORTABLE BELTSFOR PORTABLE BELT MACHINES

Norton offers portable belts in a variety of sizes, designed to fit the most common types of machine. Portable belts are designed for all metal and wood working applications. Choose 36 – 50 grits for rough/heavy-duty applications, 60 – 100 for intermediate, and 100 – 220 for finishing/polishing applications. The belts listed are popular stock sizes, but additional sizes, specifications, and backing materials, are available made-to-order. All Norton belts are supplied with butt joints for easy mounting and smoother work.

PRODUCT SELECTION GUIDE

Recommended // Suitable O			
	SG R929	NORZON R817	R230
MATERIAL	++++	++++	+++
Metal	//		✓
Hard wood		//	✓
Soft wood		✓	//

PORTABLE BELTS FOR PORTABLE BELT MACHINES

SG R929 ++++



- Premium SG abrasive grain ideal for heat sensitive metals
- High content of active filler for cool cut, no burn marks on the metal part
- X-weight polyester cloth, extremely durable even in aggressive applications
- Excellent performance at low and medium pressure





WxL (mm)	GRIT	PK QTY	ART NO.
50x800	60	10	66261023832
	80	10	66261023833
	120	10	66261023834



- Norzon grain continually exposes new cutting surfaces for
 High-performance resin bond provides strong grain long belt life even at high pressure
- Heavy polyester cloth, stiff and tear resistant for tough applications
- adhesion for longer belt life
- Open grain distribution prevents loading when grinding wood and soft materials like aluminium, plastic, rubber or leather

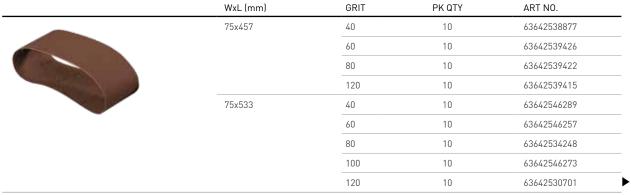


	WxL (mm)	GRIT	PK QTY	ART NO.	
	200x750	40	10	69957355996	
		60	10	69957371516	
		80	10	69957371517	
		100	10	66261182174	
		120	10	69957371513	



- Hard aluminium oxide abrasive for good product life
- Open grain distribution for reduced clogging on materials such as wood and aluminium
- Multi-purpose product ideal for sanding wood and grinding metal
- Excellent cut rate on low-pressure finishing operations, imparts a good finish

	NON FERR. WOOD		
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Dimensions Key: W = Width, L = Length





WxL (mm)	GRIT	PK QTY	ART NO.
75x610	40	10	63642546472
	60	10	63642546473
	80	10	63642567329
	100	10	63642545869
	120	10	63642546476
100x610	40	10	63642546295
	60	10	63642560145
	80	10	63642529798
	100	10	63642546242
	120	10	63642529797
100x620	40	10	63642546457
	60	10	63642534465
	80	10	63642529799
	100	10	63642534770
	120	10	63642546452
100x690	40	10	63642537627
	60	10	63642537544
	80	10	63642537546
	100	10	63642537548
	120	10	63642537632
200x750	24	10	63642521182
	36	10	69957349006
	40	10	69957349007
	60	10	69957349010
	80	10	69957349014
	100	10	69957349394
	120	10	63642558814

Dimensions Key: W = Width, L = Length

MADE-TO-ORDER PRODUCT AVAILABILITY

CAP CODE	GRAIN / GRIT	24	36	40	60	80	100	120	150	180	220	240	280	320	400
SG R929	SG, X-polyester		•	•	•	•	•	•							
Norzon R817	Norzon, Y-polyester	•	•	•	•	•	•	•							
R230	Aluminium oxide, X-cotton		•	•	•	•	•	•	•	•					

MINIMUM ORDER QUANTITIES

FOR MADE-TO-ORDER PRODUCTS

SIZE (mm)	MINIMUM ORDER QUANTITY
All portable belts	100 pieces

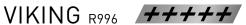


A broad selection of sizes and grits for most dimensioning, intermediate grinding and polishing applications. The belts listed are popular stock sizes, but additional sizes, specifications, and backing materials, are available made-to-order.

PRODUCT AVAILABILITY

Highly recommended Recommended Suitable O	VIKING R996	RED-X R976	SG R929	NORAX	H231	BLUEFIRE R895	NORZON R822	W445	R445	R293
MATERIAL	+++++	+++++	+++++	+++++	++++	++++	++++	++++	+++	+++
Stainless steel, inox and duplex	11	✓	0	//		✓	✓			
Inconel, titanium and super alloys	11	✓	0	//			✓			
Carbon, construction and mild steels			//			//	✓		0	0
Cast iron			//			✓	//		0	0
Non-ferrous metal (brass/aluminium)			11			✓			0	0
Hard and soft wood					//					
Stone, concrete									//	0
Glass, plastic								//	0	





- The best choice for use on stainless steel, inconels, chromium cobalt, titanium and extremely hard materials
- The maximum performance for lowest overall grinding cost on your most difficult-to-grind materials
- Achieve maximum stock removal, reduced heat generation and no loading and glazing in heavy duty applications
- 'Supersize' layer applied to the abrasive reduces heat generation and cuts faster, even with less off hand





WxL (mm)	GRIT	PK QTY	ART NO.
50x2000	24	10	69957364731
	36	10	66254403822
	40	10	66254403847
	60	10	66254411262
	80	10	66254449025
50x2500	24	10	69957364732
	36	10	66261099222
	40	10	66254408229
	60	10	66254416129
	80	10	66254448015
50x3500	24	10	69957364733
	36	10	66254404039
	40	10	66254404041
	60	10	66254436885
	80	10	66254456931
50x4000	24	10	69957300743
	36	10	66254404064
	40	10	66254404065
	60	10	66254405015
	80	10	66254444896
75x2000	24	10	69957364735
	36	10	66254410065
	40	10	66254407955
	60	10	66254407954
	80	10	66254456158
75x2500	24	10	69957364736
	36	10	66254403849
	40	10	66254403887
	60	10	66254403891
	80	10	66254469059

Dimensions Key: W = Width, L = Length

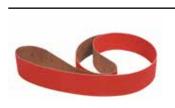
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NARROW BELTS FOR BACKSTAND MACHINES



- Patented ceramic SG grain for increased cut rate on carbon and stainless steel
- A new high performance formulation of supersize layer for excellent results on materials from stainless steel to inconel to titanium
- Higher material removal rate at low and medium pressure in fine grits
- Reduced heat generation reduces risk of burn





WxL (mm)	GRIT	PK QTY	ART NO.
50x2000	36	10	66623381099
50X2000	40	10	66623328023
	60	10	66254401458
	80	10	66261108229
	120	10	66254408387
50x2500	36	10	66254410572
	40	10	66261051186
	60	10	66261063897
	80	10	66254401374
	120	10	66261107250
50x3500	36	10	66254409222
	40	10	66623385396
	60	10	66261071965
	80	10	66254436884
	120	10	66254411405
50x4000	36	10	66261055060
	40	10	66261092227
	60	10	66261054920
	80	10	66254401290
	120	10	66254474052
75x2000	36	10	66623319745
	40	10	66261067686
	60	10	66261060879
	80	10	66254403117
	120	10	66254404255
75x2500	36	10	66261066499
	40	10	66254402279
	60	10	66254433345
	80	10	66254407537
	120	10	66254407535

Dimensions Key: W = Width, L = Length





- Premium SG abrasive ideal for heat sensitive metals as the SG grain reduces heat generation
- High content of active filler for cool cut, no burn marks on Excellent performance at low and medium pressure the metal part
- X-weight polyester cloth, extremely durable even on aggressive applications

PK QTY

GRIT

WxL (mm)



ART NO.



TTXE (IIIII)	01111	111 311	7111110.
50x1600	40	10	66261023879
	50	10	66261023880
	60	10	66261023881
	80	10	66261023882
50x2000	36	10	69957350787
	40	10	69957350790
	50	10	69957350792
	60	10	69957350793
	80	10	69957350794
	120	10	69957350795
75x2000	36	10	69957350796
	40	10	69957350797
	50	10	69957350798
	60	10	69957350799
	80	10	69957350800
	100	10	66261024222
	120	10	69957350801
75x2500	36	10	69957350882
	40	10	69957350883
	50	10	69957350884
	60	10	69957350888
	80	10	69957350898
	120	10	66261023977
100x1000	40	10	69957350903
	50	10	69957350905
	60	10	69957350906
100x2000	36	10	69957350802
	40	10	69957350804
	60	10	69957350805
	80	10	69957350806
	120	10	69957350807
150x2000	36	10	69957350809
	40	10	69957350812
	60	10	69957350813
	80	10	69957350815
150x2500	40	10	66261023984
	60	10	66261023992
	80	10	66261023993

Dimensions Key: W = Width, L = Length

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NEW BLUEFIRE R895



- Heavy polyester backing for high material removal rate in demanding applications
- Optimised grain coverage for maximum efficiency
- Improved needle-sharp grain with engineered microfracturing for aggressive cutting action
- Full range of grits available, from P24 to P220.







NORZON R822



WxL (mm)

- High-performance, self-sharpening zirconia alumina abrasive for excellent cut rate and product life
- Extremely durable for demanding applications
- X-weight cotton backing for moderate to light pressure applications

PK QTY

GRIT



ART NO.



	WXL (mm)	GRII	PKUIT	ART NU.
	50x2000	36	10	63642546222
		40	10	63642547270
		60	10	63642546210
		80	10	63642546212
		120	10	63642516010
	75x2000	24	10	63642539088
		36	10	63642539386
		40	10	63642539388
		50	10	63642538998
		60	10	63642539389
		80	10	63642538999
		120	10	63642539002
	75x2500	36	10	63642546092
		40	10	63642546094
		60	10	63642546097
		80	10	63642546099
	100x920	36	10	63642546226
		40	10	63642539330
		50	10	63642539328
		60	10	63642546216
		80	10	63642546214
		100	10	63642539383
	100x1000	40	10	63642547284
		50	10	63642538971
		60	10	63642538973
		80	10	63642538975
		100	10	63642538977
		120	10	63642536388
	150x2000	36	10	63642539008
		40	10	63642539010
		60	10	63642539014
		80	10	63642539016

Dimensions Key: W = Width, L = Length

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NARROW BELTS FOR BACKSTAND MACHINES



- Special cork grain for polishing glass and final finishing of glass edges
- Can be used wet or dry
- Long life with uniform polishing effect





WxL (mm)	GRIT	PK QTY	ART NO.
100x2000	No abrasive grain	10	63642580818
100x3350	No abrasive grain	10	63642545206
140x3300	No abrasive grain	10	66254415118



- General purpose aluminium oxide belt with good price / performance ratio
- Resin bond system provides good grain retention and life versus key competitors
- For high initial cut on non-ferrous and soft-loading materials such as glass, titanium, masonry, composites, plastic and rubber
- With active filler for improved life on metal applications





WxL (mm)	GRIT	PK QTY	ART NO.
50x2000	36	10	63642546943
	40	10	63642551489
	60	10	63642546878
50x4000	36	10	63642539981
	40	10	63642539982
	60	10	63642539985
	80	10	63642539986
75x2000	36	10	63642547942
	40	10	63642564728
	60	10	63642548528
	80	10	63642548275
75x2500	36	10	63642546130
	40	10	63642546874
	60	10	63642551507
100x920	40	10	63642548306
	60	10	63642548307
	80	10	63642551544
	100	10	63642551546
	120	10	63642551547
	180	10	63642551549
100x3000	40	10	63642551511
	60	10	63642548447

Dimensions Key: W = Width, L = Length

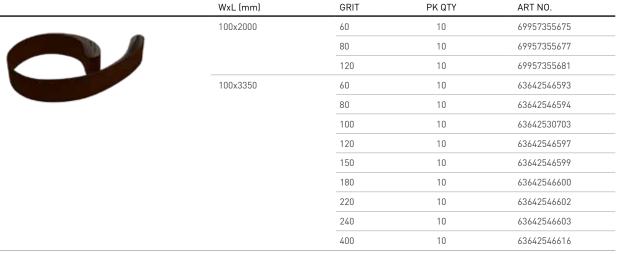


R445 +++

- Hard and sharp silicon carbide grain
- Can be used for dry or wet applications due to polyester backing
- Ideal for use in medium duty applications

 For high initial cut on non-ferrous and soft-loading materials such as glass, titanium, masonry, composites, plastic and rubber





Dimensions Key: W = Width, L = Length

MADE-TO-ORDER PRODUCT AVAILABILITY

CAP CODE	GRAIN / GRIT	24	36	40	60	80	100	120	150	180	220	240	280	320	400
Viking R996	New SG supersize, YY/Y-polyester	•	•	•	•	•									
RED-X R976	SG supersize, X-polyester		•	•	•	•	•	•							
SG R929	SG, X-polyester		•	•	•	•	•	•							
Norax	Special multi-layer abrasive														
H231	Aluminium oxide, F-paper		•	•	•	•	•	•	•		•	•	•	•	•
R895	NZ, YY-polyester	•	•	•	•	•	•	•	•	•	•				
Norzon R822	Norzon, X-cotton	•	•	•	•	•	•	•	•						
W445	SiC/cork, X-cotton														
R293	Blend aluminium oxide, X/Y-polyester	•	•	•	•	•	•	•	•		•	•	•	•	•
R445	Silicon carbide, X/Y-polyester				•	•	•	•	•		•				

MINIMUM ORDER QUANTITIES FOR MADE-TO-ORDER PRODUCTS

SIZE (mm)	LENGTH (mm) 750 - 1999mm	LENGTH (mm) > 2000mm
Up to 50mm	40 pieces	40 pieces
51 up to 100mm	30 pieces	30 pieces
Over 101mm	20 pieces	10 pieces



Norton non-woven belts are a combination of strong synthetic mesh and quality abrasive, bonded together by a smear-resistant adhesive. The open construction of non-woven material enables aggressive cutting action and improved surface finish while maintaining its non-loading feature. Ideal product to provide a great finish or remove burrs without gouging or undercutting the workpiece.

PRODUCT SELECTION GUIDE

	EXTRA COARSE	COARSE	MEDIUM	FINE	VERY FINE
Scale removal	•				
Stock removal		•			
Heavy deburring		•			
Light deburring			•		
Light finishing			•		
Blending				•	
Finishing					•

PRODUCT OVERVIEW

APPLICATIONS

- Removing surface defects
- Light edge burrs
- Parting lines, flashing
- Rust, oxides and corrosion
- Paints and scale
- Blending mill marks
- Tool marks
- Uneven edges
- Applying decorative finishes

MACHINE USED

- File belt sander
- Portable sander
- · Backstand machine

ABRASIVE GRAIN

- Vortex engineered aluminium oxide
- · Aluminium oxide

GRIT RANGE

- Extra coarse
- Coarse
- Medium
- Fine
- Very fine



RAPID PREP BELT MATERIAL AVAILABLE IN TWO SPECIFICATIONS:

XF

Offers good flexibility for file belt applications



RF

Reinforced low-stretch backing for large narrow belt applications



AND IN TWO GRAIN TYPES

VORTEX RAPID PREP A/O ####

Better choice for finishing and blending applications



RAPID PREP A/O

Good choice for finishing and blending applications



- Vortex engineered grain technology combines the cutting speed of coarse grits with the finish of fine grits
- Durable product for blending, finishing, cleaning, and light deburring
- · Most consistent cutting and finishing surface conditioning products on the market
- Clean Bond technology smear-free, does not load on aluminium or soft metals
- Achieve a burr-free, paintable finish in fewer steps without damaging the base material
- Friable grain structure keeps Ra specs throughout belt life and reduces scrap and rework

- General purpose product for blending, finishing, cleaning, and light deburring
- Achieve a burr-free, paintable finish in fewer steps without damaging the base material

RAPID PREP A/O XF SURFACE BLENDING FILE BELTS





WxL (mm)	GRADE	CAP CODE	PK QTY	ART NO.
6x457	Coarse	S2238	20	63642535959
	Medium	S2338	20	63642535963
	Fine	S2438	20	63642536140*
	Very fine	S2538	20	66623333511
13x457	Coarse	S2238	20	63642535980
	Medium	S2338	20	63642536113
	Fine	S2438	20	63642536141*
	Very fine	S2538	20	66261055311
19x457	Coarse	S2238	20	63642536114
	Medium	S2338	20	63642536116
	Fine	S2438	20	63642536142
	Very fine	S2538	20	66261003622
6x610	Coarse	S2238	20	63642536118
	Medium	S2338	20	63642536121
	Fine	S2438	20	63642536144*
	Very fine	S2538	20	66623333512
13x610	Coarse	S2238	20	63642536122
	Medium	S2338	20	63642536129
	Fine	S2438	20	63642536145*
	Very fine	S2538	20	66261019876
13x305	Coarse	S2238	20	63642536134
	Medium	S2338	20	63642536137
	Fine	S2438	20	63642536164*
	Very fine	S2538	20	66254499884

Dimensions Key: W = Width, L = Length

* Made-to-order





RAPID PREP A/O RF SURFACE BLENDING NARROW BELTS





	WxL (mm)	GRADE	CAP CODE	PK QTY	ART NO.
	50x2000	Coarse	S2228	5	63642531724
	Medium	S2328	5	63642531726	
		Fine	S2428	5	63642531732
		Very fine	S2528	5	63642531733
	75x2000	Coarse	S2228	5	63642531735
		Medium	S2328	5	63642531741
		Fine	S2428	5	63642531743
		Very fine	S2528	5	63642531751
	100x3500	Coarse	S2228	5	63642531760
		Medium	S2328	5	63642531761
		Fine	S2428	5	63642531764
		Very fine	S2528	5	63642531784
	150x2000	Coarse	S2228	5	63642531787
	Medium	S2328	5	63642531813	
		Fine	S2428	5	63642531816
		Very fine	S2528	5	63642531819

Dimensions Key: W = Width, L = Length

More sizes available on a made-to-order

VORTEX RAPID PREP RF surface blending narrow belts





/xL (mm)	GRADE	CAP CODE
arious belt	Extra Coarse	S2123
zes	Coarse	S2223
	Medium	S2323
	Fine	S2423
	Very fine	S2523

More information available on request

INFORMATION



Coated Abrasives / 195 www.nortonabrasives.com

BELTS BY DIMENSION

GRIT	CAP CODE	PK QTY	ART NO.	
9x533mm	า			
40	R996	10	66261128510	+++++
	R929	10	66261123552	++++
60	R996	10	66261128511	++++
	R929	10	66261123553	++++
80	R996	10	66261128512	++++
	R929	10	66261123554	++++
120	R929	10	66261123555	+++++
10x330m	m			
40	R929	10	66623303110	++++
	R822	10	66261144347	++++
	R230	10	69957385707	+++
60	R929	10	66261144369	++++
	R822	10	66261144348	++++
	R230	10	66261114049	+++
80	R929	10	66623303270	++++
	R822	10	66261144349	++++
	R230	10	63642515415	+++
120	R929	10	66623303271	++++
	R822	10	66261144350	++++
	R230	10	69957380686	+++
13x305m	m			
40	R929	10	66261194353	++++
	R822	10	66261194351	++++
60	R929	10	66261023616	++++
	R822	10	63642552143	++++
80	R929	10	66261023617	++++
	R822	10	63642524376	++++
120	R929	10	66261023618	++++
	R822	10	69957308462	++++
13x457m				
40	R996	10	66261128495	++++
	R929	10	66261123522	++++
	R822	10	66261141253	++++
60	R996	10	66261128498	++++
	R929	10	66261123523	++++
	R822	10	66261141254	++++
80	R996	10	66261128499	++++
	R929	10	66261123524	++++
	R822	10	66261141255	++++
120	R929	10	66261123525	++++
	R822	10	66261141256	++++
13x610m				
40	R929	10	66261123636	++++
	R822	10	66261141257	++++
60	R929	10	66261123638	++++
	R822	10	63642539830	++++
80	R929	10	66261123639	++++
	R822	10	66261141260	++++
120	R929	10	66261123640	++++
	R822	10	66261141261	++++

GRIT	CAP CODE	PK QTY	ART NO.	
15x475m	m			
40	R996	10	66261128521	++++
	R929	10	66261123646	++++
	R822	10	66261141262	++++
60	R996	10	66261128522	++++
	R929	10	66261123647	++++
	R822	10	66261141263	++++
	R445	50	63642547214	+++
80	R996	10	66261128523	++++
	R929	10	66261123648	++++
	R822	10	66261141264	++++
	R445	50	63642539677	+++
120	R929	10	66261123649	++++
	R822	10	66261141265	++++
	R445	50	63642539678	+++
19x457m				
40	R996	10	66254480433	++++
	R929	10	66254487679	++++
	R822	10	66623330766	++++
60	R996	10	66254408250	++++
	R929	10	66254480427	++++
	R822	10	63642539828	++++
80	R996	10	66254471640	++++
	R929	10	66254481839	+++++
	R822	10	63642539836	++++
120	R929	10	66254481840	++++
	R822	10	63642539843	++++
20x520m	m			
40	R929	10	66623303272	++++
	R822	10	66261141266	++++
	R230	10	69957396131	+++
60	R929	10	66261029755	++++
	R822	10	66261141267	++++
	R445	50	66254425393	+++
	R230	10	66261034453	+++
80	R929	10	66623303275	++++
	R822	10	66261141269	++++
	R445	50	63642567304	+++
	R230	10	66261106250	+++
120	R929	10	66623303276	++++
	R822	10	66261141270	++++
	R445	50	63642547790	+++
	R230	10	66623327675	+++
30x533m	m			
24	R817	50	69957383624	++++
36	R817	50	63642571575	++++
40	R822	10	63642538962	++++
	R817	50	63642556322	++++
	R230	10	63642546483	+++
60	R822	10	63642538963	++++
	R445	50	63642519009	+++
	R230	10	63642546477	+++
00	R822	10	63642538964	++++
80	TTOZZ		/0055050/00	
80	R445	50	69957379493	+++
80		50 10	63642546478	+++
120	R445			



GRIT	CAP CODE	PK QTY	ART NO.	
34x435m	m			
24	R817	50	63642545273	++++
36	R817	50	63642568989	++++
40	R817	50	63642549470	++++
35x440m	m			
40	R822	10	77696087694	++++
60	R822	10	66261032676	++++
80	R822	10	63642510293	++++
120	R822	10	77696087695	++++
50x800m	m			
60	R929	10	66261023832	++++
80	R929	10	66261023833	++++
120	R929	10	66261023834	++++
75x457m	m			
40	R230	10	63642538877	+++
60	R230	10	63642539426	+++
80	R230	10	63642539422	+++
120	R230	10	63642539415	+++
75x533m	m			
40	R230	10	63642546289	+++
60	R230	10	63642546257	+++
80	R230	10	63642534248	+++
100	R230	10	63642546273	+++
120	R230	10	63642530701	+++
75x610m				
40	R230	10	63642546472	+++
60	R230	10	63642546473	+++
80	R230	10	63642567329	+++
100	R230	10	63642545869	+++
120	R230	10	63642546476	+++
100x610r		4.0	40440544005	
40	R230	10	63642546295	+++
60	R230	10	63642560145	+++
80	R230	10	63642529798	+++
100	R230	10	63642546242	+++
120	R230	10	63642529797	+++
100x620r		10	/2//25///57	
40	R230	10	63642546457	+++
<u>60</u>	R230	10	63642534465	+++
100	R230	10	63642529799	+++
100	R230	10 10	63642534770	+++
120 100x690r	R230	10	03042340432	+++
40	R230	10	63642537627	+++
60	R230	10	63642537544	+++
80	R230	10	63642537546	+++
100	R230	10	63642537548	+++
120	R230	10	63642537632	+++
120	11,200	10	55542557552	

GRIT	CAP CODE	PK QTY	ART NO.	
200x750	mm			
24	R230	10	63642521182	+++
36	R230	10	69957349006	+++
40	R817	10	69957355996	++++
	R230	10	69957349007	+++
60	R817	10	69957371516	++++
	R230	10	69957349010	+++
80	R817	10	69957371517	++++
	R230	10	69957349014	+++
100	R817	10	66261182174	++++
	R230	10	69957349394	+++
120	R817	10	69957371513	++++
	R230	10	63642558814	+++
50x1600	mm			
40	R929	10	66261023879	++++
50	R929	10	66261023880	++++
60	R929	10	66261023881	++++
80	R929	10	66261023882	++++
50x2000			00201020002	
24	R996	10	69957364731	++++
36	R996	10	66254403822	++++
50	R929	10	69957350787	++++
	R976	10	66623381099	++++
	R895	10		
			78072724733	++++
	R822	10	63642546222	++++
	R293	10	63642546943	+++
40	R996	10	66254403847	++++
	R976	10	66623328023	++++
	R929	10	69957350790	++++
	R895	10	78072724734	++++
	R822	10	63642547270	++++
	R293	10	63642551489	+++
	R929	10	69957350792	++++
60	R996	10	66254411262	++++
	R976	10	66254401458	++++
	R929	10	69957350793	++++
	R895	10	78072724735	++++
	R822	10	63642546210	++++
	R293	10	63642546878	+++
80	R996	10	66254449025	++++
	R976	10	66261108229	++++
	R929	10	69957350794	++++
	R895	10	78072724736	++++
	R822	10	63642546212	++++
120	R976	10	66254408387	++++
	R929	10	69957350795	++++
	R895	10	78072724737	++++
	R822	10	63642516010	++++
50x2500	mm			
24	R996	10	69957364732	++++
36	R996	10	66261099222	++++
	R976	10	66254410572	++++

BELTS BY DIMENSION

GRIT	CAP CODE	PK QTY	ART NO.		GRIT	CAP CODE	PK QTY	ART NO.	
50x2500	mm continued				75x2000	mm continued			
40	R996	10	66254408229	++++	80	R996	10	66254456158	
	R976	10	66261051186	++++		R976	10	66254403117	
60	R996	10	66254416129	++++		R929	10	69957350800	
	R976	10	66261063897	++++		R895	10	78072724742	
80	R996	10	66254448015	++++		R822	10	63642538999	
	R976	10	66254401374	++++		R293	10	63642548275	
120	R976	10	66261107250	++++	100	R929	10	66261024222	
50x3500					120	R976	10	66254404255	
24	R996	10	69957364733	++++		R929	10	69957350801	
36	R996	10	66254404039	++++		R895	10	78072724745	
	R976	10	66254409222	++++		R822	10	63642539002	
40	R996	10	66254404041	++++	75x2500				
	R976	10	66623385396	++++	24	R996	10	69957364736	
60	R996	10	66254436885	++++	36	R996	10	66254403849	
	R976	10	66261071965	++++		R929	10	69957350882	
80	R996	10	66254456931	++++		R976	10	66261066499	
100	R976	10	66254436884	++++		R895	10	78072724748	
120	R976	10	66254411405	++++		R822	10	63642546092	
50x4000		10	/00572007/2			R293	10	63642546130	
24	R996	10	69957300743	++++	40	R996	10	66254403887	
36	R996	10	66254404064	++++		R976	10	66254402279	
	R976	10	66261055060	++++		R929	10	69957350883	
40	R293 R996	10	63642539981	+++		R895 R822	10 10	78072724749	
40	R976	10	66254404065	++++		R293	10	63642546094	
	R293	10	63642539982	+++	50	R929	10	69957350884	
60	R996	10	66254405015	++++	60	R996	10	66254403891	
00	R976	10	66261054920	++++	00	R976	10	66254433345	
	R293	10	63642539985	+++		R929	10	69957350888	
80	R996	10	66254444896	++++		R895	10	78072724752	
00	R976	10	66254401290	++++		R822	10	63642546097	
	R293	10	63642539986	+++		R293	10	63642551507	
120	R976	10	66254474052	++++	80	R996	10	66254469059	
75x2000						R976	10	66254407537	
24	R996	10	69957364735	++++		R929	10	69957350898	
	R822	10	63642539088	++++		R895	10	78072724751	
36	R996	10	66254410065	++++		R822	10	63642546099	
	R929	10	69957350796	++++	120	R976	10	66254407535	
	R976	10	66623319745	++++		R929	10	66261023977	
	R895	10	78072724738	++++		R895	10	78072724753	
	R822	10	63642539386	++++	100x920	mm			
	R293	10	63642547942	+++	36	R822	10	63642546226	
40	R996	10	66254407955	++++	40	R822	10	63642539330	
	R976	10	66261067686	++++		R293	10	63642548306	
	R929	10	69957350797	++++	50	R822	10	63642539328	
	R895	10	78072724739	++++	60	R822	10	63642546216	
	R822	10	63642539388	++++		R293	10	63642548307	
	R293	10	63642564728	+++	80	R822	10	63642546214	
50	R929	10	69957350798	++++		R293	10	63642551544	
	R895	10	78072724740	++++	100	R822	10	63642539383	
	R822	10	63642538998	++++		R293	10	63642551546	
60	R996	10	66254407954	++++	120	R293	10	63642551547	
	R976	10	66261060879	++++	180	R293	10	63642551549	
	R929	10	69957350799	++++					
	R895	10	78072724741	++++					
	R822	10	63642539389	++++					

^{*} Made to order

R293

10

63642548528

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GRIT	CAP CODE	PK QTY	ART NO.	
100x1000				
40	R929	10	69957350903	++++
40	R822	10	63642547284	
50	R929	10	69957350905	++++
50	R822	10	63642538971	
40	R929	10	69957350906	++++
60				++++
00	R822	10	63642538973	++++
100	R822	10	63642538975	++++
100	R822	10	63642538977	++++
120	R822	10	63642536388	++++
100x2000		10	/0057250002	
36	R929	10	69957350802	++++
40	R929	10	69957350804	++++
60	R929	10	69957350805	++++
	R445	10	69957355675	+++
80	R929	10	69957350806	++++
	R445	10	69957355677	+++
120	R929	10	69957350807	++++
	R445	10	69957355681	+++
*	W445	10	63642580818	++++
100x3000				
40	R293	10	63642551511	+++
60	R293	10	63642548447	+++
100x3350	Omm			
60	R445	10	63642546593	+++
80	R445	10	63642546594	+++
100	R445	10	63642530703	+++
120	R445	10	63642546597	+++
150	R445	10	63642546599	+++
180	R445	10	63642546600	+++
220	R445	10	63642546602	+++
240	R445	10	63642546603	+++
400	R445	10	63642546616	+++
*	W445	10	63642545206	++++
140x3300)mm			
*	W445	10	66254415118	++++
150x2000)mm			
36	R929	10	69957350809	++++
	R895	10	78072724754	++++
	R822	10	63642539008	++++
40	R929	10	69957350812	++++
	R895	10	78072724755	++++
	R822	10	63642539010	++++
60	R929	10	69957350813	++++
	R895	10	78072724756	++++
	R822	10	63642539014	++++
80	R929	10	69957350815	++++
	R895	10	78072724757	++++
	R822	10	63642539016	++++
120	R895	10	78072724758	++++
150x2500	Omm			
40	R929	10	66261023984	++++
60	R929	10	66261023992	+++++

*No abrasive grain

RAPID PREP BELTS

GRIT	CAP CODE	PK QTY	ART NO.	
6x457mm				
Coarse	S2238	20	63642535959	+++
Medium	S2338	20	63642535963	+++
Fine	S2438	20	63642536140*	+++
Very Fine	S2538	20	66623333511	+++
6x610mm				
Coarse	S2238	20	63642536118	+++
Medium	S2338	20	63642536121	+++
Fine	S2438	20	63642536144*	+++
Very Fine	S2538	20	66623333512	+++
13x305mm				
Coarse	S2238	20	63642536134	+++
Medium	S2338	20	63642536137	+++
Fine	S2438	20	63642536164*	+++
Very Fine	S2538	20	66254499884	+++
13x457mm				
Coarse	S2238	20	63642535980	+++
Medium	S2338	20	63642536113	+++
Fine	S2438	20	63642536141*	+++
Very Fine	S2538	20	66261055311	+++
13x610mm				
Coarse	S2238	20	63642536122	+++
Medium	S2338	20	63642536129	+++
Fine	S2438	20	63642536145*	+++
Very Fine	S2538	20	66261019876	+++
19x457mm				
Coarse	S2238	20	63642536114	+++
Medium	S2338	20	63642536116	+++
Fine	S2438	20	63642536142	+++
Very Fine	S2538	20	66261003622	+++
50x2000mm				
Coarse	S2228	5	63642531724	+++
Medium	S2328	5	63642531726	+++
Fine	S2428	5	63642531732	+++
Very Fine	S2528	5	63642531733	+++
75x2000mm				
Coarse	S2228	5	63642531735	+++
Medium	S2328	5	63642531741	+++
Fine	S2428	5	63642531743	+++
Very Fine	S2528	5	63642531751	+++
100x3500mm				
Coarse	S2228	5	63642531760	+++
Medium	S2328	5	63642531761	+++
Fine	S2428	5	63642531764	+++
Very Fine	S2528	5	63642531784	+++
150x2000mm				
Coarse	S2228	5	63642531787	+++
Medium	S2328	5	63642531813	+++
Fine	S2428	5	63642531816	+++
Very Fine	S2528	5	63642531819	+++
			*	Made to order

^{*} Made to order

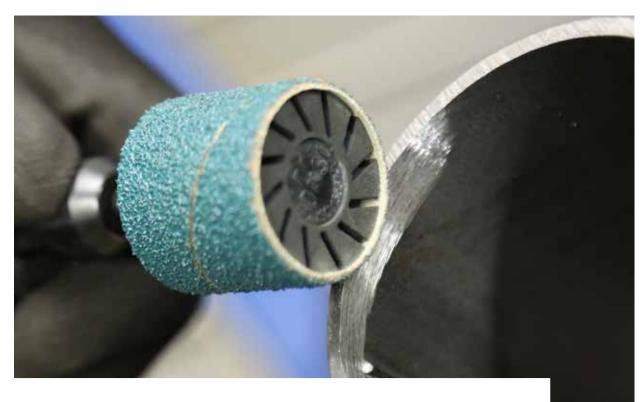
NOTES			



SPECIALTIES

Spirabands and Cones Cartridge and Spiral rolls Sanding stars 202

206



SPIRABANDS & CONESFOR DIE GRINDERS

Both abrasive spirabands and cones are unique shapes designed to access hard-to-reach areas including internal diameters, edges, surfaces curves and contours of components. They are ideal for removing parting lines, imperfections and burrs on surfaces and post-processing and repair work on metal structures, achieving high stock removal thanks to premium grain and exceptional product life even under the most demanding operating conditions. The spiral construction avoids shadow marks and provides smooth, chatter-free cutting action. Easy to mount and remove from cylindrical rubber mandrel by turning slightly to the right.

Spirabands and cones perform best at a recommended speed of 20-30m/s to optimise stock removal and surface finish whilst avoiding thermal load of the workpiece and tool wear.

PRODUCT SELECTION GUIDE

Highly recommended 🗸 🗸 Recommended 🗸





MATERIALS	BLAZE R920	NORZON R822
	++++	++++
Stainless steel, inox and duplex	//	✓
Inconel, titanium and super alloys	//	✓
Carbon steel, construction steel and mild steel	//	/ /
Cast iron	✓	/ /
Non-ferrous metal (brass/aluminium)		✓
Hard and soft wood		/ /





- The best choice on stainless steel, inconels, chromium cobalt, titanium and extremely hard materials
- Maximum performance helps achieve the lowest overall grinding cost on the most difficult-to-grind materials
- Premium ceramic alumina grain provides longer life versus any other spiraband on stainless, titanium and super alloys
- Works well in heavy duty applications for maximum stock removal, reduced heat, loading and glazing



	DIM DIAxW (mm)	GRIT	PK QTY	ART NO.	RECOMMENDED SPEED (RPM)	MANDREL CODE
ABRASIVE SPIRABANDS						
	15x30	36	100	66261137086	25000 - 31500	7660705182
		60	100	66623331569		
Secretary of the second		80	100	66623331571		
	22x20	36	100	66254402665	17500 - 21000 -	63642562578
		60	100	66261192992		
		80	100	66623330997		
	30x30	36	100	66261137092	12700 - 15800	7660707918
		60	100	66254493572		
		80	100	63642504970	_	
	45x30	36	100	66254402667	9250 - 10500	7660705196
		60	100	66261031600	_	
		80	100	66623331020	_	

Dimensions Key: DIM = Dimensions, DIA = Diameter, W = Width Other dimensions available upon request



- A great choice for carbon steel and welds
- Prevents loading on aluminium
- Zirconia abrasive provides an aggressive cut and long life on carbon steel and welds
- Ideal for use on irregular shaped components such as curves, or recesseses



	DIM DIAxW (mm)	GRIT	PK QTY	ART NO.	RECOMMENDED SPEED (RPM)	MANDREL CODE
ABRASIVE SPIRABANDS						
	13x25	36	100	66261176616	29400 - 36500	7660705185
		50	100	63642528507		
		60	100	66261032722		
		80	100	63642528508		
	15x30	36	100	66261034127	25000 - 31500	7660705182
		50	100	63642528509		
		60	100	66623386740	-	
		80	100	63642528496		1

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SPIRABANDS & CONES FOR DIE GRINDERS

	DIM DIAxW (mm)	GRIT	PK QTY	ART NO.	RECOMMENDED SPEED (RPM)	MANDREL CODE
ABRASIVE SPIRABANDS						
	22x20	36	100	63642539865	17500 - 21000	63642562578
		50	100	63642528497	_	
		60	100	63642539866	_	
		80	100	63642539867		
	25x25	36	100	63642528510	15300 - 19000	7660705183
		50	100	63642528511	_	
		60	100	66623316384	_	
		80	100	63642528512		
	30x30	36	100	63642566870	12700 - 15800	7660707918
		50	100	63642535053	_	
		60	100	63642545925	_	
		80	100	63642545926		
	38x25	36	100	66261180965	10000 - 12500	7660717568
		50	100	66261180966		
		60	100	66261137836		
		80	100	66261180967	_	
	45x30	36	100	63642528498	9250 - 10500	7660705196
		50	100	63642528514	_	
		60	100	63642545928	_	
		80	100	63642528515	_	
	51x25	36	100	63642528516	7500 - 9300	7660705184
		50	100	66261180974	_	
		60	100	66261137837		
		80	100	63642528518		
	60x30	36	100	63642536541	6500 - 7900	7660717631
		50	100	63642539765	_	
		60	100	63642539874	_	
		80	100	63642539766	_	
	DIM DBxDTxH (mm)	GRIT	PK QTY	ART NO.	RECOMMENDED SPEED (RPM)	MANDREL CODE
ABRASIVE CONES						
	20x14x63	36	100	66261176761	25000 - 31500	7660740439
		50	100	66261176657		
		80	100	66261176656	_	
		120	100	66261176540	_	
	36x22x60	36	100	63642520987	15300 - 19000	7660740441
9		50	100	63642536572	_	
No. of Street,		80	100	63642545922	_	
		120	100	66261176703	_	

Dimensions Key: DIM = Dimensions, DB = Base diameter, DT = Top diameter, H = Height

Formerly X-Treme R822



ACCESSORIES

- Rubber expanding mandrel gives a forgiving finish
- Shaft diameter 6mm

 Easy to mount and remove spiraband from serrated rubber holder by turning slightly to the right



	DIM DxWxS (mm)	PK QTY	ART NO.
SPIRABAND MANDRELS			
ſ	13x25x6	1	7660705185
4 8 Bm	15x30x6	1	7660705182
	22x20x6	1	63642562578
12/11/1	25x25x6	1	7660705183
	30x30x6	1	7660707918
	38x25x6	1	7660717568
	45x30x6	1	7660705196
50 53	51x25x6	1	7660705184
	60x30x6	1	7660717631

	DIM DBxDTxH (mm)	PK QTY	ART NO.
CONE MANDRELS			
	20x14x63	1	7660740439
	36x22x60	1	7660740441



CARTRIDGE & SPIRAL ROLLSFOR DIE GRINDERS

Cartridge rolls are excellent for getting into small spaces, intricate areas and inside surfaces and corners where other abrasive shapes cannot reach. The abrasive cloth is rolled and glued to form a solid shape with abrasive grain on all sides. As the products are used, the grain fractures during use and reveals the next layer of abrasive, continually renewing the cutting edge. Typically, cartridge rolls are used on high-speed air grinders mounted on a mandrel for flash removal, polishing, or removing machine tool marks, edge breaking and dressing fillet weld seams on metal structures.

High speed air grinders are compact and lightweight for using mandrel-mounted abrasives, allowing better control than larger die grinders, they're a 'must' for any detail work on small parts. Cartridge and spiral rolls perform best at a recommended speed of 6-9 m/s to optimise stock removal and surface finish whilst avoiding thermal load of the workpiece and tool wear.

PRODUCT SELECTION GUIDE

Highly recommended 🗸 🗸







MATERIALS	BLAZE R920	R422	METAL R265
	++++	++++	+++
Stainless steel, inox and duplex	//		
Inconel, titanium and super alloys	//		
Carbon steel, construction steel and mild steel	//		✓
Cast iron	✓		//
Non-ferrous metal (brass/aluminium)		✓	//
Hard and soft wood		//	✓
Composite materials		//	✓
Stone, concrete		//	
Glass, plastic		//	

CARTRIDGE & SPIRAL ROLLS FOR DIF GRINDERS

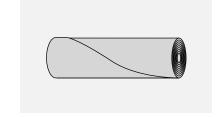
SHAPE RECOMMENDATION GUIDE

STRAIGHT ZPE

Straight rolls wear to the shape required. Effective for:

- Flash removal
- Polishing or removing machine tool marks
- Edge breaking
- Reaching into corners, where larger diameter tools cannot work

All cartridge rolls are resin bond, half-glued.

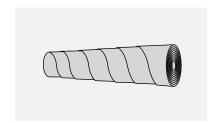


SPIRAL ZSPI

Spiral rolls are suited for use on contoured parts. Effective for:

- Grinding/polishing of channels, fillets and radii, and deburring small holes
- Tapered end can be used when the area to finish is hard to reach with a full cartridge roll
- Conforms to small areas
- Fits into irregular concaves, contours, channels

All spiral rolls are fully tapered, resin bonded, half glued.





- Ceramic alumina grain for the highest productivity Improved bond system retains the grain for of all rolls, with faster cut rate and long life
- Grinding aid provides a cooler cut and reduced loading and glazing on hard to grind materials stainless steel, cobalt, inconel and titanium
- longer, helping you get more use from just one product
- Strong backing provides excellent durability even under tough pressure and wears evenly





	DIM BSxLxB (mm)	GRIT	PK QTY	ART NO.	RECOMMENDED SPEED (RPM)	MANDREL CODE	
STRAIGHT ZPE							
A STATE OF THE PARTY OF THE PAR	6x25x3	120	50	66261128994	19000 - 28600	63642556790	
	6x38x3	80	50	66261128986	19000 - 28600	63642556791	
		120	50	66261128995			
	10x38x3	80	50	66261128988	11500-17200	63642556791	
		120	50	66261128997			
	13x38x3	60	50	66261128975	8800 - 13200	63642556791	
		80	50	66261128990			
		120	50	66261128999			
	19x38x3	120	50	66261129001	6000 - 9000	63642556791	
SPIRAL ZSPI							
40 m	10x38x3	60	50	66261129486	11500 - 17200	63642556791	
		80	50	66261129493			
	13x38x3	60	50	66261129489	8800 - 13200	63642556791	
		80	50	66261129496			

Dimensions Key: DIM = Dimensions, BS = Base diameter, L = Length, B = Bore Other dimensions available upon request

CARTRIDGE & SPIRAL ROLLS FOR DIE GRINDERS

R422

- Sharp silicon carbide abrasive for high initial cut on non-ferrous and soft-loading materials such as titanium, masonry, composites, plastic and rubber
- Resin bond system holds the grain for longer, helping you get more use from just one product
- A great solution for grinding titanium on non-ferrous aircraft and engine parts
- Ideal solution for sanding and polishing channels, fillets, recesses, radii, small contours and the bottom of dead-end holes



	DIM BSxLxB (mm)	GRIT	PK QTY	ART NO.	RECOMMENDED SPEED (RPM)	MANDREL CODE
STRAIGHT ZPE						
	13x38x3	60	50	66261129008	8800 - 13200	63642556791
		80	50	66261129018		
		Dimens	ions Key: D	IIM = Dimensions	, BS = Base diameter,	
	DIM				RECOMMENDED	MANDREL
	BSxLxB (mm)	GRIT	PK QTY	ART NO.	SPEED (RPM)	CODE
SPIRAL ZSPI	BSxLxB (mm)	GRIT	PK QTY	ART NO.		
SPIRAL ZSPI	BSxLxB (mm) 13x38x3	GRIT 60	PK QTY	ART NO. 66261129526		
SPIRAL ZSPI					SPEED (RPM)	CODE
SPIRAL ZSPI		60	50	66261129526	SPEED (RPM)	CODE

Dimensions Key: DIM = Dimensions, BS = Base diameter, L = Length, B = Bore Formerly X-Treme R422

STEEL MANDREL FOR CARTRIDGE ROLLS

Shank

DESCRIPTION	DIM DIAxL (mm)	SHAFT DIAMETER (mm)	PK QTY	ART NO.
Steel mandrel for cartridge rolls	3x19	6mm	1	63642556790
with a 6mm shaft	3x25	6mm	1	63642556791
Pilot Length	Di	mensions Key: DIM = Din	nensions, DIA = P	ilot diameter, L = Pilot length

Pilot

Diameter



METAL R265 +++



- A good choice for hard-to-grind materials that require an economical option or for multi-purpose applications
- Resin bond system ensures edge adhesion
- Aluminium oxide abrasive provides a good cut rate and good product life
- Runs cooler and more efficiently; ideal for grinding exotic alloys



	DIM BSxLxB (mm)	GRIT	PK QTY	ART NO.	RECOMMENDED SPEED (RPM)	MANDREL CODE
STRAIGHT ZPE						
(C)	6x38x3	60	50	66261128877	19000 - 28600	63642556791
		80	50	66261128899	_	
		120	50	66261128909		
20	10x38x3	60	50	66261128886	11500 - 17200	63642556791
2		80	50	66261128901	_	
		120	50	66261128912		
	13x38x3	60	50	66261128891	8800 - 13200	63642556791
		80	50	66261128904		
		120	50	66261128914		
	DIM BSxLxB (mm)	120 GRIT	50 PK QTY	66261128914 ART NO.	RECOMMENDED SPEED (RPM)	MANDREL CODE
SPIRAL ZSPI						
SPIRAL ZSPI						
SPIRAL ZSPI	BSxLxB (mm)	GRIT	PK QTY	ART NO.	SPEED (RPM)	CODE
SPIRAL ZSPI	BSxLxB (mm)	GRIT 60	PK QTY	ART NO. 66261129106	SPEED (RPM)	CODE
SPIRAL ZSPI	BSxLxB (mm)	GRIT 60 80	PK QTY 50 50	ART NO. 66261129106 66261129113	SPEED (RPM)	CODE
SPIRAL ZSPI	BSxLxB (mm) 10x38x3	60 80 120	PK QTY 50 50 50	ART NO. 66261129106 66261129113 66261129121	SPEED (RPM) 11500 - 17200	CODE 63642556790
SPIRAL ZSPI	BSxLxB (mm) 10x38x3	60 80 120 60	PK QTY 50 50 50 50	ART NO. 66261129106 66261129113 66261129121 66261129109	SPEED (RPM) 11500 - 17200	CODE 63642556790

Formerly BDX R265

MADE-TO-ORDER PRODUCT AVAILABILITY

PRODUCT / GRIT	60	80	120
BLAZE R920		•	•
R422	•	•	•
METAL R265	•	•	•

MINIMUM ORDER QUANTITY STRAIGHT ZPE

DIAMETER (mm)	MINIMUM ORDER QUANTITY
6x25x3	250 pieces
6x38x3	250 pieces
10x25x3	250 pieces
10x38x3	250 pieces
13x25x3	250 pieces
13x38x3	250 pieces
19x25x3	250 pieces
19x38x3	250 pieces

MINIMUM ORDER QUANTITY SPIRAL ZSPI

DIAMETER (mm)	MINIMUM ORDER QUANTITY
10x25x3	250 pieces
10x38x3	250 pieces
10x50x3	250 pieces
13x25x3	250 pieces
13x38x3	250 pieces
19x38x3	250 pieces
19x50x3	250 pieces

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SANDING STARS

Ideal for deburring and finishing difficult to access metal applications, irregular shaped components, holes, radii and grooves as small as 35mm, as well as removing sharp edges which may cause manual handling problems on irregular or awkward sized components. The perfect tool for applications requiring a perfect 360° finish, ideal for irregular surfaces due to high flexibility and conformability. Sanding stars are a multi-layered abrasive tool that are rived together on a 6mm shaft.

Sanding stars perform best at a recommended speed of 15-25m/s for optimising stock removal and surface finish whilst avoiding thermal load of the workpiece and tool wear.

PRODUCT SELECTION GUIDE SANDING STARS

Highly recommended 🗸 🗸 Recommended 🗸



MATERIALS	BLAZE R946
	++++
Stainless steel, inox and duplex	√ √
Inconel, titanium and super alloys	√ √
Carbon steel, construction steel and mild steel	$\checkmark\checkmark$
Cast iron	✓





- Cuts cooler and lasts longer on stainless steel, cobalt, inconel, titanium and other hard-to-grind materials
- Maximum performance for lowest overall grinding cost on your most difficult-to-grind materials
- Reduced heat, loading and glazing on stainless, titanium and super alloys
- Conforms to irregular shaped components and contours





	DIM DIAxS (mm)	GRIT	NUMBER OF PLIES	PK QTY	ART NO.	RECOMMENDED SPEED (RPM)
	40x6	60	12	10	66261131904	7200 - 12000
		120	12	10	66261132447	
	60x6	60	12	10	66261132442	4800 - 8000
		120	12	10	66261132449	
	100x6	60	12	10	66261132445	2900 - 4800
		120	12	10	66261132452	

MADE-TO-ORDER PRODUCT AVAILABILITY

PRODUCT / GRIT	80	120	150	180	240	320
BLAZE R946	•	•	•	•	•	•
NORZON R427*	•	•	•	•	•	
METAL R309*	•	•	•	•	•	•

* available as MTO

MINIMUM ORDER QUANTITY

DIAMETER (mm)	MINIMUM ORDER QUANTITY
25	50 pieces
40	50 pieces
50	50 pieces
60	50 pieces
70	50 pieces
80	50 pieces
100	50 pieces
125	50 pieces



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SAFETY ADVICE

GENERAL PRECAUTIONS

Safety instructions provided by the machine manufacturers must be followed. Where fitted, all guards, covers and hoods must be in place on the machine during grinding, and should not be modified in any way. Abrasives should not be used near inflammable material or in an environment where there is a risk of explosion.

Sparks should be directed away from the face and body, if possible towards the floor. Dust extraction equipment must be used whenever it is available. The instructions

for use given by the abrasive manufacturer must be followed e.g. 'Not to be used without a support', or 'Not to be used for wet grinding'. The workpiece must be firmly fixed before grinding starts. Check all abrasives visually before use and make certain that the product is suitable for the application. No modifications should be made to abrasive products after delivery.

When using a portable grinder always switch it off and allow the spindle to stop completely before putting the tool down.

TRANSPORT & STORAGE

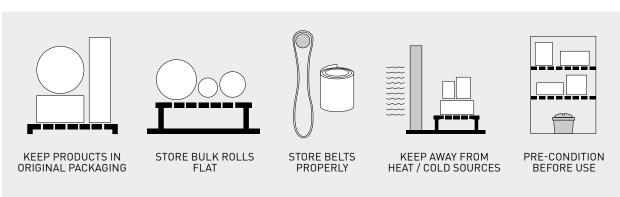
All coated abrasives should be handled carefully. Damage can be caused by mishandling, which should be avoided. Coated abrasives should be stored in dry, frost-free conditions. They should be kept away from heat sources, cold, damp walls, doors or windows and should not be in direct contact with the floor. Temperatures and humidity should be between 18°C and 22°C and 45%-65% relative humidity. Coated abrasives should not be exposed to direct sunlight. Products should be kept in their original packaging until immediately before use. Once unpacked, they should be stored in a way which avoids distortion.

Temperature and humidity are the two most important climatic factors influencing coated abrasive performance. Backings and adhesives are sensitive to climatic changes and will gain or lose moisture according to the relative humidity of their surroundings.

Excessive humidity may cause a softening of some types of adhesive bonds so that the product quickly fills and clogs, or loses its grain during use. Excessive dryness may cause brittleness, reduced flexibility, and distortion of product shapes.

As moisture in the coated abrasive product increases or decreases, dimensional changes can occur. When the backing changes more than the adhesive bond, it causes cupping.

High and low humidity can cause concave and convex cupping respectively. The newer synthetic-backed belts are not affected by moisture. Broad temperature swings will not permanently harm these products either, but cold temperatures will cause a "cold set" condition. Consequently, these products should be allowed to come to room temperature before use.



- Keep products in original packages. These packages facilitate handling and can be stacked in the most practical and convenient manner.
- Bulk rolls should not be allowed to stand on edge after they have been unpacked. Store flat on shelves or pallets.
- Narrow belts which have been removed from the carton should be rolled up and stored on edge on a clean shelf. Belts may be draped over a large cylinder, such as a brake drum, or flanged hanger of the type used for a garden hose. Never hang a belt from a nail – the backing will crease and the abrasive belt might crack.
- Wide belts should be hung over a tube of at least 100mm diameter. Centre the belt joint over the tube and add a light weight (such as old packaging tubes) to the bottom loop of the belt to aid in removing set.
- Condition for 24 hours prior to use.
- For maximum product efficiency, precondition coated abrasive products in a chamber of controlled temperature and humidity before use.



SAFETY ADVICE

For your safety you should ensure that you are fully aware of how to safely use abrasives

D0's

Read the safety instructions provided by the abrasives and equipment supplier

Store abrasives in dry, frost-free conditions avoiding wide variations in temperature

Ensure that the product is suitable for its purpose

Handle, store and transport products with care

Disconnect the power to the machine before fitting the product

Examine all products before mounting and periodically during use for possible defects or damage (core flatness, fatigue cracks, undercutting, arbor hole damage...)

Check that correct mounting devices are used and that they are clean, undistorted and free from burrs

Ensure that work rests are properly adjusted and secure

Always use a correctly designed and adjusted guard (on belts)

Ensure that the workpiece is secure

Wear appropriate personal protective equipment at all times

Avoid clogging and uneven wear to ensure that the product is working efficiently

Ensure accordance between product direction arrow / machine rotation

Ensure that all machines using abrasives meet the requirements of the current European machinery directives-CE

Be aware of the hazards likely during the use of abrasives and observe the recommended precautions to be taken:

- Bodily contact with the abrasive product at operating speed
- Injury resulting from product breakage during use
- Grinding debris, sparks, fumes and dust generated by the grinding process
- Noise
- Vibration

DON'Ts

Allow untrained people to use abrasives

Use a product that is damaged

Use a product if it cannot be properly identified

Use a machine that is not in good working order or one with defective parts

Force the abrasive onto the mounting device or modify the size of the mounting hole

Exceed the maximum operating speed marked on the product

Apply shock or excessive force to the product or let it overheat

Use mounting flanges which are not clean and flat

Tighten the mounting device excessively

Start the machine until the guard is in place and fastened securely

Continue to use a product if vibration occurs

Grind on the part of the product which is not designed for the operation $% \left(1\right) =\left(1\right) \left(1\right) \left$

Start the machine with the workpiece in contact with the abrasive product

Grind material for which the product is not designed

Stop the abrasive by applying pressure to its surface, let it stop naturally

Wear loose clothing, ties and jewellery

Use abrasive products near flammable materials

SAFETY ADVICE

PERSONAL PROTECTION

Safety goggles, ear defenders, safety gloves, dust masks and, if conditions are severe, additional face protection. Leather aprons and safety shoes must be worn.



Wear a mask (ISO 7010)



Wear protective gloves (ISO 7010)



Wear eye protection (ISO 7010)



Wear ear protection (ISO 7010)



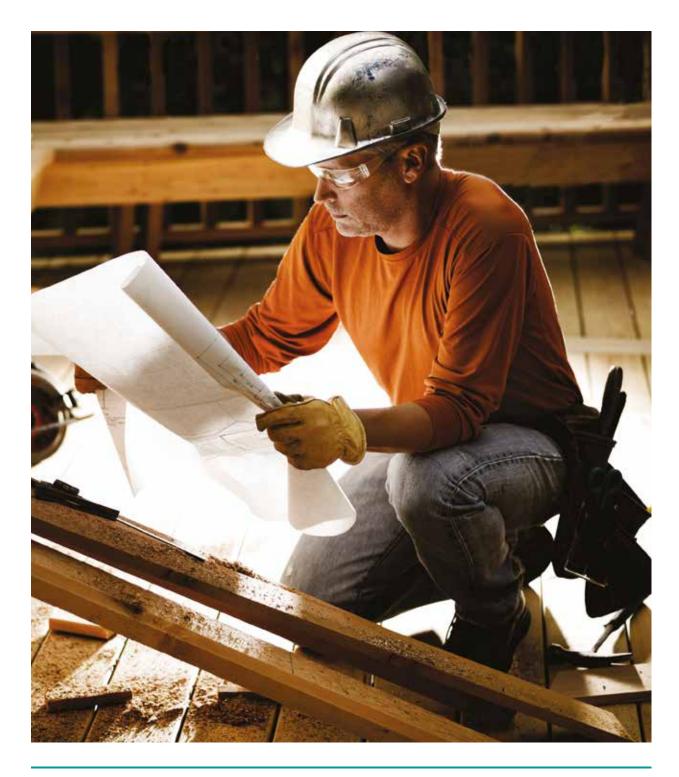
Refer to instruction manual/ booklet (ISO 7010)



Only suitable for wet grinding



Do not use for wet grinding (ISO 7010)





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INTRODUCTION BONDED ABRASIVES

From standard aluminium oxide bench wheels to premium ceramic abrasive surface grinding wheels, Norton offers high performance abrasive solutions that can maximise productivity in virtually all industrial applications.

The extensive product range is designed to meet all your precision grinding and roughing application needs, with all the most appropriate abrasive specifications, including grinding wheels, segments, mounted points, dressing sticks and sharpening stones.

Norton, the industry's most comprehensive Bonded abrasive product line.

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NON-REINFORCED & REINFORCED CUT-OFF WHEELS



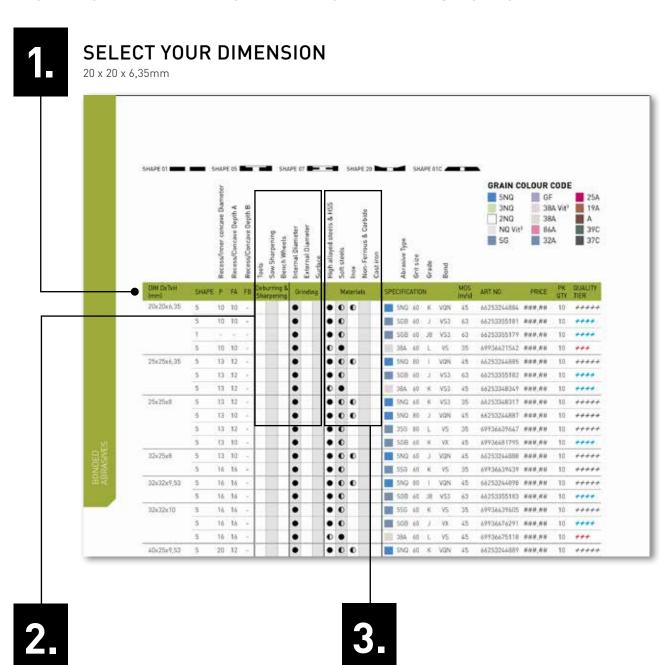
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HOW TO READ THE GRINDING WHEEL SECTION



CHOOSE YOUR APPLICATION

DEBURRING & SHARPENING

- Tools
- Saw sharpening
- Bench grinding

GRINDING

- Internal
- External
- Surface

IDENTIFY SURFACE TYPE / MATERIAL

- High alloyed steels and HSS
- Soft steels
- Non-ferrous and carbide
- Cast Iron



ARTICLE IDENTIFIED

Please contact your Norton representative if you need assistance or advice.

WHAT IS A GRINDING WHEEL?

A grinding wheel is a precision tool with thousands of cutting points. It consists of abrasive grains held in a matrix of bond and separated by pores. The abrasive grains are the cutting points while the purpose of the bond is to hold the individual grains together. The pores (hollow spaces between adjacent abrasive grains and the bond) serve to provide clearance for coolant penetration and metal chips removed in the grinding process.

When the wheel is rotated at grinding speed and applied to the workpiece, the abrasive grains cut the material that is being ground, removing the material in small chips.

Under the action of the forces imposed during grinding, the abrasive cutting points are worn flat, resulting in the points becoming blunt. This causes an increase in friction, and a build-up of heat.

The increase in grinding forces causes either the abrasive to fracture, exposing new cutting edges, or fractures the bond bridges holding the abrasive grains. In the latter case fresh abrasive grains are exposed to cut the workpiece.

In normal vitrified grinding applications, the wheel has to be dressed

By varying the properties of the abrasive, the type of bond, the make-up of the wheel, it is possible to produce grinding wheels with a vast range of different grinding characteristics.

ABRASIVE TYPES



CERAMIC ALUMINIUM OXIDE

Norton SG, Norton Quantum are patented ceramic forms of aluminium oxide that are harder and sharper than conventional abrasive grains.

The ceramic grain has a unique microcrystalline structure and when used in a grinding operation this microstructure becomes self-sharpening.

This leads to a reduction in the need for wheel dressing and a considerably cooler cutting action.



ALUMINIUM OXIDE

Generally recommended for grinding materials of high tensile strength, such as stainless steel and tool steels, but it can also be used on some high tensile aluminium and bronze alloys. It is manufactured in varying qualities.



SILICON CARBIDE

Harder than aluminium oxide with a very sharp abrasive grain shape. It is recommended for grinding relatively soft materials such as aluminium or cast iron as well as grinding extremely hard materials such as cemented carbide.



ZIRCONIA ALUMINA

For use in rough grinding applications where high stock removal is required. Associated with high tech resin bonds.





GRAIN SPECIFICATIONS

This is a particularly tough form of aluminium oxide. Its toughness is due to the presence of 3% of titanium oxide in the abrasive. Fired at low temperature the abrasive retains its natural brown colour. Fired at high temperature further oxidation of the titanium oxide takes place which changes the normal brown colour to a grey-blue. Because of its toughness, regular brown alumina is suitable for grinding high tensile strength materials, specifically off-hand grinding (bench grinding wheels) and sharpening stones.

A blend of A and 38A abrasives. This abrasive gives a grinding action that can be compared to the average of its components. It is supplied in some standard tool room wheels, used for surface, cylindrical, centreless and miscellaneous grinding on less heat sensitive steels.

38A White fused aluminium oxide (99,8% pure). The most friable and cool cutting of the aluminium oxides. This abrasive is supplied in all types of standard range wheels ideal for use on hard and heat sensitive steels and alloys. It has traditionally been used for sharpening high-speed steel and cast alloy tools and cutters. 38A is used for cylindrical, surface and internal grinding of tools, dies and gauges.

57A Semi-pure brown fused aluminium oxide (98% pure). The higher purity of 57A makes it a good general purpose abrasive. Its versatility enables it to be used for grinding steel parts in both soft and hard states, especially on large cylindrical and centreless operations. U Treatment (U57A) is a ceramic coating applied to this abrasive to increase its durability in resin bonded cutting-off wheels. It is used in the advanced range resinoid cut-off wheels.

Pink aluminium oxide is a highly refined form of alumina containing a small proportion of chromium oxide. This addition makes 86A a little tougher than pure white, increasing the strength along the shear planes. This abrasive is available in a range of mounted points and wheels.

SGB 3SG

5SG

A blend of premium abrasives that include a medium, high, very high concentration of premium abrasive SG. SG has a unique microcrystalline structure allowing self-sharpening.

2NQ

3NQ

Blends that include medium, high, very high concentrations of premium abrasive NQ. NQ has improved self-sharpening properties allowing even cooler grinding action vs. SG. NQ blends are specially suited for low to medium pressure applications.

5NQ

37C Crystolon silicon carbide abrasive. Supplied mainly in the resin bonds of advanced wheels used for grinding grey iron, non-ferrous metals and in vitrified bonds for grinding non-metallic materials, such as rubber

and stone.

39C

Crystolon is the highest purity silicon carbide abrasive. It is ideal for grinding cemented carbide cutting tools, fired ceramics and glass, where it provides advanced performance.



BONDED ABRASIVES PRODUCT SELECTION

GRIT SIZE

The number in the grinding wheel, marking designating grit size, represents the approximate number of openings per linear inch in the final screen size used to size the grain. The following rules should be followed:

USE COARSE GRIT

- For soft, ductile, stringy materials such as soft steel or aluminium
- For rapid stock removal
- Where finish is not important
- · For large areas of contact

USE FINE GRIT

- · For hard, brittle materials such as hard tool steels, cemented carbides and glass
- For fine finishes
- For small areas of contact
- For holding small corner radii

WHEEL GRADE

The grade indicates the relative holding power of the bond, which holds abrasive grains in a wheel. This is represented in the specification by letters running through the alphabet from softest to hardest. The following rules should be followed with regard to grade:

USE SOFT GRADE

- For hard materials such as hard tool steels and carbides
- For large areas of contact
- For rapid stock removal

USE HARD GRADE

- For soft materials
- For small or narrow areas on contact
- For longer wheel life

COMMON RANGE OF GRADES

F	G	Н	1	J	K	L	М	N	0	Р	Q	R	S	Т	U
				CYLIN	IDRICAL	/CENTRI	ELESS								
S	URFACE	GRINDIN	٧G												
	ID GRINDING														
				T00	L GRINE	ING									
					THRE	AD GRIN	IDING								
	NON-REINFORCED ORGANIC														
											REI	INFORCE	D ORGA	NIC	

BOND TYPES-VITRIFIED

Vitrified bonds are the most common precision grinding bond. Porosity and strength of the wheels made with this bond give high stock removal along with their rigidity helping to attain high precision. Not affected by water, acid, oils or ordinary temperature variations.

THE MOST COMMON VITRIFIED BONDS ARE:



VITRIUM VITRIUM3 REVOLUTIONARY BOND TECHNOLOGY

The Vitrium³ bond platform features an exclusive chemistry that delivers an entirely new grain adhesion science, resulting in improved product versatility across a wide range of precision grinding applications. Provides cool cutting, precise profile, high speed and versatility across all precision grinding

	applications.
VS	VS is a versatile, low temperature, vitrified bond system used in most precision applications.
VX / VXP	Equivalent to VS bond, for ceramic only.
VQN / VQNP	These bonds are associated with Norton Quantum technology - a versatile technology for low, medium and high force applications.



BOND TYPES-ORGANIC

These bonds are used in two types of wheels. Firstly, wheels used on portable or fixed machines for the rapid removal of metal. Secondly, cutting-off wheels either non-reinforced or reinforced, for use on portable or fixed machines. The most common organic bonds are:

SNAGGING W	/HEELS & CUPS
B & B3	Foundry wheels: multi-purpose bond that gives satisfactory results on most applications
B28	Foundry wheels: high level bond suitable for most technical applications requiring high powered machines
CUTTING-0F	F WHEELS
BFX	Foundry X bond technology designed to increase cut rate and wheel life in all cut-off applications on a wide range of tough materials
BF1	Specific bond ensuring the best quality of cut in dry or wet conditions
BF3	New generation bond assuring the best wheel life in dry cutting operations; versatile and long wheel life. Ideal for heavy duty operations
B24	New generation bond used on silicon carbide cut-off wheels that gives the best performance and the ultimate cut quality on non-ferrous metals in wet conditions
B25	Standard multi-purpose bond that offers durability and freeness of cut in a wide variety of materials and applications. Can also be used in wet cutting on softer grades
B26	New generation bond used on aluminium oxide cut-off wheels that gives the best performance and the ultimate cut quality on ferrous metals in wet conditions
B65	Traditional bond gives good performance and long wheel life in dry cutting conditions

SELECTING THE RIGHT PRODUCT

THERE ARE NINE MAIN FACTORS TO BE CONSIDERED WHEN SELECTING A GRINDING WHEEL FOR ANY APPLICATION:

- The material to be ground its type and hardness
- The stock to be removed
- The workpiece geometry and surface finishes required
- The grinding machine, the type of machine, the power available and its conditions

MATERIAL TO BE GROUND

The type of material affects the selection of abrasive, grit size and grade. Alumina type abrasives are the most suitable for grinding high tensile materials such as steel and ferritic cast iron. The more friable types of alumina are preferred on harder steels and applications having large arcs of contact.

Low tensile strength materials and non-metallic materials are most efficiently ground or cut with silicon carbide abrasive.

The hardness of the material governs the amount of penetration that can be achieved by the abrasive. For this reason, finer grit size wheels are required to grind hard materials and soft materials are best ground with medium to coarse grit size wheels.

For most efficient operation, the grade must be adjusted to suit the hardness of the material. As a general guide, the harder the material, the softer the grade of wheel required.

- Wheel speeds and feeds
- Grinding contact area
- Grinding fluid whether the operation is wet or dry
- The severity of the grinding operation
- The dressing method

STOCK TO BE REMOVED

This affects the choice of abrasive size and bond type.

High stock removal rates, as in fettling operations, require coarse grit wheels, typically 12 to 24 mesh.

Fine finishes and tight limits on finished workpiece geometry require finer grit sizes.

Final surface finish is often achieved by 'spark out'. No further infeed is applied and the wheel is allowed to grind until the majority of the grinding sparks cease.

CLIDEACE EINICH

SURFA	ACE FIN	IISH						Reco	mmended
		←			GRI	T SIZE			
SURFACE	FINISH	46	60	80	100	120	150	180	220
42	1,10	•							·
32	0,80	•							
26	0,70	•							
21	0,50		•						
16	0,40		•						
14	0,35		•	•					
11	0,25		•	•					
8	0,20			•	•				
7	0,17			•	•	•			
6	0,14				•	•	•		
5	0,12					•	•	•	
4	0,10						•	•	•
3	0,08							•	•
2	0,05								•
MIN FORM	METIC (mm)	0,75	0,50	0,40	0,25	0,20	0,18	0,13	0,10
RADIUS	IMP INS	,030	,020	,015	,010	,008	,007	,005	,004

The achievable surface finish in any grinding operation is highly dependent upon the grit size of the grinding wheel. The following chart shows the range of surface finishes achievable when using grinding wheels of different grit sizes on reducing the dresser infeed per revolution of the grinding conventional precision grinding applications, together with the minimum form radius that can be ground using each grit size.

Other factors can affect the surface finish achieved. In particular:

- Production grinding applications, with higher stock removal ranges, will give surface finishes at the coarser end of the range
- Plunge grinding applications will often require the selection of a grit size one size finer than shown
- Dressing techniques and the type of material can also affect the surface finish achieved

ACHIEVING IMPROVED SURFACE FINISHES

By changing the wheel dressing technique, it is possible to achieve finer surface finishes than those shown. As well as wheel, it is also possible to reduce the infeed and traverse rate when grinding, thus reducing the stock removal rate. Obviously this approach will have limited application in production grinding but it can be very useful in tool room work.

READING THE PRODUCT

- Safety pictograms
- Strong Norton branding
- Product dimensions (mm)
- Product specification
- 5 Maximum operating speed
- 6 Article number; for use when re-ordering
- 7 oSa certified The Organisation for Safety of Abrasives
- 8 European safety standard EN 12413





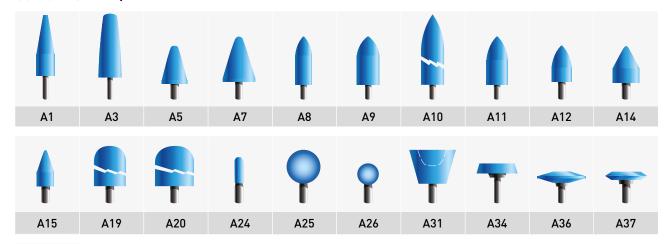
MOUNTED POINTS

239

Quantum® 5NQ blue	
Vitrified mounted poin	ts
Organic mounted poin	ts

BONDED ABRASIVES MOUNTED POINTS & WHEELS

CONICAL SHAPE / A





CONICAL SHAPE / B





CYLINDRICAL SHAPE / W CY

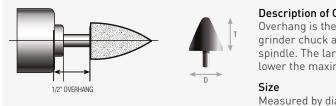
CYLINDRICAL SHAPE / C







MEASUREMENT GUIDE

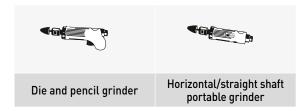


Description of Overhang

Overhang is the distance between the grinder chuck and the abrasive on the spindle. The larger the overhang, the lower the maximum safe operating speed.

Measured by diameter (D) x thickness (T)

MACHINE PICTOGRAMS



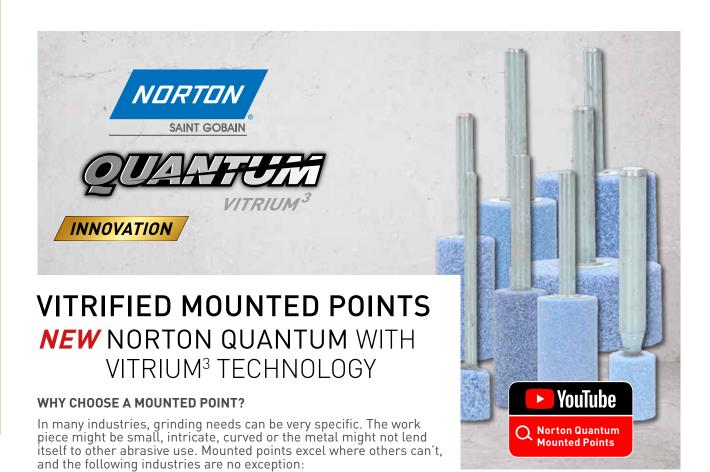
PERSONAL PROTECTION



In rotating abrasives, the maximum permissible rotational speed is a factor of key importance that results from the maximum operating speed specified in the applicable standards as a function of the tool diameter and is given in revolutions per minute (1/ min. or min.-1). Maximum safe operating speeds of all mounted points is 33 m/sec. Max RPM is shown for each shape codes in the table. Max RPM is based on the shape and spindle combination with a maximum 25mm overhang.



- For best mounted point performance, always run the mounted point at the maximum allowable speed according to ANSI B7.1. Refer to the speed chart included in each shipment for proper operating speeds.
- Use "A" shapes for medium to heavy-duty blending.
- Use "B" shapes for light deburring and finishing/polishing.
- Use "W" shapes for offhand and precision grinding of medium to heavy stock.
- Use 36 grit and coarser for rough grinding.
- Use 60 and 90 grits for imparting fine finishes or when grinding on narrow surfaces.





FOUNDRY

Mounted points are hard wearing in industries where grinding volumes are high.



AEROSPACE

On tricky shapes of turbine blade components, nozzle guide vanes, inconel, titanium and stainless steel.



METAL FABRICATION

Weld repair in corners and tight spaces, pipe work and mouldings, intersections and risers.



TOOL ROOM

Burr removal, bevelling, sharpening, preparation of ID and OD grinding.

THE RANGE

Never before has there been such a comprehensive range of sizes, with 200 stock sizes, and 80 different shapes starting from 36 grit for high material removal to 120 for a perfect finish. Mounted points are available with shaft dimensions 3mm, 6mm and 8mm; there's a solution available for any application.







NORTON QUANTUM® MOUNTED POINTS TAKE A **GIANT LEAP IN PERFORMANCE**, RANGE AND LIFE.

Utilising Norton's proven ceramic Quantum grain and Vitrium3® bond technology, this new range of vitrified mounted points offers higher material removal and longer product life than competitors when tested in a controlled environment.



BUT NOT AS WE KNOW IT

up to 30% more grinding time

Reduce wasted downtime with less product changeover, increasing productivity ratio saving total abrasive cost.



finish faster with higher throughput

Higher metal removal rate and a smooth grinding experience thanks to reduced vibrations through the machine.

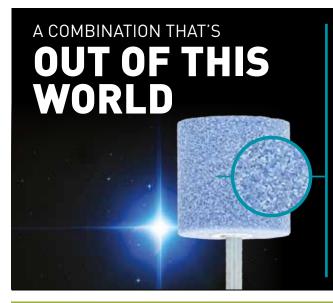


reduces total abrasive cost

Self-sharpening grain prevents loading, for free cutting action with no glazing. No need for costly, time consuming rework. The coolest cut, maintains metallurgic integrity.



Fast grinding on heat sensitive alloys (Fe and Ni based) hard and medium steels, a full range of shapes and sizes available





Norton Vitrium3 is a revolutionary bond which facilitates exceptionally cool cutting, profile holding and high speed for increased throughput.

PROVIDING A PERFECT BLEND OF SHARPNESS AND TOUGHNESS.



Norton Quantum ceramic grain was developed from Norton patented Seeded-Gel technology. The revolutionary ceramic grain multiplies the cutting efficiency by controlling breakdown at micrometric level.

HIGH PRECISION AND VERSABILITY ACROSS MANY APPLICATIONS.

BONDED ABRASIVES MOUNTED POINTS & WHEELS

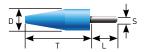
GRAIN COLOUR CODE

5NQ Vit3



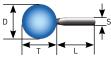


SHAPE OGIVE (A)



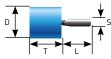
SHAPE	DIM DxT (mm)	SPINDLE SxL (mm)	ABRASIVE TYPE	GRIT SIZE	GRADE	BOND	ART NO.	MOS (RPM)	PK QTY	QUALITY TIER
A1	20x65	6x40	5NQ	46	R	VS3	69078663903	15000	10	++++
A1	20x65	6x40	5NQ	60	R	VS3	69078664021	15000	10	++++
A3	22x70	6x40	5NQ	46	R	VS3	69078664025	14000	10	++++
A3	22x70	6x40	5NQ	60	R	VS3	69078663919	14000	10	++++
A5	20x28	6x40	5NQ	46	R	VS3	69078664027	30000	10	++++
A5	20x28	6x40	5NQ	60	R	VS3	69078663924	30000	10	++++
A7	30x50	6x40	5NQ	36	R	VS3	69078664028	13000	10	++++
A7	30x50	6x40	5NQ	60	R	VS3	69078664029	13000	10	++++
A11	22x45	6x40	5NQ	46	R	VS3	69078664030	18000	10	++++
A11	22x45	6x40	5NQ	60	R	VS3	69078663906	18000	10	++++
A12	20x32	6x40	5NQ	60	R	VS3	69078663913	30000	10	++++
A15	6x25	6x40	5NQ	80	R	VS3	69078663914	30000	10	++++
A24	6x20	6x40	5NQ	60	R	VS3	69078663915	30000	10	++++
A25	Ø25	6x40	5NQ	46	R	VS3	69078664031	25000	10	++++
A25	Ø25	6x40	5NQ	60	R	VS3	69078663917	25000	10	++++
A31	35x25	6x40	5NQ	60	R	VS3	69078663921	25000	10	++++
A36	40x10	6x40	5NQ	46	R	VS3	69078664037	25000	10	++++
A38	25x25	6x40	5NQ	60	R	VS3	69078663923	25000	10	++++

SHAPE BALL (B)



B44	6x10	3x40	5NQ	80	R	VS3	69078663934	61000	10	+++++
B45	5x8	3x40	5NQ	80	R	VS3	69078663936	90000	10	+++++
B46	4x8	3x40	5NQ	90	R	VS3	69078664039	90000	10	+++++
B52	10x20	3x40	5NQ	46	R	VS3	69078664032	58000	10	+++++
B52	10x20	3x40	5NQ	60	R	VS3	69078664033	58000	10	+++++
B53	8x16	3x40	5NQ	80	R	VS3	69078663940	61000	10	+++++
B97	4x10	3x40	5NQ	90	R	VS3	69078663941	54000	10	+++++
B121	Ø13	3x40	5NQ	80	R	VS3	69078663925	58000	10	+++++
B122	Ø10	3x40	5NQ	90	R	VS3	69078663926	61000	10	+++++
B123	Ø5	3x40	5NQ	80	R	VS3	69078663928	73000	10	+++++
B124	Ø3	3x40	5NQ	80	R	VS3	69078663929	73000	10	+++++

CYLINDRICAL (W)



W144	3x6	3x40	5NQ	60	R	VS3	66253478595	105000	10	+++++
W144	3x6	3x40	5NQ	80	R	VS3	66253478592	105000	10	++++
W144	3x6	3x40	5NQ	100	R	VS3	66253478593	105000	10	++++
W144	3x6	3x40	5NQ	120	R	VS3	66253478594	105000	10	++++

^{*}Shape not available in the US ANSI code



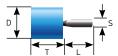
GRAIN COLOUR CODE



NORTON SANT GORAN



CYLINDRICAL (W)



SHAPE	DIM DxT (mm)	SPINDLE SxL (mm)	ABRASIVE TYPE	GRIT SIZE	GRADE	BOND	ART NO.	MOS (RPM)	PK QTY	QUALITY TIER
W144	3x6	6x40	5NQ	100	R	VS3	66253480442	105000	10	++++
W144	3x6	6x40	5NQ	120	R	VS3	66253480444	105000	10	+++++
-*	3x8	6x40	5NQ	100	R	VS3	66253480445	105000	10	++++
W145	3x10	3x40	5NQ	100	R	VS3	66253478596	105000	10	++++
W146	3x13	3x40	5NQ	100	R	VS3	66253478597	105000	10	++++
W149	4x6	3x40	5NQ	60	R	VS3	66253478599	105000	10	++++
W149	4x6	3x40	5NQ	100	R	VS3	66253478598	105000	10	++++
W155	4x8	3x40	5NQ	60	R	VS3	66253478600	105000	10	++++
W155	4x8	3x40	5NQ	100	R	VS3	66253478602	105000	10	++++
-*	4x8	6x40	5NQ	60	R	VS3	66253478997	65000	10	++++
-*	4x8	6x40	5NQ	80	R	VS3	66253478998	65000	10	++++
_*	4x8	6x40	5NQ	100	R	VS3	66253478999	65000	10	++++
W15-*	5x6	3x40	5NQ	100	R	VS3	66253477241	105000	10	++++
W15-*	5x8	6x40	5NQ	80	R	VS3	66253479000	65000	10	++++
W153	5x10	3x40	5NQ	60	R	VS3	66253477243	80000	10	++++
W153	5x10	3x40	5NQ	100	R	VS3	66253477246	80000	10	++++
W153	5x10	6x40	5NQ	60	R	VS3	66253479001	62000	10	++++
W153	5x10	6x40	5NQ	80	R	VS3	66253479002	62000	10	++++
W153	5x10	6x40	5NQ	100	R	VS3	66253479003	62000	10	++++
W154	5x13	3x40	5NQ	60	R	VS3	66253477248	70500	10	++++
W154	5x13	3x40	5NQ	100	R	VS3	66253477249	70500	10	++++
W15-*	5x15	3x40	5NQ	60	R	VS3	66253477251	70500	10	++++
W158	6x3	3x40	5NQ	100	R	VS3	66253480308	85000	10	++++
W162	6x10	3x40	5NQ	80	R	VS3	66253478605	68400	10	++++
W162	6x10	3x40	5NQ	100	R	VS3	66253477259	68400	10	++++
W162	6x10	6x40	5NQ	60	R	VS3	66253479004	62000	10	++++
W162	6x10	6x40	5NQ	80	R	VS3	66253479005	62000	10	++++
W163	6x13	3x40	5NQ	60	R	VS3	66253477264	60000	10	++++
W163	6x13	3x40	5NQ	80	 R	VS3	66253477265	60000	10	++++
W163	6x13	3x40	5NQ	100	 R	VS3	66253477266	60000	10	++++
W163	6x13	6x40	5NQ	100	R	VS3	66253479006	62000	10	++++
W164	6x20	3x40	5NQ	60	R	VS3	66253477267	45900	10	
W164	6x20	3x40	5NQ	100	R	VS3	66253477268	45900	10	++++
W16-*	6x25	3x40	5NQ	60	R	VS3	66253477266	45900	10	++++
W16-*	6x13	6x40	5NQ	100	R	VS3	66253477370	62000	10	++++
W165	8x3	3x40	5NQ	100	R	VS3	66253480309	61500	10	
W169	8x10	3x40 3x40	5NQ 5NQ	46	R	VS3	66253477269	61500	10	++++
								61500		++++
W169	8x10	3x40	5NQ	100	R	VS3	66253478607		10	++++
W169	8x10	3x40	5NQ 5NQ	100	R	VS3	66253477271	61500	10	++++
W169	8x10	6x40	5NQ ENO	60	R	VS3	66253479008	57500	10	++++
W169	8x10	6x40	5NQ	80	R	VS3	66253479009	57500	10	++++
W16-*	8x12	6x40	5NQ	80	R	VS3	66253479010	57500	10	++++

*Shape not available in the US ANSI code

Bonded Abrasives / 229

BONDED ABRASIVES MOUNTED POINTS & WHEELS

GRAIN COLOUR CODE

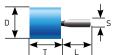






5NQ Vit3

CYLINDRICAL (W)



SHAPE	DIM DxT (mm)	SPINDLE SxL (mm)	ABRASIVE TYPE	GRIT SIZE	GRADE	BOND	ART NO.	MOS (RPM)	PK QTY	QUALITY TIER
W170	8x13	3x40	5NQ	46	R	VS3	66253477392	52500	10	+++++
W170	8x13	3x40	5NQ	80	R	VS3	66253477272	52500	10	++++
W17-*	8x16	3x40	5NQ	46	R	VS3	66253477393	52500	10	++++
W17-*	8x16	3x40	5NQ	60	R	VS3	66253477394	52500	10	+++++
W17-*	8x16	3x40	5NQ	80	R	VS3	66253477395	52500	10	+++++
W17-*	8x16	6x40	5NQ	46	R	VS3	66253477396	57500	10	+++++
W17-*	8x16	6x40	5NQ	60	R	VS3	66253477397	57500	10	+++++
W17-*	8x16	6x40	5NQ	80	R	VS3	66253477398	57500	10	+++++
W171	8x20	6x40	5NQ	60	R	VS3	66253477399	57500	10	+++++
W17-*	9x12	6x40	5NQ	80	R	VS3	66253477400	54000	10	+++++
W172	10x2	3x40	5NQ	60	R	VS3	66253480311	35000	10	++++
W172	10x2	3x40	5NQ	100	R	VS3	66253480314	35000	10	++++
W173	10x3	3x40	5NQ	60	R	VS3	66253480318	33000	10	+++++
W173	10x3	3x40	5NQ	100	R	VS3	66253480315	33000	10	+++++
W175	10x10	3x40	5NQ	46	R	VS3	66253477401	54000	10	+++++
W175	10x10	3x40	5NQ	60	R	VS3	66253477402	54000	10	+++++
W175	10x10	3x40	5NQ	80	R	VS3	66253478609	54000	10	+++++
W175	10x10	6x40	5NQ	60	R	VS3	66253477404	54000	10	+++++
W175	10x10	6x40	5NQ	80	R	VS3	66253477405	54000	10	++++
W17-*	10x12	6x40	5NQ	80	R	VS3	66253477406	54000	10	+++++
W176	10x13	3x40	5NQ	46	R	VS3	66253477408	45370	10	++++
W176	10x13	3x40	5NQ	80	R	VS3	66253480919	45370	10	++++
W176	10x13	3x40	5NQ	100	R	VS3	66253477410	45370	10	+++++
W176	10x13	6x40	5NQ	46	R	VS3	66253477412	45370	10	++++
W176	10x13	6x40	5NQ	80	R	VS3	66253477413	45370	10	++++
W177	10x20	6x40	5NQ	46	R	VS3	66253477415	46500	10	++++
W177	10x20	6x40	5NQ	80	R	VS3	66253478612	46500	10	++++
W178	10x25	6x40	5NQ	46	R	VS3	66253477417	40500	10	++++
W178	10x25	6x40	5NQ	80	R	VS3	66253477418	40500	10	++++
W179	10x32	6x40	5NQ	46	R	VS3	66253477419	33750	10	+++++
W179	10x32	6x40	5NQ	80	R	VS3	66253477420	33750	10	++++
W17-*	10x40	6x40	5NQ	46	R	VS3	66253477421	33750	10	++++
W17-*	10x40	6x40	5NQ	60	R	VS3	66253477422	33750	10	+++++
W17-*	12x15	6x40	5NQ	80	R	VS3	66253477423	33750	10	++++
W17-*	13x3	3x40	5NQ	60	R	VS3	66253480327	28000	10	++++
W17-*	13x3	3x40	5NQ	100	R	VS3	66253480329	28000	10	++++
W185	13x13	3x40	5NQ	46	R	VS3	66253478224	34500	10	++++
W185	13x13	3x40	5NQ	60	R	VS3	66253478225	34500	10	++++
W185	13x13	3x40	5NQ	80	R	VS3	66253478226	34500	10	++++
W185	13x13	6x40	5NQ	46	R	VS3	66253478237	42000	10	+++++
W185	13x13	6x40	5NQ	60	R	VS3	66253478238	42000	10	++++
W186	13x20	6x40	5NQ	60	R	VS3	66253478240	36000	10	++++
-										

*Shape not available in the US ANSI code



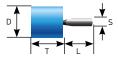
GRAIN COLOUR CODE



NORTON SANT GORAN



CYLINDRICAL (W)



SHAPE	DIM DxT (mm)	SPINDLE SxL (mm)	ABRASIVE TYPE	GRIT SIZE	GRADE	BOND	ART NO.	MOS (RPM)	PK QTY	QUALITY TIER
W187	13x25	6x40	5NQ	46	R	VS3	66253478244	30000	10	++++
W187	13x25	6x40	5NQ	60	R	VS3	66253478246	30000	10	++++
W187	13x25	6x40	5NQ	80	R	VS3	66253478248	30000	10	+++++
W188	13x32	6x40	5NQ	36	R	VS3	66253478255	30000	10	++++
W188	13x32	6x40	5NQ	46	R	VS3	66253478256	30000	10	++++
W188	13x32	6x40	5NQ	80	R	VS3	66253480917	30000	10	++++
W188	13x40	6x40	5NQ	46	R	VS3	66253478257	30000	10	++++
W18-*	16x3	3x40	5NQ	60	R	VS3	66253480331	25000	10	++++
W18-*	16x3	3x40	5NQ	100	R	VS3	66253480338	25000	10	++++
W18-*	16x5	3x40	5NQ	46	R	VS3	66253479397	34500	10	++++
W18-*	16x5	3x40	5NQ	80	R	VS3	66253479399	34500	10	++++
W18-*	16x6	6x40	5NQ	80	R	VS3	66253479401	30000	10	++++
W194	16x16	6x40	5NQ	36	R	VS3	66253478259	35000	10	+++++
W194	16x16	6x40	5NQ	46	R	VS3	66253478260	35000	10	++++
W194	16x16	6x40	5NQ	80	R	VS3	66253480915	35000	10	++++
W195	16x20	6x40	5NQ	36	R	VS3	66253479402	32000	10	++++
W195	16x20	6x40	5NQ	36	R	VS3	66253478261	32000	10	++++
W195	16x20	6x40	5NQ	80	R	VS3	66253480913	32000	10	++++
W19-*	16x32	6x40	5NQ	36	R	VS3	66253479403	23000	10	++++
W19-*	16x32	6x40	5NQ	36	R	VS3	66253478616	23000	10	++++
W19-*	16x32	6x40	5NQ	46	R	VS3	66253478264	23000	10	++++
W19-*	16x32	6x40	5NQ	60	R	VS3	66253478265	23000	10	++++
W19-*	16x32	6x40	5NQ	80	R	VS3	66253478618	23000	10	++++
_*	16x40	6x40	5NQ	36	R	VS3	66253478267	23000	10	++++
W19-*	16x40	6x40	5NQ	46	R	VS3	66253478268	23000	10	++++
W19-*	16x40	6x40	5NQ	60	R	VS3	66253478266	23000	10	++++
W197	16x50	6x40	5NQ	36	R	VS3	66253478269	20000	10	++++
W197	16x50	6x40	5NQ	60	R	VS3	66253478270	20000	10	++++
W19-*	19x3	3x40	5NQ	60	R	VS3	66253480339	38250	10	++++
W201	20x6	3x40	5NQ	46	R	VS3	66253478271	38250	10	++++
W201	20x6	3x40	5NQ	80	R	VS3	66253478272	38250	10	++++
W201	20x6	6x40	5NQ	46	R	VS3	66253478273	50000	10	++++
W201	20x6	6x40	5NQ	80	R	VS3	66253478274	50000	10	++++
W202	20x10	6x40	5NQ	36	R	VS3	66253478275	44000	10	++++
W202	20x10	6x40	5NQ	60	R	VS3	66253478276	44000	10	++++
W203	20x13	6x40	5NQ	36	R	VS3	66253478277	35000	10	++++
W204	20x20	6x40	5NQ	36	R	VS3	66253478278	30000	10	++++
W204	20x20	6x40	5NQ	80	R	VS3	66253480909	30000	10	++++
W205	20x25	6x40	5NQ	46	R	VS3	66253478279	25000	10	++++
W205	20x25	6x40	5NQ	60	R	VS3	66253478280	25000	10	++++
W205	20x25	6x40	5NQ	80	R	VS3	66253480911	25000	10	++++
W206	20x32	6x40	5NQ	36	R	VS3	66253478402	21000	10	++++

*Shape not available in the US ANSI code

BONDED ABRASIVES MOUNTED POINTS & WHEELS

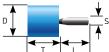
GRAIN COLOUR CODE







CYLINDRICAL (W)



Τ,										
SHAPE	DIM DxT (mm)	SPINDLE SxL (mm)	ABRASIVE TYPE	GRIT SIZE	GRADE	BOND	ART NO.	MOS (RPM)	PK QTY	QUALITY TIER
W206	20x32	6x40	5NQ	80	R	VS3	66253478620	21000	10	++++
W207	20x40	6x40	5NQ	36	R	VS3	66253478404	20000	10	++++
W207	20x40	6x40	5NQ	46	R	VS3	66253478406	20000	10	++++
W207	20x40	6x40	5NQ	60	R	VS3	66253478407	20000	10	++++
W207	20x40	6x40	5NQ	80	R	VS3	66253480907	20000	10	++++
W215	25x3	3x40	5NQ	100	R	VS3	66253480343	35000	10	++++
W216	25x6	6x40	5NQ	46	R	VS3	66253479404	35000	10	++++
W216	25x6	6x40	5NQ	80	R	VS3	66253479405	35000	10	++++
W217	25x10	6x40	5NQ	36	R	VS3	66253478409	35000	10	++++
W217	25x10	6x40	5NQ	60	R	VS3	66253478410	35000	10	++++
W218	25x13	6x40	5NQ	36	R	VS3	66253478412	30000	10	++++
_*	25x16	6x40	5NQ	60	R	VS3	66253478415	30000	10	++++
W220	25x25	6x40	5NQ	36	R	VS3	66253478419	30000	10	++++
W***	25x32	6x40	5NQ	36	R	VS3	66253478423	30000	10	++++
_*	25x32	6x40	5NQ	60	R	VS3	66253478431	30000	10	++++
W225	32x6	6x40	5NQ	46	R	VS3	66253479395	25000	10	++++
W226	32x8	6x40	5NQ	36	R	VS3	66253478433	25000	10	++++
W226	32x8	6x40	5NQ	60	R	VS3	66253478435	25000	10	++++
_*	32x16	6x40	5NQ	36	R	VS3	66253478437	25000	10	++++
_*	32x16	6x40	5NQ	46	R	VS3	66253478438	25000	10	++++
W228	32x20	6x40	5NQ	36	R	VS3	66253478440	20000	10	++++
W228	32x20	6x40	5NQ	46	R	VS3	66253478441	20000	10	++++
W230	32x32	6x40	5NQ	36	R	VS3	66253478626	15000	10	++++
W230	32x32	6x40	5NQ	46	R	VS3	66253478443	15000	10	++++
W230	32x32	6x40	5NQ	80	R	VS3	66253480906	15000	10	++++
W231	32x40	6x40	5NQ	36	R	VS3	66253478444	13000	10	++++
W231	32x40	6x40	5NQ	46	R	VS3	66253478447	13000	10	++++
W235	40x6	6x40	5NQ	46	R	VS3	66253479392	25000	10	++++
W236	40x10	6x40	5NQ	36	R	VS3	66253478449	25000	10	++++
W236	40x10	6x40	5NQ	60	R	VS3	66253478450	25000	10	++++
_*	40x15	6x40	5NQ	36	R	VS3	66253478451	25000	10	++++
_*	40x15	6x40	5NQ	60	R	VS3	66253478454	25000	10	++++
W237	40x20	6x40	5NQ	36	R	VS3	66253478457	17000	10	+++++
W237	40x20	6x40	5NQ	46	R	VS3	66253478458	17000	10	++++
W237	40x20	6x40	5NQ	80	R	VS3	66253480904	17000	10	++++
W237	40x20	8x40	5NQ	36	R	VS3	66253479394	18000	10	++++
W238	40x40	6x40	5NQ	36	R	VS3	66253478464	12000	10	++++
W238	40x40	6x40	5NQ	46	R	VS3	66253478465	12000	10	++++
W23_*	50x8	6x40	5NQ	36	R	VS3	66253478466	15000	10	++++
W238	40x40	6x40	5NQ	36	R	VS3	66253480903	15000	10	++++
_*	50x13	6x40	5NQ	36	R	VS3	66253478467	15000	10	++++
_*	50x13	6x40	5NQ	60	R	VS3	66253478468	15000	10	++++

*Shape not available in the US ANSI code



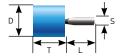
GRAIN COLOUR CODE



NORTON SANT GORAN



CYLINDRICAL (W)



SHAPE	DIM DxT (mm)	SPINDLE SxL (mm)	ABRASIVE TYPE	GRIT SIZE	GRADE	BOND	ART NO.	MOS (RPM)	PK QTY	QUALITY TIER
_*	50x13	8x40	5NQ	36	R	VS3	66253479382	18000	10	++++
W242	50x20	6x40	5NQ	36	R	VS3	66253478469	15000	10	++++
W242	50x20	8x40	5NQ	36	R	VS3	66253479381	15000	10	++++
W242	50x25	6x40	5NQ	36	R	VS3	66253478470	15000	10	++++
W242	50x25	6x40	5NQ	46	R	VS3	66253478471	15000	10	++++
W242	50x25	8x40	5NQ	36	R	VS3	66253479380	15000	10	++++
W243	50x40	8x40	5NQ	36	R	VS3	66253479379	15000	10	++++
KIT	6mm SPDL		5NQ	80	R	VS3	69078667181	-	-	++++
KIT	3mm SPDL		5NQ	80	R	VS3	69078667182	-	-	++++

*Shape not available in the US ANSI code

NORTON QUANTUM MOUNTED POINTS KIT

- Norton Quantum grain and Vitrium3 technology combine to provide the ultimate performance in grinding speed and life
- Contains 10 of the most common shapes and size mounted points



KIT CONTENTS - 3mm SPINDLE

KIT CONTENTS - 6mm SPINDLE

SHAPE	DIM DxT (mm)	GRIT SIZE	GRADE	BOND	ART NO.	KIT ART NO.	SHAPE	DIM DxT (mm)	GRIT SIZE	GRADE	BOND	ART NO.	KIT ART NO.
B42M	13x20	80	R	VS3	61463634063		A1M	20x65	80	R	VS3	61463634074	
B52M	10x20	80	R	VS3	61463634066		A5M	20x28	80	R	VS3	61463634076	
B97M	4x10	80	R	VS3	61463634067		A11M	22x45	80	R	VS3	61463634078	
B131M	13x13	80	R	VS3	61463634068		A23M	20x25	80	R	VS3	61463634086	
B122M	10xBALL	80	R	VS3	61463634069	69078667182	A21M	25x25	80	R	VS3	61463634087	69078667181
W154M	5x13	80	R	VS3	61463634070	070/000/102	A26M	16xBALL	80	R	VS3	61463634088	070/000/101
W164M	6x20	80	R	VS3	61463634071		A36M	40x10	80	R	VS3	61463634089	
W185M	13x13	80	R	VS3	61463634072		A39M	20x20	80	R	VS3	61463634090	
W215M	25x3	80	R	VS3	61463634073		W218M	25x13	80	R	VS3	61463634093	
W163M	6x13	80	Н	BF3	61463691062		W220M	25x25	80	Н	BF3	61463691058	



The Norton vitrified mounted points range provides quality and efficiency in grinding operations. The high quality grain ensures a perfect surface finish with metallographic integrity. For small jobs or high volume foundry and casting operations, or for tool room or aerospace industry applications, Norton vitrified mounted points cut cooler, and provide up to 30% higher metal removal rates.



86A VITRIFIED +++

Highly refined pink aluminium oxide abrasive

- Friable grain for good cutting performance
- Long lasting profile tool
- Versatile for large variety of steels
- Reduced dress frequency



38A VITRIFIED +++

Pure white aluminium oxide abrasive

- Most friable alumina grain for easy and cool cut
- Good value for general purpose, small applications
- Compatible with most of the steel alloys
- · Cool cutting, less burn
- Excellent price vs performance ratio



39C VITRIFIED

Highest purity green silicon carbide abrasive

- Suitable for use on castings for heavy-duty edge grinding
- Very hard and durable with excellent edge-holding capability
- Low wear rate for long product life



37C VITRIFIED +++

High purity black silicon carbide abrasive

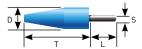
- Harder and more friable than aluminium oxide abrasive
- Suitable for roughing operations in coarse grit and resinoid wheels
- Ideal for grinding and sharpening applications on non-ferrous metals



GRAIN COLOUR CODE

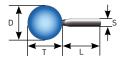
86A 37C 38A 39C

SHAPE OGIVE (A)



SHAPE	DIM DxT (mm)	SPINDLE SxL (mm)	ABRASIVE TYPE	GRIT SIZE	GRADE	BOND	ART NO.	MOS (RPM)	PK QTY	QUALITY TIER
A1	20x65	6x40	86A	36	Р	VS	66253055235	15000	10	+++
A1	20x65	6x40	38A	60	R	VM	69936635216	15000	10	+++
A1	20x65	6x40	86A	60	0	VS	66253055218	15000	10	+++
А3	22x70	6x40	38A	36	T	VM	69936623827	14000	10	+++
A3	22x70	6x40	86A	36	0	VS	66253055021	14000	10	+++
А3	22x70	6x40	38A	60	R	VM	69936643931	14000	10	+++
А3	22x70	6x40	86A	60	0	VS	66253055212	14000	10	+++
A5	19x29	6x40	38A	60	R	VM	69936613862	30000	10	+++
A5	20x28	6x40	86A	60	0	VS	66253055094	30000	10	+++
A7	30x50	6x40	86A	36	0	VS	66253055022	13000	10	+++
A8	20x50	6x40	86A	36	0	VS	66253055308	18000	10	+++
A9	30x50	6x40	86A	36	0	VS	66253055395	13000	10	+++
A10	22x70	6x40	86A	36	0	VS	66253055237	14000	10	+++
A11	22x45	6x40	38A	36	Т	VM	69936623830	18000	10	+++
A11	22x45	6x40	86A	36	0	VS	66253055095	18000	10	+++
A11	22x45	6x40	86A	36	0	VS	66253055307	18000	10	+++
A11	22x45	6x40	38A	60	R	VM	69936643935	18000	10	+++
A11	22x45	6x40	86A	60	0	VS	66253055214	18000	10	+++
A12	20x32	6x40	86A	60	0	VS	66253055096	30000	10	+++
A15	6x25	6x40	86A	90	0	VS	66253055126	30000	10	+++
A19	30x50	6x40	86A	60	0	VS	66253054961	13000	10	+++
A24	6x20	6x40	86A	60	0	VS	66253055127	41000	10	+++
A25	25x25	6x40	86A	60	0	VS	66253055128	25000	10	+++
A26	16x16	6x40	86A	46	0	VS	66253055204	54000	10	+++
A36	40x10	6x40	86A	60	0	VS	66253055129	25000	10	+++
A37	30x6	6x40	86A	90	0	VS	66253055313	30000	10	+++
A26	Ø16	6x40	38A	90	R	VM	63642561043	54000	10	+++
A38	25x25	6x40	86A	60	0	VS	66253054946	25000	10	+++

SHAPE BALL (B)



B44	6x10	3x40	38A	90	S	VM	69936626239	61000	10	+++
B44	6x10	3x40	86A	90	0	VS	66253055183	61000	10	+++
B46	4x8	6x40	38A	90	S	VM	69936626240	90000	10	+++
B52	10x20	3x40	38A	90	S	VM	69936643938	41000	10	+++
B52	10x20	3x40	86A	90	0	VS	66253055232	41000	10	+++
B53	8x16	3x40	38A	90	S	VM	69936690891	54000	10	+++
B53	8x16	3x40	86A	90	0	VS	66253055305	54000	10	+++
B54	6x13	6x40	86A	90	0	VS	66253055139	54000	10	+++
B91	13x16	3x40	86A	90	0	VS	66253055199	58000	10	+++
B97	4x10	3x40	38A	90	Q	VM	69936623856	90000	10	+++
B97	4x10	3x40	86A	90	0	VS	66253055141	90000	10	+++
B121	13x13	3x40	38A	90	S	VM	69936623857	58000	10	+++
B122	10x10	3x40	38A	90	Q	VM	69936623858	58000	10	+++
B123	5x5	3x40	38A	90	R	VM	69936630653	73000	10	+++
B123	5x5	3x40	86A	90	0	VS	66253055207	73000	10	+++

BONDED ABRASIVES MOUNTED POINTS & WHEELS

SHAPE	DIM DxT (mm)	SPINDLE SxL (mm)	ABRA TYPE		GRIT SIZE	GRADE	BOND	ART NO.	MOS (RPM)	PK QTY	QUALITY TIE
CYLINE	ORICAL (C)										
†	S S										
C262	16x32	3x40		38A	90	S	VM	69936634345	25000	10	+++
CYLINE	ORICAL (W)										
W121	13x13	3x40		86A	90	0	VS	66253055143	58000	10	+++
W144	3x6	6x40		38A	90	S	VM	69936623859	90000	10	+++
W144	3x6	6x40		86A	90	0	VS	66253055147	90000	10	+++
W146	3x13	6x40		38A	90	R	VM	69936623861	80000	10	+++
W149	4x6	3x40		86A	90	Р	VS	66253055150	80000	10	+++
W149	4x6	6x40		38A	90	S	VM	69936623862	80000	10	+++
W153	5x10	6x40		38A	90	Q	VM	69936623863	73000	10	+++
W153	5x10	6x40		86A	90	0	VS	66253055160	73000	10	+++
V154	5x13	6x40		38A	90	Q	VM	69936623864	70000	10	+++
V154	5x13	6x40		86A	90	0	VS	66253055162	70000	10	+++
V162	6x10	3x40		86A	60	Р	VS	66253055166	61000	10	+++
V162	6x10	6x40		38A	60	R	VM	69936623866	61000	10	+++
V162	6x10	6x40		86A	90	Р	VS	66253055206	61000	10	+++
V162	6x10	M4M	_	38A	90	S	VM	69936637877	61000	10	+++
V163	6x13	6x40		86A	60	0	VS	66253055210	54000	10	+++
V163	6x13	6x40		86A	90	0	VS	66253055167	54000	10	+++
V164	6x20	6x40		38A	90	S	VM	69936623869	41000	10	+++
V169	8x10	6x40		86A	60	0	VS	66253055398	61000	10	+++
V170	8x13	3x40		86A	60	0	VS	66253055248	54000	10	+++
V171	8x20	3x40		86A	60	0	VS	66253055171	41000	10	+++
V171	8x20	6x40		38A	90	S	VM	69936630875	41000	10	
V171	8x20	6x40		38A	90	S	VM	69936637878	41000	10	+++
V175					90	0	VS			10	+++
V175 V175	10x10 10x10	3x40 6x40		86A 38A	90	S	VM	69936631248	61000	10	+++
											+++
V176	10x13	6x40		38A	60	R	VM	69936623872	54000	10	+++
V176	10x13	6x40		86A	60	P	VS	66253055315	54000	10	+++
V176	10x13	6x40		39C	80	S	VM	66253480899	45370	10	+++
V176	10x13	6x40	_	38A	90	R	VM	69936623873	54000	10	+++
V176	10x13	6x40		38A	90	S	VM	69936637874	54000	10	+++
/177	10x20	3x40		86A	60	Q	VBEM	66253055092	41000	10	+++
V177	10x20	6x40		38A	60	R	VM	69936637149	41000	10	+++
V177	10x20	6x40		38A	90	S	VM	69936626743	41000	10	+++
V179	10x32	3x40		86A	60	0	VS	66253055223	25000	10	+++
V179	10x32	6x40		38A	60	R	VM	69936637875	25000	10	+++
V186	13x20	3x40		39C	80	R	VM	66253478614	36000	10	+++
V***	13x32	6x40		39C	80	S	VM	66253480918	30000	10	+++
V***	13x40	3x40		38A	46	S	VM	66243451690	20000	10	+++
V***	13x40	3x40		86A	90	Р	VS	66253055131	20000	10	+++
V194	16x16	6x40		39C	80	S	VM	66253480916	35000	10	+++



GRAIN COLOUR CODE

86A 37C 38A 39C

SHAPE	DIM DxT (mm)	SPINDLE SxL (mm)	ABRASIVE TYPE	GRIT SIZE	GRADE	BOND	ART NO.	MOS (RPM)	PK QTY	QUALITY TIER
W195	16x20	3x40	86A	60	0	VS	66253055091	47000	10	+++
W195	16x20	6x40	39C	80	S	VM	66253480914	32000	10	+++
W195	16x20	6x40	38A	90	S	VM	69936623840	47000	10	+++
W196	16x25	6x40	86A	46	М	VBEM	69210449262	35000	20	+++
W196	16x25	6x40	86A	90	0	VS	66253054973	35000	10	+++
W197	16x50	6x40	38A	46	S	VM	69936631541	18000	10	+++
W204	20x20	6x40	38A	36	Т	VM	69936626238	42000	10	+++
W204	20x20	6x40	38A	60	R	VM	69936623841	42000	10	+++
W204	20x20	6x40	86A	60	0	VS	66253055134	42000	10	+++
W204	20x20	6x40	39C	80	S	VM	66253480910	30000	10	+++
W205	20x25	6x40	86A	36	0	VS	66253054948	32000	10	+++
W205	20x25	6x40	86A	46	Р	VM	66243538896	32000	-	+++
W205	20x25	6x40	86A	60	0	VS	66253055135	32000	10	+++
W205	20x25	6x40	39C	80	S	VM	66253480912	25000	10	+++
W206	20x30	6x40	86A	60	0	VS	66253055013	30000	10	+++
W208	20x50	6x40	39C	36	S	VM	66253478622	35000	10	+++
W220	25x25	6x40	38A	36	Т	V	69936643936	25000	10	+++
W220	25x25	6x40	86A	36	0	VS	66253055231	25000	10	+++
W220	25x25	6x40	86A	60	0	VS	66253055136	25000	10	+++
W220	25x25	6x40	38A	60	R	VM	69936623845	25000	10	+++
W221	25x40	6x40	86A	36	0	VS	66253055016	19000	10	+++
W230	30x30	6x40	86A	36	0	VS	66253055221	17000	10	+++
W230	30x30	6x40	38A	36	T	VM	69936635225	17000	10	+++
W230	30x30	6x40	38A	60	R	VM	69936623849	17000	10	+++
W230	30x30	6x40	86A	60	0	VS	66253055138	17000	10	+++
W231	32x40	6x40	39C	36	R	VM	66253479390	13000	10	+++
W232	30x50	6x40	86A	60	0	VS	66253055300	11000	10	+++
W236	40x12	6x40	38A	46	S	VM	69936637876	25000	10	+++
W236	40x12	6x40	86A	60	0	VS	66253055304	25000	10	+++
W238	40x40	6x40	86A	36	Р	VS	66253055019	12000	10	+++
W238	40x40	6x40	39C	46	S	VM	66253481165	12000	10	+++
W238	40x40	6x40	38A	60	R	VM	69936623850	12000	10	+++
W238	40x40	6x40	86A	60	0	VS	66253055065	12000	10	+++
W237	40x20	6x40	39C	80	S	VM	66253481164	17000	10	+++
KIT	6mm SPDL		86A	36	0	VS	69078667184		-	+++
KIT	3mm SPDL		86A	36	0	VS	69078667188	-	-	+++

BONDED ABRASIVES MOUNTED POINTS & WHEELS

NORTON 86A MOUNTED POINTS KIT

- Vitrified pink aluminium oxide with good cutting performance and long profile holding
- Contains 10 of the most common shapes and sizes



KIT CONTENTS - 3mm SPINDLE

KIT CONTENTS - 6mm SPINDLE

SHAPE	DIM DxT (mm)	GRIT SIZE	GRADE	BOND	ART NO.	KIT ART NO.	SHAPE	DIM DxT (mm)	GRIT SIZE	GRADE	BOND	ART NO.	KIT ART NO.
B42M	13x20	60	Р	VBEM	61463634024		A1	20x65	60	Р	VBEM	61463634041	
B52M	10x20	60	Р	VBEM	61463634025		A5M	20x28	60	Р	VBEM	61463634042	
B97M	4x10	60	Р	VBEM	61463634027		A11M	22x45	60	Р	VBEM	61463634049	
B131M	13x13	60	Р	VBEM	61463634029		A23M	20x25	60	Р	VBEM	61463634050	
B122M	10xBALL	60	Р	VBEM	61463634030	/0070//7100	A21M	25x25	60	Р	VBEM	61463634051	/0070//710/
W154M	5x13	60	Р	VBEM	61463634031	69078667188	A26M	16xBALL	60	Р	VBEM	61463634052	69078667184
W164M	6x20	60	Р	VBEM	61463634039		A36M	40x10	60	Р	VBEM	61463634058	
W185M	13x13	60	Р	VBEM	61463634040		A39M	20x20	60	Р	VBEM	61463634059	
W215M	25x3	60	Р	VBEM	66253472364		W218M	25x13	60	Р	VBEM	61463634061	
W163M	6x13	80	Н	BF3	61463691062		W220M	25x25	80	Н	BF3	61463691058	





Produced specifically for demanding applications, Norton organic mounted points work harder for you. With stock removal that's twice as fast and product life that's up to four times longer than their conventional aluminium oxide counterparts, organic mounted points increase productivity and clean more parts in less time, reducing your overall process cost.







Zirconia alumina self-sharpening abrasive and durable organic bond

- Up to 4x faster stock removal than aluminium oxide products for heavy duty operations
- Stable under high cutting pressure
- Designed for large scale removal
- Super long cutting action / long lasting



Brown aluminium oxide, tougher than pure white aluminium oxide abrasive

- Good cutting performance on medium to soft steels
- Suitable for carbon steel, HSS and alloyed steel



Use "A" shapes for medium to heavy duty blending. Use "W" shapes for off hand and precision grinding of medium to heavy stock.

Bonded Abrasives / 239 www.nortonabrasives.com

BONDED ABRASIVES MOUNTED POINTS & WHEELS

GRAIN COLOUR CODE

NZ



SHAPE	DIM DxT (mm)	SPINDLE DxT (mm)	ABRA TYPE	ASIVE	GRIT SIZE	GRADE	BOND	ART NO.	MOS (RPM)	PK QTY	QUALITY TIER
A1	20x65	6x40		NZ	24	U	BXR1	61463689077	15000	10	++++
А3	22x70	6x40		NZ	24	U	BXR1	61463689079	14000	10	++++
A5	20x28	6x40		NZ	24	U	BXR1	61463689081	30000	10	++++
A11	21x45	6x40		NZ	24	U	BXR1	61463689082	18000	10	++++
W177	10x20	6x40		NZ	24	U	BXR1	61463689084	66000	10	++++
W178	10x25	6x40		NZ	24	U	BXR1	61463689085	55200	10	++++
W188	13x40	6x40		Α	36	Q	В	66253053225	30370	20	+++
W188	13x40	6x40		NZ	24	U	BXR1	61463689090	30370	10	++++
W189	13x50	6x40		NZ	24	U	BXR1	61463689089	30370	10	++++
W204	20x20	6x40		NZ	24	U	BXR1	61463689091	42750	10	++++
W205	20x25	6x40		NZ	24	U	BXR1	61463689093	34500	10	++++
W207	20x40	6x40		NZ	24	U	BXR1	61463689095	24000	10	++++
W220	25x25	6x40		А	46	Q	В	66253053237	25500	20	+++
W220	25x25	6x40		NZ	24	U	BXR1	61463689097	25500	10	++++
W221	25x40	6x40		Α	46	Q	В	66253053243	19120	20	+++
W230	30x30	6x40		А	36	Q	В	66253053250	24000	20	+++
W230	30x30	6x40		NZ	24	U	BXR1	61463689099	24000	10	++++
W236	40x13	6x40		А	46	Q	В	66253053251	25130	20	+++
W236	40x12	6x40		NZ	24	U	BXR1	61463689100	25130	10	++++
KIT	6mm METR	IC NZ		NZ	24	U	BXR1	66253145961	-	-	++++





BENCH WHEELS

Why choose Norton Starline	24
Bench wheel recommendation guide	24
The Starline range	24
Hand drassars	2/



FOR BENCH & PEDESTAL MACHINES

Bench and pedestal wheels are commonly used in tool rooms for all metal removal, deburring, shaping and sharpening applications in the maintenance and repair industry. Norton offers a simple, easily identifiable range of wheels for use on bench and pedestal grinders and on all metal types.

WHY CHOOSE NORTON STARLINE

Starline offers a good quality range with a wide range of sizes at a competitive price.

STARLINE IS AVAILABLE IN THREE GRAIN TYPES



BROWN ALUMINIUM OXIDE (A)

+++

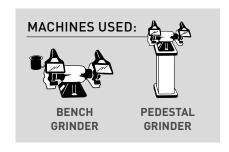
- High quality aluminium oxide with premium vitrified bond
- Precision engineered grit size and hardness for maximum cut rate, finish and wheel life.



WHITE ALUMINIUM OXIDE (38A)

+++

- White aluminium oxide with premium vitrified bond
- Precision engineered grit size and hardness for maximum cut rate and cool grinding action on hardened or high-speed tool steels.





GREEN SILICON CARBIDE (39C)

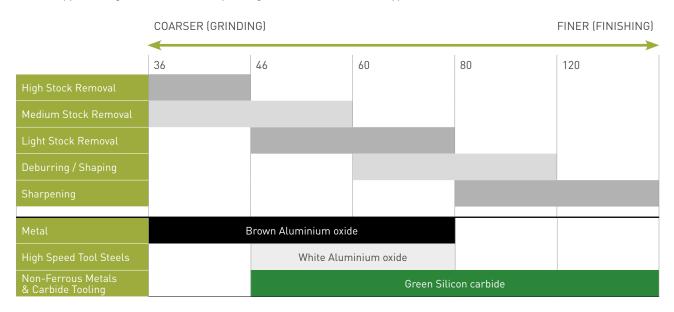
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- Sharp green silicon carbide
- Precision engineered grit size and hardness for high cut range and finish on non-ferrous metals.



BENCH WHEEL RECOMMENDATION GUIDE

Use the application guide below to identify the right abrasive for the metal type and removal rate.



STARLINE RANGE AVAILABILITY

SIZE RANGE: 125 - 350mm **GRIT RANGE:** 36 - 120

All wheels with a 32mm bore are supplied with reduction rings 32/20mm to adapt the product to different spindle sizes.



- For wheels diameter 200mm and smaller
- Before using the wheel for the first time, the face of the wheel needs to be 'opened' using a used wheel of a dressing stick
- All bench and pedestal wheels must be dressed to prevent loading. Loading can cause excessive heat, damage to the workpiece, and wheel breakage. Dressing exposes new cutting edges and provides chip clearance.
- Do not grind wood, plastic or any other non-metalic materia on a bench or pedestal grinder
- Unsecured machines can move, causing grinding breakage and injury. Fixed-based bench and pedestal grinders MUST be recured.
- It is the user's responsibility to refer to and comply with ANSI B7.1

REDUCTION RINGS

Plastic reduction rings may be used to adapt grinding wheels to fit on various spindle sizes. These rings reduce the bore hole size, allowing the wheel to be safely mounted on a spindle with a smaller diameter.

- Reduction rings should never come in contact with the flange
- Reduction rings should not be used on wheels of thicknesses less than 6mm, nor greater than 50mm
- Always use one reduction ring on each side of the wheel when the wheel is thick enough to allow correct seating
- Never use reduction rings to reduce the hole below the minimum specified in the FEPA safety code.

Reduced bore (mm)
<u>15</u>
20
Wheel bore (mm)

WHEEL BORE (mm)	REDUCED TO (mm)	ART NO.
50,8	35	7660704766
32	25	7660717540
32	20	7660717538
31.75	15.88	7660704757
31.75	12.7	7660704755
20	16	7660717530
20	15	7660717529
20	13	7660717527
20	12	7660717525
20	10	7660717524
16	6	510008919

BONDED ABRASIVES BENCH WHEELS

STARLINE

- High quality brown aluminium oxide (A) bonded with premium vitrified bond for a good metal removal rate.
- Precision engineered grit sizes and hardness for maximum cut rate, finish and wheel life.
- Sharp green silicon carbide (39C) is precision engineered for high cut range and finish on non-ferrous metals.

GRAIN COLOUR CODE



ACHINE YPE	DIM DxTxH (mm)	ABRASIVE TYPE	GRIT	GRADE	BOND	MOS (m/s)	ART NO.	PK QTY
ENCH /	125x20x32	A	46	N	VS	45	66253289859	1
EDESTAL WHEELS		A	60	N	VS	45	66253289860	1
		38A	46	N	VS	45	66253289920	1
		38A	60	N	VS	45	66253338189	1
		39C	60	K	VS	45	66253338039	1
		39C	80	K	VS	45	66253338040	1
	150x20x31.75	A	46	N	VS	45	61463626365	1
		A	60	N	VS	45	61463626363	1
		39C	60	K	VS	45	61463626364	1
		39C	80	K	VS	45	61463626163	1
	150x20x32	A	36	0	VS	45	66253338141	1
		A	46	Ν	VS	45	66253289863	1
		A	60	Ν	VS	45	66253290208	1
		38A	60	N	VS	45	66253338090	1
		39C	60	K	VS	45	66253338041	1
		39C	80	K	VS	45	66253338042	1
		39C	120	K	VS	45	66253338191	1
	150x25x32	A	60	N	VS	45	66253290209	1
		38A	60	N	VS	45	66253338092	1
		39C	60	K	VS	45	66253338044	1
	180x20x31.75	A	60	N	VS	45	61463637178	1
		39C	60	K	VS	45	61463626389	1
	180x20x32	A	46	N	VS	45	66253338021	1
		A	60	N	VS	45	66253338022	1
		38A	46	N	VS	45	66253338093	1
		38A	60	N	VS	45	66253338094	1
		39C	60	K	VS	45	66253338045	1
		39C	80	K	VS	45	66253338050	1
		39C	120	K	VS	45	66253338184	1
	200x20x31.75	A	46	N	VS	45	69083111873	1
		A	60	N	VS	45	61463626369	1
		39C	60	K	VS	45	61463626366	1
		39C	80	K	VS	45	61463626362	1
	200x20x32	A	36	0	VS	45	66253338192	1
		A	46	N	VS	45	66253338023	1
		A	60	N	VS	45	66253338024	1
		38A	46	N	VS	45	66253338096	1
		38A	60	N	VS	45	66253338099	1
		39C	46	К	VS	45	66253338051	1
		39C	60	K	VS	45	66253338052	1
		39C	80	K	VS	45	66253338053	1
		39C	120	K	VS	45	66253338185	1



MACHINE TYPE	DIM DxTxH (mm)	ABRASIVE TYPE	GRIT	GRADE	BOND	MOS (m/s)	ART NO.	PK QTY
BENCH / PEDESTAL WHEELS	200x25x31.75	A	46	N	VS	45	66253386224	1
		A	60	N	VS	45	66253386226	1
		A	60	N	VS	45	69083111867	1
		39C	60	K	VS	45	61463626370	1
		39C	80	K	VS	45	69083113038	1
		39C	100	K	VS	45	61463626372	1
	200x25x32	A	36	0	VS	45	66253338025	1
		A	46	N	VS	45	66253338026	1
		A	46	N	VS	45	69083111874	1
		A	60	N	VS	45	66253195830	1
		38A	46	N	VS	45	66253338142	1
		38A	60	N	VS	45	66253338065	1
		38A	80	N	VS	45	66253338066	1
		39C	46	K	VS	45	66253338054	1
		39C	60	K	VS	45	66253338055	1
		39C	80	K	VS	45	66253338056	1
	250x25x31.75	A	46	N	VS	45	61463637179	1
		A	60	Ν	VS	45	69083111877	1
		39C	60	K	VS	45	69083112183	1
		39C	80	K	VS	45	69083112184	1
	250x32x32	A	36	0	VS	45	66253289887	1
		A	60	N	VS	45	66253338027	1
		38A	46	N	VS	45	66253338067	1
		38A	60	Ν	VS	45	66253338068	1
		39C	46	K	VS	45	66253338057	1
		39C	60	K	VS	45	66253338059	1
		39C	80	K	VS	45	66253338060	1
	300x25x127	39C	60	K	VS	45	61463626374	1
	300x32x127	A	60	Ν	VS	45	66253338188	1
		38A	46	N	VS	45	66253338070	1
	300x32x32	A	36	0	VS	45	66253289888	1
		A	46	N	VS	45	66253338029	1
		38A	46	N	VS	45	66253381592	1
		38A	60	N	VS	45	66253338069	1
		39C	60	K	VS	45	66253338074	1
		39C	80	K	VS	45	66253338075	1
	300x40x127	A	36	0	VS	45	66253338031	1
		A	46	N	VS	45	66253289892	1
		A	60	N	VS	45	66253338032	1
		39C	60	K	VS	45	66253338077	1
		39C	80	K	VS	45	69083112185	1
	300x40x31.75	A	36	0	VS	45	66253386235	1
		A	46	N	VS	45	69083117124	1
		A	60	N	VS	45	69083117125	1

BONDED ABRASIVES BENCH WHEELS

MACHINE TYPE	DIM DxTxH (mm)	ABRASIVE TYPE	GRIT	GRADE	BOND	MOS (m/s)	ART NO.	PK QTY
	350x50x127	A	36	0	VS	45	66253338102	1
		A	46	Ν	VS	45	66253338037	1
		A	60	Ν	VS	45	66253338038	1
		38A	46	Ν	VS	45	66253338072	1
		38A	60	Ν	VS	45	66253338073	1
		39C	46	K	VS	45	66253338079	1
	39C	60	K	VS	45	66253338080	1	
		39C	80	K	VS	45	61463626361	1



Before using the wheel for the first time, the face of the wheel needs to be 'opened' using a used wheel of a dressing stick.

HAND DRESSER +++++



- High diamond concentration
- Grit 18/25 SPC

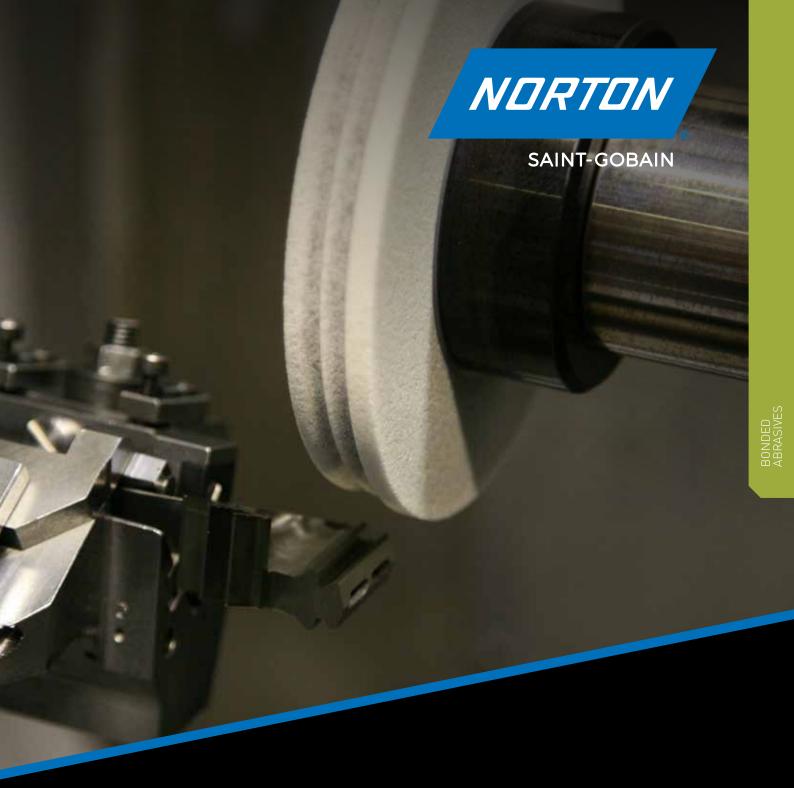
SPECIFICATION

HD-150

- High wear resistance and long product lifetime







PRECISION GRINDING

Straight wheels	25
Straight & tapered cups	27
Dishes	27
Cylinders	27
Segments	27

PRECISION GRINDING APPLICATIONS

Thanks to Norton's technical expertise, bond and abrasive grain formulations are optimised to best suit the technical request of all precision operations. Our vitrified wheels are available in a variety of shapes, diameters and arbor

sizes available from stock or on request. They are intended to maximise your productivity by improving your grinding efficiency and part quality in surface, tool and cutter, ID and cylindrical grinding as well as sharpening applications.



TOOL GRINDING

Tool grinding refers to the maintenance and repair of the cutting tools used in manufacturing operations. Wheels of all sizes and shapes are used in tool and cutter applications. Most wheels used are vitrified, in grit sizes 36 to 220, and in grades H through to N.



SAW SHARPENING

Saw sharpening refers to the maintenance and repair of saw blades. Vitrified flat wheels and cups are used in grit sizes 54 to 60. Resin treatment reinforces the wheel and helps reduce wheel face deformation.



SURFACE GRINDING

The term surface grinding is used to describe the grinding of flat surfaces in which the wheel moves past the workpiece in a flat plane, or vice versa. Surface grinding applications range can vary from heavy rapid stock removal, to precision contour grinding.



EXTERNAL CYLINDRICAL GRINDING

Norton's leading technology, provides you with the best precision, form holding vitrified wheels to maximise productivity, increase grinding efficiency and improve part quality in all your external cylindrical grinding operations.



INTERNAL CYLINDRICAL GRINDING

Internal grinding refers to the grinding of bores or holes and is probably one of the most difficult types of grinding. Internal grinding applications range from very rapid stock removal to more controlled processes capable of generating sizes and concentricity measured in microns.



BENCH AND PEDESTAL GRINDING

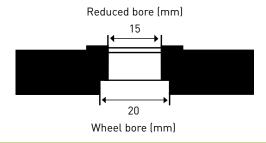
Bench and pedestal grinding application refers to off-hand deburring and sharpening of parts and tools. The wheels are mounted on bench grinders or pedestal grinders and covers three types of abrasives to answer all deburring, shaping and sharpening needs: aluminium oxide for high speed tool steels and other metals, and silicon carbide for non-ferrous metals.



REDUCTION RINGS

Plastic reduction rings may be used to adapt grinding wheels to fit on various spindle sizes. These rings reduce the bore hole size, allowing the wheel to be safely mounted on a spindle with a smaller diameter.

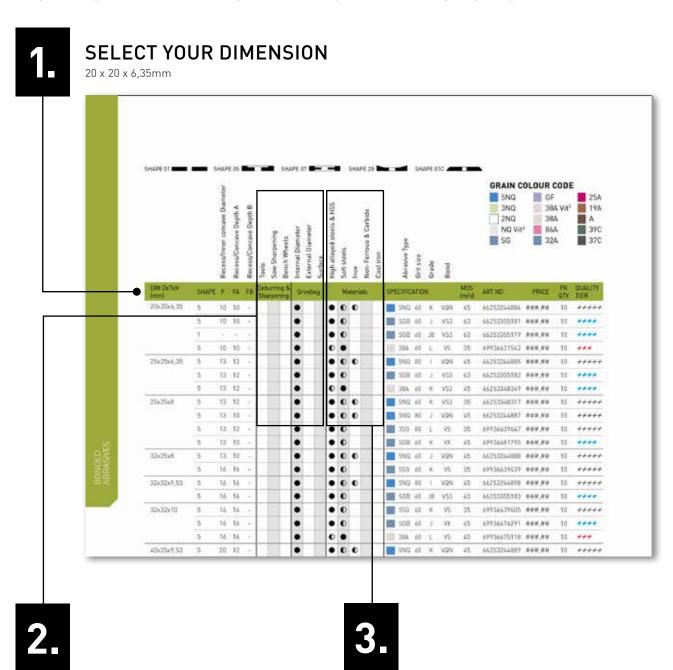
- Reduction rings should never come in contact with the flange
- Reduction rings should not be used on wheels of thicknesses less than 6mm, nor greater than 50mm
- Always use one reduction ring on each side of the wheel when the wheel is thick enough to allow correct seating
- Never use reduction rings to reduce the hole below the minimum specified in the FEPA safety code



WHEEL BORE (mm)	REDUCED TO (mm)	ART NO.
50,8	35	7660704766
32	25	7660717540
32	20	7660717538
31.75	15.88	7660704757
31.75	12.7	7660704755
20	16	7660717530
20	15	7660717529
20	13	7660717527
20	12	7660717525
20	10	7660717524
16	6	510008919



HOW TO READ THE GRINDING WHEEL SECTION



CHOOSE YOUR APPLICATION

DEBURRING & SHARPENING

- Tools
- Saw sharpening
- Bench grinding

GRINDING

- Internal
- External
- Surface

IDENTIFY SURFACE TYPE / MATERIAL

- High alloyed steels & HSS
- Soft steels
- Non-ferrous & carbide
- Cast Iron



ARTICLE IDENTIFIED

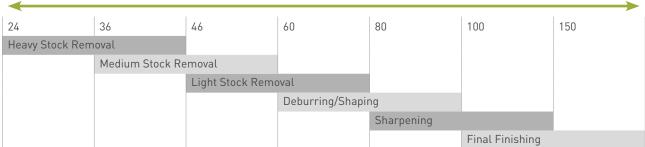
Please contact your Norton representative if you need assistance or advice.

BONDED ABRASIVES FOR PRECISION GRINDING

APPLICATION/GRIT RECOMMENDATION GUIDE

COARSER (GRINDING)

FINER (FINISHING)





- Unsecured machines can move, causing grinding breakage and injury. Fixed-based bench and pedestal grinders MUST be secured.
- Do not grind wood, plastic, or any other non-metallic material on a bench or pedestal grinder.
- All bench and pedestal wheels must be dressed to prevent loading. Loading can cause excessive heat, damage to the workpiece, and wheel breakage. Dressing exposes new cutting edges and provides chip clearance.
- Recommended starting dressing stick: 1" x 1" x 6" 37C24-SVK Part # 61463610462



WHEEL DRESSING

Single Point Diamond Tools

- Rigidly mount Single Point tools at a 10°-15° angle to the wheel centerline with a line drawn through the centre of the wheel, pointing in the direction of wheel travel
- Point of contact should be slightly below centreline of wheel
- Use coolant whenever possible
- Normal infeed is .001" per pass
- Lead selections range from .002" .010" per wheel revolution
- Rotate the tool 1/4 turn periodically to maintain a sharp point
- Use VBE, V, VS, VK bonds for general purpose applications or medium contact areas
- Use VBEP, VSP, VS3P, VCP, VP2 bonds on wide contact areas where heat is an issue

It is the user's responsibility to refer to and comply with ANSI B7.1

Multi-Point Diamond Tools

- Most multi-point tools are used for straight face dressing
- Tool should have full face contact with the wheel
- With new tool, 3 to 5 passes at .005" per pass should be taken to expose diamonds
- Infeed per pass .001" .002"
- Use coolant whenever possible
- Use appropriate lead (and traverse rate)
- Contact your Norton representative for proper tool selection for Targa (TG) wheels

Dressing Ceramic Wheels

- Use our specially designed Norton SG diamond tools when dressing ceramic wheels
- When first using a Norton SG tool, make 3 to 5 passes at .005" infeed to ensure full face contact between the dressing tool and wheel face
- Reduce normal dressing infeed by half. Do not exceed infeed of .002" per pass
- The lead selection should be between .006" .030" per wheel revolution. Faster traverse with Norton SG tools generally provides an open wheel face that can maximise productivity of the ceramic abrasive
- To optimise applications using ceramic abrasives and/ or tools, normal dressing parameters must change. Reduce infeed by 25%. Significant reductions in the amount of infeed and frequency of dress will result in substantially lower cost per part ground
- See the Fliesen Tool section for Furioso tools, engineered specifically for Quantum vitrified wheel dressing



TROUBLESHOOTING GUIDE

Check the obvious first. Before changing the grinding wheel specification, investigate the following most common causes for most grinding problems:

- 1. Diamond dressing tool condition (check if worn or dull, rotate tool or replace if necessary)
- 2. Coolant direction, volume and filtration
- 3. Wheel dressing procedures (dress more open to free up cut rate, dress more closed to improve finish)

PROBLEM	POSSIBLE CAUSE	CORRECTION			
Workpiece burn	Poor coolant direction	Redirect coolant into grinding zone			
	Restricted or low coolant volume	Increase coolant volume			
	Wheel too hard	Use one grade softer wheel			
	Wheel structure too closed	Use porous bond wheel			
	Wheel dressed too fine	Dress wheel coarser, more "open"			
	Worn dressing tool	Inspect, rotate or replace dressing tool			
	Work speed too slow	Increase work speed			
	Infeed too fast	Reduce stock removed per pass or upgrade to 5SG or 5NQ			
Wheel loading and glazing	Wheel too fine	Use coarser grit or softer grade wheel			
	Wheel too hard	Use one grade softer wheel			
	Too durable abrasive	Use a sharper, more friable abrasive			
	Poor coolant quality	Change coolant or use high detergent type			
	Wheel structure too closed	Use a porous bond wheel			
	Wheel too finely dressed	Dress wheel very open			
	Diamond dressing tool worn	Replace diamond and dress coarse (open)			
	Depth of cut too small	Increase feed and traverse speed			
Chatter	Unsupported work	Increase work support			
	Machine vibration	Check for worn bearings			
	Too heavy cut rate	Reduce cut rate			
	Wheel too hard	Use one grade softer wheel			
	Wheel structure too closed	Use a porous bond wheel			
	Wheel out of balance	Check wheel balance or try new wheel			
Chatter marks on workpiece	Worn spindle bearings	Check and correct for truth and end play			
	Wheel out of truth	Redress wheel and check mounting			
	Poorly clamped wheel	Check tightness of mounting nuts			
	Glazed face of wheel	Redress wheel with sharp dressing tool			
Poor surface finish	Incorrect wheel dress	Dress wheel finer (slow down dressing tool traverse)			
	Worn dressing tool	Inspect, rotate, or replace dressing tool			
	Too coarse grit size	Use a finer grit size			
	Wheel too hard	Use softer grade			
Not holding form	Wheel too soft	Use one grade harder wheel			
	Wheel structure too open	Use a more closed wheel structure			
Not holding corner	Incorrect wheel dress	Dress wheel finer. Face and side true wheel.			
	Too large grit size	Use smaller grit size (maximum grit diameter less than 1,5 times corner radius)			
	Wheel too soft	Use harder grade wheel			
	Wheel structure too open	Use more closed structure wheel			



Engineered microcrystalline ceramic grain combined with our latest innovative bond

- A perfect blend of sharp grains for the ultimate free cutting action
- Enhanced bond adhesion and chemistry for a cooler cut and high speed material removal
- Unique, microcrystalline structure is self-sharpening for long product life
- High profile accuracy and reduced dressing frequency







MOUNT POINT

NQ

Engineered microcrystalline ceramic grain

- A perfect blend of sharp grains for the ultimate free cutting action
- Unique, microcrystalline structure is self-sharpening for long product life
- Can be used in all low, medium and high force applications
- Reduces the need for dressing

SG VS3

An excellent ceramic grain with the latest bond innovation

- High concentration of SG ceramic aluminium oxide abrasive combined with our Vitrium³ enhanced bond adhesion and chemistry
- Unique, microcrystalline structure is self-sharpening for long product life
- Ultimate cutting capability
- High material removal rate whilst maintaining a high profile accuracy for reduced dressing

3SG / 5SG

Traditional ceramic microstructure grain

- Very high concentration of SG ceramic aluminium oxide abrasive for high removal rate and extended wheel life
- Unique, microcrystalline structure is self-sharpening for long product life
- Very good cutting capabilities on very hard steels
- Perfect for technical applications where grinding parameters can be adjusted to optimise performance









SGA / SGB

A blend with a low concentration of ceramic grain for good performance in a number of applications

- Harder and sharper than conventional abrasive grains for good cutting capabilities
- Very versatile for use on a number of steels
- Suitable for low to medium power machines

38A VS3

The latest bond innovation with conventional alumina grain

- High purity aluminium oxide abrasive for cool and burn free cutting
- Highly friable abrasive, versatile on hard metals (HRc >50)
- Ideal for heat sensitive applications with light to moderate feed rates
- Improved profile accuracy and wheel life

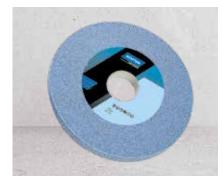


A low concentration of ceramic grain with durable aluminium oxide grain

 Good performance on common soft and medium steels







38A

High purity aluminium oxide abrasive

- Friable grain renews sharp cutting edges for good product life
- Good cut rate and reduced heat generation on hardened or high-speed tool steels
- Ideal for heat-sensitive applications ideally in low/medium pressure applications
- Ideal for use on all steel hardnesses

19A

A blend of brown and white aluminium oxides for good price vs. performance ratio

- Combines cutting efficiency and wheel life
- Very versatile, can be used on a wide variety of steels
- Good yield, good removal rate
- Good balance between cut rate and form holding ability

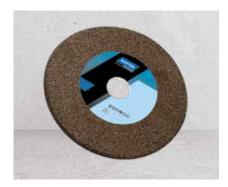
32A

Semi-friable brown aluminium oxide

- Tough grain maintains sharp edges for good wheel life
- Good profile holding reduces dressing needs
- For use on the most common soft/ medium steels

www.nortonabrasives.com Bonded Abrasives / 253

BONDED ABRASIVES FOR PRECISION GRINDING







A +++

Brown aluminium oxide

- For soft steel removal, shaping and deburring
- Very tough, suitable for grinding most types of soft steels
- Good wheel life and hard wearing for general purpose cylindrical offhand bench and pedestal grinding applications
- Good price vs. performance ratio

39C

Highest purity green silicon carbide abrasive

- The most friable conventional abrasive grain. Harder and more friable than aluminium oxide abrasive
- For all general purpose bench and pedestal applications on non-ferrous materials and carbide tools
- Ideal for high precision grinding and sharpening applications
- Good cut rate and finish on metal carbide and non-ferrous hard or heat sensitive materials



High purity black silicon carbide abrasive

- Harder and more friable than aluminium oxide abrasive
- Suitable for roughing operations in coarse grit and resinoid wheels
- Ideal for grinding and sharpening applications on non-ferrous metals





SHAPE 01	51	HAPE	US E			SHAPE	U/		_	-	SHAI	² E 20				SHAPE	UIC 4		_				
		Recess/Inner Concave Diameter	Recess/Concave Depth A	Recess/Concave Depth B	Tools Saw Sharnening	Bench Wheels	Internal Diameter	External Diameter	Surface	High Alloyed Steels & HSS	Soft Steels	Inox	Non-Ferrous & Carbide	Cast Iron		Abrasive Type	Grit Size	Grade	Bond	High	DUCT RECO ly recommend mmended	ed	NDATION ● ①
DIM DxTxH (mm)	SHAPE	Р	FA	FB	Deburr Sharp		G	rindir	ng		Ma	ateria	als		SPE	CIFICAT	ION			MOS (m/s)	ART NO.	PK QTY	QUALITY TIER
10x10x3.18	01	-	-	-			•			•	0					SGB	60	J	VS3	63	66253355175	10	++++
13x13x4	01	-	-	-			•			•	•	0				5NQ	80	K	VS3	35	66253348357	10	+++++
13x13x4.76	01	-	-	-			•			•	•					SGB	60	J	VS3	63	66253355176	10	++++
	05	6	6	-			•			•	•					SGB	60	J	VS3	63	66253355177	10	++++
16x16x6	05	10	8	-			•			•	•	0				5NQ	60	K8	VS3	35	66253348333	10	+++++
	01	-	-	-			•			•	•	0				5NQ	80	J	VQN	45	66253244881	10	+++++
	01	-	-	-			•			•	•	•				3NQ	60	K	VS3	35	66253348360	10	+++++
	01	-	-	-			•			•	0	•				3NQ	60	L	VQN	45	66253261880	10	+++++
20x20x6	05	13	10	-			•			•	•	0				5NQ	80	J	VQN	45	66253244883	10	+++++
	05	13	10	-			•			•	•	0				5NQ	60	K	VS3	35	66253348335	10	+++++
	01	-	-	-			•			•	•	•				3NQ	60	L	VQN	45	66253261903	10	+++++
	05	13	10	-			•			•	0					SGB	60	K	VX	45	69936681793	10	++++
	01	13	10	-			•			•	•					38A	60	K	VS3	45	66253348355	10	++++

HSS = High Speed Steel

Steel hardened = Over 50Rc

BONDED ABRASIVES FOR PRECISION GRINDING SHAPE 01C SHAPE 05 SHAPE 07 SHAPE 20 **GRAIN COLOUR CODE** Recess/Inner Concave Diameter 5NQ GF 25A High Alloyed Steels & HSS 3NQ 38A Vit3 19A Recess/Concave Depth A Non-Ferrous & Carbide Recess/Concave Depth 2NQ 38A Α **External Diameter** NQ Vit³ 86A 39C Internal Diameter Saw Sharpening 37C Bench Wheels SG 32A Abrasive Type Soft Steels Cast Iron **Grit Size** Surface Grade Tools Bond QUALITY DIM DxTxH Deburring & MOS SHAPE Р FB Grinding Materials **SPECIFICATION** FΑ ART NO Sharpening (mm) (m/s 20x20x6.35 5 0 10 10 0 Κ 66253244884 +++++ 5NQ 60 VON 45 10 5 0 ++++ 10 10 SGB 60 J VS3 63 66253355181 10 1 • SGB 60 J8 VS3 63 66253355179 10 ++++ 5 10 10 0 38A 60 L VS 35 69936621542 10 +++ 25x25x6.35 5 13 12 0 0 5NQ 80 VQN 45 66253244885 10 +++++ 5 13 12 • SGB 60 J VS3 63 66253355182 10 ++++ 5 13 12 0 38A 60 Κ VS3 66253348349 10 ++++ 45 25x25x8 5 13 12 0 5NQ 66253348317 +++++ VS3 35 5 13 10 0 5NQ 80 J VQN 45 66253244887 10 ++++ 5 13 12 • 80 ۷S 69936639647 +++++ 3SG 35 10 5 13 10 • SGB 60 Κ VX 45 69936681795 10 ++++ 32x25x8 ++++ 5 13 0 5NQ 60 VQN 45 66253244888 10 16 16 5SG Κ ۷S 69936639439 10 +++++ 60 35 32x32x9.53 5 16 16 • 0 5NQ 80 1 VQN 45 66253244898 10 +++++ ++++ 5 0 SGB J8 66253355183 10 16 60 VS3 63 16 5 0 32x32x10 5SG Κ +++++ 16 16 60 VS 35 69936639605 10 5 0 ++++ 16 VX 16 SGB 60 J 45 69936676291 10 5 16 16 0 38A 60 L VS 10 +++ 45 69936675118 40x25x9.53 5 20 12 • 0 5NQ 60 Κ VQN 45 66253244889 10 +++++ 5 • 20 12 SGB 60 J VS3 66253355184 10 63 ++++ 40x25x10 5 0 0 5NO Κ 16 12 80 VON 45 66253244890 10 +++++ 5 0 +++++ 16 12 5SG 60 Κ VS 35 69936639834 15 40x32x10 5 20 16 0 0 5NQ 60 L VON 45 66253244891 10 +++++ 40x40x10 5 16 20 0 0 5NQ 60 J VS3 35 66253348334 10 +++++ 5 0 0 16 20 5NQ 60 Κ VQN 45 66253244897 10 +++++ 40x40x12.7 5 20 20 $lackbox{0}$ SGB 60 J VS3 66253355185 10 ++++ 50x40x12.7 5 25 $lackbox{0}$ 0 5NQ 60 Κ VQN 45 66253244892 10 +++++ 5 25 25 0 SGB VS3 66253355186 ++++ 50x40x16 5 25 20 ++++ 5NQ Κ VQN 66253244894 5 25 • 0 5NQ 66253348348 ++++ 20 VS3 35 10 0 63x10x20 38A 60 Ν VS 66253050376 63x40x12.7 5 32 20 0 5NQ 80 VQN 45 66253244895 10 +++++ 5 32 20 SGB VS3 66253355187 10 60 J 63 5 32 20 0 ۷S 69936621565 +++ 38A 60 L 45 10 70x7.1x17 0 3NQ VS3 10 ++++ 60 L 35 66253348329 76x25x12.7 39C 80 66253052726 10 +++ 45 5 0 0 76x32x20 42 16 5NQ 60 J VQN 45 10 ++++ 66253244896 80x25x12.7 +++ 60 М ٧ 66253051624 10 39C 45 1 +++ 39C 60 М 45 66253051623 10 1 37C Ν • 60 V 35 69936668764 10 +++

Steel soft = Up to 50Rc

Steel hardened = Over 50Rc

HSS = High Speed Steel



Highly recommended Recommended

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Recess/Inner Concave Diameter
Recess/Concave Depth A
Recess/Concave Depth B
Tools
Saw Sharpening
Bench Wheels
Internal Diameter
External Diameter
Surface
High Alloyed Steels & HSS
Soft Steels
Inox
Non-Ferrous & Carbide
Cast Iron
Abrasive Type
Grit Size
Grade

DIM DxTxH (mm)	SHAPE	Р	FA	FB	Deburring & Sharpening	Grinding		Materials		SPECIFICA	ATION	l		MOS (m/s)	ART NO.	PK QTY	QUALITY TIER
100x10x20	1	-	-	-	•		0	•		38A	60	М	VS	35	69936640015	1	+++
100x10x32	1	-	-	-	•			• •		39C	80	L	VS	45	66253050380	2	+++
100x13x32	1	-	-	-	•		0	•		38A	60	L	VS	45	66253050409	1	+++
100x20x32	1	-	-	-	•		0	•		38A	60	L	VS	45	66253050413	1	+++
125x6x32	1	-	-	-	•		0	•		38A	60	L	VS	45	66253050440	2	+++
125x10x32	1	-	-	-	•		0	•		38A	60	L	VS	45	69936675731	1	+++
125x13x32	1	-	-	-	•		•	•		3SG	60	J	VX	45	66253050290	2	+++++
125x16x32	1	-	-	-	•		0	•		38A	60	М	VS	45	66253050237	1	+++
	1	-	-	-	•			• •		39C	80	L	VS	45	66253050393	2	+++
	1	-	-	-	•		0	•		38A	60	L	VS	45	69936675736	1	+++
	1	-	-	-	•		0	•		38A	60	K	VS	45	66253050620	1	+++
	1	-	-	-	•			• •		39C	80	L	VS	45	69936667443	2	+++
	1	-	-	-	•			•		A	46	N	VS	45	69936675558	1	+++
	1	-	-	-	•			•		A	60	N	VS	45	69936666909	1	+++
150x3x30	1	-	-	-	•		0	•		38A	80	L	VS3	50	66243541074	5	++++
150x3x32	1	-	-	-	•		0	•		38A	80	L	VS3	50	66243541080	5	++++
150x3.2x32	1	-	-	-	•			•		19A	60	М	VS	63	69936675941	2	+++
150x4x20	1	-	-	-	•		0	•		38A	60	L	VS	45	69936675591	1	+++
	1	-	-	-	•		0	•		38A	80	Ν	VS	45	69936676720	1	+++
	1	-	-	-	•		0	•		38A	80	L	VS3	63	66243541077	5	++++
	1	-	-	-	•		0	•		38A	100	М	VS	45	69936640219	1	+++
150x4x30	1	-	-	-	•		0	•		38A	80	N	VS	45	69936639730	1	+++
150x4x32	1	-	-	-	•		•	•		SGB	80	K	VS3	63	66243541066	5	++++
	1	-	-	-	•		0	•		38A	80	L	VS3	63	66243541079	5	++++
	1	-	-	-	•			•		19A	60	0	VS	63	69936675946	2	+++
	1	-	-	-	•			•		19A	60	М	VS	63	69936674920	2	+++
	1	-	-	-	•			• •		39C	120	K	VS	45	66253050248	2	+++
150x6x31.75	1	-	-	-	•		0	•	0	38A	80	L	VS	35	69936621582	1	+++
150x6x32	1	-	-	-	•		•	•		3SG	60	L	VX	45	66253055040	2	+++++
	1	-	-	-	•		•	•		3SG	80	L	VX	45	66253054873	2	++++
	1	-	-	-	•		•	•		SGB	60	K	VS3	63	66243541070	5	++++
	1	-	-	-	•		•	•		SGB	80	K	VS3	63	66243541083	5	++++
	1	-	-	-	•		0	•		38A	60	L	VS	35	69936675741	2	+++
	1	-	-	-	•			•		19A	60	М	VS	63	69936675964	2	+++
	1	-	-	-	•			•		39C	120	K	VS	45	69936675617	2	+++
150x8x32	1	-	-	-	•		•	0		3SG	60	J	VX	45	66253055041	2	+++++
150x6x38	1	-	-	-	•		•	0		SGB	60	K	VS3	63	66243541082	5	++++
150x8x32	1	-	-	-	•		0	•		38A	60	L	VS	45	69936675743	1	+++
	1	-	-	-	•		•	•		38A	120	J	VS	45	69936675748	1	+++
150x10x32	1	-	-	-	•		•	0		3SG	60	L	VX	45	66253050280	2	+++++

HSS = High Speed Steel

Steel hardened = Over 50Rc

BONDED ABRASIVES FOR PRECISION GRINDING SHAPE 01C SHAPE 05 SHAPE 07 SHAPE 20 **GRAIN COLOUR CODE** Recess/Inner Concave Diameter 5NQ GF 25A High Alloyed Steels & HSS Ш 19A Recess/Concave Depth A 3NQ 38A Vit3 Non-Ferrous & Carbide Recess/Concave Depth 38A Α 2NQ **External Diameter** NQ Vit³ 86A 39C Internal Diameter Saw Sharpening Bench Wheels SG 32A 37C Abrasive Type Soft Steels **Grit Size** Grade Bond Inox DIM DxTxH QUALITY Deburring & MOS SHAPE Р Grinding **SPECIFICATION** ART NO. FΑ FB Materials (mm) Sharpening (m/s 1 ++++ 0 K VS3 66243541072 5 • SGB 60 63 1 0 _ _ 38A 46 М VS 45 66253050261 1 +++ 1 0 38A 60 М VS 45 69936641112 +++ 1 0 38A 60 L ٧S 45 69936675744 1 +++ 1 0 38A 60 Κ ۷S 45 66253051070 +++ 1 -0 38A 80 М ٧S 45 66253050373 1 +++ 1 0 • 38A 100 М ٧S 45 66253050371 +++ 1 0 ۷S 45 69936675749 38A 120 1 1 39C 80 Κ ٧S 45 66253050357 2 +++ 1 39C 120 Κ ٧S 45 69936675629 2 150x13x31.75 lacktriangle0 0 3SG 60 Κ ۷S 50 69936622862 1 +++++ 1 38A 60 Κ VS3 63 66253353664 1 • 39C 60 Κ ۷S 35 69936621564 150x13x32 1 0 3SG 46 Н VX 45 66253054863 2 +++++ 1 0 2 ++++ 3SG 60 VX 45 66253050142 L 1 0 L VS 45 69936675754 1 +++ 38A 46 1 0 +++ 38A 60 VS 35 69936675757 1 L 1 0 60 Ν VS 45 1 +++ 38A 69936675758 1 0 _ 38A 60 L VS 35 69936639340 1 +++ 1 _ 38A 80 L VS 45 69936675759 +++ 1 0 38A 120 J ٧S 45 69936675760 1 +++ 150x16x32 0 3SG 60 ı VX 45 66253050367 2 +++++ 1 _ 0 3SG 60 H12 VXP 45 69936677177 2 ++++ 1 0 38A 46 L ٧S 45 69936675763 +++ 1 0 38A 60 L ٧S 45 69936675764 1 +++ 1 0 38A 80 L ۷S 45 69936675767 +++ 1 Α 46 Ν ٧S 45 69936675560 1 1 39C 80 ۷S 69936675657 2 +++ L Κ ٧S 2 39C 120 45 69936675659 150x20x31.75 0 ++++ 38A 60 Κ VS3 63 66253353966 1 Α 46 Ν ٧S 35 69936623469 1 +++ 150x20x31.75 • Α 60 Ν ۷S 35 69936623470 1 1 60 Ν ٧S 35 69936623302 1 Α 1 • 39C 60 Κ ٧S 69936623474 +++ 35 1 1 • Κ +++ 39C 100 VS 35 69936623221 1 150x20x32 1 _ • Κ 66253050155 2 +++++ 3SG 60 VX 45 1 • 0 SGB 100 J VX 45 66253049895 2 ++++ 1 0 38A 46 М VS 45 66253050372 1 +++



Highly recommended Recommended

Recess/Inner Concave Diameter Recess/Concave Depth B Recess/Concave Depth A

Saw Sharpening Bench Wheels

High Alloyed Steels & HSS **External Diameter** Internal Diameter Surface

Non-Ferrous & Carbide Soft Steels

Abrasive Type

Grit Size

DIM DxTxH (mm)	SHAPE	Р	FA	FB	Deburring & Sharpening	Grinding		М	ateria	als	SPE	ECIFICA	ATION	ı		MOS (m/s)	ART NO.	PK QTY	QUALITY TIER
	1	-	-	-	•		0	•				38A	60	N	VS	45	69936641392	1	+++
	1	-	-	-	•		0	•				38A	60	L	VS	45	69936641391	1	+++
	1	-	-	-	•		0	•				38A	60	K5	VS	45	66253051065	1	+++
	1	-	-	-	•		0	•				38A	80	K6	VS	45	66253051067	1	+++
	1	-	-	-	•		0	•				38A	80	L	VS	45	69936639416	1	+++
	1	-	-	-			0	•				38A	100	J	VS	45	66243570493	1	+++
	1	-	-	-				•				А	36	Р	VS	45	69936641366	1	+++
	1	-	-	-				•				А	60	Ν	VS	45	69936641368	1	+++
	1	-	-	-					•	•		39C	60	Κ	VS	45	69936641411	2	+++
	1	-	-	-					•	•		39C	80	L	VS	45	69936641413	2	+++
	1	-	-	-					•	•		39C	120	K	VS	45	69936641414	2	+++
	1	-	-	-	•				•	•		39C	120	K	VS	45	66253352745	2	+++
150x25x20	1	-	-	-	•				•	•		39C	80	K	VS	35	69936641429	1	+++
150x25x32	1	-	-	-	•		0	•				38A	60	K	VS	45	66253050452	1	+++
	1	-	-	-	•		0	•				38A	60	М	VS	45	66253050381	1	+++
	1	-	-	-	•			•				Α	36	Q	VS	45	66253050265	1	+++
	1	-	-	-	•			•				Α	36	Р	VS	45	69936666914	1	+++
	1	-	-	-	•			•				Α	46	N	VS	45	69936641370	1	+++
	1	-	-	-	•				•	•		39C	60	K	VS	45	69936675661	2	+++
	1	-	-	-	•				•	•		39C	80	K	VS	45	66253050278	2	+++
	1	-	-	-	•				•	•		39C	120	K	VS	45	69936675664	2	+++
175x3x51	1	-	-	-	•		0	•				38A	60	L	VS3	50	66243541075	5	++++
175x4x51	1	-	-	-	•			•				19A	60	М	VS	63	66253052709	6	+++
175x6x51	1	-	-	-	•		0	•				38A	60	L	VS3	63	66243541069	5	++++
180x6x31.75	1	-	-	-	•		0	•				38A	46	K	VS3	63	66253353969	2	++++
	1	-	-	-	•		0	•				38A	60	K	VS3	63	66253353968	2	++++
180x6x32	1	-	-	-	•		•	•				3SG	120	K	VS	35	69936676015	1	+++++
	1	-	-	-	•		0	•				38A	60	L	VS	45	69936675784	2	+++
180x10x32	1	-	-	-	•		0	•				38A	80	J	VS	45	69936675781	1	+++
180x13x31.75	1	-	-	-	•		•	•	0			3SG	46	K	VS	50	69936623227	1	++++
	1	-	-	-	•		•	•	0			3SG	60	K	VS	50	69936623231	1	++++
	1	-	-	-	•		•	0				3SG	100	J	VS	50	69936623276	1	+++++
	1	-	-	-	•		•	•				SGA	46	K	VX	50	66253121996	1	++++
	1	-	-	-			•	•				SGB	46	K	VX	50	69936623240	1	++++
	1	-	-	-	•		•	•				SGB	60	K	VX	50	69936623255	1	++++
	1	-	-	-	•		•	•				SGA	60	K	VS	50	66253121997	1	++++
	1	-	-	-			•	•				SGB	70	H12	VXP	50	69936623463	1	++++
	1	-	-	-	•		0	•				38A	46	K	VS3	63	66253353972	1	++++
	1	-	-	-			0	•				38A	60	K	VS3	63	66253353974	1	++++

HSS = High Speed Steel

Steel hardened = Over 50Rc

BONDED ABRASIVES FOR PRECISION GRINDING SHAPE 01C SHAPE 05 SHAPE 07 SHAPE 20 **GRAIN COLOUR CODE** Recess/Inner Concave Diameter 5NQ GF 25A High Alloyed Steels & HSS Recess/Concave Depth A 3NQ 38A Vit3 19A Non-Ferrous & Carbide Recess/Concave Depth 38A Α 2NQ **External Diameter** NQ Vit³ 86A 39C Internal Diameter Saw Sharpening Bench Wheels SG 32A 37C Abrasive Type Soft Steels **Grit Size** Grade Bond nox DIM DxTxH QUALITY Deburring & MOS SHAPE Р ART NO. FA FB Grinding Materials **SPECIFICATION** Sharpening (mm) (m/s 1 0 • VS 69936623274 +++ • 384 46 J 35 • 0 0 ٧S 1 _ 38A 60 J 35 69936623266 1 +++ 0 1 • 0 38A 80 Ι VS 35 69936623239 +++ 0 1 • 0 38A 100 L ۷S 35 69936623220 1 +++ 1 • • 39C 100 J ۷S 35 69936623248 +++ 180x13x32 1 • • 3NQ 60 1 VS3 35 66253348361 2 +++++ $lackbox{0}$ 0 2NQ 46 VS3 66253348363 +++++ ٧X 66253054892 +++++ 45 1 0 3SG 120 VX 45 66253054874 ++++ 1 SGB 60 ٧X 45 69936639148 2 0 38A 60 L ۷S 45 69936675797 +++ 0 38A 80 L ۷S 45 69936675801 • 0 38A 120 ۷S 69936675802 J 45 180x16x32 • 3SG 60 H12 VXF 35 69936677179 +++++ 0 G12 VXP 69936639169 2 ++++ SGB 70 45 1 0 1 1 38A VS 35 69936675806 +++ • 46 0 Κ +++ 38A 60 VS 45 66253050453 180x20x31.75 1 _ • 0 Κ +++++ 3SG 46 VS 50 69936623242 5 100 0 6 • 3SG 60 J VS 35 69936639808 1 +++++ 1 Κ 0 SGB 60 VX 50 69936623480 ++++ 1 0 _ 0 38A 46 L ۷S 35 69936623312 1 +++ 1 0 • 0 38A 60 Ι VS 35 69936623472 +++ 5 100 6 _ 0 0 384 60 J VS 35 69936640226 1 +++ • 39C 60 Κ VS 35 69936623477 +++ 180x20x32 1 • • 0 3SG 60 H12 VXP 35 66243593654 1 +++++ 1 0 SGB 46 H10 VXP 45 69936638723 2 ++++ 1 SGB 60 Κ ٧X 45 66253049878 2 ++++ 0 SGB 60 H10 VXP 69936639170 ++++ 45 1 • 46 Ν ۷S 45 69936641372 • Α 60 Ν ۷S 45 66253352810 2 39C 60 Κ ۷S 45 69936641415 2 39C 80 L ۷S 45 69936676582 2 39C 120 Κ ۷S 45 69936675666 2 180x25x31.75 5 105 • 0 46 Κ ۷S 50 69936621519 +++++ 13 • 3SG 5 105 13 0 0 ++++ 3SG 60 Κ ۷S 50 1 69936621570 5 105 13 0 SGR ++++ 46 Κ VX 50 69936621605 5 105 12 1 38A 46 K6 VS3 63 66253354036 ++++ 5 0 ++++ 105 60 K6 66253354035 1 12 38A VS3 63 5 • 0 0 105 35 2 +++ 12 38A 46 VS 69936621529



Highly recommended Recommended

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Recess/Inner Concave Diameter
Recess/Concave Depth A
Recess/Concave Depth B
Tools
Saw Sharpening
Bench Wheels
Internal Diameter
External Diameter
Surface
High Alloyed Steels & HSS
Soft Steels
Inox
Non-Ferrous & Carbide
Cast Iron
Abrasive Type
Grit Size
Grade

DIM DxTxH (mm)	SHAPE	Р	FA	FB	Deburring & Sharpening	Grinding		Mater	ials		SPECIFIC	ATION	ı		MOS (m/s)	ART NO.	PK QTY	QUALITY TIER
	5	105	12	-	•		•	•		0	38A	60	L	VS	35	69936621526	1	+++
	5	105	12	-	•		•	•		0	38A	60	J	VS	35	69936621557	1	+++
180x25x32	1	-	-	-	•		•	•			38A	60	L	VS	45	69936675812	1	+++
	1	-	-	-	•			•			А	46	Ν	VS	45	69936675564	1	+++
	1	-	-	-	•			•	•		39C	60	K	VS	45	69936675667	2	+++
	1	-	-	-	•			•	•		39C	80	L	VS	45	69936667101	2	+++
200x1.5x32	1	-	-	-	•		•	•			SGB	80	K6	VS3	50	66253354585	5	++++
200x2x32	1	-	-	-	•		•	•			SGB	80	K6	VS3	50	66253354586	5	++++
	1	-	-	-	•		•	•			38A	80	L	VS3	50	66243541085	5	++++
200x2.5x32	1	-	-	-	•		•	0			SGB	80	K6	VS3	50	66253354587	5	++++
200x3x32	1	-	-	-	•		•	0			SGB	80	K6	VS3	50	66253354588	5	++++
	1	-	-	-	•		•	•			38A	80	L	VS3	50	66243541084	5	++++
200x4x32	1	-	-	-	•		•	0			SGB	80	K	VS3	63	66243541087	5	++++
	1	-	-	-	•			•			19A	60	0	VS	63	69936675986	6	+++
200x6x20	1	-	-	-	•		•	•			38A	60	L	VS3	63	66243541081	5	++++
200x6x31.75	1	-	-	-	•		•	•		0	38A	120	ı	VS	35	69936640156	1	+++
200x6x32	1	-	-	-	•		•	0			SGB	60	K	VS3	63	66243541086	5	++++
	1	-	-	-	•		•	0			SGB	120	J	VX	45	69936677029	2	++++
	1	-	-	-	•		0	•			38A	60	K	VS3	63	66243541076	5	++++
	1	-	-	-	•		•	•			38A	60	М	VS	45	66253050455	2	+++
	1	-	-	-	•		•	•			38A	80	N	VS	45	69936639662	2	+++
	1	-	-	-	•			•			19A	60	М	VS	63	69936675988	6	+++
	1	-	-	-	•				•		39C	120	K	VS	45	69936675636	2	+++
200x8x20	1	-	-	-	•		0	•			38A	60	L	VS3	63	66243541090	5	++++
200x8x32	1	-	-	-	•		•	0			SGB	60	K	VS3	63	66243541088	5	++++
	01C	-	-	-	•		•	•			38A	60	L6	VS3	35	69210431430	5	++++
	1	-	_	-	•		•	•			38A	60	М	VS	63	69936658078	1	+++
	1	-	_	-	•			•			19A	60	М	VS	63	69936675990	6	+++
200x10x20	1	-	-	-	•		•	•			38A	60	L	VS3	63	66243541091	5	++++
200x10x32	1	-	-	-	•		•	0			SGB	60	J	VX	45	69936639157	2	++++
	1	-	-	-	•		•	•			SGB	80	J	VX	45	69936639158	2	++++
	1	-	-	-	•		•	•			38A	60	L	VS3	63	66253348277	1	++++
	1	-	-	-	•		•	•			38A	60	L	VS	45	69936675818	1	+++
	1	-	-	_	•		•	•			38A	120	J	VS	45	69936675819	1	+++
	1	-	-	-	•			•	•		39C	100	K	VS	35	69936639461	1	+++
	1	-	-	-	•			•	•		39C	120	K	VS	45	69936675637	2	+++
200x13x31.75	1	-	-	-	•		•	0 0			3SG	46	K	VS	50	69936623236	1	++++
	1	-	-	-			•	0 0			3SG	60	K	VS	50	69936623241	1	++++
	1	_	-	_	•		•	•			SGA	46	K	VX	50	66253122005	1	++++
	1	_	_				0	•			38A	60	K	VS3	63	66253354044	1	++++

HSS = High Speed Steel

Steel hardened = Over 50Rc

BONDED ABRASIVES FOR PRECISION GRINDING SHAPE 01C SHAPE 05 SHAPE 07 SHAPE 20 **GRAIN COLOUR CODE** Recess/Inner Concave Diameter 5NQ GF 25A High Alloyed Steels & HSS Recess/Concave Depth B 3NQ 38A Vit3 19A Recess/Concave Depth A Non-Ferrous & Carbide 38A 2NQ Α **External Diameter** NQ Vit³ 86A 39C Internal Diameter Saw Sharpening SG 32A 37C Bench Wheels Abrasive Type Soft Steels **Grit Size** Grade Bond DIM DxTxH QUALITY MOS Deburring & SHAPE Р ART NO. FA FB Grinding Materials **SPECIFICATION** (mm) Sharpening (m/s TIER • 38A 120 ٧S 35 69936641286 +++ 2 ++++ 200x13x32 1 • SGB 60 J VX 45 69936639160 • SGB 120 J VX 45 69936676608 2 ++++ -0 38A 60 L VS3 63 66253348352 1 ++++ 0 38A 60 L ٧S 45 69936675823 +++ 1 0 38A 60 J ۷S 45 69936675821 1 +++ 19A 60 М ٧S 69936675994 +++ 63 6 1 ۷S 2 80 45 69936676152 200x16x76.2 0 38A 60 L ۷S 45 69936675827 +++ 200x20x20 1 • 39C 80 Κ ۷S 45 69936641417 2 +++ 39C 80 М ۷S 69936640220 2 +++ 45 200x20x31.75 • 0 0 Κ VX ++++ 3SG 46 50 69936623774 SGB 70 H12 VXP 50 69936623902 ++++ • 1 0 38A 46 Κ VS3 63 66253354039 1 ++++ 0 • ++++ 1 60 Κ VS3 63 66253354038 38A 1 1 +++ Δ 46 Ν VS 35 69936623592 +++ 60 Ν VS 69936623591 Δ 35 200x20x32 0 0 3NQ 46 J +++++ VQN 45 66253261995 0 0 +++++ 2NQ 60 18 VS3 45 66253357059 2 • 3SG 60 H12 VXP 45 69936677181 2 +++++ 1 ++++ _ _ • SGB 60 H10 VXP 45 69936639172 2 1 0 SGB 46 Н ٧X 45 69936639171 2 ++++ 1 • SGB 60 Κ ٧X 45 66253049887 5 ++++ 0 38A 46 Ν ۷S 45 69936641400 +++ 1 -0 38A 46 Κ ٧S 45 66253051075 1 +++ 0 38A 46 Н ۷S 45 69936675551 +++ 1 0 60 Ν ۷S 45 69936667154 1 0 0 +++ • 38A 60 L ٧S 35 69936641402 0 ۷S 38A 60 Κ 45 66253051077 0 38A 80 Κ ۷S 45 66253051080 Α 30 Ρ ۷S 45 69936675566 +++ • Α 46 Ν ۷S 45 69936641375 +++ +++ Α 60 Ν VS 45 69936666929 1 39C 60 Κ ۷S 66253349667 2 • 45 +++ 1 2 +++ 39C 60 Κ ۷S 45 69936641418 1 Κ VS 2 +++ 39C 80 45 69936676351 1 • 80 Κ VS 2 +++ 39C 45 66253349681 1 K 2 _ 39C 120 VS 45 69936641421 +++ 1 5 +++ 37C 60 K6 ٧K 35 69210431674 200x20x50 1 • • 0 3SG 60 J VX 45 66253050362 2 +++++ HSS = High Speed Steel Steel hardened = Over 50Rc Steel soft = Up to 50Rc



Highly recommended Recommended D

Recess/Inner Concave Diameter
Recess/Concave Depth A
Recess/Concave Depth B
Tools
Saw Sharpening
Bench Wheels
Internal Diameter
External Diameter
Surface
High Alloyed Steels & HSS
Soft Steels
Inox
Non-Ferrous & Carbide
Cast Iron
Abrasive Type
Grit Size
Grade
Bond

DIM DxTxH				<u> </u>	Det	ourring	u اع	_ ш 0)		0)					4			ш	MOS		PK	QUALITY
(mm)	SHAPE	Р	FA	FB		arpenin		Grinding		٨	/lateri	ials		SPE	ECIFIC	10ITA	٧		(m/s)	ART NO.	QTY	TIER
	1	-	-	-	•				0	•)				38A	46	K	VS	45	69936641104	2	+++
	1	-	-	-		•			0	•)		0		38A	60	J	VS	35	69936639462	1	+++
200x20x50.8	1	-	-	-	•				•	0)				3SG	60	H12	VXP	45	66243593696	2	++++
	1	-	-	-	•				•	0)				3SG	46	112	VXP	45	66253052711	2	++++
	1	-	-	-				•	•	0)				3SG	46	K	VS	50	69936623654	2	++++
	1	-	-	-	•				0	•)				38A	46	J	VS	45	69936675832	1	+++
	1	-	-	-	•				0	•)				38A	60	Н	VS	45	69936675834	1	+++
	1	-	-	-	•				0	•)				38A	60	K	VS	45	66253049967	1	+++
200x20x51	1	-	-	-	•				•	0)				SGB	60	J	VX	45	69936639251	2	++++
	1	-	-	-	•						•	•			39C	60	K	VS	45	69936640176	2	+++
200x20x76.2	1	-	-	-	•				•	0)				3SG	46	Н	VX	45	66253050156	2	++++
	1	-	-	-	•				0	•)				38A	60	L	VS	45	69936675836	1	+++
200x25x20	1	-	-	-					0	•)		0		38A	60	М	VS	35	69936641405	1	+++
	1	-	-	-	•				0	•)				38A	60	K5	VBE	35	69210432867	1	+++
	1	-	-	-							•	•			39C	80	K	VS	35	69936641422	1	+++
200x25x31.75	5	110	10	-					•	0	•				3SG	60	G	VSPF	35	69936640304	1	+++++
	5	105	13	-					•	0	•				3SG	60	K	VS	50	69936621575	1	+++++
	1	-	-	-					0	•)		0		38A	60	L	VS	35	69936623794	1	+++
	1	-	-	-							•	•			39C	60	K	VS	35	69936623912	1	+++
	1	-	-	-						•)				Α	36	Р	VS	35	69936623910	1	+++
	1	-	-	-	•					•)				А	46	N	VS	35	69936623911	2	+++
	1	-	-	-	•					•)				Α	60	N	VS	35	69936623913	2	+++
	1	-	-	-							•	•			39C	100	K	VS	35	69936623599	1	+++
200x25x32	1	-	-	-	•				•	0)				3SG	60	J	VX	45	66253054889	2	+++++
	1	-	-	-	•				•	0)				SGB	60	K	VX	45	66253049888	2	++++
	1	-	-	-	•				0	•)				38A	46	N	VS	45	69936641406	1	+++
	1	-	-	-	•				0	•)				38A	46	L	VS	45	69936627127	1	+++
	1	-	-	-	•				0	•)				38A	60	М	VS	45	66253051079	1	+++
	1	-	-	-	•				0	•)				38A	60	М	VS	35	69936639846	1	+++
	1	-	-	-	•				0	•					38A	60	L	VS	45	69936641407	1	+++
	1	-	-	-	•				0	•)				38A	80	N	VS	45	69936675847	1	+++
	1	-	-	-	•				0	•					38A	80	K	VS	45	66253051082	1	+++
	1	-	-	-						•)				Α	24	R	VS	45	69936676374	1	+++
	1	-	-	-						•)				Α	30	Р	VS	45	69936641382	1	+++
	1	-	-	-						•)				Α	36	Q	VS	45	66253050267	1	+++
	1	-	-	-						•)				А	36	Р	VS	45	69936641383	1	+++
	1	-	-	-						•					Α	46	М	VS	45	66253050271	1	+++
	1	-	-	-	•						•	•			39C	46	L	VS	45	69936675639	2	+++
	1	-	-	-	•						•	•			39C	60	K	VS	45	69936641424	2	+++
	1	-	-	-							•	•			39C	80	L	VS	35	69936641427	1	+++

HSS = High Speed Steel

Steel hardened = Over 50Rc

BONDED ABRASIVES FOR PRECISION GRINDING SHAPE 01C SHAPE 05 SHAPE 07 SHAPE 20 **GRAIN COLOUR CODE** Recess/Inner Concave Diameter 5NQ GF 25A High Alloyed Steels & HSS 19A Recess/Concave Depth B 3NQ 38A Vit3 Recess/Concave Depth A Non-Ferrous & Carbide 38A Α 2NQ **External Diameter** NQ Vit³ 86A 39C Internal Diameter Saw Sharpening Bench Wheels SG 32A 37C Abrasive Type Soft Steels Cast Iron **Grit Size** Surface Grade Bond Tools Inox DIM DxTxH QUALITY MOS Deburring & SHAPE Р Materials **SPECIFICATION** FΑ FB Grinding ART NO (mm) Sharpening (m/s 1 • K VS 66253050276 +++ • 39C 80 45 0 1 ۷S +++ 384 100 J 45 66243570496 1 39C 100 J VS 45 66253050375 2 +++ 1 39C 120 Κ VS 45 69936641428 2 +++ 200x25x50 5 110 10 lacktriangle0 3SG 60 VS 69936639454 +++++ 200x25x50.8 1 • SGB 46 Κ ٧X 45 66253050183 2 ++++ 200x25x51 0 46 Κ ۷S 66253051086 +++ 38A 1 0 60 ۷S 45 69936640125 1 38A 200x25x76.2 0 38A 46 Ν ۷S 45 69936675841 +++ 0 ۷S 35 69936675842 +++ 38A 1 0 38A 60 L ٧S 35 69936675845 • Α 46 Ν ۷S 45 69936675568 • 0 38A 60 Ν ۷S 45 69936675846 +++ 39C 60 Κ VS 45 69936675672 2 +++ 39C 80 ۷S 69936675673 2 +++ L 45 1 Κ 2 +++ 39C 80 VS 35 69936675641 Κ +++ 39C 120 VS 45 69936675674 2 200x32x32 1 ++++ • SGB Κ VX 60 45 66253049892 1 0 38A 46 М VS 45 66253052712 1 +++ 1 0 60 Ι VS 45 69936675855 +++ • 384 1 • Р VS +++ Α 36 45 69936666932 1 200x32x32 • +++ Α 46 Ν VS 45 69936640814 1 _ • Α 60 Ν VS 45 69936690246 1 +++ 1 • 39C 60 Κ VS 45 69936640293 2 +++ 1 39C 80 Κ ۷S 45 69936667106 2 +++ 39C 120 Κ ٧S 45 69936675677 2 +++ 200x32x51 0 38A 60 ٧S 45 69936640245 1 200x32x76.2 0 38A Ν 69936675849 +++ 46 ۷S 1 0 Ν ۷S +++ 38A 60 45 69936675854 1 • Α 46 N6 ٧S 45 66243593707 39C 60 Κ VS 45 69936675643 69936675644 • 39C 80 Κ ٧S 45 200x40x20 5 110 25 39C 80 ۷S 35 69936640285 +++ 200x40x50.8 0 46 ۷S 69936681707 +++ 38A 45 225x5x60 0 +++ 38A 54 J ۷S 45 69936675859 225x20x51 • 3SG 60 H12 VXP 45 69936676452 2 +++++ 1 0 ++++ SGB 60 Н VX 45 69936640943 2 1 0 +++ 38A 46 VS 45 69936640871 225x25x76.2 +++++ • Н 3SG 46 VX 45 66243570377 1 • +++++ 35G 46 Н VX 45 66253055043 2 • 0 60 H12 VXP +++++ 3SG 45 66243593705



Highly recommended Recommended

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cess/Inner Concave Diameter cess/Concave Depth A cess/Concave Depth B

gh Alloyed Steels & HSS ternal Diameter

on-Ferrous & Carbide

		Recess/Inner Concav	Recess/Concave Dep	Recess/Concave Dep	Tools	Saw Sharpening	bench wheels	Internal Diameter	External Diameter	Surface	High Alloyed Steels {	Soft Steels	Inox	Non-Ferrous & Carb	Cast Iron		Abrasive Type	Grit Size	Grade	Bond				
DIM DxTxH (mm)	SHAPE	Р	FA	FB		ourring arpenin		Grii	ndin	ıg		М	ateri	als		SPE	ECIFICA	ATION	1		MOS (m/s)	ART NO.	PK QTY	QUALITY TIER
230x5x31.75	1	-	-	-	•							•					19A	54	J	VS	40	69936623905	2	+++
230x10x32	1	-	-	-	•						0	•					38A	60	М	VS	63	69936675929	1	+++
230x25x32	1	-	-	-									•	•			39C	80	K	VS	35	69936639374	1	+++
230x25x50.8	1	-	-	-	•						0	•					38A	60	Н	VS	45	69936639829	1	+++
250x3x32	1	-	-	-		•					•	•					SGB	80	K	VS3	50	66243541097	5	++++
250x10x20	1	-	-	-		•					0	•					38A	60	L	VS3	63	66243541093	5	++++
250x10x32	1	-	-	-	•						0	•					38A	60	М	VS	63	69936675931	1	+++
	01C	-	-	-		•					0	•					38A	60	L6	VS3	35	69210431945	5	++++
250x13x32	1	-	-	-	•						0	•					38A	60	L	VS3	63	66253348353	1	++++
250x20x76.2	1	-	-	-	•						0	•					38A	60	L	VS	45	69936675862	1	+++
250x25x31.75	1	-	-	-		•						•					Α	36	0	VS	35	69936623907	1	+++
	1	-	-	-		•						•					Α	46	N	VS	35	69936623914	1	+++
	1	-	-	-		•						•					Α	60	N	VS	35	69936623918	1	+++
	1	-	-	-		•							•	•			39C	60	K	VS	35	69936623664	1	+++
250x25x32	1	-	-	-	•						0	•					38A	60	L5	VS	45	66253049927	1	+++
	1	-	-	-		•						•					Α	36	Р	VS	45	69936666940	1	+++
	1	-	-	-		•						•					Α	46	N	VS	45	69936641386	1	+++
	1	-	-	_	•								•	•			39C	80	L	VS	45	69936675679	1	+++
250x25x76	1	-	-	-					0	•	•	0	0			Ш	2NQ	60	G	VS3	35	66253348365	1	+++++
	1	-	-	_					0	•		•					32A	60	l	VS	35	69936639898	2	+++
250x25x76.2	1	-	-	-	_			- 1	0	•	•	0	0			Ш	2NQ	46	G	VS3	35	66253348371	1	+++++
	1	-	-	-	•						•	0					3SG	46	K	VS	45	69936623668	1	+++++
	1				•						•	0					3SG	54	F11	VXP	45	69936676054	1	+++++
	1				•					_	•	0					3SG	60	K	VX	45	66253055045	1	+++++
	1								0	•	0	•					SGA	46	K	VX	50	61463693965	1	++++
	1	-		_	•				-		•	0					SGB	46	K	VX	45	66253050124	1	++++
	1	_	_	_	•						•	0					SGB		K	VX	45	66253050126	1	++++
	1	-	_		•						•	0							H12	VXP	45	69936623901	1	++++
	1	_	_	-	•						0	•					38A	46	L	VS	45	69936623691	1	+++
	1	-	_		•						0	•					38A	46	K	VS3	63	66253354041	1	++++
	1	_	_	_	•				-		0	•					38A	60	K	VS3 VS	63 45	66253354040	1	++++
	1	_	-	-	•				\dashv		0	•					38A	60				69936623733	1	+++
	1	_		_	•						0	•					38A 38A	80	 	VS VS	45 45	66253050101	1 1	+++
250x32x32	1	_	_	_	•						•	0					SGB		K	VX	45 45	66253050162	1	++++
230,02,02	1								-		0	•					38A	60	N	VS	45	69936667158	1	+++
	1	_		_					+		•	•					A	24	Q	VS	45	69936666942	1	+++
	1	_	_	_					+			•					Α Α	36	P	VS	45 45	69936666943	1	+++
	1	_	_	_								•					Α Α	60	M	VS	45	69936642130	1	+++
	1	_	_	_	•								•	•			39C	60	K	VS	45	69936639837	1	+++
	1	_	_	_	•		+		+				•	•			39C	80	K	VS	45	69936640845	1	+++
					_								_											

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BONDED ABRASIVES FOR PRECISION GRINDING SHAPE 01C SHAPE 05 SHAPE 07 SHAPE 20 **GRAIN COLOUR CODE** Recess/Inner Concave Diameter 5NQ GF 25A High Alloyed Steels & HSS 3NQ 38A Vit3 19A Recess/Concave Depth A Non-Ferrous & Carbide Recess/Concave Depth 38A 2NQ Α **External Diameter** NQ Vit³ 86A 39C Internal Diameter Saw Sharpening SG 32A 37C Bench Wheels Abrasive Type Soft Steels **Grit Size** Grade Bond Inox QUALITY DIM DxTxH Deburring & Sharpening MOS SHAPE Р **SPECIFICATION** FΑ FB Grinding Materials ART NO. (m/s (mm) • 250x32x76.2 Н 66253055046 +++++ 3SG 46 VX 45 • Q 250x40x32 1 • Α 36 VS 45 69936666945 +++ • Α 60 N VS 45 69936666946 +++ 0 250x40x51 1 • 37C 60 K6 ٧K 35 69210431004 3 +++ 0 0 250x40x76 38A 46 L6 VS3 35 69210432025 3 ++++ 0 1 _ 0 38A 60 L6 VS3 35 69210431657 3 ++++ 250x40x76.2 • $lackbox{0}$ 3SG 46 VX 45 66253050259 +++++ 1 0 3SG 46 G12 VXPC 45 69936676056 1 ++++ 300x25x127 • 3NQ 60 Κ VQN 45 66253262040 ++++ 1 • 2NQ VS3 45 66253348372 +++++ 3SG 46 Κ ٧X 45 66253055050 +++++ 3SG 60 H12 VXP 45 69936677184 +++++ 0 SGA 46 Κ ۷S 50 61463699584 ++++ 0 SGA 60 Κ VX 50 61463693967 ++++ 0 SGB 60 Κ ٧X 66253050132 ++++ 45 0 ++++ SGA 80 VX 50 L 61463693973 ++++ • SGB Κ VX 80 35 69936678987 1 ++++ • SGB 80 110 VXP 45 66253050121 +++ 0 ۷S 69936623662 38A 46 J 35 1 • K 2 ++++ 60 VS3 63 66253354042 384 0 Κ +++ 384 60 VS 45 66253050105 1 0 +++ 38A 80 Ι VS 45 69936623648 1 _ 19A 60 М VS 35 69936623719 1 +++ 1 39C 60 Κ VS 45 69936623687 +++ • 1 39C 80 J ٧S 45 69936640343 1 +++ 39C 120 Κ ۷S 35 69936675646 +++ 300x32x127 $lackbox{0}$ 3SG 60 Κ VX 45 66253055872 1 +++++ • 0 SGB F12 VXP 69936676705 ++++ 46 45 1 SGB 60 Κ VX 45 69936676386 1 ++++ 46 Н ۷S 45 69936675883 +++ 38A 0 60 ۷S L 45 69936675884 Q • Α 24 ٧S 45 69936675579 Α 36 0 ۷S 45 69936675580 • Α 46 Ν ۷S 45 69936675581 +++ 300x32x32 • 0 38A 60 Ν ٧S +++ 45 69936639618 1 • 0 • 38A 60 Κ VS 45 66253051100 1 +++ • Α 36 0 VS 45 69936675575 +++ 300x32x50.8 • +++ Α 46 Ν VS 45 69936675578 300x32x76.2 0 0 • 38A 46 Н VS 45 69936675880 +++ 300x40x30 Ρ Α 36 VS 45 69936681734 +++

Steel soft = Up to 50Rc

Steel hardened = Over 50Rc

HSS = High Speed Steel



Highly recommended Recommended

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Recess/Inner Concave Diameter
Recess/Concave Depth A
Recess/Concave Depth B
Tools
Saw Sharpening
Bench Wheels
Internal Diameter
External Diameter
External Diameter
Surface
High Alloyed Steels & HSS
Soft Steels
Inox
Non-Ferrous & Carbide
Cast Iron
Abrasive Type
Grit Size
Grade

DIM DxTxH (mm)	SHAPE	Р	FA	FB	Deburring & Sharpening	Grindir	ng		Materia	als	SP	ECIFICA	10174	٧		MOS (m/s)	ART NO.	PK QTY	QUALITY TIER
300x40x31.75	1	-	-	-	•				•			А	36	0	VS	35	69936623686	1	+++
	1	-	-	-	•				•			А	46	N	VS	35	69936623703	1	+++
	1	-	-	-	•				•			А	60	N	VS	35	69936623724	1	+++
	1	-	-	-	•				•	•		39C	60	L	VS	35	69936623682	1	+++
300x40x32	1	-	-	-	•				•			А	36	Р	VS	35	69936640222	1	+++
	1	-	-	-	•				•			А	46	N	VS	45	69936639682	1	+++
	1	-	-	-	•				•			А	60	М	VS	45	69936640221	1	+++
	1	-	-	-	•				•	•		39C	60	K	VS	45	69936639362	1	+++
	1	-	-	-					•			39C	80	K	VS	45	69936676387	1	+++
300x40x76	1	-	-	-		•	•	0	•			38A	60	K5	VS	45	66253049953	1	+++
300x40x76.2	1	-	-	-	•				•			А	36	0	VS	45	69936675607	1	+++
300x40x127	1	-	-	-			•	•	•			3SG	46	Н	VX	45	66253055893	1	+++++
	5	190	12	-			•	•	•			3SG	60	K	VS	50	69936621533	1	+++++
	1	-	-	-			•	•	•			3SG	60	K	VX	45	66253055053	1	+++++
	1	-	-	-			•	•	•			SGB	46	G10	VXP	45	69936639946	1	++++
	1	-	-	-			•	•	•			SGB	60	K	VX	45	66253050179	1	++++
	5	190	12	-			•	0	•			SGA	60	K	VS	50	61463699585	1	++++
	1	-	-	-			•	0	•			38A	46	J	VS	35	69936675889	1	+++
	1	-	-	-			•	0	•			38A	60	L	VS	45	69936675891	1	+++
	5	190	12	-			•	0	•			38A	60	L	VS	35	69936621532	1	+++
	5	190	12	-			•		•			19A	60	М	VS	35	69936621518	1	+++
	1	-	-	-	•				•			А	24	Q	VS	45	69936675583	1	+++
	1	-	-	-	•				•			А	36	0	VS	45	69936675584	1	+++
	1	-	-	-	•				•			А	46	N	VS	45	69936675585	1	+++
	1	-	-	-			•		•	•		39C	60	K	VS	45	69936675684	1	+++
	1	-	-	-			•		•	•		39C	80	K	VS	45	69936675649	1	+++
300x50x32	1	-	-	-	•				•			А	36	0	VS	45	69936681823	1	+++
	1	-	-	-	•				•			А	60	N	VS	45	66243570484	1	+++
300x50x76.2	7	160	10	10			•	•	•			3SG	46	Н	VS	35	69936672033	1	+++++
	1	-	-	-		•	•	0	•			38A	46	I	VS	45	66253050251	1	+++
300x50x127	1	-	-	-			•	•	•			SGB	46	H11	VXP	45	66253054500	1	++++
	1	-	-	-			•	•	•			SGB	46	G10	VXP	45	66243570384	1	++++
	1	-	-	-			•	0	•			38A	46	J	VS	45	69936623649	1	+++
350x50x127	1	-	-	-		•	•	0	•			38A	80	L6	VS3	35	69210431072	2	++++
	1	-	-	-		•	•			•		37C	60	K6	VK	35	69210431686	2	+++
355x25x127	1	-	-	-		•	•	•	•			3SG	60	L	VX	45	66253055895	1	+++++
	1	-	-	-		•	•	•	•			3SG	60	K	VS	50	69936623716	1	+++++
	1	-	-	-		•	•	0	•			SGA	46	J	VS	50	61463699586	1	++++
	1	-	-	-		0	•	•	•			SGB	60	L	VX	45	66253050135	1	++++
	1	-	-	-		0	•	0	•			38A	60	L	VS	45	69936675901	1	+++

HSS = High Speed Steel

Steel hardened = Over 50Rc

BONDED ABRASIVES FOR PRECISION GRINDING SHAPE 01C SHAPE 05 SHAPE 07 SHAPE 20 **GRAIN COLOUR CODE** Recess/Inner Concave Diameter 5NQ GF 25A High Alloyed Steels & HSS 3NQ 38A Vit3 19A Non-Ferrous & Carbide Recess/Concave Depth Recess/Concave Depth 2NQ 38A Α **External Diameter** NQ Vit³ 86A 39C Internal Diameter Saw Sharpening Bench Wheels SG 32A 37C Abrasive Type Soft Steels **Grit Size** Grade Bond QUALITY DIM DxTxH MOS Deburring & SHAPE Р Grinding FA FB Materials **SPECIFICATION** ART NO Sharpening (m/s TIER (mm) 0 • 1 0 • 355x32x127 2NQ 60 J VS3 45 66253348373 +++++ • 0 E12 ++++ 1 SGB 54 VXP 45 69936676713 1 0 • +++ 0 38A 60 Ι VS 45 69936675903 355x40x127 1 • 0 2NQ 46 G VS3 45 66253348367 1 +++++ 0 • 3SG 60 L VX 45 66253055057 +++++ 5 215 13 0 • 3SG 60 Κ ۷S 35 69936640371 1 +++++ 0 $lackbox{0}$ 3SG 60 Κ ۷S 69936623611 +++++ 1 ٧X 66253050117 ++++ 45 1 SGB 46 G10 VXP 45 66253049901 ++++ 61463699589 1 80 VXP 0 50 5 215 13 0 38A 60 L ٧S 35 69936675909 38A 46 ۷S 45 69936623753 0 • 0 38A 60 ۷S 69936675908 +++ L 45 1 Α 24 Q VS 45 69936675586 +++ Α 46 Ν ۷S 69936675587 +++ • 45 1 0 Κ +++ 39C 60 VS 45 69936675685 355x50x31.75 Ν +++ Α 60 VS 35 69936623742 355x50x127 0 • • 0 3NQ 46 Н +++++ VQN 45 66253262049 0 0 +++++ • 2NQ 46 G VS3 45 66253348366 1 1 **(**) • 3SG 46 - 1 VX 45 66253055063 +++++ 1 46 F12 +++++ • 3SG VXP 45 69936623900 1 0 0 46 ++++ SGB J VX 45 69936623781 2 1 0 SGA 54 G12 VXP 50 61463693982 1 ++++ 0 SGB 54 G10 VXP 45 66253049857 ++++ 1 0 SGB 60 Κ ٧X 45 66253050138 1 ++++ 0 0 38A 46 Κ ٧S 45 66253051108 +++ 1 0 38A 46 1 ٧S 45 69936675913 1 +++ 1 0 38A 60 L ۷S 69936675914 +++ 7 190 12 13 0 ۷S 38A 60 L 69936675899 0 38A 60 K5 ۷S 45 66253049951 0 Α 36 VS 45 69936675589 400x25x127 0 ++++ • • SGB 60 Κ ٧X 45 69936644046 400x50x127 0 0 38A 60 VS3 45 69210431108 ++++ L6 0 37C K6 69210431098 +++ 60 ٧K 45 400x50x203 0 ++++ 38A 60 VS3 45 69210431757 L6 406x25x127 • VX 66253055083 +++++ 1 3SG 60 L 45 1 1 80 110 VXF 50 ++++ SGA 61463694555 • • +++ 1 60 VS 45 69936694018 1 38A L 406x32x127 • 0 • +++ 38A 60 VS 45 66253049841



Highly recommended Recommended

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Recess/Inner Concave Diameter
Recess/Concave Depth A
Recess/Concave Depth B
Tools
Saw Sharpening
Bench Wheels
Internal Diameter
External Diameter
External Diameter
Surface
High Alloyed Steels & HSS
Soft Steels
Inox
Non-Ferrous & Carbide
Cast Iron
Abrasive Type
Grit Size

					1										S									
DIM DxTxH (mm)	SHAPE	Р	FA	FB		urrin irpeni		Gr	indir	ng		М	ateria	ls		SP	ECIFICA	ATION	١		MOS (m/s)	ART NO.	PK QTY	QUALITY TIER
406x40x127	1	-	-	-					•	•	•	•					3SG	60	L	VX	45	66253055086	1	+++++
	1	-	-	-					•	•	•	0					SGB	60	K	VX	45	66253049843	1	++++
	20	215	8	-					•	•	•	•					GF	60	K	VX	50	66243469015	1	++++
	1	-	-	-					•	•	•	•					38A	60	J	VS3	45	66253348356	1	++++
	20	215	13	-					•	•	0	•					38A	60	Ν	VS	35	66243448167	1	+++
	5	215	13						•	•	0	•					38A	60	М	VS	35	66243448163	1	+++
	5	215	13	-					0	•		•					32A	60	K	VS	35	66243448202	1	+++
	5	215	13	-					•	•			•	•			39C	60	J	VS	50	66243468572	1	+++
	1	-	-	-					0	•			•	•			39C	80	K	VS	45	66243466414	1	+++
406x50x50	1	-	-	-			•					•					А	24	Q	VS	45	66243448177	1	+++
406x50x127	1	-	-	-					•	•	•	0					3SG	46	Н	VX	45	66253055912	1	+++++
	1	-	-	-						•	•	•					5SG	46	G12	VXP	45	66243468188	1	++++
	5	215	13	-					•	•	•	•					3SG	46	I	VS	35	66243448179	1	++++
	5	215	13	-						•	•	0					3SG	46	F12	VXP	35	66243448690	1	+++++
	1	-	-	-						•	•	0					3SG	54	F12	VXP	45	66253054506	1	+++++
	5	215	13	-						•	•	0					3SG	54	E12	VXP	35	66243448671	1	+++++
	5	215	13	-						•	•	0					3SG	54	D12	VXP	35	66243467861	1	+++++
	20	215	13	-					•	•	•	0					3SG	60	K	VS	35	66243448204	1	+++++
	5	215	13	-						•	0	•					GF	54	E12	VXP	35	66243469022	1	++++
	1	-	-	-					•	•	0	•					SGA	46	K	VS	50	61463699644	1	++++
	1	-	-	-						•	•	0					SGB	46	G10	VXP	45	66243468401	1	++++
	1	-	-	-					•	•	•	0					SGB	46	Н	VX	45	66243448363	1	++++
	5	215	13	-						•	•	0					SGB	46	F12	VXP	35	66243448824	1	++++
	1	-	-	-					•	•	•	0					SGB	60	K	VX	45	66253055072	1	++++
	1	-	-	-						•	0	•					SGA	80	110	VXP	50	61463694556	1	++++
	5	215	13	-					0	•	0	•					GF	46	I	VX	35	66243469004	1	++++
	5	215	13	-						•	0	•					GF	46	F12	VXP	35	66243469021	1	++++
	5	215	13	-					•	•	0	•					GF	60	L	VX	50	66243468990	1	++++
	20	215	8	-					0	•	0	•					GF	60	L	VX	50	66243468989	1	++++
	20	215	8	-					•	•	•	•					GF	60	K	VX	50	66243468991	1	++++
	1	-	-	-						•	•	•					38A	46	111	VXP	45	66253054508	1	+++
	5	215	13	-					•	•	0	•					38A	46	ı	VS	35	66243448178	1	+++
	1	-	-	-					•	•	0	•					38A	46	Н	VS	35	69936694574	1	+++
	5	215	13	-						•	0	•					38A	46	F12	VXP	35	66243448705	1	+++
	20	215	13	-					•	•	0	•					38A	60	K	VS	35	66243448201	1	+++
	20	215	13	-					•	•	0	•					38A	60	М	VS	35	66243448116	1	+++
	5	215	13	-					•	•		•					32A	46	J	VS	35	66243448205	1	+++
	5	215	13	-					•	•		•					32A	46	ı	VS	35	66243448172	1	+++
	5	215	13	-						•		•					32A	46	F12	VXP	35	66243448726	1	+++
	5	215	13	-						•		•					32A	60	F12	VBEP	32	66243448133	1	+++
	1		_	_			•					•					A	24	Q	VS	45	66243467496	1	+++

HSS = High Speed Steel

Steel hardened = Over 50Rc

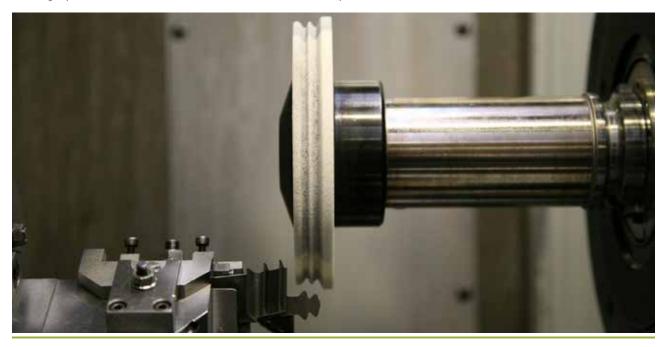
BONDED ABRASIVES FOR PRECISION GRINDING

SHAPE 05 SHAPE 07 SHAPE 01C **GRAIN COLOUR CODE** Recess/Inner Concave Diameter 5NQ GF 25A High Alloyed Steels & HSS 38A Vit³ Recess/Concave Depth A Recess/Concave Depth B 3NQ 19A Non-Ferrous & Carbide Α 2NQ 38A **External Diameter** NQ Vit³ 86A 39C Internal Diameter Saw Sharpening Bench Wheels SG 32A 37C Abrasive Type Soft Steels **Grit Size**

DIM DxTxH (mm)	SHAPE	Р	FA	FB	rring &	Grinding			Materials	SP	ECIFIC	IOITA	٧		MOS (m/s)	ART NO.	PK QTY	QUALITY TIER
	1	-	-	-	•				•		Α	36	0	VS	45	66243467497	1	+++
406x63x127	7	215	12	12				D	•		GF	46	F12	VXP	35	66243449251	1	++++
	20	215	13	-		0		D	•		GF	60	L	VX	50	66243468993	1	++++
406x76x127	7	215	12	25					•		3SG	54	E12	VXP	35	66243448665	1	+++++
	7	215	12	25					•		SGB	46	F1	VXP	35	66243448691	1	++++
	7	215	13	25		0		D	•		GF	46	1	VX	35	66243469001	1	++++
	7	215	13	25				D	•		GF	46	F1	VXP	35	66243469016	1	++++
	7	215	12	25				D	•		38A	46	F1	VBEP	35	66243448206	1	+++
	7	215	12	25		0			•		32A	46	- 1	VS	35	66243448354	1	+++
406x100x152.4	7	220	15	15					•		3SG	54	E12	VXP	35	66243449287	1	+++++
	7	220	15	15				D	•		GF	46	- 1	VX	35	66243449285	1	++++
457x50x127	20	215	8	-		0		D	•		GF	60	L	VX	50	66243468995	1	++++
	1	-	-	-		0		D	•		38A	60	L	VS	45	66243466558	1	+++
	20	215	13	-		0		D	•		38A	60	М	VS	50	66243448676	1	+++
457x50x203.2	1	-	-	-		•		D	•		SGA	60	K	VX	50	61463694560	1	++++
	1	-	-	-		•		D	•		38A	46	J	VS	35	66243466557	1	+++
457x63x127	20	215	13	-		0		D	•		GF	60	L	VX	50	66243468996	1	++++
457x80x203.2	7	290	13	13				Ð	0		SGB	46	F12	VXP	35	66243468578	1	++++
	7	280	13	13				D	•		GF	46	F12	VXP	35	66243469018	1	++++
508x50x203.2	1	-	-	-		•	•	•	0		3SG	60	K	VX	45	66253055088	1	+++++
	1	-	-	-		•		D	•		SGA	80	I10	VXP	50	61463699663	1	++++
	1	-	-	-		•	•	D	•		38A	60	L	VS	35	66243466565	1	+++
500x60x203	20	290	10	-		•	•	•	0		SGB	60	K	VX	50	66243468575	1	++++

HSS = High Speed Steel

Steel hardened = Over 50Rc





SHAPE KEY

SHAPE 06 SHAPE 11

UO SHAPE I

PRODUCT RECOMMENDATION

Highly recommended Recommended

0

Kim Width Back Thickness Saw Sharpening
Bench Wheels
Internal Diameter

Internal Diameter
External Diameter
Surface
High Alloyed Steels & HSS
Soft Steels

Inox
Non-Ferrous & Carbide
Cast Iron

Abrasive Type Grit Size Grade Bond

		<u>~</u>	ñ	S L	ă		ũ	S	Ξ	Š	드	ž	ပိ		¥	Ģ	Ģ	B				
DIM DxTxH (mm)	SHAPE	W	Е	Deburring Sharpenin		Gri	indin	g		М	ateri	als		SPI	ECIFIC	ATIO	IN		MOS (m/s)	ART NO.	PK QTY	QUALITY TIER
63x40x20	6	10	10	•				0	0	•					38A	60	J	VS3	45	66253348322	10	++++
80x32x20	11	6	8	•					•	0					SGB	60	L	VX	45	66253050137	6	++++
80x40x20	6	10	10	•				0	•	0					SGB	60	L	VX	45	66253050098	10	++++
	6	6	10	•				0	•	0					SGB	60	J	VX	45	66243570391	10	++++
	6	6	8	•				0	0	•					38A	60	L	VS3	63	66253348323	6	++++
	6	8	8	•				0	0	•					38A	60	J	VS3	63	66253348289	6	++++
80x40x32	6	10	10	•				0	0	•					38A	46	J	VS3	45	66253348326	10	++++
100x40x20	11	8	10	•					•	0					3SG	60	K	VX	45	66253050110	2	++++
	11	8	10	•					0	•					38A	60	Κ	VS	45	69936686170	2	+++
	11	8	10	•					0	•					38A	60	L	VS	45	69936688495	2	+++
100x40x31.75	11	6	13	•					•	0					3SG	54	K	VS	32	69936624036	2	++++
	11	6	13	•					•	0					3SG	60	K	VS	32	69936624043	2	++++
	11	6	13	•					0	•					38A	46	J6	VS3	35	66253358217	2	++++
	11	6	13	•					0	•					38A	54	Κ	VS	32	69936624609	2	+++
	11	6	13	•					0	•					38A	60	J6	VS3	35	66253358216	2	++++
	11	6	13	•					0	•					38A	60	J	VS3	32	66253348630	2	++++
100x40x32	11	13	13	•					•	0	0				2NQ	46	J	VS3	45	66253348633	2	++++
	11	8	10	•					•	0					3SG	60	K	VX	45	66253050114	2	++++
	6	8	10	•				0	0	•					38A	60	K	VS	45	69936674854	2	+++
	11	8	10	•					0	•					38A	60	K	VS	45	69936686169	2	+++

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BONDED ABRASIVES FOR PRECISION GRINDING

		Rim Width	Back Thickness	Tools	Saw Sharpening Bench Wheels	Internal Diameter	External Diameter		High Alloyed Steels & HSS	Soft Steels	Inox	Non-Ferrous & Carbide	Cast Iron		Abrasive Type	Grit Size	Grade	Bond	G	RAIN COLOU 5NQ 3NQ 2NQ NQ Vit ³ SG	GF 38A Vit ³ 38A 86A 32A	25A 19A A 39C 37C
DIM DxTxH (mm)	SHAPE	W	Е		urring & rpening	G	rinding	g		Ма	teria	ls		SPE	CIFIC	ATIO	N		MOS (m/s)	ART NO.	PK QTY	QUALITY TIER
100x50x20	6	10	10	•				0	•	•					3SG	60	K	VX	45	66253049965	2	++++
	6	10	13	•				0	•	•					3SG	60	L	VX	45	66253049960	2	+++++
	6	10	13	•				0	•	0					3SG	80	L	VX	45	66253049966	2	+++++
	6	10	10	•				0	•	0					3SG	60	J	VX	45	66253050069	2	++++
	6	8	10	•				•	•	•					SGB	60	K	VX	45	69936641284	2	++++
	6	10	10	•				0	•	•					38A	60	J	VS3	45	66253348327	2	++++
	6	10	10						0	•					38A	60	I	VS3	45	66253348629	2	++++
	6	10	13						-	•					38A	80	J	VS3	45	66253348324	2	++++
	6	10	10						0	•				_		120	18	VS3	45	66253358793	2	++++
	6	10	10						0	•					38A	46	K	VS	45	69936644193	2	+++
	6	10	13						0	•					38A	60	L	VS	45	69936639450	2	+++
	6	10	13					0	0	•					38A	60	М	VS	45	69936639460	2	+++
	6	10	10	•				$egin{array}{c} oldsymbol{0} \ oldsymbol{0} \end{array}$	•	•		•		=	38A 39C	80	J 	VS VS	45 45	69936639600 69936640131	2	+++
100x50x32	6	10	10	•				0		•					35G	60	J K	VX	45	66253050073	2	+++++
100x30x32	6	10	10	•						•					38A	60	K	VS	45	69936674859	2	+++
125x40x31.75	6	13	13	•					0	•					38A	46		VS3	45	66253358794	2	++++
123,40,31.73	6	13	13	•					0	•					38A	60		VS3	45	66253358795	2	++++
	11	8	10	•					_	•					38A	60	J6	VS3	35	66253358219	2	++++
	11	10	10	•					0	•					38A	54	K	VS	35	69936625578	2	+++
	6	8	10	•				0	0	•					38A	60	K	VS	32	69936623645	2	+++
125x40x32	11	8	10	•					•	0						46		VX	45	69936682429	2	++++
	11	8	10	•					0	•				_	38A			VS	45	69936686175	2	+++
	11	8	10	•					0	•					38A	60	K		45	69936686176	2	+++
125x45x20	11	6	13	•					•	0					3SG			VX	45	66253055954	2	+++++
	11	6	13	•					•	0				ī	SGB	60	K	VX	45	69936686736	2	++++
125x50x32	6	13	13	•				0	•	0					SGB	60	J	VX	45	66253050075	2	++++
	6	13	13	•				0	0	•					38A	46	K	VS	45	69936674867	2	+++
	6	10	13	•				0	0	•					38A	60	L	VS	45	69936639992	2	+++
125x63x32	6	10	13	•				0	•	0					SGB	60	K	VX	45	69936640579	2	++++
	6	25	16	•				0			•	•			39C	60	J	V	45	69936668305	2	+++
150x40x32	6	16	13	•				0	0	•					38A	46	Н	VS	45	69936674872	2	+++
	6	16	13	•				0	•	•					38A	60	K	VS	45	69936674875	2	+++
150x50x32	6	16	16					•	•	•					3SG	46	K	VX	45	66253050068	2	+++++
	11	10	13						•	•					SGB	46	J	VX	45	66253050133	2	++++
	6	16	16				Ш	0	•	•					SGB	60	K	VX	45	66253050076	2	++++
	11	10	13						•	•					SGB	60	K	VX	45	66253050134	2	++++
	11	10	13	•					•	•					38A	46	K	VS	45	69936686177	2	+++
	6	16	16	•				•	•	•					38A	60	K	VS	45	69936674879	2	+++
	11	10	13	•					•	•					38A	60	K	VS	45	69936682576	2	+++
150x50x65	6	20	16	•				0	•	•					38A	60	L	VS	45	69936639480	2	+++
	6	20	16					•			•	•			39C	80	J	VS	32	69936639798	2	+++

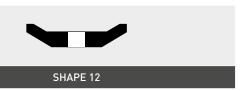


Sharpening	QUALITY TIER ++++ ++++ +++ +++
150x63x32	++++ +++ +++
6 16 16 0 0 0 0 38A 36 I VS 45 69936640369 2 ++ 150x63x50.8 6 16 16 0 0 0 0 0 38A 36 I VS 45 69936674881 2 ++ 150x63x50.8 6 16 16 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	+++
6 16 16 0 0 0 0 SGB 36 H VX 45 66253050080 2 ++ 150x63x50.8 6 16 16 0 0 0 0 SGB 36 H VX 45 66253050080 2 ++ 150x80x32 6 20 20 0 0 0 0 0 SGB 46 H VX 45 66253050080 2 ++ 6 20 20 0 0 0 0 0 SGB 46 H VX 45 66253050080 2 ++ 6 20 20 0 0 0 0 0 SGB 46 H VX 45 66253050080 2 ++ 6 20 20 0 0 0 0 0 SGB 46 H VX 45 66253050080 2 ++ 6 20 20 0 0 0 0 0 SGB 46 G10 VXP 45 69936674357 2 ++ 6 20 20 0 0 0 0 0 SGB 46 H VX 45 66253050096 2 ++ 165x63x32 6 10 13 0 0 0 0 SGB 46 H VX 45 69936674905 2 ++ 165x63x32 6 10 13 0 0 0 0 SGB 46 G11 VXP 45 66253051529 2 ++ 175x75x76.2 6 20 20 0 0 0 0 0 SGB 46 G11 VXP 45 66253050097 2 ++ 180x60x76.2 6 32 13 0 0 0 0 SGB 46 G11 VXP 45 66253050097 2 ++ 180x63x50.8 6 16 16 0 0 0 0 SGB 46 J VX 45 66253050084 2 ++ 180x63x50.8 6 16 16 0 0 0 0 SGB 46 J VX 45 66253050084 2 ++ 180x76x78 6 16 16 0 0 0 0 SGB 46 J VX 45 66253050084 2 ++ 180x76x78 6 16 16 0 0 0 0 SGB 46 J VX 45 66253049962 2 ++ 180x76x78 6 16 16 0 0 0 0 SGB 46 J VX 45 66253049962 2 ++ 180x76x78 6 16 16 0 0 0 0 SGB 46 J VX 45 66253049962 2 ++ 180x76x78 6 16 16 0 0 0 0 SGB 46 J VX 45 66253049962 2 ++ 180x76x78 6 16 16 0 0 0 0 SGB 46 J VX 45 66253049962 2 ++ 180x76x78 6 16 16 0 0 0 0 SGB 46 J VX 45 66253348321 2 ++ 180x76x78 6 16 16 0 0 0 0 SGB 46 J VX 45 66253348321 2 ++ 180x76x78 6 16 16 0 0 0 0 SGB 46 J VX 45 66253348321 2 ++ 180x76x78 6 16 16 0 0 0 0 SGB 46 J VX 45 66253348321 2 ++ 180x76x78 6 16 16 0 0 0 0 SGB 46 J VX 45 66253348321 2 ++ 180x76x78 6 16 16 0 0 0 0 SGB 46 J VX 45 66253348321 2 ++ 180x76x78 6 16 16 16 0 0 0 0 SGB 46 J VX 45 66253348321 2 ++ 180x76x78 6 16 16 16 0 0 0 0 SGB 46 J VX 45 66253348321 2 ++ 180x76x78 6 16 16 16 0 0 0 0 SGB 46 J VX 45 66253348321 2 ++ 180x76x78 6 16 16 16 0 0 0 0 SGB 46 J VX 45 66253348321 2 ++ 180x76x78 6 16 16 16 0 0 0 0 SGB 46 J VX 45 66253348321 2 ++ 180x76x78 6 16 16 16 0 0 0 0 SGB 46 J VX 45 66253348321 2 ++ 180x76x78 6 16 16 16 0 0 0 0 SGB 46 J VX 45 66253348321 2 ++ 180x76x78 6 16 16 16 0 0 0 0 SGB 46 J VX 45 66253348321 2 ++ 180x76x78 6 16 16 16 0 0 0 0 SGB 46 J VX	+++
150x63x50.8	
6 16 16 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	++++
150x80x32	
6 20 20	++++
6 20 20	++++
6 20 20	++++
165x63x32 6 10 13 • • • 38A 46 F12 VXP 45 66253051529 2 ++ 175x75x76.2 6 20 20 • <t< td=""><td>+++</td></t<>	+++
175x75x76.2 6 20 20	+++
6 20 20	+++
180x40x76.2 6 32 13 • • • • 38A 46 M VS 45 69936674884 2 ## 180x63x50.8 6 16 16 • • • • • 66253050084 2 ## 180x76x32 6 16 16 • • • 38A 36 I VS 45 69936639449 2 ## 180x76x78 6 16 16 • • • • 38A 36 I VX 45 66253049962 2 ## 6 16 16 • • • 38A 36 I VX 45 66253049962 2 ## 6 16 16 • • • 38A 36 I VX 45 66253348321 2 ## 6 16 16 • • • 38A 36 J VS 45 69936639817 2 ##	++++
180x63x50.8 6 16 16 ●	+++
6 16 16 • • • 38A 36 H VS 45 69936674887 2 ## 180x76x32 6 16 16 • • 38A 36 I VS 45 69936639449 2 ## 180x76x78 6 16 16 • • • 3SG 36 I VX 45 66253049962 2 ## 6 16 16 • • 38A 36 I8 VS3 45 66253348321 2 ## 6 16 16 • • 38A 36 J VS 45 69936639817 2 ##	+++
180x76x32 6 16 16 ● ● ● ■ 38A 36 I VS 45 69936639449 2 ★★ 180x76x78 6 16 16 ● ● ● ● ■ 3SG 36 I VX 45 66253049962 2 ★★ 6 16 16 ● ● ● ■ 38A 36 I8 VS3 45 66253348321 2 ★★ 6 16 16 ● ● ● ■ 38A 36 J VS 45 69936639817 2 ★★	++++
180x76x78 6 16 16 ● ● ● ● ■ 3SG 36 I VX 45 66253049962 2 ++ 6 16 16 ● ● ● ■ 38A 36 I8 VS3 45 66253348321 2 ++ 6 16 16 ● ● ■ 38A 36 J VS 45 69936639817 2 ++	+++
6 16 16 • • • • • • • • 38A 36 18 VS3 45 66253348321 2 *** 6 16 16 • • • • • • • • 38A 36 J VS 45 69936639817 2 ***	+++
6 16 16 ●	+++++
	++++
6 16 16 ● ● ● ■ 38A 46 H VS 45 69936639616 2 ++	+++
	+++
180x80x32 6 16 16 ● ● ● ● ■ 38A 46 H VS 45 69936674889 2 ++	+++
200x40x32 6 45 15 ●	+++
6 45 15 ●	+++
200x40x76.2 6 40 13 ●	++++
6 40 13 ●	+++
6 40 13 ●	+++
6 40 13 ●	+++
6 40 13 • • • • • 39C 80 J V 45 69936668348 2 ++	+++
6 40 13 ●	+++
200x63x50.8 6 20 20 ●	+++
200x82x78 6 16 20 • • • • • • • • • • • • • • • • • •	++++
6 16 20 ●	++++
6 16 20 ●	++++
6 16 20 ●	++++
300x63x127 6 40 20 ●	

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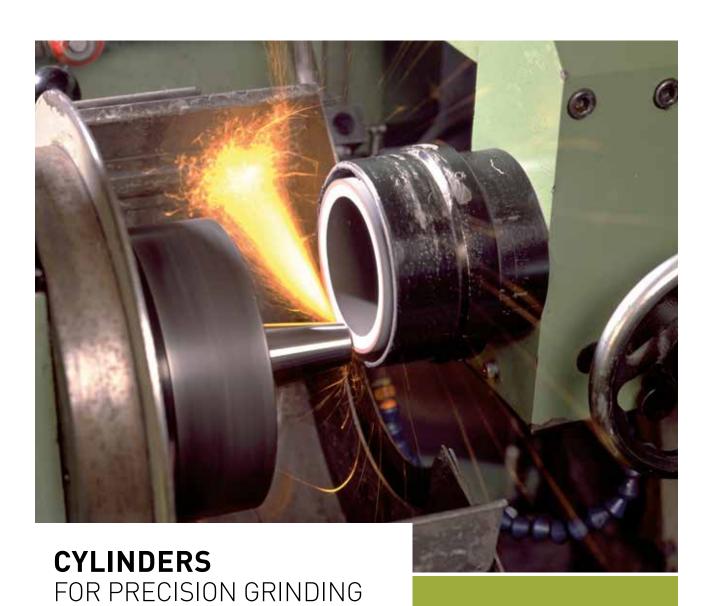
SHAPE KEY



GRAIN COLOUR CODE High Alloyed Steels & HSS 5NQ GF 25A Non-Ferrous & Carbide External Flat Diameter Internal Flat Diameter 3NQ 19A 38A Vit³ External Diameter Internal Diameter 2NQ 38A Α Saw Sharpening Back Thickness Bench Wheels NQ Vit³ 86A 39C Abrasive Type Soft Steels Rim Width Rim Depth Cast Iron SG 32A 37C Bond

DIM DxTxH (mm)	W	Е	J	K	U	Deburring Sharpenir	Grinding		М	lateri	als	SPE	CIFICATIO	N		MOS (m/s)	ART NO.	PK QTY	QUALITY TIER
100x13x12.7	5	7	45	50	2,5	•		•	•				38A 60	K	VS	45	69936624605	2	+++
100x13x20	5	7	41	41	3,2	•		•	0				3SG 60	K	VX	45	66253050236	2	++++
	5	7	41	41	3,2	•		•	•				38A 60	J	VS3	45	66253348382	2	++++
125x13x20	6	7	61	61	3,2	•		•	0	•			2NQ 60	J	VS3	45	66253348378	2	++++
	6	7	61	61	3,2	•		•	•				3SG 60	J	VX	45	69936686768	2	+++++
	6	7	61	61	3,2	•		•	•				38A 60	J	VS3	45	66253348488	2	++++
150x13x20	8	9	56	56	3,2	•		•	•				3SG 60	L	VX	45	66253050231	2	+++++
	8	9	56	56	3,2	•		•	0				SGB 46	K	VS3	45	66253348384	2	++++
	8	9	56	56	3,2	•		•	0				SGB 60	K	VS3	45	66253348379	2	++++
	7	9	86	86	3,2	•		0	•				38A 60	K	VS	45	69936686199	2	+++
150x13x31.75	9,5	8	76	76	3,2	•		•	•				3SG 60	K	VS	35	69936624608	2	+++++
150x13x32	7	9	86	86	3,2	•		•	0				3SG 60	K	VX	45	66253050239	2	+++++
	7	9	86	86	3,2	•		0	•				38A 46	K	VS	45	69936686194	2	+++
	7	9	86	86	3,2	•		0	•				38A 60	J	VS3	45	66253348380	2	++++
150x20x32	8	9	87	87	3,2	•		•	•				SGB 60	K	VX	45	66253050245	2	++++
180x20x32	9	11	70	70	3,2	•		•	0				SGB 54	K	VX	45	66253050260	2	++++
200x20x32	10	12	90	90	3,2	•		0	•				38A 60	K	VS	45	69936686215	2	+++
200x32x32	10	12	92	92	3,2	•		•	0				SGB 46	ı	VX	45	66253050253	2	++++

Highly recommended Recommended



SHAPE KEY

SHAPE 02

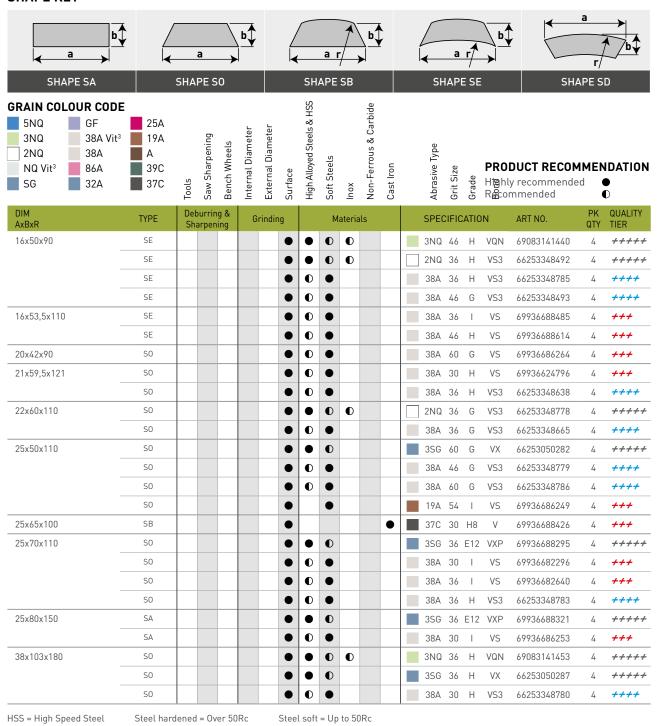
Saw Sharpening
Bench Wheels
Internal Diameter
External Diameter
Surface
High Alloyed Steels & HSS
Soft Steels
Inox
Non-Ferrous & Carbide
Cast Iron
Abrasive Type
Grit Size
Grade

DIM DxTxH (mm)	Deburring & Sharpening	Grinding	Materials	SPECIFICATION	MOS (m/s) ART NO.	PK QUALITY QTY TIER
200x100x160		•	• •	SGB 46 H VX	45 69936686693	1 ++++
		•	0	38A 46 G VS	3 45 66253348386	1 ++++
254x100x204		•	0 •	38A 46 G VS	3 45 66253348387	1 ++++

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SHAPE KEY





DRESSING STICKS & SHARPENING STONES

Dressing sticks	27
Bench & combination oil stones	28
Abrasive & precision files	28
Abrasive slips & specialties	28



DRESSING STICKS

Norton dressing sticks are designed to help you achieve maximum performance from your vitrified wheels. Use for truing, cleaning, and dressing diamond, CBN and conventional abrasive wheels.

NORBIDE ++++

- Manufactured from sintered boron carbide
- Extremely hard and very dense
- Excellent chemical and wear resistance

- Long product life, reduced maintenance and less downtime
- Suitable also for dressing tool and cutter wheels 200mm and smaller, especially cup and dish shapes

SHAPE	DIM WxHxL (mm)	SPECIFICATION	PK QTY	ART NO.
RECTANGULAR	5x12.7x76.2	NORBIDE	1	61463610148



39C /+++

- Highest purity green silicon carbide abrasive
- Harder and more friable than aluminium oxide abrasive
- Ideal for dressing conventional vitrified grinding wheels
- Outperforms 37C for better cutting efficiency and longer life

SHAPE	DIM WxHxL (mm)	SPECIFICATION	PK QTY	ART NO.
RECTANGULAR	25x50x200	39C 60 KV	1	69936685066





37C +++

- High purity black silicon carbide abrasive
- Ideal for dressing conventional vitrified grinding wheels
- Harder and more friable than aluminium oxide abrasive

SHAPE	DIM WxHxL/DIAxL (mm)	SPECIFICATION	PK QTY	ART NO.				
DRESSING STICKS FOR SUPER ABRASIVE GRINDING WHEELS								
SQUARE	13x13x150	37C 80 MV	10	69936685063				
		37C 320 HV	10	66243453547				
DRESSING STICKS FOR BONDED ABRASIVE GRINDING WHEELS								
RECTANGULAR	25x50x200	37C 24 TV	10	69936685072				
SQUARE	25x25x150	37C 30 UV	10	69936624620				
ROUND	25.4x203.2	37C 30 TV	10	61463625024				



38A +++

- High purity white aluminium oxide abrasive
- Ideal for dressing CBN Super Abrasive wheels

• Friable abrasive

SHAPE	DIM WxHxL (mm)	SPECIFICATION	PK QTY	ART NO.					
DRESSING STICKS FOR SUPER ABRASIVE GRINDING WHEELS									
RECTANGULAR	13x25x150	38A 150 HVBE	10	61463605565					
		38A 220 HVBE	10	61463605066					
		38A 320 HVBE	10	69936684889					
SQUARE	13x13x150	38A 220 HVS	10	69936682631					
		38A 150 IVBE	10	69936682314					
	20x20x200	38A 150 HVBE	10	69936685064					
		38A 220 IVBE	10	61463603606					
GENERAL PUF	GENERAL PURPOSE DRESSING STICKS								
RECTANGULAR	13x25x150	38A 220 KV	10	66243460886					





Usex 38A dressing sticks to dress CBN wheels. Use 37C dressing sticks to dress Diamond wheels.

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BENCH & COMBINATIONOIL STONES

Since 1823, Norton has been the leading supplier of benchstones, files, slips and rubbing bricks. Our comprehensive line of sharpening and finishing stones delivers superior performance solutions.

PRODUCT SELECTION

APPLICATION	COARSE / MEDIUM SHARPENING	FINE STONING
Carbide tool	Medium and coarse, Crystolon Bench	Fine Crystolon Bench
	Coarse/fine Crystolon, Combination	Coarse/fine Crystolon Combination
Steel tool	Medium and coarse India Bench	Fine India Bench
	Coarse/fine India Combination	Coarse/fine India Combination

CRYSTOLON

- Premium silicon carbide abrasive
- Pre-filled with oil
- Fast cutting stone; ideal for general sharpening of cutting tools
- Fast stock removal for quick edge shaping with minimal loading
- Saves time by eliminating the need for pre-soaking prior
 to use

DIM LxWxH (mm)	TYPE	SPECIFICATION	PK QTY	ART NO.					
BENCH STONES									
102x25x13	MJB24	Medium Crystolon	5	61463685480					
152x51x25	MJB6	Medium Crystolon	5	61463685505					
	FJB6	Fine Crystolon	5	61463685500					
COMBINATION OIL STONES									
102x44x16	JB134	Coarse/Fine Crystolon	5	61463685440					
127x51x19	JB45	Coarse/Fine Crystolon	5	61463685445					
152x51x25	JB6	Coarse/Fine Crystolon	5	61463685450					
203x51x25	JB8	Coarse/Fine Crystolon	5	61463685455					





INDIA +++

- Smooth cutting aluminium oxide abrasive
- Norton's trademark for a fine finish
- Pre-filled with oil

- Long lasting cutting edge
- Ideal for cleaning, deburring and good quality finishes
- Saves time by eliminating the need for pre-soaking prior to use

DIM LxWxH (mm)	TYPE	SPECIFICATION	PK QTY	ART NO.
BENCH STONES				
102x25x6	MB14	Medium India	5	61463685575
	FB14	Fine India	5	61463685570
102x25x13	CB24	Coarse India	5	61463685595
	MB24	Medium India	5	61463685590
	FB24	Fine India	5	61463685585
102x44x13	MB124	Medium India	5	61463626048
152x38x13	MB26	Medium India	5	61463626034
152x51x19	UPB6	Medium India	5	61463690694
152x51x25	CB6	Coarse India	5	61463685620
	MB6	Medium India	5	61463685615
	FB6	Fine India	5	61463685610
203x51x25	CB8	Coarse India	5	61463685635
	UPB8	Medium India	5	61463685755
	MB8	Medium India	5	61463685630
	FB8	Fine India	5	61463685625
COMBINATION OIL STONE	S			
102x25x13	IB24	Coarse/Fine India	5	61463626001
102x44x16	IB134	Coarse/Fine India	5	61463685550
127x51x19	IB45	Coarse/Fine India	5	61463685555
152x51x25	IB6	Coarse/Fine India	5	61463685560
152x64x25	IB20	Coarse/Fine India	5	61463626103
178x51x25	IB7	Coarse/Fine India	5	61463690647
203x51x25	IB8	Coarse/Fine India	5	61463625078





ARKANSAS

- Natural premium Novaculite quarried in Arkansas and available in soft and hard
- Dense construction
- Sharpest possible razor edges

- Near mirror finishes
- Use for finer honing after India stone
- Absorbs oil at a slower rate, hence does not require pre-filling

DIM LxWxH (mm)	TYPE	SPECIFICATION	PK QTY	ART NO.
BENCH STONES				
102x25x10	HB14	Hard Arkansas	5	61463687555
	SB14	Soft Arkansas	5	61463687565
152x51x19	HB6	Hard Arkansas	5	61463685660



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Norton abrasive files hold their shape while imparting the finest, most uniform finish on precision machine parts, and in tool and die making.

PRODUCT SELECTION

APPLICATION	COARSE / MEDIUM SHARPENING	FINE STONING	FINISH HONING
Carbide tool	Medium Crystolon square	-	-
Centre punches	Medium India triangle	Fine India triangle	-
Countersinks	Coarse/medium India triangle	Fine India triangle	Hard Arkansas triangle
Form cutter	Coarse/medium India knife blade	Fine India knife blade	Hard Arkansas knife blade
Keyways	Coarse/medium India square	Fine India square	Hard Arkansas square
Lathe bits	-	Fine India square	Hard Arkansas square
Machine knife stone	Coarse Crystolon machine knife	-	-
Magnetic chucks	-	India round	-
Pointed	Medium India pointed	-	Hard Arkansas pointed
Precision machine knife	Medium India half round	Fine India half round	-
Radius tools	Medium India round	Fine India round	Hard Arkansas round
Router bits	-	Fine India square	-
Silversmith	Medium India Silversmith	Fine India Silversmith	-
Tap threads	-	Fine India triangle	-

CRYSTOLON

- Premium silicon carbide abrasive
- Fast cutting

• Ideal for general sharpening

SHAPE	DIM LxH (mm)	TYPE	SPECIFICATION	PK QTY	ART NO.
SQUARE	152x25	MJF76	Medium Crystolon	5	61463625039
TRIANGLE	152x13	MJF146	Medium Crystolon	5	61463625043





INDIA

- Smooth cutting aluminium oxide abrasive
- Ideal when a close tolerance is more important than the speed of cut

DIM LxDIA (mm)	TYPE	SPECIFICATION	PK QTY	ART NO.
ABRASIVE FILES				
ROUND				
102x3	FF212	Fine India	5	61463626076
102x6	MF214	Medium India	5	61463686475
	FF214	Fine India	5	61463686470
102x10	MF234	Medium India	5	61463686490
	FF234	Fine India	5	61463686485
102x13	MF244	Medium India	5	61463686505
	FF244	Fine India	5	61463686500
152x10	FF236	Fine India	5	61463626106
152x13	MF246	Medium India	5	61463686520
152x16	MF256	Medium India	5	61463686535
	FF256	Fine India	5	61463686530
152x19	MF266	Medium India	5	61463686550
HALF ROUND				
102x10	MF334	Medium India	5	61463686385
102x13	MF344	Medium India	5	61463686400
	FF344	Fine India	5	61463686395
SQUARE				
102x6	FF14	Fine India	5	61463686065
	MF14	Medium India	5	61463686070
102x10	FF34	Fine India	5	61463686080
	MF34	Medium India	5	61463686085
	CF34	Coarse India	5	61463686090
102x13	CF44	Coarse India	5	61463686105
	FF44	Fine India	5	61463686095
	MF44	Medium India	5	61463686100
152x10	FF36	Fine India	5	61463626037
	MF36	Medium India	5	61463626038
152x13	FF46	Fine India	5	61463686110
	MF46	Medium India	5	61463686115
152x16	FF56	Fine India	5	61463686125
	MF56	Medium India	5	61463686130
152x19	CF66	Coarse India	5	61463686150
	FF66	Fine India	5	61463686140
	MF66	Medium India	5	61463686145
152x25	FF76	Fine India	5	61463686155



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BONDED ABRASIVES DRESSING STICKS & SHARPENING STONES

DIM LxH (mm)	TYPE	SPECIFICATION	PK QTY	ART NO.
TRIANGLE				
102x6	MF114	Medium India	5	61463686235
	FF114	Fine India	5	61463686230
102x8	MF124	Medium India	5	61463626027
	FF124	Fine India	5	61463626028
102x10	MF134	Medium India	5	61463686250
	FF134	Fine India	5	61463686245
102x13	CF144	Coarse India	5	61463686270
	MF144	Medium India	5	61463686265
	FF144	Fine India	5	61463686260
152x10	MF136	Medium India	5	61463626090
	FF136	Fine India	5	61463626054
152x13	MF146	Medium India	5	61463686280
	FF146	Fine India	5	61463686275
152x16	MF156	Medium India	5	61463686295
	FF156	Fine India	5	61463686290
152x19	MF166	Medium India	5	61463686310
	FF166	Fine India	5	61463686305
152x25	MF176	Medium India	5	61463686325
203x19	MF180	Medium India	5	61463626130
	FF180	Fine India	5	61463626082
PRECISION FILES				
KNIFE BLADE FILES				
102x25x3	MF724	Medium India	5	61463686775
	FF724	Fine India	5	61463686770
SILVERSMITH FILES				
102x13x2	FF444	Fine India	5	61463686955
	MF444	Medium India	5	61463686960

ARKANSAS ABRASIVE FILES



- Hard Novaculite abrasive quarried in Arkansas
- Produces the finest edge possible while maintaining tolerances unequalled by any other abrasive
- Produces a highly polished finish

DIM LxDIA/LxH (mm)	TYPE	SPECIFICATION	PK QTY	ART NO.	
HALF ROUND					
76x6	HB14	Hard Arkansas	5	61463686800	
SQUARE					
76x6	HF13	Hard Arkansas	5	61463686590	
76x10	HF33	Hard Arkansas	5	61463686595	
76x13	HF43	Hard Arkansas	5	61463686600	
TRIANGLE					
76x6	HF113	Hard Arkansas	5	61463686620	
76x10	HF133	Hard Arkansas	5	61463686625	
76x13	HF143	Hard Arkansas	5	61463686630	



ABRASIVE SLIPS & SPECIALTIES

Norton abrasive slips and specialty stones impart the finest, most uniform finish on a wide range of tools. These fast acting slips hold their shape and are long lasting.

PRODUCT SELECTION

APPLICATION	COARSE / MEDIUM SHARPENING	FINE STONING	FINISH HONING
Carbide tools	Medium and Crystolon round edge slip	Fine Crystolon round edge slip	-
	Coarse or medium Crystolon carbide tool slip	Fine Crystolon carbide tool slip	-
Gouges (wood)	-	Fine India gouge Sharpening stone	-
Leather	Medium Crystolon Tradesmen	-	-
Milling cutter	Medium India round edge slip	Fine India round edge slip	Hard Arkansas round edge slip
Pen knife	-	-	Arkansas pen knife
Reamers	Medium India reamer stone	Fine India reamer stone	-
Scythe stone	Scythe stone	-	-
Steel tool	-	-	Rubber stick

SHAPE	DIM LxWxH (mm)	TYPE	SPECIFICATION	PK QTY	ART NO.
SPECIALTY STON	NES				
SCYTHE STONE	240x35x13	TJ4	Scythe Stone	10	69936693133
	254x32x19	JT930	Scythe Stone	5	61463687675
RUBBER STICK	200x10x20	-	A240FR96	5	69936625667



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BONDED ABRASIVES ABRASIVE SLIPS & SPECIALTIES

CRYSTOLON

- Premium silicon carbide abrasive
- Fast cutting stone; ideal for general sharpening of cutting tools
- Fast stock removal for quick edge shaping with minimal

SHAPE	DIM LxWxH/DIAxH (mm)	TYPE	SPECIFICATION	PK QTY	ART NO.
SLIP STONES					
CARBIDE TOOL [89x19x13	FJT63	Fine Crystolon	5	61463687285
ROUND EDGE &	114x44x6	FJS24	Fine Crystolon	5	61463687075
SPECIALTY STONES					
	203x51x51	BF28	Hand Crystolon	5	61463687845
RUBBING BRICK	203x89x38	235	Fluted Crystolon	5	61463687795
MACHINE KNIFE STONE	102x38	JB74	Coarse Crystolon	5	61463687570



INDIA +++

- Smooth cutting aluminium oxide abrasive
- · Norton's trademark for a fine finish

• Ideal when a close tolerance is more important than the speed of cut

SHAPE	DIM LxWxH (mm)	TYPE	SPECIFICATION	PK QTY	ART NO.
SLIP STONES					
ROUND EDGE	102x25x11	MS14	Medium India	5	61463687140
		FS14	Fine India	5	61463687135
	114x44x6	MS24	Medium India	5	61463687150
		FS24	Fine India	5	61463687145
	114x44x10	MS34	Medium India	5	61463687165
		FS34	Fine India	5	61463687160
	114x44x13	MS44	Medium India	5	61463687180
		FS44	Fine India	5	61463687175
SPECIALTY STONES					
REAMER STONES	127x25x5	MT125	Medium India	5	61463687430



ARKANSAS

- Natural premium Novaculite quarried in
 Near mirror finishes Arkansas and available in soft and hard
- - Use for finer honing after India stone
- Sharpest possible razor edges

SHAPE	DIM LxWxH (mm)	TYPE	SPECIFICATION	PK QTY	ART NO.	
SLIP STONES						
ROUND EDGE	102x32x6	HS14	Hard Arkansas	5	61463687050	





ORGANIC WHEELS & CUPS FOR SNAGGING

Snagging wheels Snagging cups 289

BONDED ABRASIVES ORGANIC WHEFI S & CUPS FOR SNAGGING

ORGANIC WHEELS & CUPS FOR SNAGGING

Norton offers a range of products for portable snagging foundry applications. Type 01 straight wheels are used on portable machines and Type 06 and 11 cup wheels on vertical grinders. Since finish tolerances are not usually critical, coarse, durable wheels are used with grit sizes ranging from 16 to 24.



ZF7A / 25ZF

Special design of abrasive blends

- Very durable for heavy duty grinding
- Excellent wheel life and metal removal rates
- Ideal for all steels and nonferrous metals



A *+++*

Tougher than pure white aluminium oxide abrasive

- General purpose abrasive ideal for most operations
- Good wheel life, limited metal removal rate
- Good for cutting medium to soft steels
- Suitable price/performance ratio
- First choice for less technical applications



37C

Low purity black silicon carbide abrasive

- Harder and more friable than aluminium type abrasives
- Suitable for roughing operations in coarse grit and resinoid wheels
- Ideal for grinding and sharpening applications on metal carbide and nonferrous metals
- Ideal for applications with no technical requirement



39C

Highest purity green silicon carbide abrasive

- High cut rate/power on special alloys and titanium
- Extremely friable abrasive for better cutting efficiency and cut quality





Non-Ferrous Metals Back Thickness Rim Width

Abrasive type

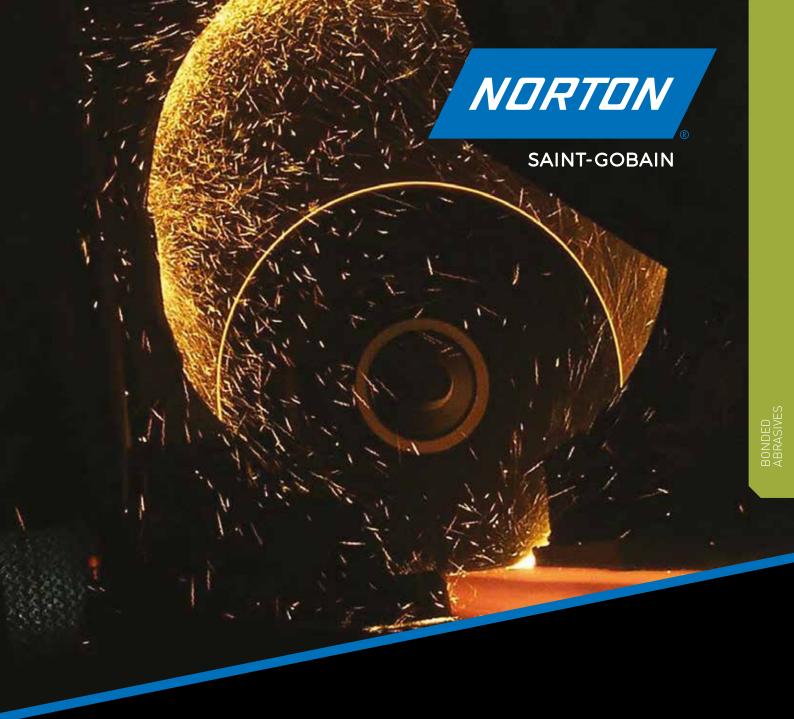
Grit Size Grade Structure

PRODUCT RECOMM	ENDATION
Highly recommended	•
Recommended	•

		<u>.</u>	Ba	Ste	ž	Ca	Ab	Gri	Gri	Str	Bo			Recommended	v
	WHEELS														
SHAPE	DIM DxTxH (mm)	W	Е	M	1ateria	ıls	SPECI	FICATI	ON			MOS (m/s)	PK QTY	ART NO.	QUALITY TIER
01	50x13x10			•		•	Α	24	Т	-	B28	50	10	66253057649	+++
01	80x13x10			0		0	Α	24	Т	-	B28	50	10	66243448964	+++
01	80x20x20			•		0	Α	24	Q	5	ВЗ	50	10	69210431625	+++
01	100x20x20	-	-	•		•	А	24	R	-	B28	50	10	66253057660	+++
01	100x20x20	-	-	•		0	А	24	Q	5	ВЗ	50	5	69210432101	+++
01	100x25x20			•		0	Α	24	Q	5	ВЗ	50	5	69210432376	+++
01	125x20x20	-	-	•		0	А	24	Q	5	ВЗ	50	5	69210431521	+++
01	125x25x20	-	-	•		0	Α	24	Q	5	В3	50	5	69210432071	+++
01	150x20x20	-	-	•		0	А	24	Q	5	ВЗ	50	5	69210431509	+++
01	150x25x20	-	-	•		•	А	24	Q	5	ВЗ	50	5	69210432717	+++
01	150x32x20	-	-	0		•	Α	24	Q	5	В3	50	5	69210433145	+++
01	200x20x32	-	-	0		0	А	24	Q	5	В3	50	5	69210431516	+++
01	200x25x32	-	-	0		0	А	24	Q	5	В3	50	5	69210431515	+++
01	300x30x32	-	-	•		0	А	24	Q	5	В3	50	1	69210433807	+++
01	300x40x51			0		0	Α	24	Q	5	В3	50	1	69210432428	+++
01	350x40x51			0		0	А	24	Q	5	В3	50	1	69210432772	+++
01	350x50x51			0		0	А	24	Q	5	В3	50	1	69210433808	+++
01	400x50x127	-	-	0		0	А	24	Q	5	В3	50	1	69210431446	+++
01	500x50x127	-	-	0		0	А	24	Q	5	В3	50	1	69210435391	+++
01	508x50x50	-	-	•		•	ZF7A	16	R	5	В3	50	1	66253057670	+++++
01	508x60x127	-	-	0		•	ZF7A	16	Q	5	В3	50	1	66243453103	+++++
01	508x60x127	-	-	0		0	ZF7A	16	R	5	В3	50	1	66253057671	++++
01	508x60x127	-	-	0		0	ZF7A	20	Q	-	В3	50	1	66253057673	++++
01	600x60x203			•		0	ZF7A	16	Q	-	B38	63	1	66243570264	++++
01	760x80x304.8			0		0	ZF7A	14	R	-	B38	50	1	66253057675	++++
	CUPS														
SHAPE	DIM DxTxH (mm)	W	Е	M	1ateria	ls	SPECI	FICATI	ON			MOS (m/s)	PK QTY	ART NO.	QUALITY TIER
11	125x50x14	25	20		0		37C	20	Q		В5	50	1	69210436678	+++
11	125x50x5/8"	25	19	0		•	А		Р	5	В5	50	1	66253065737	+++
11	125x50x5/8"	25	19		0		39C	16	Р	5	B5	50	4	69083141415	++++
11	125x50xM14	25	20		0		37C	16	N	5	B5	50	1	69210432282	+++
	150x50xM14	40	20		0		37C	16	N	5	B5	50	1	69210432287	+++

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NOTES			



STRAIGHT CUT-OFF WHEELS

Non-Reinforced wheels

BONDED ABRASIVES STRAIGHT NON-REINFORCED & REINFORCED CUT-OFF WHEELS

STRAIGHT NON-REINFORCED & REINFORCED CUT-OFF WHEELS

Reinforced cut-off wheels contain fiberglass to increase mechanical resistance when in use. The reinforcements increase the lateral stress capacity, resulting in higher resistance to breakage.

Non-reinforced cut-off wheels are only designed for use on fixed base machines, where the work is securely clamped, the wheel is adequately guarded and operating on a controlled cutting plane. They are suitable for use in dry or wet conditions, depending on bond type.







XGP +++++

Special combination of abrasive blends

- High durability with good cutting capability
- Very long wheel life and high metal removal rate
- Perfect for lab applications
- Suitable for use on all types of steel

4NZ +++++

High concentration of zirconia oxide abrasive

- Extremely tough aluminium oxide abrasive
- Very long wheel life
- Very high cutting capability and high metal removal rate if high pressure is applied
- Perfect for technical applications

39C

Highest purity green silicon carbide abrasive

- Harder and more friable than aluminium oxide abrasive
- Excellent to cut all non-metals (titanium, aluminium, bronze)
- Extremely friable abrasive for better cutting efficiency and cut quality











NZ ++++

Latest generation of Norzon grain with finer structure and sharper shape combined with Foundry X bond technology

- Excellent micro-fracturing properties
- Greater heat resistance
- Longer wheel life. Lower total abrasive cost
- Improved cut rate
- Reduced cycle time

U57A

Specially treated brown aluminium oxide abrasive

- Tough and hard aluminium oxide abrasive
- Not suitable for use on extremely hard materials
- Long wheel life
- Ideal for heavy duty applications

57A +++

Semi-friable aluminium oxide abrasive

- Less tough than type A abrasive but offers better cutting quality with a pointed shape
- Cool and burn free cutting
- Ideal for heat-sensitive applications with light to moderate feed rates
- Good compromise between cut quality and wheel life
- Very versatile: suitable for all steels







An abrasive blend of semi-friable 57A aluminium oxide and white monocrystalline 32A aluminium oxide

- · Cool and burn free cutting
- Suitable for all steels
- Improved metal removal rate compared to 57A pure semi-friable aluminium oxide abrasive

A +++

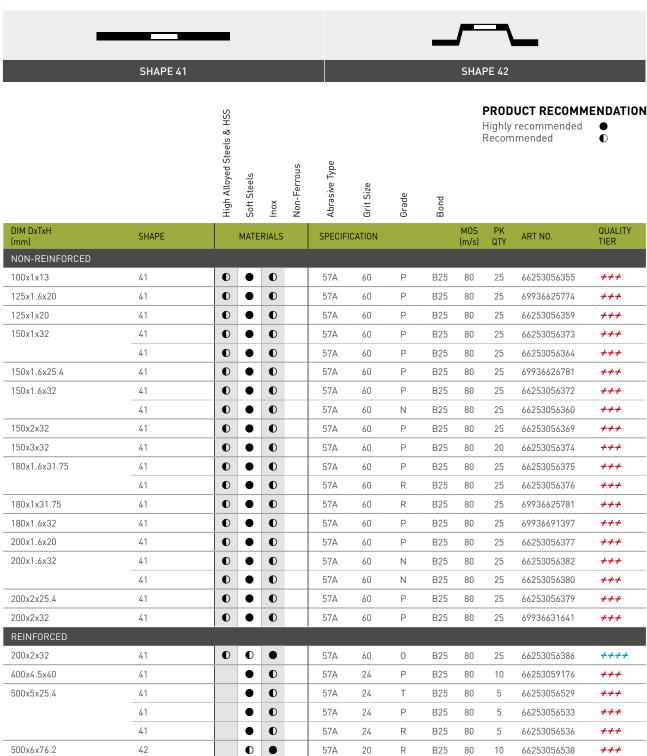
Pure brown aluminium oxide abrasive

- The toughest aluminium oxide abrasive
- Long wheel life, limited metal removal rate
- Good for cutting medium to soft steels
- Suitable price/performance position
- First choice for less technical applications

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BONDED ABRASIVES STRAIGHT NON-REINFORCED & REINFORCED CUT-OFF WHEELS

SHAPE KEY



41

• 0

57A

24

Ρ

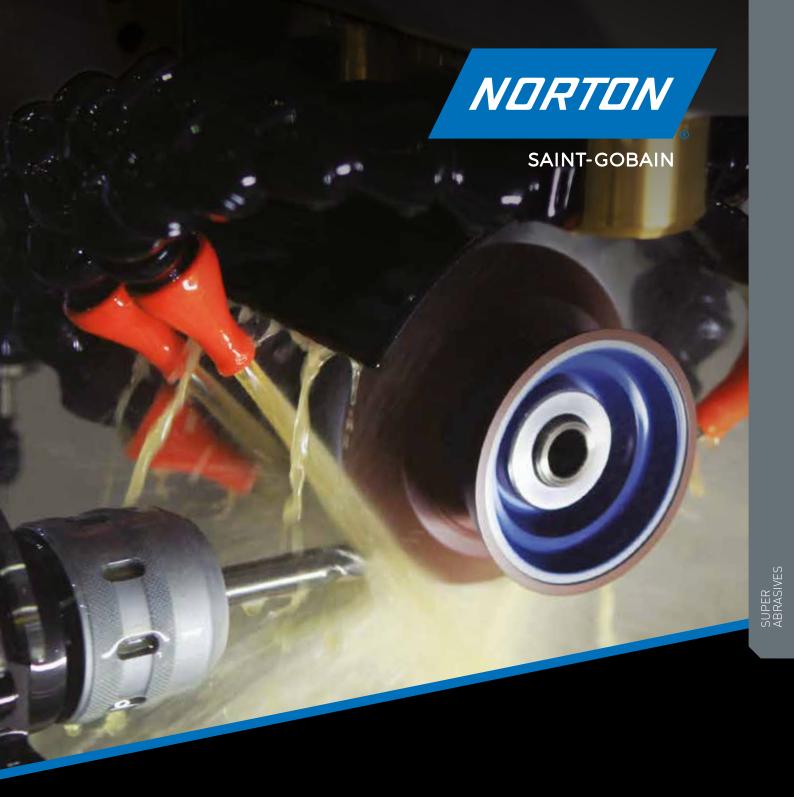
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+++



SUPER ABRASIVES

Introduction	296	Diamond lapping compounds	319
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SUPER ABRASIVES PRODUCT SELECTION

INTRODUCTION

Diamond is the hardest material known to man, closely followed by Cubic Boron Nitride (CBN). As a result of their hardness these materials are used extensively in the most demanding precision grinding, slicing, and cutting applications. Super Abrasive wheels use diamond and CBN technology to cut demanding materials such as carbide, high speed steel, ceramics, and glass.

Norton provides ultimate, high performance Super Abrasive solutions for the cutting tools industry, offering products specifically designed to deal with the hardest and most challenging materials.

HOW TO READ A SPECIFICATION

ASD	151	R	75	B99
ABRASIVE TYPE	GRIT SIZE	GRADE	CONCENTRATION	BOND

ABRASIVE TYPE

Both diamond and CBN have distinctive characteristics that meet the most demanding applications.

ASD: Synthetic diamond, armoured, high quality, versatile.

CB: Cubic boron nitride, armoured, durable.

GRIT SIZE

Size of the Super Abrasive particles according to FEPA standards. The smaller the number, the finer the grit size.

GRADE

Refers to the degree of durability of the wheel, progressing alphabetically from A (softest, least durable) to Z (hardest, most durable).

CONCENTRATION

Indicates the amount of Super Abrasive grits in the wheel. For CBN wheels the concentration number is included in the grade (Q=50, T=75, W=100, Z=125), concentration 100--4.4 ct/cm³, and accordingly 50--2.2 ct/cm³. The optimum concentration depends upon the application.

BOND

The element in a grinding wheel that holds the diamond or CBN grains together.

$GRIT\ SIZE\ \ \hbox{The grit size selection depends on the required stock removal rate and the required surface finish.}$

EUROPEAN (FEPA)	U.S. STANDARD	US NORTON GRIT SIZE [MESH]				
SIZE	MESH	DIAMOND	CBN			
1182	16/20	16	-			
852	20/30	24	24			
602	30/40	36	36			
501	35/40	-	_			
427	40/50	46	46			
301	50/60	60	60			
251	60/70	-	-			
-	50/80	80	80C			
252	60/80	100	80			
213	70/80	-	-			
181	80/100	105	100			
-	80/120	100S	120C			
151	100/120	110	120			
126	120/140	120	150			
107	140/170	150	180			
91	170/200	180	220			
76	200/230	220	230			
64	230/270	240	240			
54	270/325	320	320			
46	325/400	400	400			

APPROXIMATE EUROPEAN (FEPA) SIZE	NOMINAL MICRON SIZE	NORTON GRIT SIZE [MESH]
M63	40/60	-
M40	30/40	500
M25	20/30	-
M16	10/20	600
M10	6/12	800
M6,3	4/8	-
M4,0	2/4	-
M1,0	0/2	_

CONCENTRATION

The concentration influences the stock removal rate and the geometry of the workpiece.

DIAMOND 50/75/100/125 **CBN** Q/T/W/Z



DIAMOND & CBN WHEELS

Norton diamond and CBN wheels are designed to grind and cut the hardest materials known to man, helping make 'difficult-to-grind' applications routine operations. Hardness, abrasion resistance, compressive strength, thermal conductivity are all features designed to achieve a high level of precision and quality, making them a logical choice for a wide range of applications.



DIAMOND WHEELS



BENEFITS

- High quality synthetic diamonds provide excellent material removal rate and longer wheel life than conventional silicon carbide wheels
- Engineered B-99 resin bond provides free cutting capabilities and superior form holding in dry tool room and 1A1R cut-off operations in grinding glass and ceramic materials
- Can be used wet or dry, in off-hand finishing of carbide tools, providing fast stock removal

APPLICATIONS

- Cemented carbide
- Glass
- Ceramics
- Fibreglass
- Plastics
- Stone
- Abrasives
- Electronic components and materials

CBN WHEELS



BENEFITS

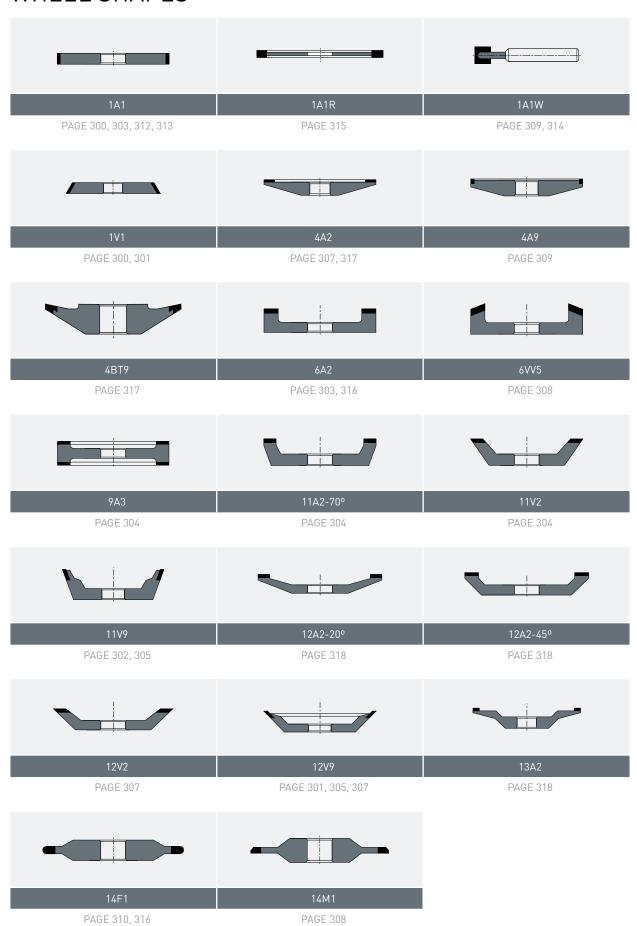
- Made with durable CBN abrasive which cuts easily through hard to grind steels, HRC50 and harder, resisting wear
- Engineered B-99 resin bond for free cutting capability and superior form holding
- Aztec IV bond for larger cutting depth
- Used for dry tool re-sharpening when heavy stock removal is required

APPLICATIONS

- High speed tool steels
- Die steels
- Hardened carbon steels
- Alloy steels
- Aerospace alloys
- Hard stainless steel
- Abrasion-resistant ferrous materials

SUPER ABRASIVES PRODUCT SELECTION

WHEEL SHAPES





ROUND TOOLS

DIAMOND AND CBN GRINDING WHEELS FOR THE MACHINING OF ROUND TOOLS

Norton offers a comprehensive product range for work on round tools including drills, end mills and reamers. Diamond and CBN grinding wheels are ideal for producing and re-sharpening tungsten carbide and HSS tools.

The following sections are arranged by application for easy identification of the correct grinding wheel for fluting, gashing, grinding of clearance angles and re-sharpening. Within the sub-chapters the grinding wheels are ordered by FEPA code.



BOND OVERVIEW DIAMOND

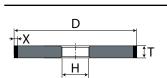
BOND	WEAR RESISTANCE	RECOMMENDATION FOR USE					
R100 B99		For CNC grinding operations (wet)					
R75 B99	A	For universal grinding (wet or dry)					
R50 B99		For universal grinding (wet or dry)					
R75 B49		For universal grinding (dry)					
R50 B49		For universal grinding (dry)					

BOND OVERVIEW CBN

BOND	WEAR RESISTANCE	RECOMMENDATION FOR USE					
W B99		For CNC grinding operations (wet)					
T B99	†	For universal grinding (wet or dry)					
Aztec IV		Very free grinding dry grinding bond					
R75 B49		For universal grinding (dry)					

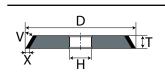


1A1 FLUTING



DxTxX (mm)	H (mm)	SPECIFICATION	PK QTY	ART NO.
DIAMOND				
100x6x3	32	ASD91 R100 B99	1	7958732719
100x10x5	20	ASD64 R100 B99	1	7958732706
100x12x5	20	ASD64 R100 B99	1	7958732713
125x5x3	20	ASD126 R100 B99	1	7958732469
125x10x10	20	ASD64 R100 B99	1	7958732470
125x12x10	20	ASD64 R100 B99	1	7958732471
150x12x10	20	ASD64 R100 B99	1	7958732727
CBN				
100x11x5	20	CB107 W B99	1	7958732712
100x15x5	20	CB107 W B99	1	7958732716
125x10x10	20	CB107 W B99	1	7958728828

1V1 FLUTING

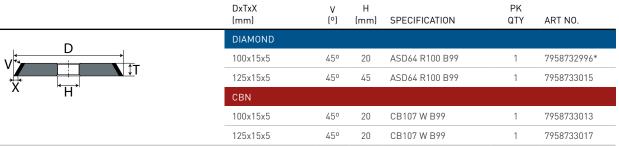


(mm)	(°)	(mm)	SPECIFICATION	QTY	ART NO.
DIAMOND					
100x10x5	10°	20	ASD64 R100 B99	1	7958732976
100x15x5	20°	20	ASD64 R100 B99	1	7958732974**
125x10x5	30°	20	ASD64 R100 B99	1	7958732984**
CBN					
100x15x5	20°	20	CB107 W B99	1	7958732994

^{**} Available while stocks last



1V1 GASHING



* Made-to-order

12V9 GASHING

	DxXxU (mm)	H (mm)	T (mm)	K (mm)	E (mm)	J (mm)	SPECIFICATION	PK QTY	ART NO.
D	DIAMOND								
X K	100x2x10	20	20	52	11	60	ASD64 R100 B99	1	7958732837
U TAFT	100x3x10	20	20	52	11	60	ASD64 R100 B99	1	7958732832
H, 45°	125x2x10	20	25	60	12	74	ASD64 R100 B99	1	7958733019
i j	150x3x10	20	25	81	15	99	ASD64 R100 B99	1	7958732919
	CBN								
	100x3x10	20	20	52	11	60	CB107 W B99	1	7958732826
ADDITIONAL INFORMATION	125x3x10	20	25	71	14	74	CB107 W B99	1	7958732814
Stiffened body	150x3x10	20	25	81	15	99	CB107 W B99	1	7958732920





DIAMOND & CBN WHEELSFOR MACHINING ROUND TOOLS

Norton B99 resin bond tools are an ideal choice for grinding clearances and relief angles on CNC machines. With excellent cutting behaviour the bond produces a good surface finish. The listed grinding wheels are suitable for the production and re-sharpening of tungsten carbide and HSS round tools.

D64 R100 B99 and B107 W B99 are the most common specifications for clearance angle grinding applications, however, other specifications are available on request.



11V9 CLEARANCE ANGLE GRINDING

D K K 70° T

ADDITIONAL INFORMATION Stiffened body

DxXxU (mm)	H (mm)	T (mm)	K (mm)	E (mm)	J (mm)	SPECIFICATION	PK QTY	ART NO.	
DIAMOND									
75x2x10	20	30	40	10	53	ASD64 R100 B99	1	7958732849	
100x2x10	20	35	59	15	74	ASD64 R100 B99	1	7958732876	
100x3x10	20	35	53	15	74	ASD64 R100 B99	1	7958732877	
125x3x10	20	40	70	18	95	ASD64 R100 B99	1	7958732856	
CBN									
75x2x10	20	30	40	10	53	CB107 W B99	1	7958732851	
100x2x10	20	35	59	15	74	CB107 W B99	1	7958732874	
100x3x10	20	35	53	15	74	CB107 W B99	1	7958732844	
125x3x10	20	40	70	18	95	CB107 W B99	1	7958732854**	

** Available while stocks last

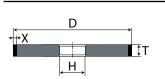


Norton offers a comprehensive selection of different bonds and concentrations for re-sharpening applications on universal machines. The B99 grinding wheels can be used wet or dry.

The lower the diamond or CBN concentration the more suited the product will be to grinding large contact areas. Aztec IV is a special free cutting resin bond which is designed for dry grinding operations and enables high material removal.

DVTVV

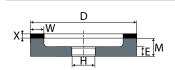
1A1 RE-SHARPENING



(mm)	(mm)	SPECIFICATION	QTY	ART NO.
DIAMOND				
100x4x3	20	ASD91 R75 B99	1	7958732717
100x10x5	20	ASD91 R75 B99	1	7958732711
125x10x5	20	ASD126 R100 B99	1	7958732466
150x10x3	20	ASD126 R50 B99	1	7958732724
150x10x3	32	ASD126 R75 B99	1	7958732726
CBN				
100x10x5	20	CB126 T B99	1	7958732704
150x10x3	20	CB126 T B99	1	7958732725

DΙ

6A2 RE-SHARPENING



DxV (mr		H (mm)	M (mm)	E (mm)	SPECIFICATION	PK QTY	ART NO.
DIA	MOND						
100	x6x4	20	23	10	ASD151 R75 B99	1	7958732881
100	x12x2	20	18	10	ASD54 R50 B99	1	7958732886
100	x12x2	20	18	10	ASD107 R50 B99	1	7958732879
125	x6x5	20	25	10	ASD64 R75 B99	1	7958732922
125	x10x2	70	23	10	ASD107 R50 B99	1	7958732882
150	x10x2	20	23	10	ASD91 R50 B99	1	7958732932
150	x15x2	32	23	10	ASD107 R50 B99	1	7958732933
150	x20x2	20	20	10	ASD126 R75 B99	1	7958732934
СВІ	N						
125	x6x4	20	23	10	CB151 T B99	1	7958732925
150	x6x4	20	23	10	CB151 T B99	1	7958732936
150	x6x4	32	23	10	CB151 T B99	1	7958732935

DIAMOND & CNC WHEELS FOR ROUND TOOL UNIVERSAL GRINDING

9A3 RE-SHARPENING

	DxWxX (mm)	H (mm)	M (mm)	E (mm)	SPECIFICATION	PK QTY	ART NO.
X‡ D IE M	DIAMOND						
	175x5x2	20	30	14	ASD126 R50 B99	1	7958733002
	175x5x2	20	30	14	ASD46 R50 B49	1	66260120338
	175x5x2	20	30	14	ASD64 R50 B49	1	66260120339
	175x5x2	20	30	14	ASD126 R50 B49	1	66260120340

11A2-70° RE-SHARPENING

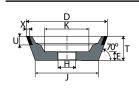
	DxWxX (mm)	H (mm)	M (mm)	K (mm)	E (mm)	J (mm)	SPECIFICATION	PK QTY	ART NO.
XI ZOO M	DIAMOND								
	100x5x4	20	20	75	10	88	ASD151 R75 B99	1	60157682163
	CBN								
	100x5x4	20	20	75	10	88	CB126 T B99	1	60157682165

11V2 RE-SHARPENING

	DxWxX (mm)	H (mm)	M (mm)	K (mm)	E (mm)	J (mm)	SPECIFICATION	PK QTY	ART NO.
w ← D	DIAMOND								
XI XI	100x5x3	20	22	72	8	82	ASD91 R75 B99	1	7958733007
	100x5x3	20	22	72	8	82	ASD126 R75 B99	1	7958733011



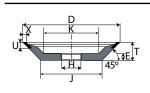
11V9 RE-SHARPENING



DxXxU (mm)	H (mm)	T (mm)	K (mm)	E (mm)	J (mm)	SPECIFICATION	PK QTY	ART NO.
DIAMOND								
75x2x10	20	30	40	10	53	ASD107 R75 B99	1	7958732857
75x2x10	20	30	40	10	53	ASD126 R75 B99	1	7958732859
75x2x10	20	30	40	10	53	SD64 R75 B49	1	66260120321
75x2x10	20	30	40	10	53	SD126 R75 B49	1	66260120322*
100x2x10	20	35	55	10	74	ASD126 R75 B99	1	7958732867
100x3x10	20	35	60	10	74	ASD126 R75 B99	1	7958732862
100x3x10	32	35	60	10	74	ASD126 R75 B99	1	7958732865
100x2x10	20	35	55	10	75	SD64 R75 B49	1	66260120323
100x2x10	20	35	55	10	75	SD126 R75 B49	1	7958795053
125x3x10	20	40	81	10	96	ASD126 R75 B99	1	7958732847
125x3x10	32	40	81	10	96	ASD126 R75 B99	1	7958732848
CBN								
75x1.5x10	20	30	40	10	53	BN181 Aztec IV	1	69014152323
75x2x10	20	30	40	10	53	CB126 T B99	1	7958732853
75x2x10	20	30	40	10	53	CB126 R75 B49	1	66260121233
100x1.5x10	20	35	55	10	75	BN126 Aztec IV	1	69014152115
100x1.5x10	20	35	55	10	75	BN181 Aztec IV	1	69014152118
100x1.5x10	32	35	55	10	75	BN181 Aztec IV	1	69014152120
100x2x10	20	35	55	10	74	CB126 T B99	1	7958732869
100x2x10	32	35	55	10	74	CB126 T B99	1	7958732871*
100x2x10	20	35	55	10	75	CB126 R75 B49	1	66260121234

^{*} Made-to-order

12V9 RE-SHARPENING



DxXxU (mm)	H (mm)	T (mm)	K (mm)	E (mm)	J (mm)	SPECIFICATION	PK QTY	ART NO.
DIAMOND								
75x2x10	20	25	34	10	39	ASD64 R75 B99	1	7958732816
75x3x6	20	20	45	10	42	ASD76 R75 B99	1	7958732890*
75x2x10	20	20	45	10	35	SD15 R50 B49	1	66260120324
75x2x10	20	20	45	10	35	SD64 R75 B49	1	66260120326
75x2x10	20	20	45	10	35	SD126 R75 B49	1	66260120327
100x2x6	20	20	64	10	59	ASD126 R75 B99	1	7958732821
100x3x10	20	20	65	10	59	ASD46 R75 B99	1	7958732885
100x2x10	20	20	65	10	60	SD15 R50 B49	1	66260120328*
100x2x10	20	20	65	10	60	SD64 R75 B49	1	66260120329
100x2x10	20	20	65	10	60	SD126 R75 B49	1	66260120330
CBN								
75x2x6	20	20	45	10	42	CB107 T B99	1	7958732813
75x2x10	20	20	45	10	35	CB126 R75 B49	1	66260121235
100x2x6	20	20	65	10	59	CB126 T B99	1	7958732818
100x3x10	20	20	65	10	59	CB126 T B99	1	7958732880
100x2x10	20	20	65	10	60	CB126 R75 B49	1	66260121236

* Made-to-order

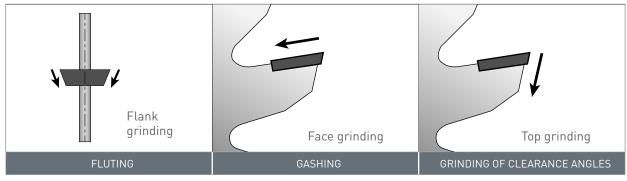


SAW BLADES

DIAMOND AND CBN GRINDING WHEELS FOR THE SAW BLADE INDUSTRY

With an emphasis on excellent price vs. performance ratios, the saw blade programme aims to provide the best solutions for grinding tungsten carbide tipped saw blades and one-piece HSS saws.

The tungsten carbide tipped circular saw blade grinding wheels have been specifically designed for face grinding and flank grinding. Norton offers grinding wheels for the most common machine types required for these applications.



1A1W grinding pins for hollow tooth grinding are also available.

BOND OVERVIEW DIAMOND

BOND	WEAR RESISTANCE	RECOMMENDATION FOR USE
ECO Face	A	Face grinding of tungsten carbide tipped saw blades
ECO Flank	Ī	Flank grinding of tungsten carbide tipped saw blades
ECO Top-AW		Top-grinding of tungsten carbide tipped saw blades on AKEMAT and WOODTRONIC machines
ECO Top		Universal top-grinding of tungsten carbide tipped saw blades
ECO Top-R		Top-grinding of tungsten carbide tipped saw blades, especially re-sharpening
ECO Top-P		Top-grinding of tungsten carbide tipped saw blades, especially production
B99		Universal resin bond for wet and dry grinding

BOND OVERVIEW CBN

BOND	WEAR RESISTANCE	RECOMMENDATION FOR USE					
ECO Curve		Profiling and re-sharpening of HSS saw blades					

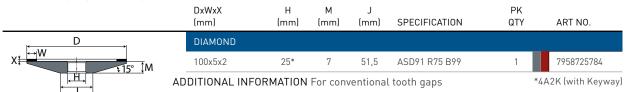


FOR SHARPENING OF TUNGSTEN CARBIDE TIPPED SAW BLADES

The tooth face of circular saw blades is ground with sharp angled cup wheels. Depending on the tooth pitch, different angles and wheel thicknesses are required. The greater the number of teeth around the circumference, the narrower the space between them and the thinner the grinding wheel needs to be. Even the narrowest tooth gaps can be machined with our 12V9 ECO Face wheels.

For reasons of stability, conventional tooth gaps are mainly ground using 4A2 or 12V2 grinding wheels.

4A2 FACE GRINDING



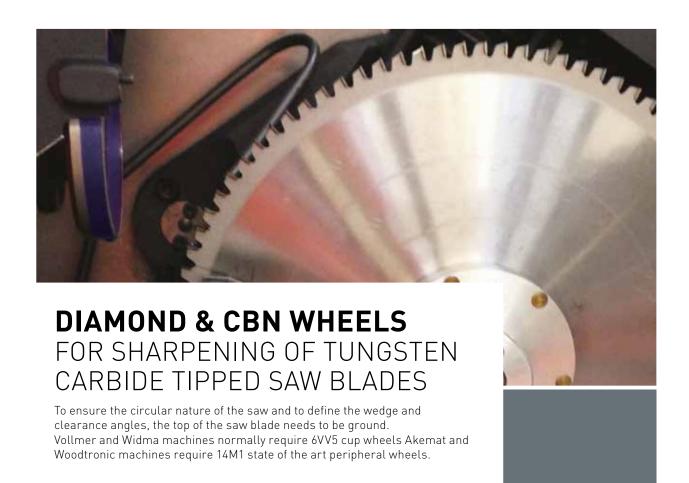
12V2 FACE GRINDING

	(mm)	H (mm)	(mm)	V (°)	E (mm)	SPECIFICATION	QTY	Al	RT NO.
D	DIAMOND								
XA TE M	125x4x2	32	11	30°	9	ASD46 R125 B99	1	60	1157682189
	125x4x2	32	11	30°	9	ASD76 R125 B99	1	60	1157682188
	200x4x2	32	13	30°	11	ASD46 R125 B99	1	79	58725781
	200x4x2	32	13	30°	11	ASD76 R125 B99	1	79	58725780

ADDITIONAL INFORMATION For conventional tooth gaps

12V9 FACE GRINDING

	DxXxU (mm)	H (mm)	(mm)	(mm)	E (mm)	(mm)	SPECIFICATION	PK QTY	ART NO.
D D	DIAMOND								
U Tr	100x2.3x4	25*	10	77	7	51	D46 ECO Face	1	7958717431
H, 20°	125x2.3x4	25*	10	101	7	76	D46 ECO Face	1	7958714565
r j 1	125x2.3x4	32	13	101	10	70	D46 ECO Face	1	69014148184
ADDITIONAL INFORMATION	150x2.3x4	32	13	126	10	95	D46 ECO Face	1	7958719191
For conventional tooth gaps	200x2.3x4	32	13	173	10	145	D46 ECO Face	1	69014148205



6VV5 TOP GRINDING

	DxWxX (mm)	V (°)	H (mm)	T (mm)	E (mm)	SPECIFICATION	ADDITIONAL INFORMATION	PK QTY	ART NO.
	DIAMOND								
D D	100x5x10	80	25*	24	7	ASD126/46 R100/ R75 ECO TOP	Universal use	1	7958725658
V° X X X X X X X X X X X X X X X X X X X	125x5x10	80	32	22	11	ASD126/46 R100/ R75 ECO TOP-P	For production, oil	1	7958725661
	125x5x10	80	32	22	11	ASD126/46 R125/ R100 ECO TOP-R	For re-sharpening	1	7958725663

*6VV5K (with keyway)

14M1 TOP GRINDING

	DxUxX (mm)	V (°)	H (mm)	T (mm)	J (mm)	SPECIFICATION	PK QTY	ART NO.
D	DIAMOND							
V° TUT	150x5x8	80	32	10	119	ASD107/46 R100/ R75 ECO TOP-AW	1	7958725785
++X	200x5x8	8°	32	10	156	ASD126/46 R100/ R75 ECO TOP-AW	1	7958725786

ADDITIONAL INFORMATION D126/D46: U=2,5/2,5

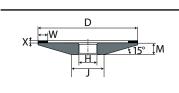


FOR SHARPENING OF TUNGSTEN CARBIDE TIPPED SAW BLADES

During the flank grinding process the cutting width of the circular saw blade is defined. Therefore, typically two 4A9 grinding wheels are simultaneously fed from both sides.

When manufacturing saw blades there is a wide variety of tooth geometries and designs to chose from. Depending on the intended use of the saw, the tooth design can be flat, alternate, trapezoid or any combination of these. Hollow ground teeth are very common to achieve finer cuts with no burrs. The rounded shape of hollow ground teeth is produced with 1A1W grinding pins.

4A9 FACE GRINDING

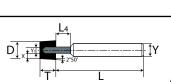


ADDITIONAL INFORMATION Universal use

DxXxW (mm)	H (mm)	T (mm)	J (mm)	SPECIFICATION	PK QTY	ART NO.
DIAMOND						
80x4x5	32	10	53	ASD64 ECO Flank	1	7958725778
86x4x5	32	10	59	ASD64 ECO Flank	1	7958725779
100x4x4.5	20*	14	35	ASD64 ECO Flank	1	7958725739
100x4x4.5	20*	14	35	ASD126 ECO Flank	1	7958725744
100x4x5	32	10	55	ASD64 ECO Flank	1	7958725737
100x4x5	32	10	55	ASD126 ECO Flank	1	7958725738
					*	/ A O I / ()

*4A9K (with Keyway)

1A1W hollow tooth grinding



DxTxX (mm)	Y (mm)	L (mm)	Y ₁ (mm)	L ₄ (mm)	SPECIFICATION	PK QTY	ART NO.
DIAMOND							
6.5x3x1.75	6	42	4.1	10	ASD76 R125 B99	1	7958725782
7x3x2	6	42	5.1	10	ASD76 R125 B99	1	7958725783

ADDITIONAL INFORMATION For all common machines

COLOUR CODES FOR MACHINE MANUFACTURERS

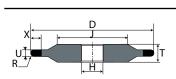
Vollmer-Biberach	Vollmer-Dornhan	Woodtronic	Akemat	Widma
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HSS saw blades are one-piece saws that are ground from one solid piece of metal. For this process HSS saws require special grinding machines.

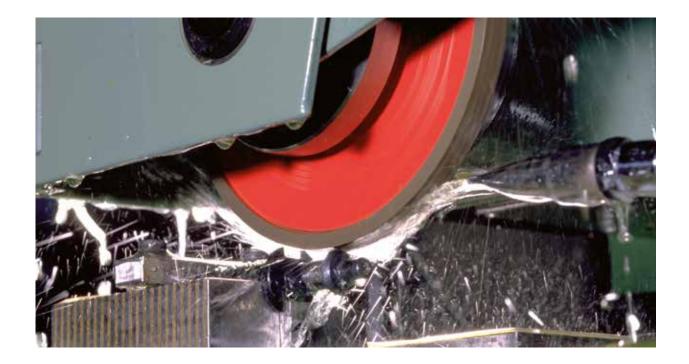
14F1 wheels grind the required profile under CNC control. Wheels are ideal for both initial profiling and re-sharpening thanks to the advanced resin bond systems which ensure the wheels are economic and extremely wear resistant.

14F1 initial profiling and re-sharpening



ADDITIONAL INFORMATION For Loroch machines

I	NE-SHARF EINING										
	DxUxX (mm)	R (mm)	H (mm)	T (mm)	J (mm)	SPECIFICATION	PK QTY	ART NO.			
	CBN										
	200x1.3x6.5	0.65	32	8	169	CB107 ECO Curve	1	7958706686			
	200x1.6x7	8.0	32	8	164	CB107 ECO Curve	1	7958714307			
	200x2x8	1	32	8	164	CB107 ECO Curve	1	7958706684			
	200x2.5x8	1.25	32	8	159	CB107 ECO Curve	1	7958716444			
	200x3x10	1.5	32	8	160	CB107 ECO Curve	1	7958718179			
	200x4x12.5	2	32	8	157	CB107 ECO Curve	1	7958716216			



GENERAL ENGINEERING

DIAMOND AND CBN GRINDING WHEELS FOR GENERAL ENGINEERING

Norton diamond and CBN wheels for general engineering are suitable for many grinding applications like OD-, ID-, and flat grinding, machining of knives, milling cutters and polishing.

Most of the bonds listed in this section are made with ASD (armoured synthetic diamonds) grit and are suitable for wet and dry grinding applications. Some wheels use AMD (armoured metal bond diamonds) which are more wear resistant but require a coolant.

More information about the application can be found in the relevant sub-chapters.

BOND OVERVIEW DIAMOND

BOND	WEAR RESISTANCE	RECOMMENDATION FOR USE						
R100 B99		For universal grinding (wet or dry)						
R75 B99	A	For universal grinding (wet or dry)						
R50 B99		For universal grinding (wet or dry)						
R75 B49		For universal grinding (dry)						
R50 B49		For universal grinding (dry)						

BOND OVERVIEW CBN

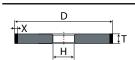
BOND	WEAR RESISTANCE	RECOMMENDATION FOR USE					
W B99		For universal grinding (wet or dry)					
T B99		For universal grinding (wet or dry)					
Q B99	T	For universal grinding (wet or dry)					
R75 B49		For universal grinding (dry)					
R50 B49		For universal grinding (dry)					



DIAMOND & CBN WHEELS FOR GENERAL ENGINEERING

Norton offers a comprehensive stock programme for resin bonded 1A1 standard grinding wheels designed for OD- and flat grinding tungsten carbide and steel parts. All specified grinding wheels can be used for OD- and flat grinding. However, wheels (R50) with lower concentration have been specifically designed for flat grinding operations. Other specifications are available on request.

1A1 od and flat grinding



DxTxX (mm)	H (mm)	SPECIFICATION	PK QTY	ART NO.
DIAMOND				
175x15x3	32	ASD126 R50 B99	1	7958732730
200x10x3	32	ASD126 R75 B99	1	7958732731
200x10x3	51	ASD126 R75 B99	1	7958732732
200x15x3	32	ASD126 R75 B99	1	7958732840
250x15x3	51	ASD126 R75 B99	1	7958764970**
250x15x3	76,2	ASD126 R75 B99	1	7958732804
300x10x3	127	ASD126 R75 B99	1	7958732824
300x15x3	76	ASD126 R75 B99	1	7958764968**
300x15x3	127	ASD126 R75 B99	1	7958732810
300x20x3	127	AMD126 R50 B99	1	7958732812
350x15x3	127	ASD126 R50 B99	1	7958788919*
350x20x3	127	ASD126 R50 B99	1	7958788920*
350x30x3	127	ASD126 R50 B99	1	7958788921*
400x15x3	127	ASD126 R50 B99	1	7958788923*
400x20x3	127	ASD126 R50 B99	1	7958788924*
400x30x3	127	ASD126 R50 B99	1	7958788925*
CBN				
200x10x3	51	CB126 T B99	1	7958732803
200x15x3	32	CB126 Q B99	1	7958732838
250x15x3	51	CB126 T B99	1	7958764971**
250x20x3	76,2	CB126 Q B99	1	7958732802
300x15x3	127	CB126 T B99	1	7958732808
300x20x3	127	CB126 Q B99	1	7958732815
350x15x3	127	CB126 Q B99	1	7958788927*
350x20x3	127	CB126 Q B99	1	7958788928*
350x30x3	127	CB126 Q B99	1	7958788929*
400x15x3	127	CB126 Q B99	1	7958788930*
400x20x3	127	CB126 Q B99	1	7958788932*
400x30x3	127	CB126 Q B99	1	7958788933*
		* Made-to-order	** Availa	able while stocks last

DIAMOND & CBN WHEELSFOR GENERAL ENGINEERING

Resin bonded grinding pins and grinding wheels can be used for wet or dry applications, either manually or on automatic grinding machines.

To avoid burning and to ensure stable grinding conditions the diameter must be carefully selected. It is highly recommended to choose a diameter no bigger than 70% of the bore. When using grinding pins it is very important to follow the permitted speed instructions, which are engraved on the grinding tool.

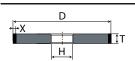
If the permitted speed is slower than the adjustable speed of the grinding spindle, a different technical solution is required.

DxTxX

Н



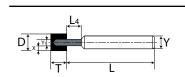
1A1 ID GRINDING



(mm)	(mm)	SPECIFICATION	QTY	ART NO.
DIAMOND				
15x12x2	6	ASD126 R100 B99	1	7958732728
20x10x2	6	ASD126 R100 B99	1	7958732950
30x10x3	10	ASD126 R75 B99	1	7958732956
40x15x3	10	ASD126 R75 B99	1	7958732971
CBN				
12x10x2	6	CB126 W B99	1	7958732722
15x12x2	6	CB126 W B99	1	7958732729
20x10x2	6	CB126 W B99	1	7958732948
20x15x2	6	CB126 W B99	1	7958732957
25x10x2	10	CB126 W B99	1	7958732945
25x12x2	10	CB126 W B99	1	7958732939
30x15x3	10	CB126 W B99	1	7958732937
40x15x3	10	CB126 W B99	1	7958732961
50x15x3	20	CB126 W B99	1	7958732981

DIAMOND & CBN WHEELS FOR GENERAL ENGINEERING

1A1W IDF GRINDING



DxTxX (mm)	Y (mm)	L (mm)	Y ₁ (mm)	L ₄ (mm)	SPECIFICATION	PK QTY	ART NO.
DIAMOND							
3x6x0.65	3	60	1.7	8	ASD64 R100 B99	1	7958732951
3x6x0.65	3	60	1.7	8	ASD126 R100 B99	1	7958732949**
5x6x1.5	3	60	2.1	8	ASD64 R100 B99	1	7958732944
5x6x1.5	3	60	2.1	8	ASD126 R100 B99	1	7958732943
6x6x1.5	6	60	3.1	8	ASD64 R100 B99	1	7958732940
6x6x1.5	6	60	3.1	8	ASD126 R100 B99	1	7958732941
8x10x2	6	60	4.1	12	ASD64 R100 B99	1	7958732954
8x10x2	6	60	4.1	12	ASD126 R100 B99	1	7958732953
10x10x2	6	60	-	-	ASD64 R100 B99	1	7958732959
10x10x2	6	60	-	-	ASD126 R100 B99	1	7958732960
12x12x2	6	60	-	-	ASD64 R100 B99	1	7958732963
CBN							
3x6x0.65	3	60	1.7	8	CB126 W B99	1	7958732947
5x6x1.5	3	60	2.1	8	CB126 W B99	1	7958732946
6x6x1.5	6	60	3.1	8	CB126 W B99	1	7958732938
8x10x2	6	60	4.1	12	CB126 W B99	1	7958732955
10x10x2	6	60	-	-	CB126 W B99	1	7958732958
12x12x2	6	60	-	-	CB126 W B99	1	7958732962

^{**} Available while stocks last

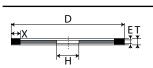


FOR GENERAL ENGINEERING

Norton offers a small assortment of standard resin bonded cut-off grinding wheels. The specified diamond cut-off wheels cut hard, short-chipping and wear resistant materials such as glass, ceramics and carbide. The contained CBN cut-off wheels are ideal for machining high speed steel, hardened steel, 55 HRC and magnetic materials.

Further specifications for resin bond, sintered metal and electroplated metal bond are available on request.

1A1R cut-off



(mm)	(mm)	H (mm)	SPECIFICATION	QTY	ART NO.
DIAMOND					
100x0.9x5	0.7	20	ASD126 R75 B99	1	60157681683
125x1x5	0.7	20	ASD126 R75 B99	1	60157681686
150x1x5	0.8	20	ASD126 R75 B99	1	60157681688
CBN					
100x0.9x5	0.7	20	CB151 T B99	1	60157681767
125x1x5	0.7	20	CB151 T B99	1	60157682094
150x1x5	0.8	20	CB151 T B99	1	60157682103



Norton offers a range of resin bonded grinding wheels for machining flat, circular and profile knives.

The 6A2 grinding wheels are specifically designed for wet grinding of circular knifes with tungsten carbide-steel combinations on Göckel and Reform machines.

The 14F1 grinding wheels are designed for use on Weinig machines for grinding profile knives for the wood industry.

6A2 FLAT GRINDING

	DxWxX (mm)	H (mm)	M (mm)	E (mm)	SPECIFICATION	PK QTY	MACHINES	ART NO.
D	DIAMOND							
X TE M	200x8x4	50	31	23	AMD126 R100 B99	1	For Göckel	7958732926
<u>H</u> ↓	200x8x4	75	31	23	AMD126 R100 B99	1	For Reform	7958732850

14F1 PROFILE GRINDING

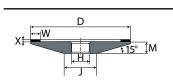
	DxUxX (mm)	R (mm)	H (mm)	T (mm)	J (mm)	SPECIFICATION	PK QTY	ART NO.
D D	DIAMOND							
X	200x2x7	1	60	10	129	ASD64 R100 B99	1	7958732992
R	200x4x7	2	60	10	134	ASD151 R100 B99	1	7958732986
احسما	CBN							
ADDITIONAL INFORMATION	200x2x7	1	60	10	129	CB126 T B99	1	7958732990
For Weinig machines	200x4x7	2	60	10	134	CB151 W B99	1	7958732988



Grinding tool faces and clearances are the main applications of the milling cutter.

Norton offers a diverse range of grinding wheels to enable excellent performance in both applications. A comprehensive range of grit sizes and concentrations provides the ideal solution for each application. The price vs. performance ratio of these tools is the underlying benefit of this product range.

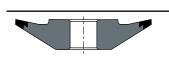
4A2 FACE GRINDING



DxWxX (mm)	H (mm)	M (mm)	J (mm)	SPECIFICATION	PK QTY	ART NO.
DIAMOND						
100x5x2	20	6	66	ASD64 R75 B99	1	7958732965
125x5x2	20	7	84	ASD64 R75 B99	1	7958732868
125x5x2	20	7	84	ASD126 R75 B99	1	7958732870
125x5x2	32	7	84	ASD91 R75 B99	1	7958732866
125x10x2	20	7	84	ASD107 R75 B99	1	7958732873
150x5x2	32	9	94	ASD64 R75 B99	1	7958732863
150x5x2	20	9	94	ASD126 R75 B99	1	7958732864
150x5x2	32	9	94	ASD54 R50 B99	1	7958732858**
150x5x2	32	9	94	ASD91 R75 B99	1	7958732855
150x3x3,3	20	9	94	ASD64 R75 B49	1	66260120336*
175x5x4	32	11	104	ASD126 R75 B99	1	7958732929*
CBN						
100x5x2	20	6	66	CB126 T B99	1	7958732884
150x5x4	20	9	94	CB107 T B99	1	7958732852
150x3x3,3	20	9	94	CB107 R75 B49	1	66260120370*
175x5x4	20	11	104	CB126 T B99	1	7958733000
				***	++ A .1	

^{*} Made-to-order ** Available while stocks last

4BT9 FACE GRINDING

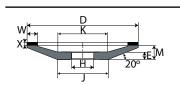


* Made-to-order

DxWxX (mm)	H (mm)	SPECIFICATION	PK QTY	ART NO.
DIAMOND				
100x10x1	20	ASD64 R75 B99	1	66260171068*
100x10x1	20	ASD126 R75 B99	1	66260171069*
CBN				
100x10x1	20	CB64 T B99	1	66260171070*
100x10x1	20	CB126 T B99	1	66260171067*

DIAMOND & CBN WHEELS FOR GENERAL ENGINEERING

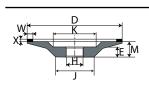
12A2-20° FACE GRINDING



H (mm)	M (mm)	K (mm)	E (mm)	J (mm)	SPECIFICATION	PK QTY	ART NO.
20	14	54	8	54	ASD126 R75 B99	1	69014151721
20	14	54	8	54	ASD126 R100 B99	1	60157682171
32	14	54	8	54	ASD91 R75 B99	1	60157682172
20	16	68	9	68	ASD64 R50 B99	1	69014151397
20	16	68	9	68	ASD126 R75 B99	1	69014151961
32	16	68	9	68	ASD126 R75 B99	1	69014151963
32	16	68	9	68	ASD64 R100 B99	1	60157682177
32	16	68	9	68	ASD91 R100 B99	1	60157682176**
20	18	82	10	82	ASD126 R75 B99	1	69014151422
32	18	82	10	82	ASD126 R75 B99	1	69014151424
20	16	68	9	68	CB126 Q B99	1	69014151412
32	16	68	9	68	CB126 T B99	1	60157682182
20	18	82	10	82	CB126 T B99	1	69014151427
	(mm) 20 20 32 20 32 32 32 32 20 32 20 32 32	(mm) (mm) 20 14 20 14 32 14 20 16 32 16 32 16 32 18 32 18 32 16 32 18 32 16 32 16	(mm) (mm) 20 14 54 20 14 54 32 14 54 20 16 68 20 16 68 32 16 68 32 16 68 32 16 68 32 16 82 32 18 82 32 16 68 32 16 68 32 16 68	(mm) (mm) (mm) 20 14 54 8 20 14 54 8 32 14 54 8 20 16 68 9 20 16 68 9 32 16 68 9 32 16 68 9 32 16 68 9 20 18 82 10 32 18 82 10 20 16 68 9 20 18 82 10 32 16 68 9	(mm) (mm) (mm) (mm) 20 14 54 8 54 20 14 54 8 54 32 14 54 8 54 20 16 68 9 68 20 16 68 9 68 32 16 68 9 68 32 16 68 9 68 32 16 68 9 68 32 16 82 10 82 20 18 82 10 82 32 18 82 10 82 32 18 82 10 82 32 16 68 9 68 32 18 82 10 82 32 16 68 9 68 32 16 68 9 68	(mm) (mm) (mm) (mm) specification 20 14 54 8 54 ASD126 R75 B99 20 14 54 8 54 ASD126 R100 B99 32 14 54 8 54 ASD126 R100 B99 20 16 68 9 68 ASD64 R50 B99 20 16 68 9 68 ASD126 R75 B99 32 18 82 10 82 ASD126 R75 B99 32 18 82 10 82 ASD126 R75 B99 32 18 82 10 82 ASD126 R75 B99 32 16 68 9 68	(mm) (mm) (mm) (mm) SPECIFICATION QTY 20 14 54 8 54 ASD126 R75 B99 1 20 14 54 8 54 ASD126 R100 B99 1 20 14 54 8 54 ASD126 R100 B99 1 32 14 54 8 54 ASD127 R75 B99 1 20 16 68 9 68 ASD126 R75 B99 1 32 16 68 9 68 ASD126 R75 B99 1 32 16 68 9 68 ASD126 R75 B99 1 32 16 68 9 68 ASD126 R75 B99 1 20 18 82 10 82 ASD126 R75 B99 1 32 18 82 10 82 ASD126 R75 B99 1 32 18 82 10 82 ASD126 R75 B99 1

^{**} Available while stocks last

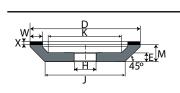
13A2 FACE GRINDING



DxWxX (mm)	H (mm)	M (mm)	K (mm)	E (mm)	J (mm)	SPECIFICATION	PK QTY	ART NO.
DIAMOND								
125x5x4	20	19	50	9	73	ASD126 R75 B99	1	7958732991**
125x5x4	20	18	50	9	73	ASD64 R50 B49	1	66260120331
125x5x4	20	18	50	9	73	ASD181 R50 B49	1	66260120332*
150x5x4	20	20	75	11	95	ASD64 R50 B49	1	66260120333**
CBN								
125x5x4	20	19	50	9	73	CB64 Q B99	1	7958732973
125x5x4	20	18	50	9	73	CB64 R50 B49	1	66260120367**
150x5x4	20	20	75	11	95	CB126 R50 B49	1	66260120368**
175x5x4	20	22	75	11	95	CB126 R50 B49	1	66260120369**

^{*} Made-to-order ** Available while stocks last

12A2-45° TOP GRINDING



DxWxX (mm)	H (mm)	M (mm)	(mm)	E (mm)	(mm)	SPECIFICATION	QTY	ART NO.
DIAMOND								
100x5x2	20	23	54	10	56	ASD107 R50 B99	1	7958732999
100x6x3	20	20	64	10	62	ASD76 R75 B99	1	7958732968
100x6x3	20	20	64	10	62	ASD126 R75 B99	1	7958732966
125x6x3	32	23	83	10	81	ASD126 R75 B99	1	7958732969
CBN								
100x5x2	20	23	54	10	56	CB126 Q B99	1	7958732997
125x6x2	20	23	83	10	81	CB126 T B99	1	7958732970



Norton lapping compounds are supplied in a standard concentration of 5g dispenser syringes. Perfectly sized synthetic diamond powder is mixed with a paste. When used, this compound should be diluted with water or alcohol.

APPLICATIONS & MARKETS

- Used for lapping an extremely wide range of parts by hand
- Superfinishing of electronic components, semi-conductors, magnetic heads, rigid discs and optical discs
- Finishing for routine operations
- Preparatory lapping
- Fast removal of material, roughing

DIAMOND COMPOUND PASTE

- Optimised diamond grit distribution
- Easy and safe application

GRADE (MICRONS)	COLOUR	CONTENTS	PK QTY	ART NO.
1/4	GREY	5g	1	69014154990
1/2	LIGHT GREY	5g	1	69014154991
1	IVORY	5g	1	69014154992
3	YELLOW	5g	1	69014154993
6	ORANGE	5g	1	69014154994
9	GREEN	5g	1	69014154995
12	LIGHT BLUE	5g	1	69014154996
15	BLUE	5g	1	69014154997
20	BROWN	5g	1	69014154998
30	RED	5g	1	69014154999
45	CHESTNUT	5g	1	69014155000
60	VIOLET	5g	1	69014155001





FILES

• Free cutting and very high wear resistant, requiring only low contact pressure

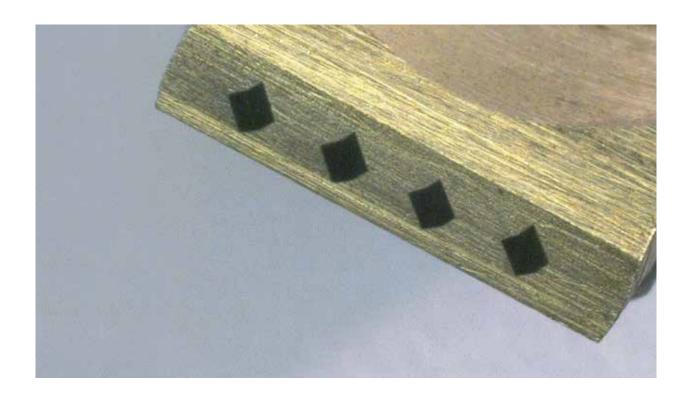
SHAPE	T (mm)	H (mm)	L (mm)	PK QTY	ART NO.
	1.4	4.8	140	6	60157636812
	1.9	5.3	140	6	60157636813
\triangle	3.6	3.6	140	6	60157636814*
	2.5	2.5	140	6	60157636815*
	1.4	4.8	140	6	60157636817*
Set - all above	-	-	-	6	60157636811*





PRODUCT SELECTION GUIDE

APPLICATIONS	STRAIGHT PLUNGE GRINDING	ANGULAR PLUNGE / PROFILE GRINDING	CENTRELESS / THROUGH-FEED GRINDING	INTERNAL GRINDING	DIAFORM	SINTERED GRAINS
PROFILE AVAILABILITY				U		
Blade tool with CVD		•				•
Blade tool with natural grains	•	•	•			•
Profile dresser					•	
Multi point	•		•			
Single point				•		
				Highly reco	mmended	Recommended



SELECTING A BLADE TOOL DRESSER

Dressing of profiles with blade tools	Dressing tools use a 'needle' form of natural or synthetic diamonds. Needle diamonds are especially suited to dressing profiles using infeeds and angular feeds.
Natural diamonds	An effective diamond layer with a length of up to 15mm creates an economical dressing solution. Using precise diamond setting patterns, with overlapped rows of stones, ensures that consistent dressing results are achieved.
Synthetic diamonds	The constant cross section given by synthetic diamonds, guarantees a constant dressing behaviour through the complete life of the dressing tool.

SELECTION OF GRIT SIZE

Grit size of grinding wheel	Synthetic diamond size (mm)	Natural diamond size
46	0.8x0.8	D1181
60	0.8x0.8	D1001
80-120	0.6x0.6	D711



A new dressing tool should be put through at least 5 dressing cycles in order to fit the diameter of the grinding wheel.

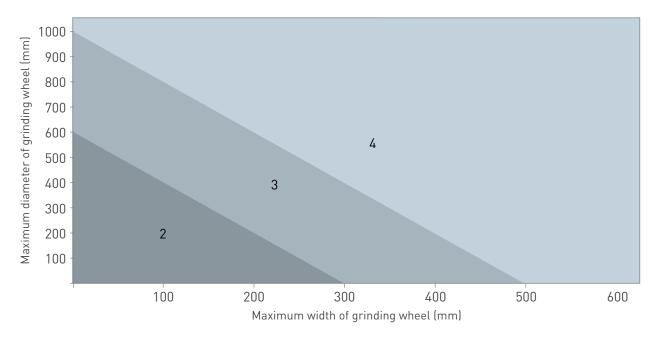
The lifetime of the dressing tool is extended by ensuring that adequate coolant pressure and volume are directed at the tool.

SELECTION OF TOOL SIZE





NUMBER OF CVD NEEDLES PER BLADE



SELECTING A SINGLE-POINT DRESSER

Which tool to choose depends mainly on the dimensions of the wheel to be dressed. In order to calculate this, it is best to use the following method:

MULTIPLY THE DIAMETER OF THE WHEEL BY ITS THICKNESS

Thickness	Diameter x Thickness (mm)	Carat	
	< 6000	0.33 Carat	
	6000 – 18000	0.50 Carat	
	> 18000	1.0 Carat	

For best results. always use a coolant when dressing

SELECTING A MULTI-POINT DRESSER

Which tool to choose depends mainly on the dimensions of the wheel to be dressed. In order to calculate this, it is best to use the following method:

MULTIPLY THE DIAMETER OF THE WHEEL BY ITS THICKNESS

Thickness	Diameter x Thickness (mm)	Carat	
	< 30000	1.3 Carat	
	30000 – 60000	2.5 Carat	
	> 60000	5.0 Carat	

For best results. always use a coolant when dressing

DIAMOND DRESSERS

CHOICE OF DIAMOND GRIT

Wheel abrasive	Diamond
80-120	D301
60-80	D711
46-60	D1001
36-46	D2240

BLADE TOOL DRESSERS HPB-D 3565 & 3585



- Synthetic multi-crystalline diamond
- The most consistent dresser for demanding profiling and straight dressing

WxLxDL			PK	
(mm)	GRIT	SPECIFICATION	QTY	ART NO.
10.5x28x4	0.6x0.6	HPB-D 3565 / 2	1	60157682820
10.5x28x4	0.6x0.6	HPB-D 3565 / 3	1	60157682856
10.5x28x4	0.6x0.6	HPB-D 3565 / 4	1	60157682895
10.5x28x4	0.8x0.8	HPB-D 3585 / 2	1	60157682899
10.5x28x4	0.8x0.8	HPB-D 3585 / 3	1	60157682902
10.5x28x4	0.8x0.8	HPB-D 3585 / 4	1	60157682904



BLADE TOOL DRESSERS HPB-D & -C 30, 45, 60



- An economical dressing solution for all Alox and SiC wheels
- Needles are recommended for profile dressing

Natural diamond

GRIT	SPECIFICATION	PK QTY	ART NO.
D711	HPB-D 30	1	60157682759*
D1001	HPB-D 45	1	60157682782
D1181	HPB-D 60	1	60157682786
NEEDLE	HPB-D	1	60157682790
D711	HPB-C 30	1	60157682801
D1001	HPB-C 45	1	60157682806
D1181	HPB-C 60	1	60157682809
NEEDLE	HPB-C	1	60157682814
	D711 D1001 D1181 NEEDLE D711 D1001 D1181	D711 HPB-D 30 D1001 HPB-D 45 D1181 HPB-D 60 NEEDLE HPB-D D711 HPB-C 30 D1001 HPB-C 45 D1181 HPB-C 60	GRIT SPECIFICATION QTY D711 HPB-D 30 1 D1001 HPB-D 45 1 D1181 HPB-D 60 1 NEEDLE HPB-D 1 D711 HPB-C 30 1 D1001 HPB-C 45 1 D1181 HPB-C 60 1



* Made-to-order

SCREWED SHANKS FOR BLADE TOOL DRESSERS ++++



DIA (mm)	L (mm)	SHANK CODE	SPECIFICATION	PK QTY	ART NO.
12.065	40	MT1	НРВ-Н3	1	60157682832
9.045	25.5	MT0	HPB-H4	1	60157682907
11.11	50	Z11.11	HPB-H2	1	60157682910
10.00	50	Z10	НРВ-НХ	1	60157682911



SINGLE-POINT DRESSER BC SG +++++



- Highest quality diamonds
- Specifically developed for dressing ceramic abrasive (SG/TG) wheels which require faster traverse speed dressing
- High performance tools
- Enables dressing costs to be reduced, specially at production grinding stations

SHANK (mm)	CARAT	PK QTY	ART NO.
Z8	0.50	1	66260161757
	1.00	1	66260161755
Z10	0.33	1	66260161769
	0.50	1	66260161768
	1.00	1	66260161766
Z11.11	0.33	1	66260156906
	0.50	1	66260156907
	1.00	1	66260157010
Z12	0.50	1	66260161779
	1.00	1	66260161777



SINGLE-POINT DRESSER BC (CYLINDRICAL SHANK)



- Standard diamonds
- Ideal for applications where it is difficult to measure the performance of the dressing tool
- Economy product
- Suitable for dressing conventional abrasive wheels

SHANK (mm)	CARAT	PK QTY	ART NO.
Z8	0.33	1	66260161753
	0.50	1	66260161752
	1.00	1	66260161750
Z10	0.33	1	66260161764
	0.50	1	66260161763
	1.00	1	66260161761
Z11.11	0.33	1	66260195003
	0.50	1	66260195005
	1.00	1	66260195009
Z12	0.33	1	66260161775
	0.50	1	66260161774



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NEW SINGLE-POINT DRESSER (SP MK-SHANK & BC CYLINDRICAL SHANK)



- Commercial standard diamonds
- Standard dresser for conventional abrasive wheels

SHANK (mm)	CARAT	PK QTY	ART NO.
MK0	0.3	1	66260211018
	0.5	1	66260211022
	1.0	1	66260211023
MK1	0.3	1	66260211024
	0.5	1	66260211025
	1.0	1	66260211027
Z8	0.33	1	66260211028
	0.5	1	66260211029
	1.0	1	66260211030
Z10	0.33	1	66260211031
	0.5	1	66260211033
	1.0	1	66260211034



SINGLE-POINT DRESSER SP (MK- SHANK) +++



- Commercial standard diamonds
- Standard dresser for conventional abrasive wheels

SHANK (mm)	CARAT	PK QTY	ART NO.
MKO	0.3	1	69014119596
	0.5	1	69014119598
	1.0	1	69014119599
	1.5	1	69014119600
MK1	0.3	1	69014119570
	0.5	1	69014119591
	1.0	1	69014119594
	1.5	1	69014119595



PROFILE DRESSER +++++



- Extremely high performance tools
- Used to meet extremely high profile accuracy requirements

SHANK (mm)	RADIUS (mm)	ANGLE	SPECIFICATION	ART NO.
Z9,52	0.13	40°	DC 40/130	60157682850
	0.25	40°	DC 40/250	60157682889
	0.50	40°	DC 40/500	60157682901
	0.13	60°	DC 60/130	60157682903
	0.25	60°	DC 60/250	60157682905
	0.50	60°	DC 60/500	60157682909





MULTI-POINT DRESSER +++++

- Economical and robust too
- Ideal for straight dressing at high speed with low technical demands

TYPE	SHANK (mm)	GRIT	PK QTY	ART NO.
D11x11	Z8	D2240	1	60157682849
(5 Carat)		D1001	1	60157682896
		D711	1	60157682906
	Z10	D2240	1	60157682892
		D1001	1	60157682897
		D711	1	60157682908
	Z11.11	D2240	1	60157682893
		D1001	1	60157682898
		D711	1	60157682912
	MT1	D2240	1	60157682894
	12.065	D1001	1	60157682900
		D711	1	60157682914
D8x11	Z8	D2240	1	60157682915
(2.5 Carat)		D1001	1	60157682920
		D711	1	60157682970
	Z10	D2240	1	60157682916
		D1001	1	60157682922
		D711	1	60157682968
	Z11.11	D2240	1	60157682917
		D1001	1	60157682923
		D711	1	60157682977
	MT1	D2240	1	60157682918
	12.065	D1001	1	60157682925
		D711	1	60157682981
D6x8	Z8	D711	1	60157682986
(1.3 Carat)		D301	1	60157683153
	Z10	D711	1	60157682990
		D301	1	60157683154
	Z11.11	D711	1	60157682992
		D301	1	60157683155
	MT1	D711	1	60157682996
	12.065	D301	1	60157683156



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HAND DRESSER



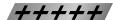
- High diamond concentration
- Grit 18/25 SPC

- High wear resistance and long product lifetime
- · Suitable for face and side dressing

SPECIFICATION	PK QTY	ART NO.
HD-150	1	60157682852



BRAKE CONTROLLED TRUING DEVICE

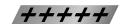


- For fast effective truing of diamond and CBN wheels with minimum loss of abrasive
- Ideal for truing diamond and CBN wheel types: straight wheels with diamond in the periphery, tool and cutter grinding wheels, wheels used on surface and cylindrical grinding machines, cut-off wheels and internal grinding wheels and cup wheels with diamonds in the rim, as used on vertical spindle surface grinders



SPECIFICATION	PK QTY	ART NO.
BCTD	1	66260274459

SCREWED SHANKS FOR BLADE TOOL DRESSERS +++++



DIA (mm)	T (mm)	B (mm)	SPECIFICATION	PK QTY	ART NO.	
80	25	13	Wheel 37C60-NV	10	69936668764	

DRESSING STICKS



- High purity white aluminium oxide abrasive
- Ideal for dressing CBN Super Abrasive wheels

• Friable abrasive

DIA (mm)	SPECIFICATION	PK QTY	ART NO.	APPLICATION
	38A 150 HVBE	10	61463605565	For SA wheels ≥D54
13x25x150	38A 220 HVBE	10	61463605066	-
	38A 320 HVBE	10	69936684889	For SA wheels ≤D46





Mount the device spindle parallel to the wheel spindle to ensure correct straight face truing. For cup shaped wheels, the device spindle will be mounted perpendicularly to the wheel spindle. Use appropriate traverse rates.



TECHNICAL INFORMATION

DESIGNATION OF GRIT SIZES

	IATION	0. 0.						
FEPA	US	JIS	DWMI	DIAMOND	CBN	RA (mm) SURFACE FINISH		SH
MICRONS	MESH	313		DIAMOND	OBIN	CARBIDE	STEEL PLUNGE	STEEL OSCILLATING
1181	16/18							
1182	16/20			16				
1001	18/20							
851	20/25							
852	20/30	20		24	24			
711	25/30							
601	30/35							
602	30/40	30		36	36			
501	35/40							
426	40/45							
427	40/50	40		46	46			
356	45/50							
301	50/60	50		50	50			
	50/80							
251	60/70			60	60			
252	60/80	60	60	80c	80c	0.6-0.9		
213	70/80			80	80			
181	80/100	80	80	100	100	0.4-0.7	1.0-1.1	0.9-1.1
	80/120			110c				
151	100/120	100	100	110	120		0.9-1.0	0.8-0.9
126	120/140	120	120	120	150	0.4-0.5	0.8-0.9	0.6-0.8
107	140/170	140	150	150	180		0.6-0.8	0.5-0.6
91	170/200	170	180	180	220	0.3-0.4	0.5-0.6	0.4-0.5
76	200/230	200	220	220	230			
64	230/270	230	240	240	240	0.2-0.3	0.4-0.5	
54	270/325	270	320	320	320			
46	325/400	325	400	400	400	0.1-0.2		
	400/500	400		500	500			
M63	40/60							
M40	30/40	500		500				
M25	20/30	700						
	15/25	800						
M16	*10/20*	1000		600				
	8/16	1500						
M10	*6/12*	2000		800				
M6,3	*4/8*	2500						
	3/6	4000						
M4	*2/4*	5000						
M1	*0/2*	15000						

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SUPER ABRASIVES TECHNICAL SECTION

CONCENTRATION

The concentration is defined by a standard and indicates the weight of abrasive (in carats) contained in 1cm^3 of abrasive strip – 1 carat = 0.2 grams.

CONCEN	NTRATION*	NUMBER OF	ABRASIVE WEIGHT PER cm ³	
DIAMOND ABRASIVE	CBN ABRASIVE*	CARATS/cm ³		
100	= W	4.4	= 0.88g/cm ³	
75	= T	3.3	= 0.66g/cm ³	
50	= Q	2.2	= 0.44g/cm ³	

^{*} Other concentrations available upon request

SELECTION OF CONCENTRATION

The choice of concentration depends on the machining parameters:

HIGH	CONCENTRATION		MEDIUM OR LOW CONCENTRATION			
Ro	ughing operations		Finishing operation			
Po	owerful machine		Low power machine			
Sr	mall contact area		Large contact area			
Retention of pr	rofile or sharp edges of whe	eel	Cutting without temperature rise			
OPERATION	INTERNAL GRINDING	EXTERNAL GRINDING	SURFACE GRINDING	SHARPENING		
Diamond	100	75	50	50/75		
CBN	W	Т	Q	Q/T		



DIAMOND TOOLS

Diamond blade recommendation guide	332 CUP GRINDERS		368-37	
Introduction	334	for Concrete & Building Materials	368	
DIAMOND BLADES	335-367	DRILLING CORE BITS for Concrete	371-38 4	
for Concrete & Reinforced Concrete	335	for Universal Building Materials	37	
for Universal Building Materials	340	for Natural Stone & Tiles	378	
for Multi Materials	349	for Asphalt & Abrasive Materials	380	
for Ceramic & Porcelain Tiles	353	Tot Aspirate & Abrasive Materials	300	
for Granite, Marble & Natural Stone	357	Technical Information	382	
for Asphalt & Abrasive Materials	360			
for Define the middle	2//			

DIAMOND BLADE RECOMMENDATION GUIDE

	Extreme	Pro	Classic		Extreme Universal	Pro l Universal	Classic	Classic	Standard	Extreme		Classic	Standard Universal		Pro Cut'n'	Pro Universal
	Beton	Beton	Beton	Beton	Laser	Laser	Laser	Classic Universal	Universal	Turbo	Turbo	Turbo	Turbo	Grind	Grind	Ductile
QUALITY	***	***	$\Phi \Phi \Phi$		***	***	$\oplus \oplus \oplus$	***		*******		♥ ♥ ♥		***		4444
WET OR DRY	WET & DRY	WET & DRY	WET & DRY	WET & DRY	WET & DRY	WET & DRY	WET & DRY	WET & DRY	WET & DRY	WET & DRY	WET & DRY	WET & DRY	WET & DRY	WET & DRY	WET & DRY	WET & DRY
MACHINES					A			%				-	-	<u> </u>	-	
DIAMETER (mm)	115-1200	230-600	115-400) 115-350	300-1000	115-1000	115-1000	115-350	115-350	115-350	115-350	115-230	115-230	100-125	100-125	115-350
TECHNOLOGY	i-HD™	LASER	LASER	SINTERED) LASER	LASER	LASER	SINTERED	SINTERED	SINTERED	SINTERED	SINTERED	SINTERED	i-HD™	SINTERED	VACUUM
REINFORCED CONCRETE																
Hard concrete, kerbs & gutters	• •	• •	•	•												
Reinforced concrete, con- crete lintels	••	•	•	•												
UNIVERSAL																
Concrete block (3,6-7,3N)	••	••	•		• •	• •	•	•	•	••	••	•	•	••	•	•
Calcium silicate blocks	• •	• •	•		• •	• •	•	•	•	• •	• •	•	•	• •	•	•
Concrete pavers	• •	• •	•		• •	• •	•	•	•	• •	• •	•	•	• •	•	•
Concrete with gravels	• •	• •	•		• •	• •	•	•	•	• •	• •	•	•	• •	•	•
Clay bricks/ceramic porous blocks	••	• •	•		• •	• •	•	•	•	• •	• •	•	•	• •	•	•
Clinker bricks/facing tiles/ terracota	••	••	•		••	••	•	•	•	• •	• •	•	•	••	•	•
Vitrified clay pipes	• •	• •	•		• •	• •	•	•	•	• •	• •	•	•	• •	•	•
ASPHALT / ABRASIVE MAT	TERIALS															
Asphalt																
Asphalt over concrete																
Green concrete																
CERAMICS																
Porcelain tiles																
Ceramic and Porcelain tiles																
NATURAL STONE																
Granite														•	•	•
Marble														•	•	
Sandstone														•	•	•
Limestone														•	•	•
OTHER MATERIALS																
Cast iron																•
Fiberglass, PVC, rubber																•

PERFORMANCE KEY

• • RECOMMENDED

Ideally suited for this application

ACCEPTABLEEither the blade life or cutting speed could be affected

Extreme CG	Pro CG	Classic CG	Pro 4x4 Explorer	Invincible	All mate- rials 4x4 standard	Acnhalt	Pro Asphalt	Classic Asphalt	Extreme Green concrete	Pro Green concrete	Extreme Ceramic Turbo	Extreme			Standard Ceramic		Pro Granite Turbo	Pro Granite	Pro Marmo
0000	\$\$\$	999	***			0000	****	***	***	0000	***	****	***	***		~~~	000	0000	###
WET & DRY	WET & DRY	WET & DRY	WET & DRY	WET & DRY	WET & DRY	WET & DRY	WET & DRY	WET & DRY	WET	WET	WET & DRY	WET	WET & DRY	WET & DRY	WET & DRY	WET & DRY	WET & DRY	WET & DRY	WET & DRY
-	-	<u> </u>		-		% **	*	%	*	*		Ä						A	
100-180	100-180	100-180	115-500	115-150	115-350	300-1000	300-600	300-600	300-350	300-350	115-300	200-350	115-350	115-350	115-230	230-900	115-400	300-600	50-350
i-HD™	i-HD™	i-HD™	LASER	i-HD™	LASER	i-HD™	LASER	LASER	LASER	LASER	SINTERED	SINTERED	SINTERED	SINTERED	SINTERED	i-HD™	LASER	LASER	E/PLATED
• •	• •	•	•	•	•														
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Diamond Tools / 333 www.nortonabrasives.com

INTRODUCTION

Norton Clipper Diamond Blades are the ultimate abrasive cutting solution in construction and building industries. With a range of products suitable for use on concrete, tile, brick, and asphalt, Norton Clipper offers the best choice for every cutting and drilling application in the building/construction industry.

UNDERSTANDING THE PRODUCT

- Safety pictograms
- Strong Norton Clipper branding
- Product name
- Product dimensions (mm)
- Machine type
- oSa certified The Organisation for Safety of Abrasives
- European safety standard EN13236:2010



DIFFERENTIATION IN THE RANGE

Norton offers the industry's widest selection of diamond blades to meet every customer requirement. The range is classified into three quality-tiers (best/better/good) to help you choose the right product for your specific application.

+++++

EXTREME

The Norton Clipper Extreme product range offers high performance; fast cutting and long blade life, for heavy usage, to meet the need of the most demanding applications.

PRO

Norton Clipper Pro is a professional quality range designed for frequent use. The Pro range offers great performance in speed of cut and blade life.

CL ASSIC

Norton Clipper Classic is a range of standard diamond tools for low frequency use, providing a good quality to performance ratio.

STANDARD

Simple range designed with the customer in mind.

Focused on key applications and providing the user with a reliable solution.

SELECTING THE RIGHT BLADE FOR YOUR MATERIAL

To make selecting the right blade as easy as possible, our material colour coding system has been applied to all of our packaging.



BETON / CONCRETE Extreme, Pro, Classic

CFRAMIC Extreme, Pro, Classic



MULTI-MATERIALS Pro 4x4 Explorer, 2x2



UNIVERSAL Extreme, Pro, Classic



NATURAL STONE Extreme, Pro



REFRACTORY Extreme, Pro

Extreme, Pro, Classic



Reinforced concrete, cured concrete, kerb stones, concrete pipes, engineering bricks, facing bricks, refractory bricks, flagstones and paving stones, block paving, washed gravel concrete slabs, natural stone, flint, sandstone, limestone.

EXTREME BETON SILENCIO

Residential areas, city centres, schools and hospitals are especially sensitive to noise, with local regulations preventing excessive noise levels. With up to 17mm high segments and a bespoke specification for each application, Norton Silencio is our quietest diamond blade, reducing noise by up to 20x (-13 dB) compared to conventional blades when used on concrete, reinforced concrete, granite and building materials, while achieving a fast, efficient cut.

- A noise dampening layer is sandwiched between two sheets of steel which absorbs the cutting vibrations and sound of the product when in use
- Patented 'off-set gullets' prevent whistling air flow around the diamond blade
- Each blade is fine-tuned to provide the best possible noise reduction and cutting performance on a particular machine application







MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.
-	230	22.23	17/2.8	1	70184601168**
%	300	20	15/3.2	1	70184629000
%	300	25.4	15/3.2	1	70184642421
%	350	20	15/3.2	1	70184647780**
%	350	25.4	15/3.2	1	70184628999**
*	350	25.4	15/3.2	1	70184628997
%	400	20	15/3.2	1	70184694504
%	400	25.4	15/3.2	1	70184643510
₩	450	25.4	15/3.2	1	70184631020
₩	500	25.4	15/3.2	1	70184630416







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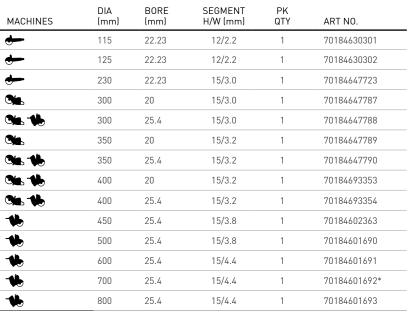


Extreme beton, now with $I-HD^{TM}$ Technology, produces many benefits for the end-user, including:

- Up to 20% faster cut rate than the previous version.
- Up to 20% longer life thanks to increased segment height, a high density and more even distribution of diamonds throughout the segment as well as better grain retention.
- Less vibration for a smoother, more comfortable cut and better cut quality.
- 60% stronger torque resistance for exceptional safety thanks to the i-HD™ process.
- Applications: for concrete and reinforced concrete on an angle grinder, cut-off saw and floor saws up to more than 90 hp.















EXTREME BETON +++++

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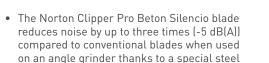


MACHINES	POWER	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	ART NO.
₩.	20 - 30 hp	500	25.4	15/3.8	70184601696
₩	20 - 30 hp	600	25.4	15/4.4	70184601735
₩.	20 - 30 hp	700	25.4	15/4.4	70184601999*
₩.	35 - 54 hp	600	25.4	15/4.4	70184694212*
₩	35 - 54 hp	700	25.4	15/4.4	70184694733
₩	35 - 54 hp	800	25.4	15/4.4	70184694735*
₩.	35 - 54 hp	900	25.4	15/4.4	70184601694
₩.	55 - 90 hp	600	25.4	15/4.4	70184694719*
₩.	55 - 90 hp	700	25.4	15/4.4	70184694718*
♣	55 - 90 hp	800	25.4	15/4.4	70184694721*
₩.	55 - 90 hp	1000	25.4	15/4.4	70184694723*
₩	55 - 90 hp	1200	25.4	15/4.4	70184694724*
	% % % % % % % % % %	20 - 30 hp 20 - 30 hp 20 - 30 hp 35 - 54 hp 35 - 54 hp 35 - 54 hp 35 - 54 hp 55 - 90 hp 55 - 90 hp 55 - 90 hp	MACHINES POWER [mm] 1 20 - 30 hp 500 1 20 - 30 hp 600 20 - 30 hp 700 35 - 54 hp 600 35 - 54 hp 700 35 - 54 hp 800 35 - 54 hp 900 55 - 90 hp 600 55 - 90 hp 700 55 - 90 hp 800 55 - 90 hp 1000	MACHINES POWER (mm) (mm) ♣ 20 - 30 hp 500 25.4 ♣ 20 - 30 hp 600 25.4 ♣ 20 - 30 hp 700 25.4 ♣ 35 - 54 hp 600 25.4 ♣ 35 - 54 hp 700 25.4 ♣ 35 - 54 hp 800 25.4 ♣ 35 - 54 hp 900 25.4 ♣ 55 - 90 hp 600 25.4 ♣ 55 - 90 hp 700 25.4 ♣ 55 - 90 hp 800 25.4 ♣ 55 - 90 hp 800 25.4 ♣ 55 - 90 hp 1000 25.4	MACHINES POWER (mm) (mm) H/W (mm) 1 20 - 30 hp 500 25.4 15/3.8 1 20 - 30 hp 600 25.4 15/4.4 1 20 - 30 hp 700 25.4 15/4.4 1 35 - 54 hp 600 25.4 15/4.4 2 35 - 54 hp 700 25.4 15/4.4 35 - 54 hp 800 25.4 15/4.4 35 - 54 hp 900 25.4 15/4.4 55 - 90 hp 600 25.4 15/4.4 55 - 90 hp 700 25.4 15/4.4 55 - 90 hp 800 25.4 15/4.4 55 - 90 hp 800 25.4 15/4.4 55 - 90 hp 800 25.4 15/4.4 55 - 90 hp 1000 25.4 15/4.4



* Available on request

PRO BETON SILENCIO



• Features 12mm high segments for longer life.



• It is specialised for use on reinforced concrete and building materials, helping you to cut quickly and efficiently in environments where noise and costs need to be kept to a minimum.

• Diameter 350mm has been developed for electric handheld machines such as the











MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	ART NO.	
-	230	22.23	12/2.6	70184602810	
—	350	25.4	12/2.8	70184603274	

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DIAMOND BLADES FOR CONCRETE & REINFORCED CONCRETE

PRO BETON



- Laser welded blade for intensive use on a wide range of construction materials and reinforced concrete.
- For dry or wet cutting.
- Narrow gullet for great results on hard











MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	ART NO.	
-	230	22.23	12/2.8	70184612117	
%	300	20	10/2.5	70184627058	
₩	350	20	10/2.8	70184627060	
% ₹ *	350	25.4	10/2.8	70184627061	
% ₹ *	400	25.4	10/3.2	70184627062	
A 🐪	450	25.4	10/3.2	70184627063	
#	500	25.4	10/3.8	70184627064	
7 🐪	600	25.4	10/4.0	70184627065	



PRO BETON SOFT



- Laser welded blade.
- For dry or wet cutting.
- Depth indicator to monitor blade life and show cutting direction (up to 450mm).
- Wide gullet for great results on soft materials.
- Pro Beton Soft blades range are recommended to cut hard material.











MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	ART NO.
%	300	20	12/2.8	70184611453
%	300	25.4	12/2.8	70184611455
%	350	20	12/2.8	70184611456
%	350	25.4	12/2.8	70184611458
%	400	20	12/3.2	70184611459
%	400	25.4	12/3.2	70184611460
₩	450	25.4	12/3.2	70184611461
*	500	25.4	12/3.8	70184611981
*	600	25.4	12/4.4	70184611982





CLASSIC BETON TURBO

- Laser welded diamond blade.
- Corrugated segments.

• For dry or wet cutting.







MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	ART NO.
-	115	22.23	10/2.4	70184694465
-	125	22.23	10/2.4	70184694466
-	230	22.23	10/2.6	70184694467
36	300	20	10/3.2	70184694468
%	300	25.4	10/3.2	70184602486
%	350	20	10/3.2	70184694469
%	350	25.4	10/3.2	70184694470
36	400	20	10/3.2	70184601392
%	400	25.4	10/3.2	70184694471



CLASSIC BETON



• An economical solution.

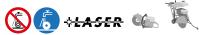
• Dry or wet cutting.

Laser welded blade.









MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	ART NO.	
%	300	20	10/2.8	70184626869	
%	300	25.4	10/2.8	70184626870	
%	350	20	10/2.8	70184626871	
%	350	25.4	10/2.8	70184626872	
%	400	25.4	10/3.2	70184626873	
₩	450	25.4	10/3.2	70184626874	
₩	500*	25.4	10/3.4	70184694416*	
*	600*	25.4	10/3.6	70184694417*	



NEW STANDARD BETON TURBO

- Sintered segmented blade with a Turbo shape.
- More aggressive cut on harder materials.
- For cutting light reinforced concrete and harder building materials.











MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	ART NO.
_	115	22.23	8/2.6	70184608578
_	125	22.23	8/2.8	70184608579
_	230	22.23	9/3.4	70184608580
%	300	20	10/3.7	70184608581
% A	350	25.4/20	10/4	70184608582

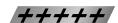


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Discover our diamond blades specially designed for cutting: reinforced concrete, cured concrete, kerb stones, concrete pipes, engineering bricks, facing bricks, refractory bricks, flagstones and paving stones, block paving, washed gravel concrete slabs, natural stone, flint, sandstone, limestone.

EXTREME UNIVERSAL SILENCIO +++++



• Our best quality for your masonry saw.

1000 60/55

• Reduction of noise up to 30x.

• Laser welded blade for optimum safety and performance.

70184694595



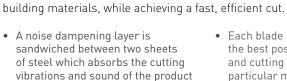


MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.
Ħ.	650	25.4	15/4.4	1	70184694227
	900	60/55	15/4.4	1	70184694030

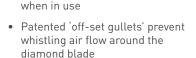
15/4.4

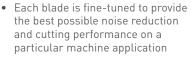


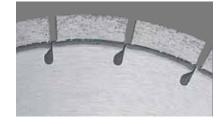




the best possible noise reduction and cutting performance on a particular machine application











MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.
A	300	25.4	15/2.8	1	70184640269
A	350	25.4	15/2.8	1	70184628998
A	400	25.4	15/3.1	1	70184640270
A	450	25.4	15/3.1	1	70184694368*
A	500	25.4	15/3.2	1	70184630309

* Available on request





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EXTREME UNIVERSAL TURBO

- +++++
- The Extreme Universal blade cuts all medium to hard construction materials, fast.
- 12mm impregnated diamond segments provide a long life.
- Arrow shaped inserts on the blade protect the steel core for reduced blade wear, as well as indicating the correct direction for rotation.
- The ventilated waved steel centre reduces heat which aids blade rigidity during dry cutting.
- The corrugated continuous rim enables smooth, high-quality cutting and ease of use. It also cuts more aggressively on hard materials.
- Ideal for use on a very wide range of medium to hard construction materials, block paving, granite, natural stone, roof tiles and hard tiles.











MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.
-	115	22.23	12/1.8	1	70184623598
-	125	22.23	12/2.0	1	70184623599
-	230	22.23	12/2.8	1	70184623180
%	300	20	12/2.8	1	70184611230
% 7	300	25.4	12/2.8	1	70184611236
%	350	20	12/3.2	1	70184611427
% A	350	25.4	12/3.2	1	70184611561
<u> </u>	230	70/22.23 + Flange	12/2.8	1	70184623448



EXTREME UNIVERSAL LASER



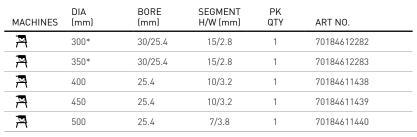
- The Extreme Universal blade has super-fast cutting and very long life on all materials from soft to hard.
- Up to 15mm high segments provide long life and fast cut on all building materials.
- The DUO segments provide high cutting speed, improved comfort and low vibration levels.
- Arrow shaped gullet slots quickly remove debris from the blade surface and indicates the rotational direction.
- 'DUO' shaped cut reduces heat and cools the blade core.
- Laser welded segments ensure optimum safety against segment loss.





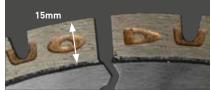








 $^{^{*}}$ Special Duo shaped segments and Duo laser cuts for 300mm & 350mm diameter blades only







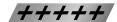
ROTATIONAL DIRECTION



FOR BEST RESULTS USE ON NORTON CLIPPER
MASONRY SAWS - SEE NORTON CLIPPER SURFACE
SOLUTIONS BUILDING & CONSTRUCTION
CATALOGUE FOR FURTHER DETAILS



EXTREME UNIVERSAL LASER #++++



• Super fast cutting and very long life on all materials from soft to hard.

• Up to 15mm high segments.

70184647651



MACHINES

DIA

900

(mm)



60

BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.	

15/4.8



EXTREME UNIVERSAL TP-Z +++++



• For the removal of mortar joints between

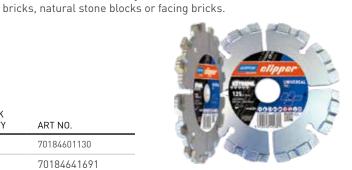
- Innovative mortar raker with alternated Z shape segments that reduce contact surface area for a faster cut with less friction.
- Made with i-HD™ technology for long life and a high removal rate.







MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.
-	115	22.23	7/6.5	1	70184601130
_	125	22.23	7/6.5	1	70184641691



PRO UNIVERSAL DUCTILE



- Multi-material vacuum-brazed blades for drycutting of a wide variety of materials.
 - concrete, asphalt roof shingles, PVC, clay and fiberglass-reinforced resin, small amount of wood, ductile iron and metals







MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.
-	115	22.23	2.8	1	70184694459
-	125	22.23	2.8	1	70184694460
_	180	22.23	2.8	1	70184694461
_	230	22.23	3.1	1	70184694462
%	300	20	3.4	1	70184694463
% 🛪	350	25.4	3.4	1	70184694464
36	400	20	3.3	1	70184694691



Formerly Multi-Runner

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PRO UNIVERSAL TP



- · Segments with different thicknesses to cater for various mortar joints.
- The hard-metal protection inserts prevent under-cutting of the steel-centre and contributes to longer product life.
- For the removal of mortar joints between bricks, natural stone blocks or facing bricks.
- Removes mortar 2x faster than a standard





MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.	
-	115	22.23	6.5/4.5	1	70184610712	
-	125	22.23	6.5/4.5	1	70184610713	
-	115	22.23	6.5/6.5	1	70184610305	
-	125	22.23	6.5/6.5	1	70184610307	
-	115	22.23	6.5/8.0	1	70184610715	

6.5/8.0



PRO UNIVERSAL TP-V

22 23



• Special tool for the repair of cracks in floors and walls.

125

- The V-shape segments widen the crack to allow repair with mortar.
- For use on concrete floors and walls, masonry walls, and plasterboard.

70184610716

Removes concrete 2x faster than a standard blade.







MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.
-	115	22.23	13/6.5	1	70184624198
—	125	22.23	13/6.5	1	70184624199



PRO UNIVERSAL TURBO



- 12mm high continuous rim blade.
- Ideal for use on general materials and stone.
- Reinforcement flanges around the bore ensure rigidity and straight cutting under the most demanding conditions.
- Use dry or wet.









MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.
-	115	22.23	12/2.1	1	70184610314
-	125	22.23	12/2.1	1	70184610315
-	150	22.23	12/2.5	1	70184610316
-	180	22.23	12/2.5	1	70184610317
-	230	22.23	12/2.8	1	70184610267
%	300	20	12/3.2	1	70184610259
%	350	20	12/3.2	1	70184610334*
% A	350	25.4	12/3.2	1	70184610336



* Available on request



PRO UNIVERSAL SILENCIO

- The Norton Clipper Pro Universal Silencio blade reduces noise by up to eight times (-9 dB(A)) compared to conventional blades when used with a masonry saw
- The Pro Universal Silencio blade features 12mm high segments for longer life
- Ideal for concrete and building materials, it achieves a fast, efficient cut with limited noise for sensitive environments at a more economical cost when price is a consideration









MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.
-	115	22.23	12/2.2	1	70184607952
-	125	22.23	12/2.2	1	70184607953
*	230	22.23	12/2.6	1	70184608410
	350	25.4	12/3.1	1	70184602811



PRO UNIVERSAL LASER

- Fast cutting
- Suitable for dry or wet cutting on masonry saws
- For use on concrete slabs and general purpose building materials











MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.
-	115	22.23	12/2.2	1	70184607493
<u> </u>	125	22.23	12/2.3	1	70184607684
<u> </u>	150	22.23	12/2.2	1	70184607685
A	150	30	12/2.2	1	70184607693
<u> </u>	180	22.23	12/2.5	1	70184607686
A	180	30	12/2.5	1	70184607687
<u> </u>	230	22.23	12/3.0	1	70184603038
%	300	20	12/3.1	1	70184607689
%	300	25.4	12/3.1	1	70184607690
%	350	20	12/3.20	1	70184607691
%	350	25.4	12/3.2	1	70184607692
% A	350	25.4	10/2.8	1	70184611209
Ħ	400	25.4	10/2.5	1	70184610679
96	400	25.4	10/3.2	1	70184625951
96	400	20	12/3.2	1	70184631497
7	450	25.4	12/3.2	1	70184609093
A	500	25.4	10/3.2	1	70184625953
# # # # # # # # # # # # # # # # # # #	350 400 400 400 450	25.4 25.4 25.4 20 25.4	10/2.8 10/2.5 10/3.2 12/3.2 12/3.2	1 1 1 1 1 1	70184611209 70184610679 70184625951 70184631497 70184609093



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PRO UNIVERSAL TP

- Segments with different thicknesses for a number of different mortar joints.
- The hard-metal protection inserts prevent under-cutting of the steel-centre and contributes to longer product life
- For the removal of mortar joints between bricks, natural stone blocks or facing bricks
- Removes mortar 2x faster than a standard blade









MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.
_	115	22.23	6.5/4.5	1	70184610712
_	115	22.23	6.5/6.5	1	70184610305
	125	22.23	6.5/4.5	1	70184610713
	125	22.23	6.5/6.5	1	70184610307
-	125	22.23	6.5/8.0	1	70184610716



PRO UNIVERSAL LASER



- Laser welded ensure optimum performance and security.
- 12mm segment height.

- For use on concrete slabs and general purpose building materialsRemoves mortar 2x faster than a standard blade
- Use dry or wet cutting on masonry saws.







MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.
F	600	25.4	12/4.4	1	70184647258*
≓	625	60	12/4.4	1	70184693972
F	650	25.4	12/4.4	1	70184647265
⊭	700	60	12/4.4	1	70184647264
≓	900	60	12/4.4	1	70184647266
F	1000	60	12/4.4	1	70184647263



CLASSIC UNIVERSAL LASER

- An economical blade choice for dry or wet cutting on masonry saws.
- For use on construction materials and lightweight blocks, clay blocks and sandstone.







MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.
₽	650	25.4	10/4.4	1	70184647267
₽	900	60	10/4.4	1	70184647269
Ħ.	1000	60	10/4.4	1	70184647650

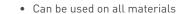


^{*} Available on request



PRO PIPE CUTTER

- For cutting and grinding plastic pipes
- Allows to cut and grind a plastic pipe in only one step











MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.	
_	125	22.23	2.5	1	70184601374	



CLASSIC UNIVERSAL TURBO



• Use dry or wet

- An economical solution
- Continuous rimmed blade









MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.
—	115	22.23	10/2.2	1	70184626814
—	125	22.23	10/2.2	1	70184626815
_	180	22.23	10/2.4	1	70184626816
_	230	22.23	10/2.6	1	70184626818
%	300	20	10/3.2	1	70184626822
% A	350	25.4	10/3.2	1	70184626824
_	125	M14	10/2.0	1	70184629695
<u>*</u>	230	70/22.23 + Flange	10/2.6	1	70184626819



CLASSIC UNIVERSAL LASER



- An economical blade choice for dry or wet cutting on masonry saws
- For use on construction materials and lightweight blocks, Poroton, Kalksandstein





MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.
-	115	22.23	7/2.2	1	70184626834
-	125	22.23	7/2.2	1	70184626835
_	150	22.23	7/2.2	1	70184626836
-	180	22.23	7/2.5	1	70184626837
%	230	22.23	10/2.5	1	70184626838
%	300	20	10/2.5	1	70184626839
% A	300	25.4	10/2.5	1	70184626840
%	350	20	10/2.8	1	70184626841
% A	350	25.4	10/2.8	1	70184626842



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CLASSIC UNIVERSAL



• An economical solution

Use dry or wet

Sintered blade







1	
,	

MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.
-	115	22.23	10/1.8	1	70184626806
-	125	22.23	10/1.8	1	70184626807
<u>+</u>	180	22.23	10/2.2	1	70184626809
-	230	22.23	10/2.4	1	70184626810
%	300	20	10/3.0	1	70184626811
% A	350	25.4	10/3.2	1	70184626813



NEW STANDARD UNIVERSAL TURBO

- Sintered continuous rim blade with a Turbo shape
- Aggressive cut on harder materials.
- Better quality of cut thanks to its continuous
- Ideal for hard materials that need a good quality of cut (roof tiles)

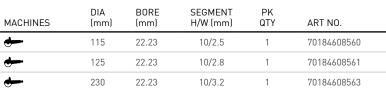














• Sintered segmented blade

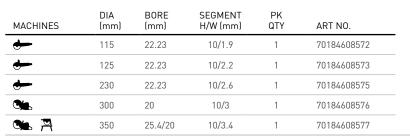
• For universal building materials such as bricks, pavers and building blocks



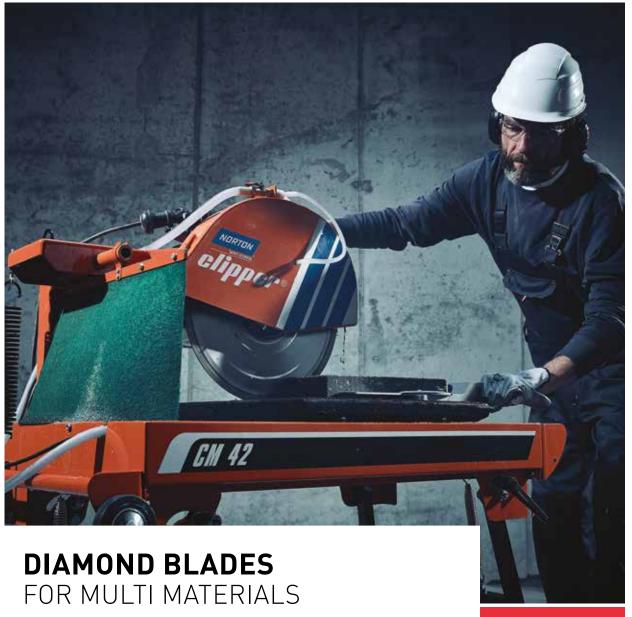












Multi-purpose blades for cutting concrete, reinforced concrete, roof tiles, paviours, blocks, granite, natural stone, asphalt, breeze blocks, sandstone and gridstone.

www.nortonabrasives.com Diamond Tools / 349





- INVINCIBILITY Second generation iHD autoattachment technology makes blade segments Invincible and the blade itself, incredibly safe to use.
- DEPENDABILITY No mounting/demounting required, you can rely on Invincible to cut through all building materials.
- VERSATILITY Invincible works well with any sidekick; battery powered or regular angle grinder.
- SPEED AND POWER Our 'Man of Steel' cuts through material quickly and easily.

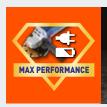








MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.		
-	115	22.23	12/2.2	1	70184603342		
-	125	22.23	12/2.2	1	70184603343		
PER KIT OF 10 BLADES WITH A CARDBOARD DISPLAY:							
<u>+</u>	115	22.23	12/2.2	10	70184607642		
+	125	22.23	12/2.2	10	70184607643		



NO CORD, NO PROBLEM.

Invincible blades, available in 115mm (70184603342) and 125mm (70184603343), are designed specifically to form a 'dynamic duo' with all battery powered machines.







Multipurpose blade cuts all

materials

- Up to 12mm segment height for more cuts per wheel
- Trapezoid shaped segments give a comfortable, smoother cut with lower vibration levels
- Patented cut depth indicator allows better visibility of cut depth when in use
- Keep track of segment wear with the specially engraved wear indicator
- Patented drop shaped gullets prevents fatigue cracks even when cutting thick metal

APPLICATIONS

- Reinforced concrete
- Concrete lintels
- Limestone concrete
- Concrete roof tiles
- Paviors and blocks
- Granite and natural stones
- Asphalt
- Asphalt over concrete
- Breeze blocks
- Gridstone
- Sandstone
- Steel parts up to 5mm thick







MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.
-	115	22.23	10/2.2	1	70184602018
_	125	22.23	10/2.2	1	70184602019
-	180	22.23	10/2.5	1	70184602020
<u>+</u>	230	22.23	12/2.5	1	70184602021
%	300	20	12/3.0	1	70184602022
% A %	300	25.4	12/3.0	1	70184602023
%	350	20	12/3.2	1	70184602091
% ₹ *	350	25.4/20	12/3.2	1	70184602092
% ₹ *	350	25.4	12/3.2	1	70184602093
% A %	400	25.4	12/3.2	1	70184602095
%	400	20	12/3.2	1	70184602094
7	450	25.4	12/3.2	1	70184602096
A *	500	25.4	10/3.8	1	70184602097



Segment wear indicator



Patented cutting depth indicator

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DIAMOND BLADES FOR MULTI MATERIALS

PRO 2X2 RANGE

- Norton Clipper PRO 2x2 is a laser-welded diamond blade, suitable for cutting a wide range of materials, from asphalt and abrasive materials to concrete and reinforced concrete.
- Equipped with special undercutting protection segments, the Norton Clipper PRO 2x2
- Ensures user safety even when cutting very abrasive materials.
- Multipurpose blade cuts all materials

- 10mm high segments
- Undercutting protection segments for safety
- Laser-welded segments
- Fully compliant with EN13236
- Suitable for cutting concrete and asphalt
- Free-cutting and comfortable
- Long life, especially in floor sawing applications









MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.
	300	20	10/2.5	1	70184647331
	300	25.4	10/2.5	1	70184647332
	350	20	10/2.8	1	70184647336
_	350	25.4	10/2.8	1	70184647337
36	400	25.4	10/2.8	1	70184601398
% 🛪	450	25.4	10/2.8	1	70184601399
%	500	25.4	10/2.8	1	70184601400



NEW STANDARD ALL MATERIALS

- For cutting multiple materials such as concrete, granite, asphalt, bricks, pavers, building blocks, steel parts up to 5mm thick and much more.
- For use on a handheld saw machine. Masonry saw and floor saw are compatible with 350mm diameter diamond blades for occasional use.
- 100% laser blades with segment height of 10mm



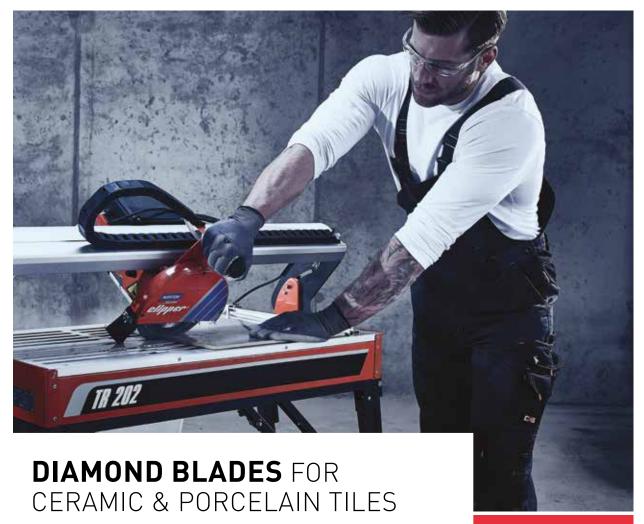






MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.
—	115	22.23	10/2.2	1	70184609627
-	125	22.23	10/2.2	1	70184609628
<u> </u>	230	22.23	10/2.5	1	70184609629
%	300	20	10/2.5	1	70184609630
% ∺ %	350	25.4/20	10/2.8	1	70184609633





Discover our diamond blades specially designed for cutting: ceramic and porcelain tiles, vitrified reconstituted stone, glass, textured glass, glazed ceramic tiles, granite, marble, slate and hard natural stone.

EXTREME CERAMIC

- Continuous rim sintered diamond blade for wet For use on glazed ceramic tiles, granite, cutting on masonry saws.
- Thin laser-cut slots to allow blade cooling and smoother cut.
- marble, slate, quarry tiles.







MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.
7	200	25.4	9/1.6	1	70184647047
7	230	25.4	9/1.6	1	70184644431
F F	250	25.4	9/1.6	1	70184644432
芹	300	25.4	9/2.0	1	70184630334
芹	350	25.4	9/2.0	1	70184630335



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- high quality cut
- Premium diamond grade and free cutting metal bond make this blade perfect for cutting even the hardest tiles
- 1,4mm thickness for fast cutting and reduced material wastage
- straight without causing damage to the tile
- For use on angle grinders, rail tile and masonry saws
- Can be used on porcelain, ceramic, vitreous, marble, terracotta, granite, slate, reconstituted stone, floor and wall tiles











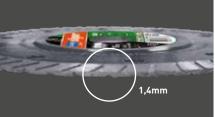
DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.
115	22.23	10/1.4	1	70184644759
125	22.23	10/1.4	1	70184644760
180	22.23	10/1.4	1	70184621970
200	25.4	10/2	1	70184625427*
230	22.23	10/2	1	70184621973
230	25.4	10/2	1	70184627653*
250	25.4	10/2	1	70184625428*
250	30	10/2	1	70184645565*
300	25.4	10/2.2	1	70184625429*
300	30	10/2.2	1	70184645566*
	(mm) 115 125 180 200 230 230 250 250 300	(mm) (mm) 115 22.23 125 22.23 180 22.23 200 25.4 230 22.23 230 25.4 250 25.4 250 30 300 25.4	(mm) (mm) H/W (mm) 115 22.23 10/1.4 125 22.23 10/1.4 180 22.23 10/1.4 200 25.4 10/2 230 22.23 10/2 230 25.4 10/2 250 25.4 10/2 250 30 10/2 300 25.4 10/2.2	(mm) (mm) H/W (mm) QTY 115 22.23 10/1.4 1 125 22.23 10/1.4 1 180 22.23 10/1.4 1 200 25.4 10/2 1 230 22.23 10/2 1 230 25.4 10/2 1 250 25.4 10/2 1 250 30 10/2 1 300 25.4 10/2.2 1



* Available on request







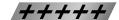
1,4mm thick blade



Fast cutting continuous rim



EXTREME CERAMIC SOFT*



- Continuous rim sintered diamond blade for wet cutting on masonry saws.
- Thin laser-cut slots to allow blade cooling and smoother cut.
- For use on glazed ceramic tiles.
- Offers a very good finish on the hardest









MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.
F	200	25.4	2 /9	1	70184603234
	230	25.4	2 /9	1	70184603235
F P	250	25.4	2 /9	1	70184603236
F P	300	25.4	2 /9.5	1	70184602483
A	350	25.4	2 /9.5	1	70184602484
Ħ	400	25.4	2.4 /10	1	70184603237



PRO CERAMIC



- Good value for money continuous diamond rim
- Can be used for dry or wet cutting
- For use on ceramics, granite, marble, slate, quarry tiles













MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.
Wet & dry cutting					
-	115	22.23	9/1.6	1	70184625942
-	125	22.23	9/1.6	1	70184625940
-	180	22.23	9/1.7		70184625944
<u> </u>	230	22.23	9/2.2	1	70184625946
Wet cutting only					
-	150	25.4/22.23	10/1.6	1	70184625560
-	180	25.4/22.23	10/1.9	1	70184625561
	200	25.4	10/1.9	1	70184625093
	200	30	10/1.9	1	70184625094
	230	25.4	10/1.9	1	70184625096
	250	25.4	10/2	1	70184625097
严 அ	300	25.4	10/2	1	70184625098
P A	350	25.4	10/2	1	70184625100



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^{*} Extreme Ceramic Soft range blades are recommended to cut hard materials

DIAMOND BLADES FOR CERAMIC & PORCELAIN TILES

CLASSIC CERAMIC TURBO

- Turbo continuous rimmed diamond blade for faster and smoother cutting of hard ceramic tiles.
- Economical solution.
- For dry or wet cutting of porcelain and ceramic tiles.









MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.
-	115	22.23	7/1.6	1	70184627645
	125	22.23	7/1.6	1	70184627646



CLASSIC CERAMIC



- Value for money continuous rimmed diamond blade
- Dry or wet cutting of medium hard tiles and ceramic tiles













MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.
-	115	22.23	5/1.6	1	70184626825
<u> </u>	125	22.23	5/1.6	1	70184626826
	180	25.4/22.23	5/1.7	1	70184626828
	200	30/25.4	5/1.7	1	70184626829
	230	22.23	5/1.8	1	70184626830
	230	25.4	5/1.8	1	70184628734
	250	25.4	5/1.8	1	70184626831
P	300	25.4	5/2.1	1	70184626832
F A	350	25.4	5/2.1	1	70184626833



NEW STANDARD CERAMIC

- Sintered continuous rim blade.
- For ceramic, glazed ceramic and porcelain
- Suitable for similar materials that need a good quality cut with a continuous rim blade.









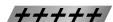


MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.
-	115	22.23	7/1.6	1	70184608555
-	125	22.23	7/1.6	1	70184608556
← →	180	22.23/25.4	7/1.8	1	70184608557
	200	30/25.4	7/2	1	70184608558
← 🖰	230	22.23/25.4	8/2	1	70184608559





EXTREME GRANITE



- The 15mm 'Duo' shaped trapezoidal segments are produced with i-HD™ technology making them optimised for cutting hard materials such as granite, natural stone, concrete slab and blocks. These segments also provide benefits such as super long life, excellent cutting speed, improved operator comfort and low vibration.
- The Extreme Granite also provides optimum safety against segment loss.
- The exclusive "arrow" shaped gullet slots permanently indicate the correct direction of rotation.











MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.
-	230	22.23	15/2.6	1	70184601172
6	300	20	15/2.8	1	70184601173
6	350	25.4	15/2.8	1	70184601174
Ħ	350	25.4	15/2.8	1	70184603311
Ħ	500	25.4	15/3.2	1	70184603312
*	900	60	12/4.6	1	70184603313
PP.	1000	60	12/4.6	1	70184608796



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EXTREME STRADALIT #++++

• Laser-welded, 10mm high segments with silent steel-centre, ideal for wet cutting very hard natural stone, cured clay pavers and engineering bricks on masonry saws.







MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.
Ħ	350	25.4	10/2.5	1	70184621132
7	400	25.4	10/2.5	1	70184623047



PRO GRANITE TURBO



- The 12mm laser welded segments are corrugated in shape, which generate less friction and makes the blade more efficient. These segments also provide the blade with strong cutting performance and long life.
- Designed for dry and wet cutting.
- Specifically designed for granite, concrete slabs and other hard stone materials.
- An excellent cost to performance ratio, offering great value for money.













MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.
-	115	22.23	12/2.2	1	70184626525
-	125	22.23	12/2.2	1	70184626526
-	180	22.23	12/2.4	1	70184626527
-	230	22.23	12/2.6	1	70184626528
-	230	70/22.23 + Flange	12/2.6	1	70184629653
%	300	20	12/3.2	1	70184626530
A	300	25.4	12/3.2	1	70184626529
%	350	20	12/3.2	1	70184626531
% 🛱	350	25.4	12/3.2	1	70184626532
% 7	400	25.4	12/3.2	1	70184626533



PRO GRANITE



• Great value for money blade.

• Designed for use on granite, marble and natural stone.









MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.
A	300	25.4	10/2.5	1	70184610384
Ħ	350	25.4	10/3.0	1	70184610385
A	400	25.4	10/3.2	1	70184610386
7	450	25.4	10/3.4	1	70184610436
7	500	25.4	7/3.2	1	70184610437
A	600	25.4	7/4.4	1	70184610438*



* Available on request



PRO MARMO



- Versatile diamond blade suitable for materials such as granite, marble, plastics and natural stone, and is ideal for use on angle grinders, cut-off saws and masonry saws
- The electroplated surface and drop-down diamond inserts on the steel centre clean the cutting profile while in use, these features ensure fast and smooth cutting







MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.	
<u> </u>	50	6	2.4	1	70184629965	
<u> </u>	115	22.23	2.4	1	70184626663	
-	125	22.23	2.4	1	70184626666	
<u> </u>	150	20	2.4	1	70184601282	
<u> </u>	230	22.23	2.8	1	70184626668	
% 7	300	25.4	2.9	1	70184620243	
% A	350	25.4	2.9	1	70184620244	



PRO MARMO SURF



- Pro Marmo Surf can be used as both a diamond Electroplated continuous rim generates blade and a diamond cup grinder and is well suited for cutting and grinding natural stone.
 - smooth cutting and grinding.





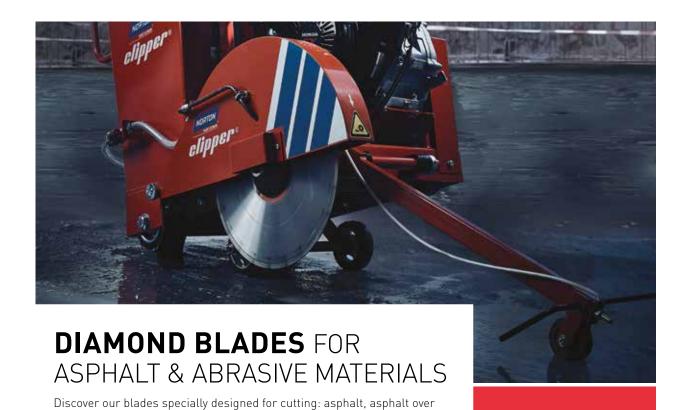








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concrete, green concrete, bitumen, cement joints, breeze blocks and Lignacite blocks

EXTREME ASPHALT #++++

- The Extreme Asphalt blade delivers extremely fast cutting performance and accuracy. The ideal diamond blade for all high speed saws and floor saws when cutting asphalt, asphalt over concrete, green concrete and abrasive building materials.
- 15mm laser welded duo shaped segments protect against undercutting on the steel centre and give the blade excellent cutting speed, low vibration when in use, and extended product life*.
- The patented 'depth of cut' indicator with stroboscope effect provides the user with greater
- Eight high wear protection segments further extend the blade's life.
- Exclusive "arrow" shaped engraving permanently marks the direction of rotation*.
- Wide gullet slots contribute to fast removal of cutting debris.













MACHINES	POWER	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.
%	< 20 hp	300	20	15/3	1	70184694907
%	< 20 hp	350	25.4	15/3.2	1	70184694537
%	< 20 hp	400	25.4	15/3.2	1	70184694911
★	< 20 hp	450	25.4	15/3.2	1	70184694912
*	< 20 hp	500	25.4	15/3.6	1	70184694913











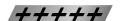


NAME	MA- CHINE	POWER	Ø (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ITEM NO.
	*	20 - 30 hp	500	25.4	10/4.3	1	70184640191
	*	20 - 60 hp	600	25.4	12/4.4	1	70184603293
A b - l + 10	*	20 - 60 hp	700	25.4	12/4.4	1	70184603354
Asphalt 10	*	20 - 60 hp	800	25.4	12/4.4	1	70184603355
	*	20 - 30 hp	900	25.4	10/4.3	1	70184640195
	*	20 - 30 hp	1000	25.4	10/4.3	1	70184640196*
	₩	30 - 60 hp	500	25.4	10/4.3	1	70184640200*
	*	20 - 60 hp	600	25.4	12/4.4	1	70184603293
Asphalt 20	*	20 - 60 hp	700	25.4	12/4.4	1	70184603354
	*	20 - 60 hp	800	25.4	12/4.4	1	70184603355
	*	30 - 60 hp	900	25.4	10/4.3	1	70184640204
Asphalt 30	*	60 - 90 hp	600	25.4	12/4.4	1	70184607905
Asphalt 40	*	60 - 90 hp	600	25.4	12/4.4	1	70184607905



* Available on request

EXTREME GREEN CONCRETE +++++



- 14mm high laser welded segments for longer
- Wear protection segments to prevent undercutting of the steel core..
- For use on green concrete, lignacite and tarmac top blocks for machines up to 25 hp.











MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.	
♣	300	25.4	14/3	1	70184602877	
♦	350	25.4	14/3	1	70184602876	
4	400	25.4	14/3.3	1	70184603117	



EXTREME ASPHALT LB ++++



- Diamond blades with wide segments for loop cutting asphalt and abrasive materials with a floor saw.
- Large choice of segment widths to suit all loop cutting applications on abrasive materials.

• Thick steel centre and hammer segments for better protection against under-cutting of the steel core.









MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.
₩.	350	25.4	8	1	70184618296*
₩	350	25.4	10	1	70184615813*

* Available on request

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PRO ASPHALT

- 12mm high continuous rim blade
- Ideal for universal use on general materials and stone
- Reinforcement flanges around the bore ensure rigidity and straight cutting under the most demanding conditions
- Use dry or wet













MACHINES	POWER	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.
**	< 20 hp	300	20	10/2.8	1	70184623182
ॐ	< 20 hp	300	25.4	10/2.8	1	70184623184
	< 20 hp	350	20	10/3.2	1	70184623185
₩ ₩	< 20 hp	350	25.4	10/3.2	1	70184623186
₩ ₹ ₩	< 20 hp	400	25.4	10/3.2	1	70184628159
*	< 20 hp	450	25.4	10/3.2	1	70184628160
7 🐪	< 20 hp	500	25.4	10/3.8	1	70184611979
7 🐪	< 20 hp	600	25.4	7/3.8	1	70184611980



PRO GREEN CONCRETE



- Laser welded segments for wet cutting.
- Wear protection segments to help prevent under-cutting of the steel centre.
- For use on green concrete, lignacite and tarmac top blocks.









MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.
Ó III⊳	300	25.4	10/2.5	1	70184624684
₩	350	25.4	10/2.8	1	70184624685



CLASSIC ASPHALT

- Laser welded diamond segments make this blade suitable for wet or dry cutting of asphalt, asphalt over concrete, green concrete, abrasive materials and concrete roof tiles.
- Its versatility and price to performance ratio, make this blade excellent value for money.











MACHINES	POWER	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.
	< 20 hp	300	20	10/2.5	1	70184626876
ॐ	< 20 hp	300	25.4	10/2.5	1	70184626877
%	< 20 hp	350	20	10/2.8	1	70184626878
ॐ	< 20 hp	350	25.4	10/2.8	1	70184626879
	< 20 hp	400	20	10/3.2	1	70184645242
ॐ	< 20 hp	400	25.4	10/3.2	1	70184626880
*	< 20 hp	450	25.4	10/3.2	1	70184626881
*	< 20 hp	500*	25.4	10/3.2	1	70184601944
₩.	< 20 hp	600*	25.4	10/3.2	1	70184601945



QUICK FIX

The system allows for blades bore to be adjusted to fit machines with different arbor/shaft diameters. There are two versions, the first allows a blade with a 25,4mm bore to be fitted to a machine with a 22,23mm arbor/shaft. The second allows a blade with either a 25,4mm or 22,23mm bore to be mounted on a machine with a 20mm arbor/shaft.

The system complies with the requirements of European Standard EN 13236.

MACHINES	BORE OF BLADE (mm)	BORE OF MACHINE (mm)	ART NO.
%	25.4	22.23	70184623894
%	25.4/22.23	20	70184622589





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^{* 500-600}mm with undercutting protection segments



Discover our blades specially designed for cutting of: Electrofused, Corhart ZAC, Corhart 104, Zirconia, Jargal, Mullite, Aluminia, Basalt, Oxydes - Dolomite, Tar & Magnesite, Oxydes - Magnesite and Chromite, Chrome. low and high content of aluminia. Oxydes - Zirconia, Silica, Beauxite, Durital, Rocal, Zirmul, Non oxydes - silicon carbide, Carborundum, Graphite and all refractory materials.

	RC400	RC465	RC525	RC540	RC575	PRO BETON	PRO ZDM200	PRO ZMD944T
NON OXIDES (C 80-90%) (SiC 40-70%)						BETON	EDITECT	21107441
Silicon Carbide, Carborundum, Graphite					•			
OXIDES								
Dolomite, Tar (MgO 40% CaO 60%)		•						
Magnesite (MgO 80-95%)		•	•				•	•
Chromite, Chrome (Cr ₂ O ₃ 30-10% MgO 40-80%)			•				•	•
Zirconia, Silica (ZrO ₂ 65-95%) (SiO ₂)				•		•		
LOW CONTENT ALUMINA (AL ₂ O ₃ 25-70%)								
Fireclay			•			•	•	
HIGH CONTENT ALUMINA (AL ₂ O ₃ 70-95%)								
Mulite, Beauxite, Durital, Rocal, Zirmul				•		•		
ELECTROFUSED								
Corhart ZAC, Corhart 104, Zirconia, Jargal	•							
Mulite, Alumina, Basalt	•							
INSULATION			•					



EXTREME RC400 +++++

- Laser-welded diamond blade with key-hole geometry.
- For use on electrofused Corhart ZAC, Corhart 104, Zirconia, Jargal, Mullite, Alumina, Basalt.





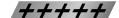


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526203*
526204*
502467
326205*
526206
526586*
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* Available on request

EXTREME RC465 +++++



- Laser-welded diamond blade with key-hole geometry.
- For use on oxides Dolomite, Tar and Magnesite.





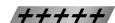


MACHINES	Ø (mm)	BORE (mm)	STEEL TYPE	SEGMENT H/W (mm)	ITEM NO.
\overline{A}	350	25.4	Standard	10/3.2	70184645262
SILENCIO	350	25.4	Silencio	10/3.2	70184640519
A	400	25.4	Standard	10/3.2	70184626316*
\overline{A}	450	25.4	Standard	10/3.8	70184626317*
SILENCIO	450	25.4	Silencio	10/3.8	70184630620
A	500	25.4	Standard	10/3.8	70184626318
A	600	25.4	Standard	10/3.8	70184626319*
	650	25.4	Standard	10/3.8	70184629314*



* Available on request

EXTREME RC525 +++++



- Laser-welded diamond blade with key-hole geometry
- Fireclay insulation brick.
- For use on oxides Magnesite and Chromite, Chrome. Low Content Alumina < 70%.





MACHINES	Ø (mm)	BORE (mm)	STEEL TYPE	SEGMENT H/W (mm)	ITEM NO.
Ħ	350	25.4	Standard	10/2.8	70184626284
A	400	25.4	Standard	12/3.2	70184628207
Ħ	450	25.4	Standard	12/3.8	70184626282*
silencio	, 450	25.4	Silencio	12/3.8	70184629538
SIENCIO	, 500	25.4	Silencio	12/3.8	70184641533
A	500	25.4	Standard	12/3.8	70184626283*
A	600	25.4	Standard	12/3.8	70184626706*



* Available on request

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DIAMOND BLADES FOR REFRACTORY MATERIALS

EXTREME RC540 #++++

- Laser-welded diamond blade with wide-gullet geometry.
- For use on oxides Zirconia, Silica. High Content Alumina >70% - Mullite. Beauxite, Durital, Rocal, Zirmul.



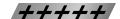


MACHINES	Ø (mm)	BORE (mm)	STEEL TYPE	SEGMENT H/W (mm)	ITEM NO.
A	350	25.4	Standard	10/2.8	70184626285
SILENCIO	350	25.4	Silencio	10/3.2	70184629947
A	400	25.4	Standard	10/3.2	70184626286*
A	450	25.4	Standard	10/3.8	70184626287
A	500	25.4	Standard	10/3.8	70184626288
SIL	500	25.4	Silencio	10/3.8	70184626693
A	600	25.4	Standard	10/3.8	70184626707*



* Available on request

EXTREME RC575 +++++



- Laser-welded diamond blade with wide-gullet geometry.
- For use on non-oxides Silicon Carbide, Carborundum, Graphite.









MACHINES	Ø (mm)	BORE (mm)	STEEL TYPE	SEGMENT H/W (mm)	ITEM NO.
A	350	25.4	Standard	10/2.8	70184626320*
A	400	25.4	Standard	10/3.2	70184626321*
A	450	25.4	Standard	10/3.8	70184626322*
₹ sil=Ncio	450	25.4	Silencio	10/3.8	70184647831
A SILENCIA	500	25.4	Silencio	10/3.8	70184631081
A	500	25.4	Standard	10/3.8	70184626323*
arraycolored	600	25.4	Standard	10/3.8	70184626324*



* Available on request





PRO BETON



- Good value for money laser-welded blade, with 10mm high free-cutting segments, for wet or dry cutting.
- Versatile product designed for petrol handheld saws, floor saws and masonry saws.
- For use on concrete, reinforced concrete, concrete slabs, refractory blocks containing aluminium









MACHINES	Ø (mm)	BORE (mm)	SEGMENT H/W (mm)	ITEM NO.
abla	350	25.4	10/2.8	70184627061
A	400	25.4	10/3.2	70184627062
A	450	25.4	10/3.2	70184627063
\blacksquare	500	25.4	10/3.8	70184627064
7	600	25.4	10/4.0	70184627065



PRO ZDM 200



• Very good value for money laser-welded refractory blade for wet or dry cutting.



MACHINES

abla

A







Ø (mm)

350

450

500



BORE (mm)

25.4

25.4

25.4

SEGMENT H/W (mm)	ITEM NO.
7/2.4	70184610238
7/3.2	70184610239

70184610240*



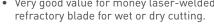
* Available on request

PRO ZMD 944T



7/3.2

• Very good value for money laser-welded





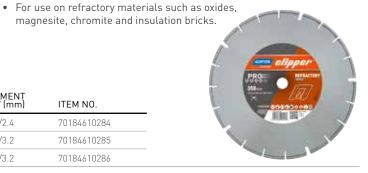




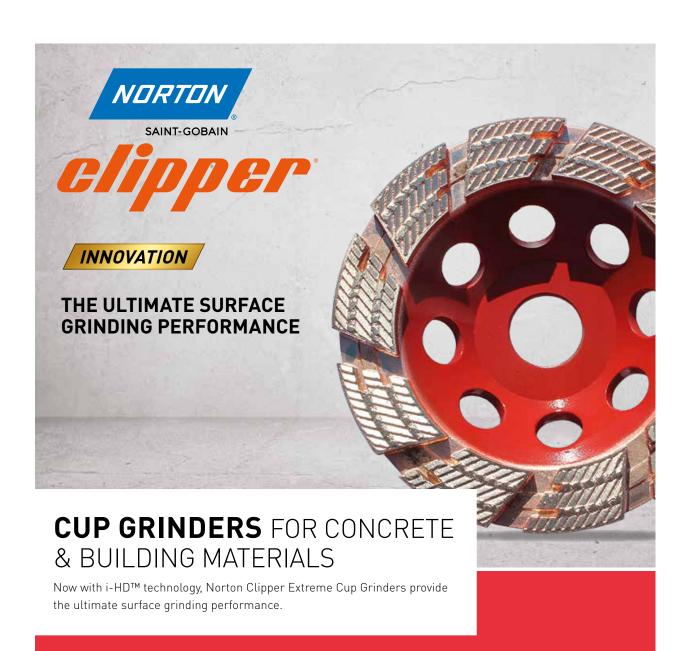




MACHINES	Ø (mm)	BORE (mm)	SEGMENT H/W (mm)	ITEM NO.	
Ą	350	25.4	7/2.4	70184610284	_
Ŗ	450	25.4	7/3.2	70184610285	
	500	25.4	7/3 2	70184610286	



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EXTREME CG COMFORT

INNOVATION

- EXTREME CG Comfort has been specifically developed to lower vibration levels and improve operator comfort
- Lower vibration levels
- Comfortable to use
- New segment shape for optimum results
- $i-HD^{TM}$ Technology for high material removal and long life











MACHINES	DIA (mm)	CUP HEIGHT (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.
÷	100	20	22.23	4.5	1	70184607656
-	125	25	22.23	4.5	1	70184602648
+	180	30	22.23	4.5	1	70184607657



See page 07 for more information on merchandising displays



EXTREME CG +++++

- i-HD segments provide the best finish, high material removal rates and longest life thanks to the uniform density of diamonds across each whole segment.
- The unique large segment design enables faster grinding of large surfaces.
- · Low vibrations provide better comfort during
- · Large ventilation holes mean better cooling and less heat generation.
- Flat 125mm cup grinder is suitable for use on all vacuum grinders.
- For use on building materials, concrete, natural stone and abrasive materials.
- For tilers, general builders, concrete flooring contractors, swimming pool installers.













MACHINES	DIA (mm)	CUP HEIGHT (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.
	100	19	22.23	4.5	1	70184694991
-	125	24	22.23	4.5	1	70184694993
-	180	29	22.23	4.5	1	70184694994
-	125 FLAT	19	22.23	4.5	1	70184694992





- High material removal rate
- Low vibration for better comfort when in use
- i-HD manufacturing technology ensures long life and a good standard of finishing

• For surfacing and grinding medium hardness construction and building materials (concrete, reinforced concrete, natural stone)











MACHINES	DIA (mm)	CUP HEIGHT (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.
+	100	19	22.23	4.5	1	70184694988
-	125	24	22.23	4.5	1	70184694989
+	180	29	22.23	4.5	1	70184694990



CLASSIC CG

- An economical solution
- For surfacing and grinding hard construction and building materials (concrete, reinforced concrete, natural stone)



• Flat sides avoid damaging walls or ceilings during flush grinding











MACHINES	DIA (mm)	CUP HEIGHT (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.
-	100	19	22.23	4.5	1	70184694995
-	125	24	22.23	4.5	1	70184694996
_	180	29	22.23	4.5	1	70184601079



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PRO CG-PCD LOW VIBRATION

- Designed for the fast removal of glue, epoxy resins and paint
- The embedded anti-vibration system provides comfort during use

• Use a concrete cup wheel after using PCD wheels to ensure a great finish











MACHINES	DIA (mm)	CUP HEIGHT (mm)	BORE (mm)	PCD ELEMENTS	PK QTY	ART NO.	
-	125	18	22.23	12pcs	1	70184645886	



CLASSIC CG-PCD



- Cost-effective Polycrystalline Diamond (PCD) cup wheel
- Designed for the fast removal of glue, epoxy resins and paint

• Use a concrete cup wheel after using PCD wheels to ensure a great finish











MACHINES	DIA (mm)	CUP HEIGHT (mm)	BORE (mm)	PCD ELEMENTS	PK QTY	ART NO.
-	125	19	22.23	12pcs	1	70184693445



EXTREME CUT'N GRIND +++++



- · Multi-purpose tool for cutting and grinding of building materials
- i-HD™ technology offers longer life, a faster cut and a unique design
- Can be used for the same applications as diamond blades and diamond cup grinders
- Equipped with an aluminium flange in connection M14 for offset cutting and grinding

















PRO CUT' N GRIND



- Sintered Turbo shape, for fast material removal and good finishing quality in cutting and grinding
- Equipped with an aluminium flange in connection M14 for offset cutting and grinding
- Can be used for the same applications as diamond blades and diamond cup grinders
- For use on concrete, washed concrete. blocks, ductile iron and natural stones













MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.
_	100	M14	25 / 3.9	1	70184641171
-	125	M14	25 / 3.9	1	70184641172



PRO CB BETON CROWNED



- Useful length: 300mm
- Connection: 1/2" Male thread

sandstone, limestone.

- Applications: for concrete and masonry walls
- Professional crownbit for small diameters wet-drilling jobs
- Brazed crownbit for wet-drilling







MACHINES	CROWN W/H(mm)	USEFUL LENGTH (mm)	No. SEGMENTS	ART NO.
<u> </u>	14/10	300	1 Crown	70184612947
1 1	16/12	300	1 Crown	70184612823
1	18/14	300	1 Crown	70184612824
1	20/16	300	1 Crown	70184612825
1 1	22/18	300	1 Crown	70184612826
1	25/21	300	1 Crown	70184612827
1 1	28/24	300	1 Crown	70184612828
11	30/26	300	1 Crown	70184612829
1 1	32/28	300	1 Crown	70184612830
A #	35/31	300	1 Crown	70184612831
A	38/34	300	1 Crown	70184612833
A	40/36	300	1 Crown	70184612834
11	51/47	300	1 Crown	70184612835

engineering bricks, facing bricks, refractory bricks, flagstones and paving stones, block paving, washed gravel concrete slabs, natural stone, flint,



* Made to order

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^{*} OD / ID: Outer Diameter / Inner Diameter.

DRILLING CORE BITS FOR CONCRETE

PRO CB BETON SEGMENTED



- Useful length: 450mm
- Connection: 1 1/4" UNC female thread
- Applications: concrete and reinforced concrete, masonry blocks. Also suitable for asphalt and abrasive materials

• Core drills with laser welded segments for wet drilling. The special tapered-shape segments allow for an easier start of the drill







MACHINES	DIA (mm)	SEGMENT L/W/H(MM)	No. SEGMENTS	ART NO.
<u>/</u>	52/45	24/3.5/10	4	70184624870
<u>/</u> 1	57/50	24/3.5/10	4	70184624871
<u>/</u> i	62/55	24/3.5/10	5	70184624872
<u>/</u> 1	67/60	24/3.5/10	5	70184624873
<u>/</u> 1	72/65	24/3.5/10	5	70184624874
<u>/1</u>	77/70	24/3.5/10	6	70184624875
<u>/1</u>	82/75	24/3.5/10	6	70184624876
<u>/</u>	87/80	24/3.5/10	6	70184624878
<u>/</u>	92/85	24/3.5/10	7	70184624879
<u>/</u> 1	102/95	24/3.5/10	8	70184624880
<u> </u>	107/100	24/3.5/10	8	70184624881
<u>/</u> 1	112/105	24/3.5/10	8	70184624882
<u>/</u> 1	122/114	24/4.0/10	9	70184624883
<u>/</u> 1	127/119	24/4.0/10	9	70184624884
<u> </u>	132/124	24/4.0/10	9	70184624885
<u>/</u> 1	142/134	24/4.0/10	10	70184624886
<u> </u>	152/144	24/4.0/10	11	70184624887
<u>/</u> 1	162/154	24/4.0/10	11	70184624888
<u>/</u>	172/164	24/4.0/10	12	70184624889
<u>/</u>	182/174	24/4.0/10	12	70184624890
<u>/</u> 1	202/194	24/4.0/10	14	70184624892
<u>/1</u>	212/203	24/4.5/10	14	70184624893**
<u>/</u>	227/218	24/4.5/10	15	70184624894
<u>/</u>	252/243	24/4.5/10	16	70184624895
<u>/</u>	272/263	24/4.5/10	18	70184624896**
<u>/</u>	300/290	24/5.0/10	19	70184624897
<u>/</u>	350/340	24/5.0/10	21	70184624900
<u>/</u>	400/390	24/5.0/10	24	70184624901



^{*} OD / ID: Outer Diameter / Inner Diameter.

^{*} Made to order



CLASSIC CB BETON

• Useful length: 450mm

• Core drill with brazed segments

• Connection: 1 1/4" UNC female thread

• Good value for money

• Applications: for concrete and masonry walls







1 56 450 10 1 70 1 61 450 10 1 70 1 66 450 10 1 70 1 71 450 10 1 70 1 81 450 10 1 70 1 86 450 10 1 70 1 91 450 10 1 70 1 101 450 10 1 70 1 111 450 10 1 70 1 121 450 10 1 70 1 126 450 10 1 70 1 141 450 10 1 70 1 141 450 10 1 70 1 151 450 10 1 70 1 151 450 10 1 70 1 151 450 10 1 70	184613201 184613202 184613203 184613204 184613205 184613206 184613207 184613208 184613209 184613210 184613211
A 61 450 10 1 70 A 66 450 10 1 70 A 71 450 10 1 70 A 81 450 10 1 70 A 86 450 10 1 70 A 91 450 10 1 70 A 101 450 10 1 70 A 111 450 10 1 70 A 121 450 10 1 70 A 126 450 10 1 70 A 131 450 10 1 70 A 141 450 10 1 70 A 151 450 10 1 70 <td>184613203 184613204 184613205 184613206 184613207 184613208 184613209</td>	184613203 184613204 184613205 184613206 184613207 184613208 184613209
A 66 450 10 1 70 A 71 450 10 1 70 A 76 450 10 1 70 A 81 450 10 1 70 A 91 450 10 1 70 A 101 450 10 1 70 A 111 450 10 1 70 A 121 450 10 1 70 A 126 450 10 1 70 A 131 450 10 1 70 A 141 450 10 1 70 A 151 450 10 1 70	184613204 184613205 184613206 184613207 184613208 184613209
1 71 450 10 1 70 1 76 450 10 1 70 1 81 450 10 1 70 1 86 450 10 1 70 1 91 450 10 1 70 1 101 450 10 1 70 1 111 450 10 1 70 1 121 450 10 1 70 1 126 450 10 1 70 1 131 450 10 1 70 1 141 450 10 1 70 1 151 450 10 1 70 1 161 450 10 1 70	184613205 184613206 184613207 184613208 184613209 184613210
76 450 10 1 70 81 450 10 1 70 86 450 10 1 70 101 450 10 1 70 101 450 10 1 70 101 450 10 1 70 111 450 10 1 70 121 450 10 1 70 126 450 10 1 70 131 450 10 1 70 141 450 10 1 70 151 450 10 1 70 161 450 10 1 70	184613206 184613207 184613208 184613209 184613210
A 81 450 10 1 70 A 86 450 10 1 70 A 91 450 10 1 70 A 101 450 10 1 70 A 111 450 10 1 70 A 121 450 10 1 70 A 126 450 10 1 70 A 131 450 10 1 70 A 141 450 10 1 70 A 151 450 10 1 70 A 161 450 10 1 70	184613207 184613208 184613209 184613210
A 86 450 10 1 70 A 91 450 10 1 70 A 101 450 10 1 70 A 110 450 10 1 70 A 121 450 10 1 70 A 126 450 10 1 70 A 131 450 10 1 70 A 141 450 10 1 70 A 151 450 10 1 70 A 161 450 10 1 70	184613208 184613209 184613210
101 450 10 1 70 101 450 10 1 70 106 450 10 1 70 111 450 10 1 70 121 450 10 1 70 126 450 10 1 70 131 450 10 1 70 141 450 10 1 70 151 450 10 1 70 161 450 10 1 70	184613209 184613210
101 450 10 1 70 106 450 10 1 70 111 450 10 1 70 121 450 10 1 70 126 450 10 1 70 131 450 10 1 70 141 450 10 1 70 151 450 10 1 70 161 450 10 1 70	184613210
106 450 10 1 70 111 450 10 1 70 121 450 10 1 70 126 450 10 1 70 131 450 10 1 70 141 450 10 1 70 151 450 10 1 70 161 450 10 1 70	
111 450 10 1 70 121 450 10 1 70 126 450 10 1 70 131 450 10 1 70 141 450 10 1 70 151 450 10 1 70 161 450 10 1 70	184613211
121 450 10 1 70 126 450 10 1 70 131 450 10 1 70 141 450 10 1 70 151 450 10 1 70 161 450 10 1 70	
126 450 10 1 70 131 450 10 1 70 141 450 10 1 70 151 450 10 1 70 161 450 10 1 70	184613212
131 450 10 1 70 141 450 10 1 70 151 450 10 1 70 161 450 10 1 70	184613213
1 141 450 10 1 70 1 151 450 10 1 70 1 161 450 10 1 70	184613214
151 450 10 1 70 161 450 10 1 70	184613215
161 450 10 1 70	184613216
	184613217
41	184613218
<u> </u>	184613219
181 450 10 1 70	184613220
1.	184613221*
201 450 10 1 70	184613222
4.	184613223
10	184613252
4.	184613224
4.	184613253*
300 450 10 1 70	



Dimensions Key: DIA = Diameter

* Made to order

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DRILLING CORE BITS FOR CONCRETE

CLASSIC CB BETON

- Useful length: 450mm
- Connection: 1 ¼" UNC female thread
- Applications: for concrete and masonry walls
- Core drill with brazed segments
- Good value for money







MACHINES	0D / ID* (mm)	SEGMENT L/W/H(MM)	SEGMENT HEIGHT (mm)	ART NO.
<u> </u>	52/47	24/2.6/10	4	70184641409
<u>/</u> 1	62/57	24/2.6/10	4	70184641410
<u>/</u> 1	72/67	24/2.6/10	5	70184641411
<u>/</u> 1	82/77	24/2.6/10	6	70184641412
<u>/</u> 1	92/87	24/2.6/10	7	70184641413
<u>/</u> 1	102/97	24/2.6/10	8	70184641415
<u>/</u> 1	112/107	24/2.6/10	8	70184641416
<u>/</u> 1	122/117	24/2.6/10	9	70184641417
<u>/</u>	132/127	24/2.6/10	9	70184641419

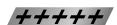


^{*} OD / ID: Outer Diameter / Inner Diameter.





EXTREME CB UNIVERSAL #++++



• Useful length: 150mm

• Connection: M16 female thread

• New swirled core for reduced friction and

improved dust removal

• For dry-drilling of non-reinforced masonry walls, poroton, concrete blocks and abrasive materials









MACHINES	DIA (mm)	USEFUL LENGTH (mm)	SEGMENT HEIGHT (mm)	PK QTY	ART NO.
Marin .	52	150	7	1	70184601792
Marin .	65	150	7	1	70184601793
- Tom	82	150	7	1	70184601794
- Tom	91	150	7	1	70184601874
Par .	102	150	7	1	70184601795
- Tom	107	150	7	1	70184601796
- Tom	117	150	7	1	70184601797
- Tom	127	150	7	1	70184601798
P	152	150	7	1	70184601799
P	162	150	7	1	70184601800
No.	202	150	7	1	70184601875

Dimensions Key: DIA = Diameter



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CLASSIC CB UNIVERSAL



- Useful length: 150mm (300mm for diam 28mm)
- Connection: 1/2" BSP Female
- Conical connection shape to improve the mounting of the corebit
- Reduced vibration, increased safety and better comfort
- Easier core extraction
- Optimised for the best balance between drilling speed, product life and comfort







MACHINES	DIA (mm)	USEFUL LENGTH (mm)	SEGMENT HEIGHT (mm)	PK QTY	ART NO.
	28	150	7	1	70184620351
- Para	35	150	7	1	70184694483
- Para	38	150	7	1	70184620352
- Para	45	150	7	1	70184694484
- Para	52	150	7	1	70184620353
· ·	55	150	7	1	70184694485
· ·	65	150	7	1	70184640268
- Para	68	150	7	1	70184694486
- Para	78	150	7	1	70184620354
- Para	105	150	7	1	70184694487
- Para	107	150	7	1	70184620355
· Para	117	150	7	1	70184620356
· Para	120	150	7	1	70184694488
· Para	127	150	7	1	70184620357
· ·	128	150	7	1	70184620358
Para .	132	150	7	1	70184694489



CLASSIC DS



- Useful length: 60mm (300mm for diam 28mm)
- Connection: M16 Female
- Application: medium-hard building materials
- Laser-welded segmented drill bit for handheld drilling. Suitable for dry drilling of electrical sockets and switches
- Good value for money













CLASSIC CB UNIVERSAL PLUMBER KIT

- Dry drilling is a fairly simple process requiring a drill motor of min 800W equipped with a clutch. Power drills or drilling motors with three jaw chucks, SDS and ½" BSP fittings can all be used with Norton dry diamond cores once the correct adaptor has been chosen.
- Accessories like length extensions or dustswivel can also be fitted











	MACHINES DESCR	RIPTION	ITEM No.	EAN
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CLASSIC CB UNIVERSAL DRY DIAMOND CORE 5-SET Containing : 38mm, 52mm, 65mm, 117mm, 127mm Cores, 1 x Hex, 1 x SDS ½" Male Adaptor, 1 x Ejector Drift, 1 x A Taper Masonry Drill, 1 x 200mm Extention ½" Male-Female, ½"-½" Male-Male adaptor.

70184640014

5450248453178

DESCRIPTION	DIAMETER	CONNECTION	LENGTH	ITEM No.
Classic CB Universal core bit	38	1/2" Female	150mm	70184620352
Classic CB Universal core bit	52	1/2" Female	150mm	70184620353
Classic CB Universal core bit	65	1/2" Female	150mm	70184640268
Classic CB Universal core bit	117	1/2" Female	150mm	70184620356
Classic CB Universal core bit	127	1/2" Female	150mm	70184620357
HEX - 1/2" Male adaptor	-	-	-	310011349
SDS Male - 1/2" Male adaptor	-	-	-	310012391
Ejector Drift	-	-	-	310011351
Taper Masonry drill	-	-	-	310011347
200mm extention 1/2" Male - 1/2" Female	-	-	-	310004578
1/2" Male - 1/2" Male adaptor	-	-	-	310012389

MACHINES DESCRIPTION ITEM No. EAN



CLASSIC CB UNIVERSAL DRY DIAMOND CORE 5-SET
Containing: 35mm, 45mm, 55mm, 68mm, 105mm Cores, 1 x Hex,
1 x SDS ½" Male Adaptor, 1 x Ejector Drift, 1 x A Taper Masonry Drill,
1 x 200mm Extention ½" Male-Female, ½"-½" Male-Male adaptor.

70184642767

5450248501374

DESCRIPTION	DIAMETER	CONNECTION	LENGTH	ITEM No.
Classic CB Universal core bit	35	1/2" Female	150mm	70184694483
Classic CB Universal core bit	45	1/2" Female	150mm	70184694484
Classic CB Universal core bit	55	1/2" Female	150mm	70184694485
Classic CB Universal core bit	68	1/2" Female	150mm	70184694486
Classic CB Universal core bit	105	1/2" Female	150mm	70184694487
HEX - 1/2" Male adaptor	-	-	-	310011349
SDS Male - 1/2" Male adaptor	-	-	-	310012391
Ejector Drift	-	-	-	310011351
Taper Masonry drill	-	-	-	310011347
200mm extention 1/2" Male - 1/2" Female	-	-	-	310004578

All above Dry Core Bits have $\frac{1}{2}$ " BSP female back end fitting.







SDS Male - 1/2" MALE ADAPTOR



EJECTOR DRIFT



TAPER MASONRY DRILL



200mm EXTENTION 1/2" MALE - 1/2" FEMALE

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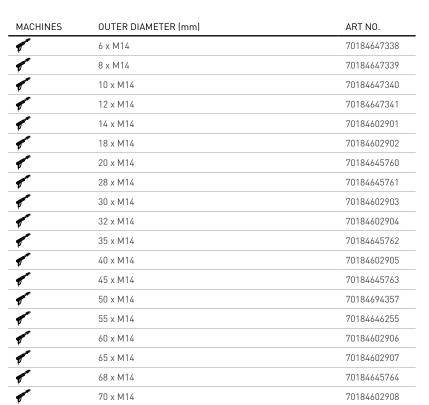
EXTREME VB DRY +++++

- Connection: M14 for fitting directly onto angle grinders
- Vacuum-brazed diamond drills designed for dry-drilling of hard ceramic tiles and natural stones.















MACHINES	OUTER DIAMETER (mm)	ART NO.
Marin .	75 x M14	70184602909
· ·	82 x M14	70184645765
· ·	102 x M14	70184602119
· ·	107 x M14	70184602120
Marin .	132 x M14	70184602121
gr.	Suitcase pack containing dia. 20, 28, 35, 50, 68mm + mounting wrench	70184694328
gr.	Suitcase pack containing dia. 6/8/10/12/35/45/68 + centering device	70184694419
8	Suitcase pack containing dia. 20, 35, 40, 68mm + mount- ing wrench (only EN and DE languages)	70184601112



CLASSIC VB DRY



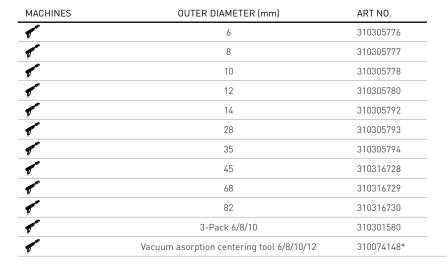
- Connection: Ø 10mm connection for 3-jaw chuck power drills.
- Application: For dry or wet drilling







Electroplated diamond drills designed for
drilling all types of tiles found in the industry,
will also give outstanding performance on hard
and brittle materials such as marble, granite
and porcelain.





* Available on request

ACCESSORIES







MACHINES	DESCRIPTION	ART NO.
Same.	Centering device for small diameters up to 28mm	310491177
No.	Centering device for diameters up to 90mm	70184645766
The same of the sa	M14-Hex adaptor	310464939











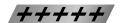
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ASPHALT & ABRASIVE MATERIALS

Discover our core bits specially designed for drilling asphalt, asphalt over concrete, green concrete and abrasive materials. To be used on powerful drilling machines.

EXTREME CB ASPHALT #++++



- Useful length: 450mm.
- Connection: 1" 1/4 Female.
- Applications: For roads and pavements.
- High performance, laser welded core bit ideal for abrasive materials and powerful machines.
- Featuring fluted segments which provide speed and extended product life.







	ART NO.	
3.8x12x24	70184640578*	
3.8x12x24	70184630755*	
3.8x12x24	70184640579*	
3.8x12x24	70184630759*	
3.8x12x24	70184630762*	
3.8x12x24	70184630768*	
3.8x12x24	70184630769*	
3.8x12x24	70184630771*	
3.8x12x24	70184630772*	
	3.8x12x24 3.8x12x24 3.8x12x24 3.8x12x24 3.8x12x24 3.8x12x24 3.8x12x24	3.8x12x24 70184630755* 3.8x12x24 70184640579* 3.8x12x24 70184630759* 3.8x12x24 70184630762* 3.8x12x24 70184630768* 3.8x12x24 70184630769* 3.8x12x24 70184630771*

^{*} OD / ID: Outer Diameter / Inner Diameter.





	OD / ID*	SEGMENT	
MACHINES	(mm)	L/W/H(MM)	ART NO.
	117/109	3.8x12x24	70184630773*
	127/119	4.2x12x24	70184630774*
	132/124	4.2x12x24	70184630775*
	152/144	4.2x12x24	70184630776*
	162/154	4.2x12x24	70184630777*
	178/170	4.2x12x24	70184630778*
	187/179	4.2x12x24	70184630779*
	202/193	4.5x12x24	70184630780*
	212/203	4.5x12x24	70184630781*
	225/216	4.5x12x24	70184630782*
	250/241	4.5x12x24	70184630783*
	275/266	4.5x12x24	70184630822*
	300/290	5x12x24	70184630808*
	325/315	5x12x24	70184630810*
	350/340	5x12x24	70184630811*
	400/390	5x12x24	70184630833*
	450/440	5x12x24	70184630812*
	500/490	5x12x24	70184640073*
	550/540	5x12x24	70184640581*
	600/590	5x12x24	70184640582*
	700/690	5x12x24	70184640583*



* Available on request

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^{*} OD / ID: Outer Diameter / Inner Diameter.

TECHNICAL INFORMATION

OPERATING SPEEDS

MAXIMUM OPERA	ATING SPEED	
DIAMETER (mm)	MAX M/S	MAX RPM
100	80	15300
115	80	13300
125	80	12250
150	80	10200
180	80	8500
200	80	7650
230	80	6650
250	80	6100
300	100	6400
350	100	5500
400	100	4800
450	63	2700

NEVER EXCEED THE MAXIMUM OPERATING SPEEDS:

- Hand held blades ø ≤ 230mm: 80m/s
 Hand held blades ø > 230mm: 100m/s
- Others: 63m/s

PERSONAL PROTECTION

Safety goggles, ear defenders, safety gloves, dust masks and, if conditions are severe, additional face protection. Leather aprons and safety shoes must be worn.



Wear a mask (ISO 7010)



Wear protective gloves (ISO 7010)



protection (ISO 7010)



protection (ISO 7010)



Refer to instruction manual/ booklet (ISO 7010)



Do not use for face grinding (ISO 7010)



Do not use for wet grinding (ISO 7010)



Only suitable for wet grinding



TROUBLESHOOTING

DIAMOND BLADE DOES NOT CUT

Cause	The segments are too hard for the material
Solution	Check if the blade is suitable for the material
Cause	The segments have become blunt
Solution	Sharpen the segments by cutting an abrasive material (e.g. sandstone)
Cause	Insufficient machine power
Solution	Check the voltage, machine power and filters

EXCESSIVE WEAR

Cause	The segment is too soft for the material (e.g. if a blade for hard material is used to cut abrasive material)
Solution	Check if the diamond blade is suitable for the material

CRACKING OF STEEL CENTRE

Cause	The segments are too hard for the material
Solution	Check if the blade is suitable for the material
Cause	Excessive cutting pressure, overheating, material slippage, twisting or jamming in the cut
Solution	Leave the blade to do the work, do not exert too much pressure and allow the blade to cool regularly by leaving it to rotate away from the workpiece for a few seconds

LOOSENING OR CRACKING OF SEGMENTS

Cause	The segments are too hard for the material. This results in the diamond blade bouncing in the cut resulting in cracking segments
Solution	Check if the diamond blade is suitable for the material

SCORCHING OF SEGMENTS

Cause	Excessive cutting pressure causing overheating. This is easily recognisable from the blue colouring where the segments and the steel core are welded together
Solution	Allow the diamond blade to cool regularly by rotating the blade away from the workpiece for a few seconds
Cause	The segments are too hard for the material
Solution	Check if the diamond blade is suitable for the material. Alternatively use less cutting pressure and let the blade do the work

UNDERCUTTING

Cause	Undercutting occurs when the steel core wears faster than the segment, i.e. where the segment and steel core meet. This is usually caused by materials that are highly abrasive. The cutting debris is not removed sufficiently and the steel core is affected. Undercutting is certain to occur if a diamond blade for hard materials is used to cut abrasive materials
Solution	Use a diamond blade suitable for the specific material

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SAFETY ADVICE

D₀s

Read the safety instructions provided by the abrasives and equipment supplier

Store abrasives in dry, frost-free conditions avoiding wide variations in temperature

Ensure that the product is suitable for its purpose

Handle, store and transport products with care

Examine all products before mounting and periodically during blade use for possible defects or damage (core flatness, fatigue cracks, undercutting, arbor hole damage...)

Check that correct mounting devices are used and that they are clean, undistorted and free from burrs

Ensure that work rests are properly adjusted and secure

Always use a correctly designed and adjusted guard (on the blade and belts)

Ensure that the workpiece is secure

Wear appropriate personal protective equipment at all times

Avoid clogging and uneven wear to ensure that the product is working efficiently

Ensure accordance between product direction arrow / machine rotation

Ensure that all machines using abrasives meet the requirements of the current European machinery directives-CE

Be aware of the hazards likely during the use of abrasives and observe the recommended precautions to be taken:

- Bodily contact with the abrasive product at operating speed
- Injury resulting from product breakage during use
- Grinding debris, sparks, fumes and dust generated by the grinding process
- Noise
- Vibration

DON'Ts

Allow untrained people to use abrasives

Use a product that is damaged or one which has been dropped

Use a product if it cannot be properly identified

Use a machine that is not in good working order or one with defective parts

Force the abrasive onto the mounting device or modify the size of the mounting hole

Exceed the maximum operating speed marked on the product

Apply shock or excessive force to the product or let it overheat

Use mounting flanges which are not clean and flat

Tighten the mounting device excessively

Start the machine until the guard is in place and fastened securely

Continue to use a product if vibration occurs.

Grind on the part of the product which is not designed for the operation

Start the machine with the workpiece in contact with the abrasive product

Grind material for which the product is not designed

Stop the abrasive by applying pressure to its surface, let it stop naturally

Exceed permissible rotation speeds: refer to values engraved on product

Use blades with missing segments or core cracks

Use dry products marked for wet use

Wear loose clothing, ties and jewellery



SAW BLADES

Getting to Know our Product Ranges Blades for Wood & Composites Blades for Multimaterial 386 Blades for Veneer & Laminates 390 Blades for Aluminium 395 398 400

U⊔

GETTING TO KNOW OUR PRODUCT RANGES

The Norton Clipper product range offers a solution for four key material applications, with a number of options available depending on the machine and the cut required. From cutting Wood & Composites on a Table Saw, to reciprocating saw, we have you covered.

RECIPROCATING SAWS



REFERENCE NUMBER	PRODUCT NAME	DESCRIPTION	WORKING LENGTH (MM)	OVERALL LENGTH (MM)	WOOD & COMPOSITES	MULTI- MATERIALS	VENEER & LAMINATE	ALUMINIUM
70184608354	S1543HM	RECIP BLADE TCT 240 S1543HM	220	240		Δ		
70184608355	S 1243 HM	RECIP BLADE TCT 304 S1243HM	260	304		Δ		
70184608356	S 2243 HM	RECIP BLADE TCT 455 S2243HM	415	455		Δ		
70184608357	S 1122 HF	RECIP BLADE BIM 228 S1122HF	208	228		ΔΙ		
70184608358	S 1411 DF	RECIP BLADE BIM 300 S1411DF	280	300		ΔΟ		
70184608359	S 1111 DF	RECIP BLADE BIM 228 S1111DF	208	228		Δ		
70184608360	S 1542 K	RECIP BLADE HCS 240 S1542K	220	240	Δ			
70184608361	S 1131 L	RECIP BLADE HCS 240 S1131L	220	240	Δ			
70184608362	S 2345 X	RECIP BLADE HCS 200 S2345X	180	200	+			
70184608363	S 644 D	RECIP BLADE HCS 152 S644D	132	152	+0			
70184608364	S 922 HF	RECIP BLADE BIM 152 S922HF	132	152		Δ		
70184608365	S610VF	RECIP BLADE BIM/CO 152 S610VF	132	152		Δ		
70184608366	S1210VF	RECIP BLADE BIM/CO 300 S1210VF	280	300		Δ		

KIT



REFERENCE NUMBER	PRODUCT NAME	DESCRIPTION	WORKING LENGTH (MM)	OVERALL LENGTH (MM)	WOOD & COMPOSITES	VENEER & LAMINATE	ALUMINIUM
	T144DP (2x)		76	100	ΔΙ		
	T144D (2x)	KIT 10 HCS JIGSAW BLADES	76	100	ΔΙ		
70184608383	T101B (2x)		76	100	++		
	T244D (2x)		76	100	ΔΟ		
	T101A0 (2x)		50	76	+0		
70184608384		KIT 2 TCT PLANNER KNIFES 82mm		82	+		

KEY

Complete A Complete
 Fast Cut
 Curved Cut
 Clean Cut
 Straight Cut
 Cross Cutting
 Extra Clean Cut





JIGSAW

REFERENCE NUMBER	PRODUCT NAME	DESCRIPTION	WORKING LENGTH (MM)	OVERALL LENGTH (MM)	WOOD & COMPOSITES	MULTI- MATERIALS	VENEER & LAMINATE	ALUMINIUM
70184608367	T 344 D	JIGSAW BLADE HCS 132 T344D	110	132	ΔΙ			
70184608368	T 234 X	JIGSAW BLADE HCS 116 T234X	90	116	∆+			
70184608369	T 301 CD	JIGSAW BLADE HCS 116 T301CD	90	116	10+			
t70184608370	T 308 BF	JIGSAW BLADE BIM 117 T308BF	91	117	++			
70184608371	T 101 B	JIGSAW BLADE HCS 100 T101B	76	100	++			
70184608372	T 144 DP	JIGSAW BLADE HCS 100 T144DP	76	100	∆+			
70184608373	T 101 A0	JIGSAW BLADE HCS 76 T101A0	50	76	+0			
70184608374	T 101 BR	JIGSAW BLADE HCS 100 T101BR	76	100	++			
70184608375	T 244 D	JIGSAW BLADE HCS 100 T244D	76	100	ΔΟ			
70184608376	T 119 BO	JIGSAW BLADE HCS 76 T119B0	50	76	ΔΟ			
70184608377	T 308 BFP	JIGSAW BLADE BIM 100 T308BFP		100	++			
70184608378	T 119 B	JIGSAW BLADE HCS 76 T119B	50	76	ΔΙ			
70184608379	T 101 BIF	JIGSAW BLADE BIM 82 T101BIF	56	82			++	
70184608380	T 218 A	JIGSAW BLADE HCS 76 T218A	50	76				+0
70184608381	T 118 B	JIGSAW BLADE HCS 76 T118B	50	76				+1
70184608382	T 127 D	JIGSAW BLADE HCS 100 T127D	76	100				∆+1

MITRE SAW



REFERENCE NUMBER	DIAMETER (MM)	DIAMETER X TOOTH DIAMETER X BORE (MM)	TOOTH NUMBER / TOOTH SHAPE		WOOD & IMPOSITE	ΕS	MULTI- MATERIALS	VENEER & LAMINATE	ALUMINIUM
70184608088	160	160 x 2.6/1.6 x 20	48/ATB Neg		+	х			
70184608096	190	190 x 2.8/1.8 x 30	48/ATB Neg	Δ-	+	X			
70184608135	190	190 x 2.6/1.8 x 30	60/TCG Neg						++
70184608099	216	216 x 2.8/1.8 x 30	48/ATB Neg	Δ-	+	X			
70184608056	216	216 x 2.8/1.8 x 30	24/ATB Neg	Δ-					
70184608057	216	216 x 2.3/1.8 x 30	36/ATB Neg	Δ-		X			
70184608136	216	216 x 2.6/1.8 x 30	80/TCG Neg						++
70184608137	230	230 x 2.8/2.0 x 30	80 TCG Neg						++
70184608065	250	250 x 3.2/2.2 x 30	24/ATB Neg	Δ-					
70184608138	250	250 x 2.8/2.0 x 30	80/TCG Neg						++
70184608114	255	255 x 3.2/2.2 x 30	60/ATB Neg	Δ-	+	X			
70184608067	255	255 x 3.2/2.2 x 30	24/ATB Neg	Δ-					
70184608068	255	255 x 2.6/1.8 x 30/16	24/ATB Neg	Δ-					
70184608139	255	255 x 3.0/2.2 x 30	80/TCG Neg						++
70184608115	260	260 x 2.6/1.8 x 30	48/ ATB Neg	Δ-	+	X			
70184608116	260	260 x 2.6/1.8 x 30	60/ATB Neg	Δ-	+	x			
70184608124	305	305 x 3.2/1.2 x 30	60/ATB Neg	Δ-	+	x			
70184608072	305	305 x 3.2/2.2 x 30	36/ATB Neg	Δ-					
70184608140	305	305 x 3.0/2.2 x 30	96/TCG Neg						++

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SAW RI ADF

CIRCULAR & TABLE SAW





10184689302	REFERENCE NUMBER	DIAMETER (MM)	DIAMETER X TOOTH DIA X BORE (MM)	TOOTH N° /TOOTH SHAPE	WOOD & COMPOSITES	MULTI- MATERIALS	VENEER & LAMINATE	ALUMINIUM
701846888033 125 125 x 2.6/1.6 x 20/1.6 d 20/1.8	70184608030	100	100 x 2.6/1.6 x 20	24/ATB	<u> </u>			
70184688033 130 130 × 2 & 1.6 × 2011	70184608032	120	120 x 1.8/1.2 x 20	24/ATB	<u></u>			
70184688835 150 150 x 2 s/1.6 x 30/20 24/ATB	70184608033	125	125 x 2.6/1.6 x 20	24/ATB	<u> </u>			
T0184689336 150 150 x 3 x 2 x 2 x 3 x 3 x 2 x 3 x 3 x 3 x 3	70184608034	130	130 x 2.6/1.6 x 20/16	24/ATB	X			
T01846888337 150	70184608035	150	150 x 2.6/1.6 x 30/20	24/ATB	<u> </u>			
T01846808039 160	70184608036	150	150 x 3.6/2.6 x 20	24/ATB	<u></u>			
Total Tot	70184608037	150	150 x 3.6/2.6 x 30	24/ATB	<u> </u>			
70184688040 160	70184608038	160	160 x 2.6/1.6 x 20	16/ATB	Δ-			
701844698041 160 160 x 2.2/1.4 x 30/20 24/ATB Δ — X 701844698042 160 160 x 2.6/1.6 x 20 24/ATB Δ — X 701844698043 160 160 x 2.6/1.6 x 30/20 24/ATB Δ — X 701844698044 140 160 x 2.8/1.8 x 20 24/ATB Δ — X 70184698045 165 165 x 1.8/1.2 x 20 24/ATB Δ — X 70184698046 165 165 x 2.6/1.6 x 30/20/16 24/ATB Δ — X 70184698047 170 170 x 2.6/1.8 x 30 24/ATB Δ — X 70184698049 180 180 x 2.6/1.8 x 30/20/16 24/ATB Δ — X 70184698050 180 180 x 2.6/1.8 x 30/20/16 24/ATB Δ — X 70184698051 180 180 x 2.6/1.8 x 30/20/16 24/ATB Δ — X 70184698052 190 190 x 2.8/1.8 x 30 24/ATB Δ — X 70184698052 190 190 x 2.8/1.8 x 30 24/ATB Δ — X 70184698052 210 210 x 2.8/1.8 x 30 24/ATB Δ — X 70184698052	70184608039	160	160 x 2.6/1.6 x 16	24/ATB	<u> </u>			
70184408042 160 160 x 2.6/1.6 x 30/20 24/ATB Δ- X 70184608043 160 160 x 2.6/1.6 x 30/20 24/ATB Δ- X 70184608045 165 165 x 1.8/1.2 x 20 24/ATB Δ- X 70184608045 165 165 x 2.6/1.6 x 20 24/ATB Δ- X 70184608047 170 170 x 2.6/1.6 x 30/20/16 24/ATB Δ- X 70184608047 170 170 x 2.6/1.6 x 30/20/16 24/ATB Δ- X 70184608049 180 180 x 2.8/1.8 x 30/20/16 24/ATB Δ- X 70184608051 185 185 x 1.8/1.2 x 30/20/16 24/ATB Δ- X 70184608052 190 190 x 2.8/1.8 x 30/20/16 24/ATB Δ- X 70184608052 190 190 x 2.8/1.8 x 30/20/16 24/ATB Δ- X 70184608052 190 190 x 2.8/1.8 x 30 24/ATB Δ- X 70184608054 210 210 x 2.8/1.8 x 30 36/ATB Δ- X	70184608040	160	160 x1.8/1.2 x 20	24/ATB	<u> </u>			
70184668043 160 160 x 2.6/1.6 x 30/20 24/ATB Δ- X 70184608044 160 160 x 2.8/1.8 x 20 24/ATB Δ- X 70184608046 165 165 x 1.8/1.2 x 20 24/ATB Δ- X 70184608046 165 165 x 2.6/1.6 x 20/20/16 24/ATB Δ- X 70184608047 170 170 x 2.6/1.8 x 30/20/16 24/ATB Δ- X 70184608047 180 180 x 2.8/1.8 x 30 24/ATB Δ- X 70184608049 180 180 x 2.8/1.8 x 30 30/ATB Δ- X 70184608050 180 180 x 2.8/1.8 x 30 30/ATB Δ- X 70184608051 185 1.8/1.8 x 30/20/16 24/ATB Δ- X 70184608052 190 190 x 2.8/1.8 x 30 36/ATB Δ- X 70184608055 210 210 x 2.8/1.8 x 30 36/ATB Δ- X 70184608054 216 216 x 2.6/1.8 x 30 46/TEB Δ- X	70184608041	160	160 x 2.2/1.6 x 30/20	24/ATB	<u> </u>			
70184608044	70184608042	160	160 x 2.6/1.6 x 20	24/ATB	<u> </u>			
70184608045 165 165 x 1.8/1.2 x 20 24/ATB △- X 70184608046 165 165 x 2.6/1.6 x 20/20/16 24/ATB △- X 70184608047 170 170 x 2.6/1.8 x 30/20/16 24/ATB △- X 70184608048 170 170 x 2.8/1.8 x 30 24/ATB △- X 70184608049 180 180 x 2.8/1.8 x 30 24/ATB △- X 70184608051 185 185 x 1.8/1.2 x 30/20/16 24/ATB △- X 70184608052 190 190 x 2.8/1.8 x 30/20/16 24/ATB △- X 70184608052 190 190 x 2.8/1.8 x 30 24/ATB △- X 70184608055 210 210 x 2.8/1.8 x 30 24/ATB △- X 70184608059 210 210 x 2.8/1.8 x 30 36/ATB △- X 70184608059 225 225 x 2.8/1.8 x 30 32/ATB △- X 70184608059 225 225 x 2.8/1.8 x 30 36/ATB △- X	70184608043	160	160 x 2.6/1.6 x 30/20	24/ATB	<u> </u>			
70184608046 165 165 x 2.6/1.6 x 20 24/ATB Δ- X 70184608047 170 170 x 2.6/1.6 x 30/20/16 24/ATB Δ- X 70184608048 170 170 x 2.8/1.8 x 30 24/ATB Δ- X 70184608050 180 180 x 2.8/1.8 x 30 30/ATB Δ- X 70184608051 185 1.85 x 1.8/1.2 x 30/20/16 24/ATB Δ- X 70184608052 190 190 x 2.8/1.8 x 30/20/16 24/ATB Δ- X 70184608054 210 210 x 2.8/1.8 x 30 24/ATB Δ- X 70184608055 210 210 x 2.8/1.8 x 30 36/ATB Δ- X 70184608054 216 216 x 2.6/1.8 x 30 60/TCG ++ ++ 701846080142 216 216 x 2.6/1.8 x 30 60/TCG ++ ++ 70184608059 225 225 x 2.8/1.8 x 30 36/ATB Δ- X 70184608059 225 225 x 2.8/1.8 x 30 36/ATB Δ- X	70184608044	160	160 x 2.8/1.8 x 20	24/ATB	<u> </u>			
70184608047 170 170 x 2.6/1.6 x 30/20/16 24/ATB Δ- X 70184608048 170 170 x 2.6/1.8 x 30 24/ATB Δ- X 70184608049 180 180 x 2.8/1.8 x 30/20/16 24/ATB Δ- X 70184608051 185 185 x 1.8/1.2 x 30/20/16 24/ATB Δ- X 70184608052 190 190 x 2.8/1.8 x 30/20/16 24/ATB Δ- X 70184608054 210 210 x 2.8/1.8 x 30 24/ATB Δ- X 70184608055 210 210 x 2.8/1.8 x 30 36/ATB Δ- X 70184608142 216 216 x 2.6/1.8 x 30 60/TCG ++ ++ 70184608133 216 216 x 2.8/1.8 x 30 24/ATB Δ- X 70184608133 216 216 x 2.8/1.8 x 30 24/ATB Δ- X 70184608142 230 228/1.8 x 30 24/ATB Δ- X 70184608081 230 230 x 2.8/1.8 x 30 36/ATB Δ- X <tr< td=""><td>70184608045</td><td>165</td><td>165 x 1.8/1.2 x 20</td><td>24/ATB</td><td><u></u></td><td></td><td></td><td></td></tr<>	70184608045	165	165 x 1.8/1.2 x 20	24/ATB	<u></u>			
70184608048 170 170 × 2.8/1.8 × 30 24/ATB Δ — X 70184608049 180 180 × 2.8/1.8 × 30/20/16 24/ATB Δ — X 70184608050 180 180 × 2.8/1.8 × 30 30/ATB Δ — X 70184608051 185 185 × 1.8/1.2 × 30/20/16 24/ATB Δ — X 70184608052 170 190 × 2.8/1.8 × 30 24/ATB Δ — X 70184608054 210 210 × 2.8/1.8 × 30 24/ATB Δ — X 70184608055 210 210 × 2.8/1.8 × 30 36/ATB Δ — X 70184608142 216 216 × 2.3/1.8 × 30 60/TCG ++ 70184608143 216 216 × 2.3/1.8 × 30 24/ATB Δ — X 70184608059 225 225 × 2.6/1.6 × 30 32/ATB Δ — X 70184608061 230 230 × 2.8/1.8 × 30 36/ATB Δ — X 70184608062 235 225 × 2.8/1.8 × 30 36/ATB Δ — X 70184608063 235 225 × 2.8/1.8 × 30 36/ATB Δ — X 70184608064 240 <td>70184608046</td> <td>165</td> <td>165 x 2.6/1.6 x 20</td> <td>24/ATB</td> <td><u> </u></td> <td></td> <td></td> <td></td>	70184608046	165	165 x 2.6/1.6 x 20	24/ATB	<u> </u>			
70184608049 180 180 x 2.8/1.8 x 30/20/16 24/ATB Δ- X 70184608050 180 180 x 2.8/1.8 x 30 30/ATB Δ- X 70184608051 185 185 x 1.8/1.2 x 30/20/16 24/ATB Δ- X 70184608052 190 190 x 2.8/1.8 x 30 24/ATB Δ- X 70184608054 210 210 x 2.8/1.8 x 30 24/ATB Δ- X 70184608055 210 210 x 2.8/1.8 x 30 36/ATB Δ- X 70184608142 216 216 x 2.6/1.8 x 30 60/TCG ++ ** 70184608143 216 216 x 2.6/1.8 x 30 60/TCG ++ ** 70184608143 216 216 x 2.3/1.8 x 30 24/ATB Δ- X 70184608059 225 225 x 2.6/1.6 x 30 32/ATB Δ- X 70184608060 230 230 x 2.8/1.8 x 30 24/ATB Δ- X 70184608060 230 235 x 2.8/1.8 x 30 36/ATB Δ- X	70184608047	170	170 x 2.6/1.6 x 30/20/16	24/ATB	<u> </u>			
70184608050 180 180 x 2.8/1.8 x 30 30/ATB Δ- X 70184608051 185 185 x 1.8/1.2 x 30/20/16 24/ATB Δ- X 70184608052 190 190 x 2.8/1.8 x 30/20/16 24/ATB Δ- X 70184608054 210 210 x 2.8/1.8 x 30 24/ATB Δ- X 70184608142 216 216 x 2.8/1.8 x 30 60/TCG ++ ++ 70184608143 216 216 x 2.3/1.8 x 30 60/TCG ++ ++ 70184608058 220 220 x 2.8/1.8 x 30 32/ATB Δ- X 70184608059 225 225 x 2.6/1.6 x 30 32/ATB Δ- X 70184608061 230 230 x 2.8/1.8 x 30 36/ATB Δ- X 70184608060 230 230 x 2.8/1.8 x 30 36/ATB Δ- X 70184608062 235 235 x 2.8/1.8 x 30/16 24/ATB Δ- X 70184608064 240 240 x 3.0/2.0 x 30 36/ATB Δ- X	70184608048	170	170 x 2.8/1.8 x 30	24/ATB	<u> </u>			
70184698051 185 185 x 1.8/1.2 x 30/20/16 24/ATB Δ- X 70184698052 190 190 x 2.8/1.8 x 30/20/16 24/ATB Δ- X 70184698052 210 210 x 2.8/1.8 x 30 24/ATB Δ- X 70184698055 210 210 x 2.8/1.8 x 30 36/ATB Δ- X 70184698142 216 216 x 2.6/1.8 x 30 60/TCG ++ ++ 70184698143 216 216 x 2.6/1.8 x 30 60/TCG ++ ++ 70184698056 220 220 x 2.8/1.8 x 30 24/ATB Δ- X 70184698061 230 230 x 2.8/1.8 x 30 36/ATB Δ- X 70184698061 230 230 x 2.8/1.8 x 30 36/ATB Δ- X 70184698062 230 230 x 2.8/1.8 x 30 36/ATB Δ- X 70184698062 235 235 x 2.8/1.8 x 30/16 24/ATB Δ- X 70184698064 240 240 x 3.0/2.0 x 30 36/ATB Δ- X	70184608049	180	180 x 2.8/1.8 x 30/20/16	24/ATB	<u></u> ∆– x			
70184608052 190 190 x 2.8/1.8 x 30/20/16 24/ATB Δ- X 70184608054 210 210 x 2.8/1.8 x 30 24/ATB Δ- X 70184608055 210 210 x 2.8/1.8 x 30 36/ATB Δ- X 70184608142 216 216 x 2.6/1.8 x 30 60/TCG ++ 70184608143 216 216 x 2.3/1.8 x 30 60/TCG ++ 70184608058 220 220 x 2.8/1.8 x 30 24/ATB Δ- X 70184608059 225 225 x 2.6/1.6 x 30 32/ATB Δ- X 70184608061 230 230 x 2.8/1.8 x 30 24/ATB Δ- X 70184608062 230 230 x 2.8/1.8 x 30 24/ATB Δ- X 70184608062 235 235 x 2.8/1.8 x 30/16 24/ATB Δ- X 70184608064 240 240 x 3.0/2.0 x 30 24/ATB Δ- X 70184608064 250 250 x 2.8/2.0 x 30 60/TCG ++ T 70184608064 260 <td>70184608050</td> <td>180</td> <td>180 x 2.8/1.8 x 30</td> <td>30/ATB</td> <td><u> </u></td> <td></td> <td></td> <td></td>	70184608050	180	180 x 2.8/1.8 x 30	30/ATB	<u> </u>			
70184608054 210 210 x 2.8/1.8 x 30 24/ATB Δ- X 70184608055 210 210 x 2.8/1.8 x 30 36/ATB Δ- X 70184608142 216 216 x 2.6/1.8 x 30 60/TCG ++ 70184608143 216 216 x 2.3/1.8 x 30 60/TCG ++ 70184608058 220 220 x 2.8/1.8 x 30 24/ATB Δ- X 70184608059 225 225 x 2.6/1.6 x 30 32/ATB Δ- X 70184608061 230 230 x 2.8/1.8 x 30 36/ATB Δ- X 70184608060 230 230 x 2.8/1.8 x 30 36/ATB Δ- X 70184608063 235 235 x 2.8/1.8 x 30 36/ATB Δ- X 70184608062 235 235 x 2.8/1.8 x 30/16 24/ATB Δ- X 70184608064 240 240 x 3.0/2.0 x 30 24/ATB Δ- X 70184608069 260 260 x 3.2/2.2 x 30 24/ATB Δ- X 70184608070 280	70184608051	185	185 x 1.8/1.2 x 30/20/16	24/ATB	<u></u>			
70184608055 210 210 x 2.8/1.8 x 30 36/ATB Δ- x 70184608142 216 216 x 2.6/1.8 x 30 60/TCG ++ 70184608143 216 216 x 2.3/1.8 x 30 60/TCG ++ 70184608058 220 220 x2.8/1.8 x 30 24/ATB Δ- X 70184608061 230 230 x 2.8/1.8 x 30 36/ATB Δ- X 70184608060 230 230 x 2.8/1.8 x 30 24/ATB Δ- X 70184608063 235 235 x 2.8/1.8 x 30 36/ATB Δ- X 70184608062 235 235 x 2.8/1.8 x 30/16 24/ATB Δ- X 70184608064 240 240 x 3.0/2.0 x 30 24/ATB Δ- X 70184608064 240 240 x 3.0/2.0 x 30 60/TCG ++ X 70184608067 250 250 x 2.8/2.0 x 30 60/TCG ++ X 70184608070 280 280 x 3.2/2.2 x 30 24/ATB Δ- A 70184608073 315	70184608052	190	190 x 2.8/1.8 x 30/20/16	24/ATB	<u></u>			
70184608142 216 216 x 2.6/1.8 x 30 60/TCG +++ 70184608143 216 216 x 2.3/1.8 x 30 60/TCG +++ 70184608058 220 220 x2.8/1.8 x 30 24/ATB Δ- X 70184608069 225 225 x 2.6/1.6 x 30 32/ATB Δ- X 70184608061 230 230 x 2.8/1.8 x 30 36/ATB Δ- X 70184608060 230 230 x 2.8/1.8 x 30 24/ATB Δ- X 70184608063 235 235 x 2.8/1.8 x 30/16 24/ATB Δ- X 70184608064 240 240 x 3.0/2.0 x 30 24/ATB Δ- X 70184608064 240 240 x 3.0/2.0 x 30 36/ATB Δ- X 70184608066 250 250 x 3.2/2.2 x 30 36/ATB Δ- X 70184608069 260 260 x 3.2/2.2 x 30 24/ATB Δ- 70184608071 305 305 x 3.2/2.2 x 30 24/ATB Δ- 70184608073 315 315 x 3.2/2.2 x 30 24/ATB Δ- 70184608075 355 355 x 3.2/2.4 x 30 <td>70184608054</td> <td>210</td> <td>210 x 2.8/1.8 x 30</td> <td>24/ATB</td> <td>Δ-</td> <td></td> <td></td> <td></td>	70184608054	210	210 x 2.8/1.8 x 30	24/ATB	Δ-			
70184608143 216 216 × 2.3/1.8 × 30 60/TCG ++ 70184608058 220 220 × 2.8/1.8 × 30 24/ATB Δ- X 70184608059 225 225 × 2.6/1.6 × 30 32/ATB Δ- X 70184608061 230 230 × 2.8/1.8 × 30 36/ATB Δ- X 70184608060 230 235 × 2.8/1.8 × 30 36/ATB Δ- X 70184608063 235 235 × 2.8/1.8 × 30/16 24/ATB Δ- X 70184608064 240 240 × 3.0/2.0 × 30 24/ATB Δ- X 70184608064 240 240 × 3.0/2.0 × 30 36/ATB Δ- X 70184608064 250 250 × 2.8/2.0 × 30 60/TCG ++ X 70184608064 260 260 × 3.2/2.2 × 30 24/ATB Δ- X 70184608069 260 260 × 3.2/2.2 × 30 24/ATB Δ- X 70184608070 280 280 × 3.2/2.2 × 30 24/ATB Δ- X 70184608073	70184608055	210	210 x 2.8/1.8 x 30	36/ATB	<u> </u>			
70184608058 220 220 x2.8/1.8 x 30 24/ATB Δ- X 70184608059 225 225 x 2.6/1.6 x 30 32/ATB Δ- X 70184608061 230 230 x 2.8/1.8 x 30 36/ATB Δ- X 70184608060 230 230 x 2.8/1.8 x 30 24/ATB Δ- X 70184608063 235 235 x 2.8/1.8 x 30/16 24/ATB Δ- X 70184608064 240 240 x 3.0/2.0 x 30 24/ATB Δ- X 70184608064 250 250 x 3.2/2.2 x 30 36/ATB Δ- X 70184608064 250 250 x 3.2/2.2 x 30 60/TCG ++ X 70184608145 250 250 x 3.2/2.2 x 30 24/ATB Δ- X 70184608070 280 280 x 3.2/2.2 x 30 24/ATB Δ- X 70184608071 305 305 x 3.2/2.2 x 30 24/ATB Δ- X 70184608073 315 315 x 3.2/2.2 x 30 40/ATB Δ- X 7018	70184608142	216	216 x 2.6/1.8 x 30	60/TCG			++	
70184608059 225 225 x 2.6/1.6 x 30 32/ATB Δ- X 70184608061 230 230 x 2.8/1.8 x 30 36/ATB Δ- X 70184608060 230 230 x 2.8/1.8 x 30 24/ATB Δ- X 70184608063 235 235 x 2.8/1.8 x 30/16 24/ATB Δ- X 70184608064 240 240 x 3.0/2.0 x 30 24/ATB Δ- X 70184608064 250 250 x 3.2/2.2 x 30 36/ATB Δ- X 70184608145 250 250 x 3.2/2.2 x 30 36/ATB Δ- X 70184608069 260 260 x 3.2/2.2 x 30 24/ATB Δ- 70184608070 280 280 x 3.2/2.2 x 30 24/ATB Δ- 70184608071 305 305 x 3.2/2.2 x 30 24/ATB Δ- 70184608073 315 315 x 3.2/2.2 x 30 24/ATB Δ- 70184608074 330 330 x 3.2/2.2 x 30 24/ATB Δ- 70184608076 355 355 x 3.2/2.4 x 30 24/ATB	70184608143	216	216 x 2.3/1.8 x 30	60/TCG			++	
70184608061 230 230 x 2.8/1.8 x 30 36/ATB Δ— X 70184608060 230 230 x 2.8/1.8 x 30 24/ATB Δ— X 70184608063 235 235 x 2.8/1.8 x 30/16 24/ATB Δ— X 70184608064 240 240 x 3.0/2.0 x 30 24/ATB Δ— X 70184608066 250 250 x 3.2/2.2 x 30 36/ATB Δ— X 70184608145 250 250 x 2.8/2.0 x 30 60/TCG ++ ++ 70184608070 280 280 x 3.2/2.2 x 30 24/ATB Δ— 70184608071 305 305 x 3.2/2.2 x 30 24/ATB Δ— 70184608073 315 315 x 3.2/2.2 x 30 24/ATB Δ— 70184608074 330 330 x 3.2/2.2 x 30 24/ATB Δ— 70184608075 355 355 x 3.2/2.4 x 30 24/ATB Δ— 70184608076 355 355 x 3.2/2.4 x 30 40/ATB Δ— 70184608081 125 125 x 2.6/1.6 x 20 36/ATB +	70184608058	220	220 x2.8/1.8 x 30	24/ATB	Δ-			
70184608060 230 230 x 2.8/1.8 x 30 24/ATB Δ- 70184608063 235 235 x 2.8/1.8 x 30/16 24/ATB Δ- 70184608062 235 235 x 2.8/1.8 x 30/16 24/ATB Δ- 70184608064 240 240 x 3.0/2.0 x 30 24/ATB Δ- 70184608066 250 250 x 3.2/2.2 x 30 36/ATB Δ- X 70184608145 250 250 x 2.8/2.0 x 30 60/TCG ++ ++ 70184608069 260 260 x 3.2/2.2 x 30 24/ATB Δ- 70184608071 305 305 x 3.2/2.2 x 30 24/ATB Δ- 70184608073 315 315 x 3.2/2.2 x 30 24/ATB Δ- 70184608074 330 330 x 3.2/2.2 x 30 40/ATB Δ- 70184608075 355 355 x 3.2/2.4 x 30 24/ATB Δ- 70184608076 355 355 x 3.2/2.4 x 30 40/ATB Δ- 70184608081 125 125 x 2.6/1.6 x 20 36/ATB + X 70184608082 130 130 x 2.6/1.6 x 30/20 48/ATB + X	70184608059	225	225 x 2.6/1.6 x 30	32/ATB	<u> </u>			
70184608063 235 235 x 2.8/1.8 x 30 36/ATB Δ- X 70184608062 235 235 x 2.8/1.8 x 30/16 24/ATB Δ- 70184608064 240 240 x 3.0/2.0 x 30 24/ATB Δ- 70184608066 250 250 x 3.2/2.2 x 30 36/ATB Δ- X 70184608145 250 250 x 2.8/2.0 x 30 60/TCG ++ ++ 70184608069 260 260 x 3.2/2.2 x 30 24/ATB Δ- 70184608071 305 305 x 3.2/2.2 x 30 24/ATB Δ- 70184608073 315 315 x 3.2/2.2 x 30 24/ATB Δ- 70184608074 330 330 x 3.2/2.2 x 30 40/ATB Δ- 70184608075 355 355 x 3.2/2.4 x 30 24/ATB Δ- 70184608076 355 355 x 3.2/2.4 x 30 40/ATB Δ- 70184608081 125 125 x 2.6/1.6 x 20 36/ATB + X 70184608082 130 130 x 2.6/1.6 x 20 36/ATB + X 70184608083 150 150 x 2.6/1.6 x 30/20 48/ATB + <t< td=""><td>70184608061</td><td>230</td><td>230 x 2.8/1.8 x 30</td><td>36/ATB</td><td><u> </u></td><td></td><td></td><td></td></t<>	70184608061	230	230 x 2.8/1.8 x 30	36/ATB	<u> </u>			
70184608062 235 235 x 2.8/1.8 x 30/16 24/ATB Δ- 70184608064 240 240 x 3.0/2.0 x 30 24/ATB Δ- 70184608066 250 250 x 3.2/2.2 x 30 36/ATB Δ- X 70184608145 250 250 x 2.8/2.0 x 30 60/TCG ++ 70184608069 260 260 x 3.2/2.2 x 30 24/ATB Δ- 70184608070 280 280 x 3.2/2.2 x 30 24/ATB Δ- 70184608071 305 305 x 3.2/2.2 x 30 24/ATB Δ- 70184608073 315 315 x 3.2/2.2 x 30 24/ATB Δ- 70184608074 330 330 x 3.2/2.2 x 30 40/ATB Δ- 70184608075 355 355 x 3.2/2.4 x 30 24/ATB Δ- 70184608076 355 355 x 3.2/2.4 x 30 40/ATB Δ- 70184608081 125 125 x 2.6/1.6 x 20 36/ATB + X 70184608082 130 130 x 2.6/1.6 x 20 36/ATB + X 70184608083 150 150 x 2.6/1.6 x 30/20 48/ATB + X <td>70184608060</td> <td>230</td> <td>230 x 2.8/1.8 x30</td> <td>24/ATB</td> <td>Δ-</td> <td></td> <td></td> <td></td>	70184608060	230	230 x 2.8/1.8 x30	24/ATB	Δ-			
70184608064 240 240 x 3.0/2.0 x 30 24/ATB Δ- 70184608066 250 250 x 3.2/2.2 x 30 36/ATB Δ- x 70184608145 250 250 x 2.8/2.0 x 30 60/TCG ++ 70184608069 260 260 x 3.2/2.2 x 30 24/ATB Δ- 70184608070 280 280 x 3.2/2.2 x 30 24/ATB Δ- 70184608071 305 305 x 3.2/2.2 x 30 24/ATB Δ- 70184608073 315 315 x 3.2/2.2 x 30 24/ATB Δ- 70184608074 330 330 x 3.2/2.2 x 30 40/ATB Δ- 70184608075 355 355 x 3.2/2.4 x 30 24/ATB Δ- 70184608076 355 355 x 3.2/2.4 x 30 40/ATB Δ- 70184608081 125 125 x 2.6/1.6 x 20 36/ATB + x 70184608082 130 130 x 2.6/1.6 x 20 36/ATB + x 70184608083 150 150 x 2.6/1.6 x 30/20 48/ATB + x	70184608063	235	235 x 2.8/1.8 x 30	36/ATB	<u></u>			
70184608066 250 250 x 3.2/2.2 x 30 36/ATB Δ- X 70184608145 250 250 x2.8/2.0 x 30 60/TCG ++ 70184608069 260 260 x 3.2/2.2 x 30 24/ATB Δ- 70184608070 280 280 x 3.2/2.2 x 30 24/ATB Δ- 70184608071 305 305 x 3.2/2.2 x 30 24/ATB Δ- 70184608073 315 315 x 3.2/2.2 x 30 24/ATB Δ- 70184608074 330 330 x 3.2/2.2 x 30 40/ATB Δ- 70184608075 355 355 x 3.2/2.4 x 30 24/ATB Δ- 70184608076 355 355 x 3.2/2.4 x 30 40/ATB Δ- 70184608081 125 125 x 2.6/1.6 x 20 36/ATB + X 70184608082 130 130 x 2.6/1.6 x 20 36/ATB + X 70184608083 150 150 x 2.6/1.6 x 30/20 48/ATB + X	70184608062	235	235 x 2.8/1.8 x 30/16	24/ATB	Δ-			
70184608145 250 250 x2.8/2.0 x 30 60/TCG 70184608069 260 260 x 3.2/2.2 x 30 24/ATB Δ- 70184608070 280 280 x 3.2/2.2 x 30 24/ATB Δ- 70184608071 305 305 x 3.2/2.2 x 30 24/ATB Δ- 70184608073 315 315 x 3.2/2.2 x 30 24/ATB Δ- 70184608074 330 330 x 3.2/2.2 x 30 40/ATB Δ- 70184608075 355 355 x 3.2/2.4 x 30 24/ATB Δ- 70184608081 125 125 x 2.6/1.6 x 20 36/ATB + X 70184608082 130 130 x 2.6/1.6 x 20 36/ATB + X 70184608083 150 150 x 2.6/1.6 x 30/20 48/ATB + X	70184608064	240	240 x 3.0/2.0 x 30	24/ATB	Δ-			
70184608069 260 260 x 3.2/2.2 x 30 24/ATB Δ- 70184608070 280 280 x 3.2/2.2 x 30 24/ATB Δ- 70184608071 305 305 x 3.2/2.2 x 30 24/ATB Δ- 70184608073 315 315 x 3.2/2.2 x 30 24/ATB Δ- 70184608074 330 330 x 3.2/2.2 x 30 40/ATB Δ- 70184608075 355 355 x 3.2/2.4 x 30 24/ATB Δ- 70184608076 355 355 x 3.2/2.4 x 30 40/ATB Δ- 70184608081 125 125 x 2.6/1.6 x 20 36/ATB + X 70184608082 130 130 x 2.6/1.6 x 20 36/ATB + X 70184608083 150 150 x 2.6/1.6 x 30/20 48/ATB + X	70184608066	250	250 x 3.2/2.2 x 30	36/ATB	<u> </u>			
70184608070 280 280 x 3.2/2.2 x 30 24/ATB Δ- 70184608071 305 305 x 3.2/2.2 x 30 24/ATB Δ- 70184608073 315 315 x 3.2/2.2 x 30 24/ATB Δ- 70184608074 330 330 x 3.2/2.2 x 30 40/ATB Δ- 70184608075 355 355 x 3.2/2.4 x 30 24/ATB Δ- 70184608076 355 355 x 3.2/2.4 x 30 40/ATB Δ- 70184608081 125 125 x 2.6/1.6 x 20 36/ATB + x 70184608082 130 130 x 2.6/1.6 x 20 36/ATB + x 70184608083 150 150 x 2.6/1.6 x 30/20 48/ATB + x	70184608145	250	250 x2.8/2.0 x 30	60/TCG			++	
70184608071 305 305 x 3.2/2.2 x 30 24/ATB Δ- 70184608073 315 315 x 3.2/2.2 x 30 24/ATB Δ- 70184608074 330 330 x 3.2/2.2 x 30 40/ATB Δ- 70184608075 355 355 x 3.2/2.4 x 30 24/ATB Δ- 70184608076 355 355 x 3.2/2.4 x 30 40/ATB Δ- 70184608081 125 125 x 2.6/1.6 x 20 36/ATB + X 70184608082 130 130 x 2.6/1.6 x 20 36/ATB + X 70184608083 150 150 x 2.6/1.6 x 30/20 48/ATB + X	70184608069	260	260 x 3.2/2.2 x 30	24/ATB	Δ-			
70184608073 315 315 x 3.2/2.2 x 30 24/ATB Δ- 70184608074 330 330 x 3.2/2.2 x 30 40/ATB Δ- 70184608075 355 355 x 3.2/2.4 x 30 24/ATB Δ- 70184608076 355 355 x 3.2/2.4 x 30 40/ATB Δ- 70184608081 125 125 x 2.6/1.6 x 20 36/ATB + X 70184608082 130 130 x 2.6/1.6 x 20 36/ATB + X 70184608083 150 150 x 2.6/1.6 x 30/20 48/ATB + X	70184608070	280	280 x 3.2/2.2 x 30	24/ATB	Δ-			
70184608074 330 330 x 3.2/2.2 x 30 40/ATB Δ- 70184608075 355 355 x 3.2/2.4 x 30 24/ATB Δ- 70184608076 355 355 x 3.2/2.4 x 30 40/ATB Δ- 70184608081 125 125 x 2.6/1.6 x 20 36/ATB + X 70184608082 130 130 x 2.6/1.6 x 20 36/ATB + X 70184608083 150 150 x 2.6/1.6 x 30/20 48/ATB + X	70184608071	305	305 x 3.2/2.2 x 30	24/ATB	Δ-			
70184608075 355 355 x 3.2/2.4 x 30 24/ATB Δ- 70184608076 355 355 x 3.2/2.4 x 30 40/ATB Δ- 70184608081 125 125 x 2.6/1.6 x 20 36/ATB + X 70184608082 130 130 x 2.6/1.6 x 20 36/ATB + X 70184608083 150 150 x 2.6/1.6 x 30/20 48/ATB + X	70184608073	315	315 x 3.2/2.2 x 30	24/ATB	Δ-			
70184608076 355 355 x 3.2/2.4 x 30 40/ATB Δ- 70184608081 125 125 x 2.6/1.6 x 20 36/ATB + x 70184608082 130 130 x 2.6/1.6 x 20 36/ATB + x 70184608083 150 150 x 2.6/1.6 x 30/20 48/ATB + x	70184608074	330	330 x 3.2/2.2 x 30	40/ATB	Δ-			
70184608081 125 125 x 2.6/1.6 x 20 36/ATB + X 70184608082 130 130 x 2.6/1.6 x 20 36/ATB + X 70184608083 150 150 x 2.6/1.6 x 30/20 48/ATB + X	70184608075	355	355 x 3.2/2.4 x 30	24/ATB	Δ-			
70184608082 130 130 x 2.6/1.6 x 20 36/ATB + X 70184608083 150 150 x 2.6/1.6 x 30/20 48/ATB + X	70184608076	355	355 x 3.2/2.4 x 30	40/ATB	Δ-			
70184608083 150 150 x2.6/1.6 x 30/20 48/ATB + X	70184608081	125	125 x 2.6/1.6 x 20	36/ATB	+ X			
	70184608082	130	130 x 2.6/1.6 x 20	36/ATB	+ X			
70184608084 160 160 x 2.6/1.6 x 20 40/ATB + X	70184608083	150	150 x2.6/1.6 x 30/20	48/ATB	+ x			
	70184608084	160	160 x 2.6/1.6 x 20	40/ATB	+ x			





REFERENCE NUMBER	DIAMETER (MM)	DIAMETER X TOOTH DIA X BORE (MM)	TOOTH N° /TOOTH SHAPE	WOOD 8	& СОМРО	DSITES	MULTI- MATERIALS	VENEER & LAMINATE	ALUMINIUM
70184608085	160	160 x 2.6/1.6 x 30/16	48/ATB		+	х			
70184608086	160	160 x 1.8/1.2 x 20	48/ATB		+	x			
70184608087	160	160 x 2.6/1.6 x 20	48/ATB		+	x			
70184608089	160	160 x 2.2/1.6 x 20	60/ATB		+	x			
70184608090	160	165 x 2.6/1.6 x 20	48/ATB		+	x			
70184608091	165	165 x 2.6/1.6 x 20	64/ATB		+	X			
70184608092	170	170 x 2.6/1.6 x 30/16	48/ATB		+	X			
70184608093	180	180 x 2.8/1.8 x 30/20/16	48/ATB		+	X			
70184608094	190	190 x 2.8/1.8 x 30	40/ATB		+	X			
70184608095	190	190 x 2.8/1.8 x 30/20/16	48/ATB		+	X			
70184608097	210	210 x 2.8/1.8 x 30	48/ATB		+	x			
70184608098	210	210 x 2.8/1.8 x 30	64/ATB		+	X			
70184608100	220	220 x 2.8/1.8 x 30	48/ATB		+	x			
70184608101	225	225 x 2.8/1.8 x 30	48/ATB		+	x			
70184608102	225	225 x 2.6/1.6 x 30	64/ATB		+	х			
70184608103	230	230 x 2.8/1.8 x 30	48/ATB		+	x			
70184608104	230	230 x 2.8/1.8 x 30	64/ATB		+	х			
70184608105	235	235 x 2.8/1.8 x 30/16	48/ATB		+	x			
70184608106	235	235 x 2.8/1.8 x 30	64/ATB		+	х			
70184608107	235	235 x 2.8/1.8 x 30	80/ATB		+	x			
70184608108	240	240 x 3.0/2.0 x 30	48/ATB		+	х			
70184608109	250	250 x 3.2/2.2 x 30	48/ATB		+	X			
70184608110	250	250 x 3.2/2.2 x 30	60/ATB		+	x			
70184608111	250	250 x 3.2/2.2 x 30	96/ATB		+	X			
70184608112	255	255 x 3.2/2.2 x 30	40/ATB		+	x			
70184608113	255	255 x 3.2/2.2 x 30	40/ATB	_	+	X			
70184608117	260	260 x 3.2/2.2 x 30	40/ATB		+	x			
70184608118	260	260 x 3.2/2.2 x 30	60/ATB		+	X			
70184608119	280	280 x 3.2/2.2 x 30	48/ATB		+	x			
70184608120	280	280 x 3.2/2.2 x 30	60/ATB		+	X			
70184608121	300	300 x x3.2/2.2 x 30	48/ATB		+	x			
70184608122	300	300 x 3.2/2.2 x 30	60/ATB		+	X			
70184608123	305	305 x 3.2/2.2 x 30	48/ATB		+	x			
70184608125	305	305 x 3.2/2.2 x 30	96/ATB		+	X			
70184608124	305	305 x 3.2/2.2 x 30	60/ATB Neg		+	x			
70184608126	355	355 x 3.2/2.4 x 30	60/ATB		+	x			
70184608127	355	355 x 3.2/2.4 x 30	80/ATB		+	X			
70184608132	300	300 x 3.2/2.2 x 30	20/Demolition				Δ-		
70184608144	225	225 x 2.6/1.6 x 30	60/TCG					++	
70184608146	305	305 x 3.0/2.2 x 30	80/TCG					++	
70184608128	160	160 x 3.0/2.0 x 20	18/Demolition				Δ-		
70184608129	190	190 x 3.0/2.0 x 30	20/Demolition				Δ-		
70184608130	216	216 x 3.0/2.0 x 30	24/Demolition				Δ-		
70184608131	230	230 x 3.0/2.0 x30	24/Demolition				Δ-		
70184608133	315	230 x 2.8/1.8 x 30	20/Demolition				Δ-		
70184608134	350	350 x 3.5/2.5 x 30	24/Demolition				Δ-		
70184608141	160	160 x 2.2/1.6 x 20	48/TCG					++	
70184608053	190	190 x 2.8/1.8 x 30	30/ATB	Δ-		X			

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BLADES FOR WOOD & COMPOSITES ONE RANGE TO FIT ALL WOOD REQUIREMENTS

When it comes to wood and composite blades Norton Clipper have a complete collection for the professional woodworker. Encompassing solutions for hard and softwood, wooden panels, OSB, MDF, and HDF, Norton Clipper blades are built for power, precision and durability.

CORE BITS

 Perfectly round holes every time; the Norton Clipper Hole Saw is a 'cut' above the rest in wood and composites.



			PK	
MACHINES	DIAMETERS AVAILABLE	APPLICATION	QTY	ART NO.



TCT: 22 / 25 / 32 / 35 / 40 / 44 / 51 / 60 / 65 / 68 / 76 / 102

Softwood & composites

12 + 2 Arbors 70184608385



JIGSAWS

- Whatever the application, Norton Clipper has a jigsaw blade for it.
- This range always delivers fast, clean cutting performance for a variety of different natural and manmade wood materials



MAX MATERIAL HEIGHT (MM)	WORKING LENGTH (mm)	OVERALL LENGTH (mm)	CUT (FINE, FAST, STRAIGHT, CURVED)	TEETH MATERIAL	TPI	PK QTY	PRODUCT NAME	ITEM NO.
Thick construction timber, softwood(5-65mm), chipboards, wood core plywood, fibreboards	110	132	Fast & straight cut	HCS	6T	3	T 344 D	70184608367
Softwood (2-65mm), chipboards, wood core plywood, fibreboards	90	116	Clean & straight cut	HCS	8/12T	3	T 234 X	70184608368
Softwood, chipboards, wood core plywood, fibreboards (10-65 mm)	90	116	Clean, straight & curved cut	HCS	8T	3	T 301 CD	70184608369
Laminated panels, plastic and fibreboards (5-50mm)	91	117	Extra clean & straight cut	BIM	10T	3	T 308 BF	70184608370
Softwood, chipboard, wood core plywood, fibreboards (3-30 mm), plastics/epoxy (diameter <30 mm)	76	100	Clean & straight cut	HCS	10T	3	T 101 B	70184608371





MAX MATERIAL HEIGHT (MM)	WORKING LENGTH (mm)	OVERALL LENGTH (mm)	CUT (FINE, FAST, STRAIGHT, CURVED)	TEETH MATERIAL	TPI	PK QTY	PRODUCT NAME	ITEM NO.
Softwood, chipboards, wood core plywood, fibreboards (5-50 mm), doors, kitchen worktops (<50 mm)	76	100	Fast & straight cut	HCS	6T	3	T 144 DP	70184608372
Softwood, plywood, laminated panels (1.5-15 mm), especially for curve cuts	50 76		Clean curved cut	HCS	20T	3	T 101 A0	70184608373
Softwood, chipboard, wood core plywood, fibreboards (3-30 mm), laminated panels, clean surface	76	100	Extra clean & straight cut	HCS	10T	3	T 101 BR	70184608374
Softwood (5-50 mm), chipboards, wood core plywood, fibre boards, especially for curve cuts	76	100	Fast & curved cut	HCS	6T	3	T 244 D	70184608375
Softwood (2-15 mm), plywood, chipboard, wood core plywood, fibreboards, especially for curve cuts	50	76	Fast & curved cut	HCS	12T	3	T 119 BO	70184608376
Laminated panels, plastic and fibreboards (5-50mm)		100	Extra clean & straight cut	BIM	12T	3	T 308 BFP	70184608377
Softwood (2-15 mm), plywood, chipboards, wood core plywood, fibreboards	50	76	Fast & straight cut	HCS	12T	3	T 119 B	70184608378
5 - 50 3 - 30 1.5 - 15	76	100	Fast cut / Clean cut / Normal cut	T144DP:HCS T144D:HCS T101B:HCS T244D:HCS T101AO:HCS	T144D:6T T101B:10T T244D:6T	10		70184608383

RECIPROCATING SAW BLADES

• All Norton Clipper Reciprocating Saw blades for wood and composites offer the user outstanding performance whether it be fast and straight or clean, curved cutting



MAX MATERIAL HEIGHT (MM)	WORKING LENGTH (MM) L	OVERALL ENGTH (MM)	CUT TYPE	TEETH MATERIAL	TPI	PK QTY	PRODUCT NAME	ITEM NO.
Fuel wood,damp wood(dia.15-190mm)	220	240	Fast cut	HCS	ЗТ	2	S 1542 K	70184608360
Coarse, fast cuts in wood(tree cutting and pruning)	220	240	Fast cut	HCS	5T	2	S 1131 L	70184608361
Timber 6 - 150 mm Plastic 6-150 Wooden panels <175mm	180	200	Clean cut	HCS	6-10T	2	S 2345 X	70184608362
Construction timber(6-100mm), wooden panels (<75mm),boards; chip, MDF(6-60mm), plywood, plastic (6-100mm).*Especially for plunge cuts	132	152	Curved & clean cut	HCS	6T	2	S 644 D	70184608363

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CIRCULAR SAW / TABLE SAW

- This range of circular and table saw blades is optimised for ripping and fast cutting of all kinds of wood and composite materials.
- They have fewer teeth than the finishing blades.
- The larger diameter blades have an anti-kickback design to ensure the highest safety for the user.
- These blades can also be professionally resharpened to extend their life.



BLADE DIAMETER (mm)	THICKNESS (mm)	BORE (mm)	NO' OF TEETH	TEETH DESIGN	RPM	PRODUCT NAME	ITEM NO.
100	2.6 / 1.6	20	24T	ATB	15300	WR.100.20.Z24.1	70184608030
120	1.8 / 1.2	20	24T	ATB	12800	WR.120.20.Z24.1	70184608032
125	2.6 / 1.6	20	24T	ATB	12000	WR.125.20.Z24.1	70184608033
130	2.6 / 1.6	20/16	24T	ATB	11800	WR.130.20.Z24.1	70184608034
150	2.6 / 1.6	30/20	24T	ATB	10000	WR.150.30.Z24.1	70184608035
150	2.8 / 1.8	20	24T	ATB	10000	WR.150.20.Z24.1	70184608036
150	3.6 / 2.6	30	24T	ATB	10000	WR.150.30.Z24.2	70184608037
160	2.6 / 1.6	16	24T	ATB	9500	WR.160.16.Z24.1	70184608039
160	2.6 / 1.6	20	16T	ATB	9500	WR.160.20.Z16.1	70184608038
160	1.8 / 1.2	20	24T	ATB	9500	WR.160.20.Z24.1	70184608040
160	2.6 / 1.6	20	24T	ATB	9500	WR.160.20.Z24.2	70184608042
160	2.8 / 1.8	20	24T	ATB	9500	WR.160.20.Z24.3	70184608044
160	2.2 / 1.6	30/20	24T	ATB	9500	WR.160.30.Z24.1	70184608041
160	2.6 / 1.6	30/20	24T	ATB	9500	WR.160.30.Z24.2	70184608043
165	1.8 / 1.2	20	24T	ATB	9500	WR.165.20.Z24.1	70184608045
165	2.6 / 1.6	20	24T	ATB	9500	WR.165.20.Z24.2	70184608046
170	2.6 / 1.6	30/20/16	24T	ATB	9000	WR.170.30.Z24.1	70184608047
170	2.8 / 1.8	30	24T	ATB	9000	WR.170.30.Z24.2	70184608048
180	2.8 / 1.8	30/20/16	24T	ATB	8500	WR.180.30.Z24.1	70184608049
180	2.8 / 1.8	30	30T	ATB	8500	WR.180.30.Z30.1	70184608050
185	1.8/1.2	30/20/16	24T	ATB	8500	WR.185.30.Z24.1	70184608051
190	2.8 / 1.8	30/20/16	24T	ATB	8000	WR.190.30.Z24.1	70184608052
190	2.8 / 1.8	30	30T	ATB	8000	WR.190.30.Z30.1	70184608053
210	2.8 / 1.8	30	24T	ATB	7200	WR.210.30.Z24.1	70184608054
210	2.8 / 1.8	30	36T	ATB	7200	WR.210.30.Z36.1	70184608055
220	2.8 / 1.8	30	24T	ATB	7000	WR.220.30.Z24.1	70184608058
225	2.6 / 1.6	30	32T	ATB	6500	WR.225.30.Z32.1	70184608059
230	2.8 / 1.8	30	24T	ATB	6500	WR.230.30.Z24.1	70184608060
230	2.8 / 1.8	30	36T	ATB	6500	WR.230.30.Z36.1	70184608061
235	2.8 / 1.8	30/16	24T	ATB	6500	WR.235.30.Z24.1	70184608062
235	2.8 / 1.8	30	36T	ATB	6500	WR.235.30.Z36.1	70184608063
240	3.0 / 2.0	30	24T	ATB	6300	WR.240.30.Z24.1	70184608064
250	3.2 / 2.2	30	36T	ATB	6000	WR.250.30.Z36.1	70184608066
260	3.2 / 2.2	30	24T	ATB	5800	WR.260.30.Z24.1	70184608069
280	3.2 / 2.2	30	24T	ATB	5400	WR.280.30.Z24.1	70184608070
305	3.2 / 2.2	30	24T	ATB	5000	WR.305.30.Z24.1	70184608071
315	3.2 / 2.2	30	24T	ATB	4800	WR.315.30.Z24.1	70184608073
330	3.2 / 2.2	30	40T	ATB	4600	WR.330.30.Z40.1	70184608074
355	3.2 / 2.4	30	24T	ATB	4300	WR.355.30.Z24.1	70184608075
355	3.2 / 2.4	30	40T	ATB	4300	WR.355.30.Z40.1	70184608076



CIRCULAR SAW / TABLE SAW

- This range of circular and table saw blades is optimised for cross-cutting and finishing all kinds of wood and composite materials.
- They have more teeth than the ripping blades and offer the best quality of cut.
- These blades can also be professionally resharpened to extend their life.



D. 105 D.1115						الولالا"	N. b.
BLADE DIAMETER (mm)	THICKNESS (mm)	BORE (mm)	NO' OF TEETH	TEETH DESIGN	RPM	PRODUCT NAME	
125	2.6 / 1.6	20	36T	ATB	12000	WF.125.20.Z36.1	70184608081
130	2.6 / 1.6	20	36T	ATB	11800	WF.130.20.Z36.1	70184608082
150	2.6 / 1.6	30/20	48T	ATB	10000	WF.150.30.Z48.1	70184608083
160	2.6 / 1.6	20	40T	ATB	9500	WF.160.20.Z40.1	70184608084
160	1.8 / 1.2	20	48T	ATB	9500	WF.160.20.Z48.1	70184608086
160	2.6 / 1.6	20	48T	ATB	9500	WF.160.20.Z48.2	70184608087
160	2.2 / 1.6	20	60T	ATB	9500	WF.160.20.Z60.1	70184608089
160	2.6 / 1.6	30/16	48T	ATB	9500	WF.160.30.Z48.1	70184608085
165	2.6 / 1.6	20	48T	ATB	9500	WF.165.20.Z48.1	70184608090
165	2.6 / 1.6	20	64T	ATB	9500	WF.165.20.Z64.1	70184608091
170	2.6 / 1.6	30/16	48T	ATB	9000	WF.170.30.Z48.1	70184608092
180	2.8 / 1.8	30/20/16	48T	ATB	8500	WF.180.30.Z48.1	70184608093
190	2.8 / 1.8	30	40T	ATB	8000	WF.190.30.Z40.1	70184608094
190	2.8 / 1.8	30/20/16	48T	ATB	8000	WF.190.30.Z48.1	70184608095
210	2.8 / 1.8	30	48T	ATB	7200	WF.210.30.Z48.1	70184608097
210	2.8 / 1.8	30	64T	ATB	7200	WF.210.30.Z64.1	70184608098
220	2.8 / 1.8	30	48T	ATB	7000	WF.220.30.Z48.1	70184608100
225	2.8 / 1.8	30	48T	ATB	6500	WF.225.30.Z48.1	70184608101
225	2.6 / 1.6	30	64T	ATB	6500	WF.225.30.Z64.1	70184608102
230	2.8 / 1.8	30	48T	ATB	6500	WF.230.30.Z48.1	70184608103
230	2.8 / 1.8	30	64T	ATB	6500	WF.230.30.Z64.1	70184608104
235	2.8 / 1.8	30/16	48T	ATB	6500	WF.235.30.Z48.1	70184608105
235	2.8 / 1.8	30	64T	ATB	6500	WF.235.30.Z64.1	70184608106
235	2.8 / 1.8	30	96T	ATB	6500	WF.235.30.Z96.1	70184608107
240	3.0 / 2.0	30	48T	ATB	6300	WF.240.30.Z48.1	70184608108
250	3.2 / 2.2	30	48T	ATB	6000	WF.250.30.Z48.1	70184608109
250	3.2 / 2.2	30	60T	ATB	6000	WF.250.30.Z60.1	70184608110
250	3.2 / 2.2	30	96T	ATB	6000	WF.250.30.Z96.1	70184608111
255	3.2 / 2.2	30	40T	ATB	6000	WF.255.30.Z40.1	70184608112
255	3.2 / 2.2	30	60T	ATB	6000	WF.255.30.Z60.1	70184608113
260	3.2 / 2.2	30	40T	ATB	5800	WF.260.30.Z40.1	70184608117
260	3.2 / 2.2	30	60T	ATB	5800	WF.260.30.Z60.2	70184608118
280	3.2 / 2.2	30	48T	ATB	5400	WF.280.30.Z48.1	70184608119
280	3.2 / 2.2	30	60T	ATB	5400	WF.280.30.Z60.1	70184608120
300	3.2 / 2.2	30	48T	ATB	5000	WF.300.30.Z48.1	70184608121
300	3.2 / 2.2	30	60T	ATB	5000	WF.300.30.Z60.1	70184608122
305	3.2 / 2.2	30	48T	ATB	5000	WF.305.30.Z48.1	70184608123
305	3.2 / 2.2	30	96T	ATB	5000	WF.305.30.Z96.1	70184608125
355	3.2 / 2.4	30	60T	ATB	4300	WF.355.30.Z60.1	70184608126
355	3.2 / 2.4	30	80T	ATB	4300	WF.355.30.Z80.1	70184608127

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MITRE SAW

 This durable range of mitre saw blades cut through wood and composite materials effortlessly, providing high levels of precision.



		BLADE DIAMETER	BORE				- P P	A A 4
	PRODUCT NAME	(mm)	(mm))	NO' OF TEETH	THICKNESS (mm))	TEETH DESIGN	RPM	ITEM NO.
	WR.216.30.Z24.1	216	30	24T	2.8 / 1.8	ATB Neg	7000	70184608056
	WR.216.30.Z36.1	216	30	36T	2.3 / 1.8	ATB Neg	7000	70184608057
RIPPING	WR.250.30.Z24.1	250	30	24T	3.2 / 2.2	ATB Neg	6000	70184608065
RIPP	WR.255.30.Z24.1	255	30	24T	3.2 / 2.2	ATB Neg	6000	70184608067
	WR.255.30.Z24.2	255	30/16	24T	2.6 / 1.8	ATB Neg	6000	70184608068
	WR.305.30.Z36.1	305	30	36T	3.2 / 2.2	ATB Neg	5000	70184608072
	WF.160.20.Z48.3	160	20	48T	2.6 / 1.6	ATB Neg	9500	70184608088
	WF.190.30.Z48.2	190	30	48T	2.8 / 1.8	ATB Neg	8000	70184608096
	WF.216.30.Z40.1	216	30	40T	2.8 / 1.8	ATB Neg	7000	70184608498
Ŋ	WF.216.30.Z48.1	216	30	48T	2.8 / 1.8	ATB Neg	7000	70184608099
FINISHING	WF.254.30.Z48.1	254	30	48T	2.8 / 1.8	ATB Neg	6000	70184608499
Ä	WF.255.30.Z60.2	255	30	60T	3.2 / 2.2	ATB Neg	6000	70184608114
	WF.260.30.Z48.1	260	30	48T	2.6 / 1.8	ATB Neg	5800	70184608115
	WF.260.30.Z60.1	260	30	60T	2.6 / 1.8	ATB Neg	5800	70184608116
	WF.305.30.Z60.1	305	30	60T	3.2 / 2.2	ATB Neg	5000	70184608124

REDUCTION RINGS

20 to 16 BAGUE/REDUCTION 20X16X2 510004702 30 to 15.88 BAGUE/REDUCTION 30X15.8X1.8 510008339 30 to 16 BAGUE/REDUCTION 30X16X1.6 510006938 BAGUE/REDUCTION 30X20X1.4 510007983 BAGUE/REDUCTION 30X20X2.5 510007599 BAGUE/REDUCTION 30X25.4X1.8 510003057 BAGUE/REDUCTION 30X25.4X2.2 510007566	BORE SIZES (MM)	DESCRIPTION	ITEM NO.
30 to 16 BAGUE/REDUCTION 30X16X1.6 510006938 BAGUE/REDUCTION 30X20X1.4 510007983 BAGUE/REDUCTION 30X20X2.5 510007599 BAGUE/REDUCTION 30X25.4X1.8 510003057	20 to 16	BAGUE/REDUCTION 20X16X2	510004702
30 to 20 BAGUE/REDUCTION 30X20X1.4 510007983 BAGUE/REDUCTION 30X20X2.5 510007599 BAGUE/REDUCTION 30X25.4X1.8 510003057	30 to 15.88	BAGUE/REDUCTION 30X15.8X1.8	510008339
30 to 20 BAGUE/REDUCTION 30X20X2.5 510007599 BAGUE/REDUCTION 30X25.4X1.8 510003057	30 to 16	BAGUE/REDUCTION 30X16X1.6	510006938
BAGUE/REDUCTION 30X20X2.5 510007599 BAGUE/REDUCTION 30X25.4X1.8 510003057	20 +2 20	BAGUE/REDUCTION 30X20X1.4	510007983
30 to 25.4	30 t0 20	BAGUE/REDUCTION 30X20X2.5	510007599
	20 to 25 /	BAGUE/REDUCTION 30X25.4X1.8	510003057
	JU (U ZJ.4	BAGUE/REDUCTION 30X25.4X2.2	510007566

CORE PLANER BLADE BITS

 Made with a high quality braised carbide insert, these planer blades always deliver excellent cutting performance and the reversibility of the blade adds to its durability.

APPLICATION	LENGTH	CUT TYPE	TEETH MATERIAL	PK QTY	ITEM NO.
Natural wood	82mm	Extra clean cut	тст	2	70184608384



BLADES FOR MULTIMATERIALRELIABLE RESULTS NO MATTER THE MATERIAL

Specialised teeth and anti-recoil support allows the multi-material range of blades to cut through a vast array of material types with ease. Concerns about damaging the blade between processes are a thing of the past, as this range has been designed with cutting construction timbers, pallets, nails and non-ferrous metals in mind.

► YouTube How to use the new Carbide multi-material cutting disc?

ANGLE GRINDER BLADES

• Fast cutting angle grinder blades with electroplated carbide teeth, a great choice for all types of wood (with or without nails), plastic, PVC, and plaster.





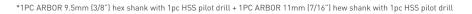
DIAMETER (mm)	BORE (mm)	APPLICATION	CUT TYPE	TEETH MATERIAL	PK QTY	ITEM NO.	
76	10	Wood, plastic, PVC, plaster, wood with nails	Fast cut	Electroplated carbide	1	70184608308	
115	10	Wood, plastic, PVC, plaster, wood with nails	Fast cut	Electroplated carbide	1	70184608924	
115	22.23	Wood, plastic, PVC, plaster, wood with nails	Fast cut	Electroplated carbide	15 1xDisplay	70184631424	KIT
125	22.23	Wood, plastic, PVC, plaster, wood with nails	Fast cut	Electroplated carbide	1	70184608309	
125	22.23	Wood, plastic, PVC, plaster, wood with nails	Fast cut	Electroplated carbide	15 1xDisplay	70184608723	KIT

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 Norton Clipper hole saws/drill corebits work perfectly with aluminium, wood, plaster, copper and brass materials.







RECIPROCATING SAW BLADES

- Multi-material reciprocating saw blades offer the user super-fast cutting performance and are available in three different material types – TCT,
- BIM and BIM+. With this versatile range, you can cut an array of materials ranging from small bricks to reinforced plastic and pallets.



MAX MATERIAL HEIGHT (mm)	WORKING LENGTH (mm)	OVERALL LENGTH (mm)	CUT TYPE	TEETH MATERIAL	TPI	PK QTY	PRODUCT NAME	ITEM NO.
For small bricks up to a material thickness of 150 mm (Poroton, Fibre cement, Porous concrete, Red brick)	220	240	Fast cut	Carbide	2T	2	S1543HM	70184608354
For medium-sized bricks up to a material thickness of 215 mm (Poroton, Fibre cement, Porous concrete, Red brick)	260	304	Fast cut	Carbide	2T	1	S 1243 HM	70184608355
For large bricks up to a material thickness of 365 mm (Poroton, Fibre cement, Porous concrete, Red brick)	415	455	Fast cut	Carbide	2T	1	S 2243 HM	70184608356
Pallet / metal sheet 5 - 175 mm aluminium profiles 3 - 12 mm	208	228	Straight & fast cut	BIM	10T	2	S 1122 HF	70184608357
Wood with nails/metal, chipboards (10-250mm), aerated concrete(10-250mm), plastics/glass fibre reinforced plastics, profiles (5-60mm)	280	300	Curved + fast cut	BIM	6T	2	S 1411 DF	70184608358
Pallet 10 - 100 mm Plastic 8 - 50 mm	208	228	Fast cut	ВІМ	6T	2	S 1111 DF	70184608359
Wood with nails/metal(5-100mm), sheet metal, pipes, aluminium profiles (3-12mm) pallets.	132	152	Fast cut	BIM	10T	2	S 922 HF	70184608364
Heavy for Wood and Metal, milled Wood with nails/ metal, wood, chipboard (<100 mm), glass fibre reinforced plastic/epoxy, solid (<100 mm), wall cut- outs: wood and metal (<100 mm)	132	152	Fast cut	BIM CO8%	5-8T	2	S610VF	70184608365
Heavy for metal. Wood with nails/metal, wood, chipboard (<250 mm), glass fibre reinforced plastic/epoxy, solid (<250 mm), wall cutouts: wood and metal (<250 mm), for rescue/demolition work	280	300	Fast cut	BIM CO8%	5-8T	2	S1210VF	70184608366



DEMOLITION CIRCULAR SAWS

- This robust range of demolition circular saws is designed to power through a wide variety of different materials.
- These blades can also be professionally resharpened to extend their life.



BLADE DIAMETER	THICKNESS	BORE						
(mm)	(mm)	(mm)	NO' OF TEETH	TEETH DESIGN	RPM	PRODUCT NAME	ITEM NO.	
160	3.0 / 2.0	20	18T	Demolition	9500	MM.160.20.Z18.1	70184608128	
190	3.0 / 2.0	30	20T	Demolition	8000	MM.190.30.Z20.1	70184608129	
216	3.0 / 2.0	30	24T	Demolition	7000	MM.216.30.Z24.1	70184608130	
230	3.0 / 2.0	30	24T	Demolition	6500	MM.230.30.Z24.1	70184608131	

DEMOLITION TABLE SAW

• Demolition table saw blades that make light work of various materials including pallets and construction timbers.



BLADE DIAMETER	THICKNESS	BORE	NO'			-		
(mm)	(mm)	(mm)	OF TEETH	TEETH DESIGN	RPM	PRODUCT NAME	ITEM NO.	
300	3.2 / 2.2	30	20T	Demolition	5000	MM.300.30.Z20.1	70184608132	
315	3.2 / 2.2	30	20T	Demolition	4800	MM.315.30.Z20.1	70184608133	
350	3.5 / 2.5	30	24T	Demolition	4300	MM.350.30.Z24.1	70184608134	

REDUCTION RINGS

BORE SIZES (mm)	DESCRIPTION	ITEM NO.		
20 to 16	REDUCTION 20X16X2	510004702		
30 to 15.88	REDUCTION 30X15.8X1.8	510008339		
30 to 16	REDUCTION 30X16X1.6	510006938		
30 to 20	REDUCTION 30X20X1.4	510007983		
30 (0 20	REDUCTION 30X20X2.5	510007599		
30 to 25.4	REDUCTION 30X25.4X1.8	510003057		
30 (0 25.4	REDUCTION 30X25.4X2.2	510007566		

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BLADES FOR VENEER & LAMINATES ACHIEVE A CHIP-FREE CLEAN CUT ON ALL LAMINATE AND VENEERED SURFACES

Norton Clipper's super sharp high-quality carbide blades offer extreme durability and performance for the perfectly finished edge. Whether you need to cut melamine faced boards, plywood, laminated panels or sheets of HPL, we have a professional blade to suit.

CIRCULAR SAW / TABLE SAW

- The Triple Chip Grind (TCG) teeth on these circular saw blades make them the ideal choice for cutting veneer and laminate quickly and cleanly.
- These blades can also be professionally resharpened to extend their life.



BLADE DIAMETER (mm)	THICKNESS (mm)	BORE (mm)	NO' OF TEETH	TEETH DESIGN	RPM	PRODUCT NAME	ITEM NO.
160	2.2 / 1.6	20	48T	TCG	9500	LA.160.20.Z48.1	70184608141
216	2.6 / 1.8	30	60T	TCG	7000	LA.216.30.Z60.1	70184608142
216	2.3 / 1.8	30	60T	TCG	7000	LA.216.30.Z60.2	70184608143
225	2.6 / 1.6	30	60T	TCG	6500	LA.225.30.Z60.1	70184608144
250	2.8 / 2	30	60T	TCG	6000	LA.250.30.Z60.1	70184608145
305	3.0 / 2.2	30	80T	TCG	5000	LA.305.30.Z80.1	70184608146



JIGSAWS

• The perfect jigsaw blade for cutting laminates and veneer with its sharp, straight, burr-free cutting performance with teeth sharpened to precision.

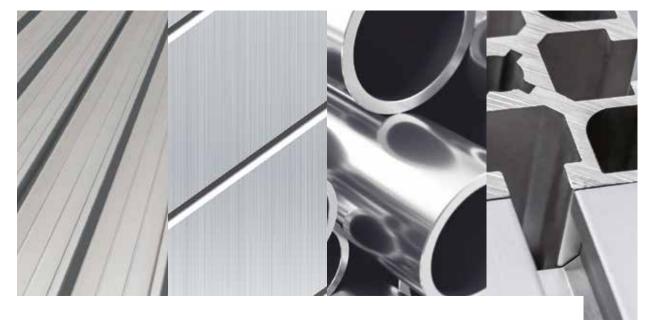


MAX MATERIAL HEIGHT (mm)	WORKING LENGTH (mm)	OVERALL LENGTH (mm)	CUT (FINE, FAST, STRAIGHT, CURVED)	TEETH MATERIAL	TPI	PK QTY	PRODUCT NAME	ITEM NO.
Laminates and laminated panels 1.5 - 15mm	56	82	Extra clean & straight cut	BIM	14T	3	T 101 BIF	70184608371

REDUCTION RINGS

BORE SIZES (mm)	DESCRIPTION	ITEM NO.		
20 to 16	REDUCTION 20X16X2	510004702		
30 to 15.88	REDUCTION 30X15.8X1.8	510008339		
30 to 16	REDUCTION 30X16X1.6	510006938		
20.1.20	REDUCTION 30X20X1.4	510007983		
30 to 20 —	REDUCTION 30X20X2.5	510007599		
30 to 25.4	REDUCTION 30X25.4X1.8	510003057		
30 (0 25.4	REDUCTION 30X25.4X2.2	510007566		

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BLADES FOR ALUMINIUM

OUTSTANDING STRENGTH AND DURABILITY TO SLICE THROUGH ALUMINIUM

This is Norton Clipper's specialist range of blades suited to cutting aluminium, brass, and copper. A specialised high strength grade of carbide makes the teeth ultra hard wearing and the negative hook angle keeps the blade cutting powerfully and sustainably time after time.

JIGSAWS

- Jigsaw blades for cutting aluminium metal.
- A combination of corrugated and milled teeth and hardened steel blade make these blades perfect for clean, precise cutting.



MAX MATERIAL HEIGHT (mm)	WORKING LENGTH (mm)	OVERALL LENGTH (mm)	CUT TYPE	TEETH MATERIAL	TPI	PK QTY	PRODUCT NAME	ITEM NO.
Thin sheet metals (1-3 mm), especially for curve cuts	50	76	Clean & curved cuts	HSS	21T	3	T 218 A	70184608380
Medium-thick sheet metals (2.5-6 mm)	50	76	Clean & straight cut	HSS	12T	3	T 118 B	70184608381
Thin to thick sheet metals (3-15 mm), pipes and profiles, (diameter <30 mm)	76	100	Fast, clean & straight cut	HSS	8T	3	T 127 D	70184608382



MITRE SAW / TABLE SAW

 High-quality mitre saw blades with TCG negative angled teeth specifically designed for cutting aluminium.



BLADE DIAMETER (mm)	THICKNESS (mm)	BORE (mm)	NO' OF TEETH	TEETH DESIGN	RPM	PRODUCT NAME	ITEM NO.
190	2.6 / 1.8	30	60T	TCG Neg	5000	AL.190.30.Z60.1	70184608135
216	2.6 / 1.8	30	80T	TCG Neg	4400	AL.216.30.Z80.1	70184608136
240	2.8 / 2.0	30	80T	TCG Neg	4000	AL.230.30.Z80.1	70184608137
250	2.8 / 2.0	30	80T	TCG Neg	3800	AL.250.30.Z80.1	70184608138
255	3.0 / 2.2	30	80T	TCG Neg	3800	AL.255.30.Z80.1	70184608139
305	3.0 / 2.2	30	96T	TCG Neg	3000	AL.305.30.Z96.1	70184608140

REDUCTION RINGS

BORE SIZES (mm)	DESCRIPTION	ITEM NO.
20 to 16	BAGUE/REDUCTION 20X16X2	510004702
30 to 15.88	BAGUE/REDUCTION 30X15.8X1.8	510008339
30 to 16	BAGUE/REDUCTION 30X16X1.6	510006938
30 to 20	BAGUE/REDUCTION 30X20X1.4	510007983
30 (0 20	BAGUE/REDUCTION 30X20X2.5	510007599
30 to 25.4	BAGUE/REDUCTION 30X25.4X1.8	510003057
30 (0 25.4	BAGUE/REDUCTION 30X25.4X2.2	510007566

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NOTES			



WIRE BRUSHES & CARBIDE BURRS

Wire brushes	405
Carbide burrs	42
Bevelling tools	433
Steel wool	43

INTRODUCTION

Norton offers a range of wire brushes suitable for a wide variety of surface processing applications. The range encompasses crimped and knotted wire power wheel brushes, bevelled brushes, cup brushes, end brushes and hand brushes.

A number different types of wire are available which have been specifically selected to give the best results in any specific application.

WIRE TYPES

	TEMPERED QUALITY STEEL WIRE			STA	INLESS	IRE	BRASS WIRE		
	CRIMPED	CRIMPED STRAIGHT		CRIMPED		STRAIGHT		CRIMPED	
Removing dust and smoothing low-grade and non-alloy steels			Brushing and s		g chrome ainless st		Brushing, cleaning and smoothing brass, copper and bronze		
	NOSCW NOrmal Steel Crimped Wire	mal Steel NOrmal Steel NOrmal Steel		STSCW STainless Steel Crimped Wire	STSKW STainless Steel Knotted Wire		STSSW STainless Steel Straight Wire	BRACW BRAss Crimped Wire	

SHAPE KEY

CODE	PRODUCT TYPE	TOOL	APPLICATION
WHB	Crimped Wheel Brushes	2	Supplied as standard with arbour hole as indicated. The size of the arbour hole can be reduced with reduction rings. Wheel brushes with short wire are more aggressive. Larger widths require more horse power.
	Twist Knotted Wheel Brushes		Suitable for brushing out welded joints and brushing sharp corners.
BEB	Bevel Brushes		Specially designed for brushing hard-to-reach places such as edges and corners.
	Crimped Cup Brushes		Use for cleaning jobs, especially on larger surfaces. Ideal for removing rust, corrosion, paint and primers. Removal of rust, corrosion, paint and primers.
СРВ	Twist Knotted Cup Brushes		An aggressive brush excellent for heavy-duty cleaning and finishing of large surfaces. Can be used for removing barnacles, scale, paint, rust and corrosion, as well as cleaning weld seams and spot-welds.
WHB/ENB	Shaft Mounted Brushes		Suitable for industrial use. Ideal for hard-to-reach areas. All shaft mounted brushes are equipped with a 6mm shank.
HCB/SPB	Hand Brushes	The Manuary	With wooden core. Available in different widths. For use on narrow work pieces. Ideal for light deburring and cleaning profiled surfaces.
TUB	Pipe Brushes		With handle or thread. For deburring and cleaning tubes.



PRODUCT SELECTION GUIDE

FOR ANGLE GRINDERS

ANGLE GRINDER SIZE (mm)	115	125	150	180	230			
BRUSH TYPES		BRUSH DIAMETER (mm)						
Wheel brush, knotted	100.115	125	150	178	-			
Wheel brush, crimped	100.115	-	-	-	-			
Cup brush, knotted	65	75	80	100	120			
Cup brush, crimped	60	75	80.100	100	125.150			

BY APPLICATION

Highly recommended

WIRF	DIAMETER	(mm)
* * I I \ L	DIAMETER	(111111)

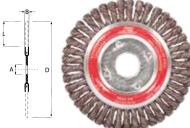
APPLICATIONS	0.2	0.3	0.35	0.5	0.8
Roughening				•	•
Planing	•	•	•		
Deburring	•	•	•		
Edge honing	•	•	•		
Descaling/paint stripping	•	•	•	•	•
Weld seams	•	•	•	•	•

BY TYPE & MATERIAL

Highly recommended PRODUCT AVAILABILITY ON:	STEEL	CARBON STEEL	STAINLESS STEEL	NON-FERROUS METAL	ALUMINIUM
Normal steel	•	•			
Stainless steel			•	•	•

TWIST KNOTTED WHEEL BRUSHES #++++

- Aggressive removal for heavy duty rust, paint, corrosion and weld spatter
- Work at high speed to finish parts
- Wheel shape makes it easy to access hard-to-reach areas
- Brush does not clog or load with surface material, for a cleaner finish

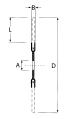


DxBxA L (mm)	NO. KNOTS	RECOMMENDED RPM	PK QTY	NORMAL STEEL	STAINLESS STEEL
0.50 mm					
115x6x22.2 T22	36	6300 - 12500	1	63642581151	63642581639
125x6x22.2 T23	42	5500 - 11000	1	63642581157	63642581640
165x6x22.2 T35	76	4000 - 8000	1	63642581169	-

TWIST KNOTTED WHEEL BRUSHES



- Powerful performance for de-burring, Work at high speed to finish parts edge honing and removing rust, paint, corrosion and weld spatter
- Wheel shape makes it easy to access hard-to-reach areas
- faster
- Brush does not clog or load with surface material, for a cleaner finish





DxBxA L (mm)	RECOMMENDED RPM	PK QTY	NORMAL STEEL	STAINLESS STEEL
0.35 mm				
100x11x22.2 T22	7500 - 12500	1	66254406185	-
115x11xM14 T23	6300 - 12500	1	66254406173	-
125x13x22.2 T28	5500 - 11000	1	66254406178	-
125x13xM14 T28	5500 - 11000	1	66254406172	-
0.50 mm				
115x11x22.2 T23	6300 - 12500	1	66254406167	66254406153
115x11xM14 T23	6300 - 12500	1	66254406160	-
125x13x22.2 T28	5500 - 11000	1	66254406166	-
125x13xM14 T28	5500 - 11000	1	66254406158	66254410928*
178x15x22.2 T35	4500 - 8500	1	66254406163	-
DIMENCION KEY D. Diamas	+ D \\\(\alpha\); delt \(\Lambda \) \(\D \) \(\alpha\) \(\alpha\)			* Made-to-order

DIMENSION KEY: D = Diameter

B = Width

A = Bore min

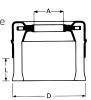
L = Wire Length

Made-to-order



TWIST KNOTTED CUP BRUSHES +++++

- Aggressive brush for high speed roughing, rust, paint, corrosion and weld spatter removal
- Cup shape is ideal for use on large surface areas, removing matter quickly
- Brush guard offers protection, acting as a shield against surface material, whilst retaining visibility of the workpiece
- Brush guard is flexible enough for use on flat contoured, and hard-to-reach areas





DxA L (mm)	GRINDER SIZE (mm)	PK QTY	NORMAL STEEL		STAINLESS STEEL	
0.50 mm						
65xM14 T20	115 & 125	1	66261103046	20.19	66261103171	24.48





TWIST KNOTTED CUP BRUSHES



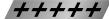
- For tough cleaning and de-burring on heavy rust, weld scale and paint
- Cup shape with rigid wire construction provides extra cleaning power on large surface areas
- Stiff, long lasting knots make light work of heavy material build-up for applications such as preparing joints for filing and scaling
- Long life thanks to anti-clog nature



DxA L (mm)	GRINDER SIZE (mm)	PK QTY	NORMAL STEEL	STAINLESS STEEL
0.35 mm				
65xM14 T20	115	1	66254406104	-
100xM14 T25	150	1	66254406099	-
0.50 mm				
65xM14 T20	115	1	66254406095	66254406068
80xM14 T25	125	1	66254406094	-
100xM14 T25	150	1	66254406088	-

* Made-to-order

CRIMPED CUP BRUSHES +++++



- A multi-purpose brush for the most common cleaning jobs
- Use on large surfaces for removing rust, paint and primer fast
- Offers excellent protection against flying debris thanks to the brush guard
- Brush guard allows visibility on the workpiece



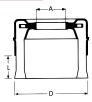


DxA L (mm)	GRINDER SIZE (mm)	PK QTY	NORMAL STEEL	STAINLESS STEEL
0.30 mm				
75xM14 T22	115 & 125	1	66261103049	66261103176

CRIMPED WIRE CUP BRUSHES



- Cup brush shape with crimped wire construction for cleaning light surface oxidation, paint and primers
- Cover large areas fast thanks to the cup shape
- Select a smaller diameter wire for lighter cleaning, thicker wire for more aggressive applications
- Long product life, thanks to anti-clog nature of the brush



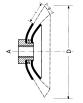


DxBxA L (mm)	GRINDER SIZE (mm)	PK QTY	NORMAL STEEL	STAINLESS STEEL
0.30 mm				
60xM14 T16	115	1	66254406058	66254406037
75xM14 T20	125	1	66254406055	-
80xM14 T25	125	1	66254406054	66254404868
100xM14 T30	150	1	66254406053	-
125xM14 T35	230	1	66254406050	-
150xM14 T55	230	1	66254406049	-

TWIST KNOTTED BEVEL BRUSHES



- Bevel shape is specially designed for hard-to-reach areas including edges and corners
- Brush guard offers protection against flying debris, whilst still providing visibility of the workpiece
- Brush guard is flexible, allowing brush to be used on flat. open surfaces as well as hard to reach
- Long product life, thanks to anti-clog nature of the brush





DxA L (mm)	GRINDER SIZE (mm)	PK QTY	NORMAL STEEL	STAINLESS STEEL
0.50 mm				
100xM14 T22	115	1	66261103055	66261103179

DIMENSION KEY: D = Diameter

B = Width

A = Bore min

L = Wire Length



TWIST KNOTTED BEVEL BRUSH



- Bevel shape is specially designed for hard-to-reach areas including edges and corners
- For aggressive removal of rust, corrosion, paint and primer
- Stiff, long lasting knots make light work of heavy material build-up for applications such as preparing joints for filing and scaling
- Long product life, thanks to anti-clog nature of the brush



DxBxA L (mm)	GRINDER SIZE (mm)	PK QTY	NORMAL STEEL	STAINLESS STEEL
0.50 mm				
100x13xM14 T20	115	1	66254406149	66254406146
115x15xM14 T27.5	125	1	66254406147	66254406144

CRIMPED WIRE BEVEL BRUSHES #++++



- Bevel shape is specially designed for hard-to-reach areas including edges and corners
- For removal of light rust, corrosion, paint and primer
- Brush guard offers protection against flying debris, whilst still providing visibility of the workpiece
- Long product life, thanks to anti-clog nature of the brush

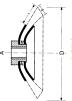


DxA L (mm)	GRINDER SIZE (mm)	PK QTY	NORMAL STEEL	STAINLESS STEEL
0.30 mm				
100xM14 T24	115	1	66261103056	66261103180

CRIMPED WIRE BEVEL BRUSHES



- Bevel shape is specially designed for hard-to-reach areas including edges and corners
- For removal of light rust, corrosion, paint and primer
- Thick wire diameter provides more aggressive cleaning
- Long product life, thanks to anti-clog nature of the brush





DxBxA L (mm)	GRINDER SIZE (mm)	PK QTY	NORMAL STEEL
0.50 mm			
100x13xM14 T20	115	1	66254406142
115x15xM14 T27.5	125	1	66254406109*

* Made-to-order









PRODUCT SELECTION GUIDE

BY APPLICATION

Highly recommended

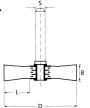
WIRE DIAMETER (mm)

3 ,			WI	RE DIAMETE	R (mm)		
APPLICATIONS		0.2	0.3		0.35		0.5
Roughing				·	•		•
Planing		•	•		•		
Deburring		•	•		•		•
Edge honing		•	•		•		
Descaling/paint stripping			•		•		•
Weld seams		•	•		•		
BY TYPE & MATERIAL Highly recommended PRODUCT AVAILABILITY ON:	STEEL	CARBON STEEL	STAINLESS STEEL	NON-FERROUS METAL	ALUMINIUM	SOFT WOOD	HARD WOOD
Normal steel	•	•				•	•
Stainless steel			•	•	•		
Brass wire				•		•	



TWIST KNOTTED WIRE WITH SHANK

- Circular shape for hard-to-reach areas including edges and corners
- For aggressive removal of rust, corrosion, paint and primer
- Stiff, long lasting knots make light work of heavy material build-up for preparing joints for filing and scaling
- 6mm shank fits most brands of hand drills





DxB L (mm)	SHANK	PK QTY	NORMAL STEEL
0.35 mm			
70x15 T15	6	12	66254405406
0.50 mm			
70x15 T15	6	12	66254405407

CRIMPED WIRE WITH SHANK

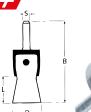
- Circular shape for hard-to-reach areas including edges and corners
- For removal of light rust, corrosion, paint and primer
- Thicker wire diameter provides more aggressive cleaning, for less aggressive applications, choose a thinner wire
- 6mm shank fits most brands of hand drills



DxB L (mm)	SHANK	PK QTY	NORMAL STEEL	STAINLESS STEEL	BRASS
0.20 mm					
20x4 T3	6	10	66254404872	-	-
30x6 T6.5	6	10	66254404875	-	-
30x9 T6.5	6	10	66254404876	66254404909	-
40x9 T9	6	10	66254404879	66254404910	-
50x10 T12.5	6	10	66254404880	-	-
50x15 T12.5	6	10	66254404881	66254405238	66254405397
60x10 17.5	6	10	-	66254405269	-
60x15 17.5	6	10	66254404885	66254405270	-
70x10 T19	6	10	66254404886	66254405271	-
80x20 T19	6	10	-	66254405392*	66254405405
0.30 mm					
50x10 T12.5	6	10	66254404891	-	-
60x15 17.5	6	10	66254404897	66254405394*	-
70x10 T19	6	10	66254404899	66254405395	-
70x15 T19	6	10	-	66254405396	-
80x20 T19	6	10	66254404907*	66254405398	-
DIMENSION KEY:	D = Diameter	B = Width	A = Bore min	L = Wire Length	* Made-to-order

TWIST KNOTTED END BRUSHES

- End brush shape is perfect for heavyduty cleaning and deburring hardto-reach areas such as tubes and internal diameters
- Twist knotted wires are aggressive and remove material faster
- For use on steel, choose a larger wire diameter for more aggressive applications, for lighter work, select a smaller wire diameter
- 6mm shank fits most brands of hand drills



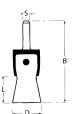


DxB L (mm)	SHANK	PK QTY	NORMAL STEEL
0.35 mm			
19x68 T28	6	12	66254405421
22x68 T28	6	12	66254405422*
0.50 mm			
28x68 T28	6	12	66254405423

* Made-to-order

CRIMPED WIRE END BRUSHES ### ON SHANK (ENB)

- End brush shape is perfect for cleaning and deburring hard-to-reach areas such as tubes and internal diameters
- Crimped wires are perfect for lighter cleaning and material removal
- For use on steel, choose a larger wire diameter for more aggressive applications, for lighter work, select a smaller wire diameter
- 6mm shank fits most brands of hand drills





DxBxL (mm)	SHANK	PK QTY	NORMAL STEEL	STAINLESS STEEL
0.20 mm				
12x60 T20	6	12	66254405408	-
17x65 T22	6	12	66254405409	-
0.30 mm				
12x60 T20	6	12	66254405410	66254405414
17x65 T22	6	12	66254405411	66254405415
24x68 T25	6	12	66254405412	66254405418*
30x68 T26	6	12	66254405413	66254405419
DIMENSION KEY: D = Diameter	B = Width A = Bore min	L = Wire L	ength	* Made-to-order









PRODUCT SELECTION GUIDE

BY APPLICATION

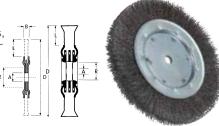
Highly recommended

WIRE	DIAMETER	(mm)
------	----------	------

APPLICATIONS		0.2		0.3		9.0	5
Roughing	·		,			•	
Surface preparation		•		•			
De-burring		•		•			
Edge honing		•		•			
Descaling/paint stripping		•		•		•	
Weld seams		•		•		•	
BY TYPE & MATERIAL				S			
Highly recommended •	STEEL	CARBON STEEL	STAINLESS STEEL	NON-FERROUS METAL	ALUMINIUM	SOFT WOOD	HARD WOOD
PRODUCT AVAILABILITY ON:	STI	CA	ST/ STI	NΣ	AL	20	HA
Normal steel	•	•				•	•
Stainless steel			•	•	•		

CRIMPED WHEEL BRUSHES (WHB)

- Wheel brushes are ideal for removing Choose a larger wire diameter corrosion, rust, hardened paints and hard adhesive residues
- Crimped wire removes light rust, corrosion, paint and primer
- for more aggressive applications, for lighter work, select a smaller wire diameter
- For working on large surface R areas, several wheel brushes can be mounted on the machine simultaneously



DxBxAxR L (mm)		PK QTY	NORMAL STEEL	STAINLESS STEEL
0.20 mm				
100x20x20x30 T24		1	66254406450	-
125x24x20x30 T36		1	66254406409	-
150x29x32x50.8 T27		1	66254406407	-
200x26x32x80 T40		1	66254406401	-
0.30 mm				
80x15x20x20 T20		1	66254406399	-
100x11x12x20 T22		1	66254406455*	-
125x11x12x20 T34		1	66254406454	-
125x24x20x30 T36		1	66254406282	-
150x18x32x50.8 T27		1	66254406265	66254406206
180x22x32x50.8 T42		1	66254406263	-
180x28x32x50.8 T42		1	66254406259	66254406196
200x26x32x80 T40		1	66254406255	66254406187
200x36x32x80 T40		1	66254406243	-
250x32x50.8x100 T50		1	66254406241	-
0.50 mm				
200x20x32x80 T40		1	66254406216	-
250x38x50.8x100 T50		1	66254406214	-
DIMENSION KEY: D = Diameter	B = Width	A = Bore min	L = Wire Length	* Made-to-order



PRODUCT SELECTION GUIDE

BY APPLICATION

Highly recommended

TYPE OF WIRE

APPLICATIONS		BRASS	CRIM	PED	STRAIGHT	N'	YLON/PVC
Descaling/paint stripping	'		•			'	
Weld seams			•				
Brushing/dust removal					•		•
Light cleaning		•					•
BY TYPE & MATERIAL Highly recommended	STEEL	CARBON STEEL	STAINLESS STEEL	NON-FERROUS METAL	ALUMINIUM	SOFT WOOD	HARD WOOD
PRODUCT AVAILABILITY ON:	S			žΣ		3(
Normal steel	•	•				•	•
Stainless steel			•	•	•		
Brass wire				•		•	

BRUSHES WITH HANDLE

- Basic hand brush for simple cleaning jobs in hard-to-reach or small areas
- Plastic handle for better grip and comfort in use
- Choose a larger wire diameter for more aggressive applications, for lighter work, select a smaller wire diameter

L1xL2xL (mm)		NUMBER OF ROWS	PK QTY	ART NO.	
WOOD HANDLE NO	RMAL STEEL STRA	IGHT WIRE 0.30	mm		
290x140x25		1R	12	66254405431	
290x140x25		2R	12	66254405432	1114
290x140x25		3R	12	66254405434	White the state of
290x140x25		4R	12	66254405435	Wash.
290x140x25		5R	12	66254405437	
WOOD HANDLE STA	AINLESS STEEL ST	RAIGHT WIRE 0.3			ti
290x140x25		2R	12	66254405443*	
290x140x25		4R	12	66254405447	12 L2
WOOD HANDLE STA	AINLESS STEEL CR	IMPED WIRE 0.30) mm		
290x140x25		2R	12	66254405457	
290x140x25		4R	12	66254405461	
WOOD HANDLE BR	ASS CRIMPED WIRI	E 0,30 mm			
290x140x25		4R	12	66254405466	
290x140x25		6R	12	66254405468	
PLASTIC HAND NO	RMAL STEEL STRAI				
265x140x25		1R	12	66254405470	The last
PLASTIC HAND STA	AINLESS STEEL STE	RAIGHT WIRE 0.3	0 mm		
265x140x25		1R	12	66254405471	
PLASTIC HAND BRA	ASS CRIMPED WIRE	0.30 mm			
265x140x25		1R	12	66254405473	
DIMENSION KEY:	D = Diameter	B = Width	A = Bore min	L = Wire Length	* Made-to-order

SPECIAL HAND BRUSHES



SPARK PLUG BRUSHES

L1xL2xL (mm)	WIRE	ROWS	PK QTY	ART NO.
SPB				
200x18x45	0.20	3x6R	24	66254405474



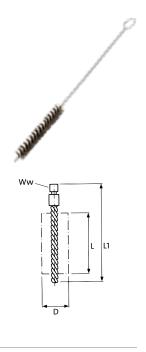


PIPE BRUSHES WITH HANDLE



- Pipe brush cleans and descales internal diameter of pipes
- Flexible metal shaft allows cleaning around bends and corners
- Choose a larger wire diameter for more aggressive applications, for lighter work, select a smaller wire diameter

DxLxL1 (mm)	PK QTY	ART NO.
NORMAL STEEL CRIMPED WIRE 0,10 mm		
10x100x300	20	66254405706
12x100x300	20	66254405704
NORMAL STEEL CRIMPED WIRE 0,20 mm		
20x100x300	20	66254405715
BRASS CRIMPED WIRE 0,10 mm		
10x100x300	20	66254405725
18x100x300	20	66254405728*
BRASS CRIMPED WIRE 0,15 mm		
20x100x300	20	66254405730*
NYLON WIRE 0,10 mm		
10x100x300	20	66254405734*
15x100x300	20	66254405737



* Made-to-order

PIPE BRUSHES WITH SHANK

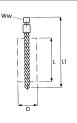


DxLxL1 (mm)	W/w	PK QTY	ART NO.
NORMAL STEEL CRIMPED WIRE 0,20 mm			
18x80x115	6	10	66254405502
25x80x115	6	10	66254405503
NORMAL STEEL CRIMPED WIRE 0,30 mm			
32x100x160	1/2"BSW	5	66254405634



LONG SHAFT FOR PIPE BRUSHES WITH SHANK

D (mm)	SHANK / W/w	WIRE Ø	PK QTY	ART NO.
DOU				
1000	6	-	1	66254405629
1000	1/2"BSW	-	1	66254405692
DIMENSION KEV.	D - Diameter	D = Width	A - Para min	L - Wire Length









OPERATING SPEED

Peripheral speed is a decisive factor in achieving optimum performance from a brush, the table below enables you to determine the relevant peripheral speed by simply reading down and across the appropriate diameter and drive shaft operating speed columns.

					BR	USH DIAN	METER (m	ım)				
RPM	20	40	50	80	100	125	150	180	200	250	300	350
min ⁻¹	-	-	-	-	-	-	-	-	-	-	-	-
800	-	-	-	3.35	4.19	5.23	6.28	7.53	8.37	10.47	12.56	14.75
900	-	-	2.35	3.77	4.71	5.88	7.06	8.48	9.41	11.77	14.12	16.47
1150	-	-	3.01	4.81	6.01	7.52	9.02	10.83	12.03	15.04	18.04	21.04
1200	1.26	2.51	3.14	5.02	6.28	7.85	9.41	11.3	12.55	15.69	18.83	21.97
1400	1.46	2.93	3.66	5.86	7.32	9.15	10.98	13.18	14.64	18.31	21.97	25.63
1500	1.57	3.14	3.92	6.28	7.85	9.81	11.77	14.13	15.69	19.61	23.54	27.46
1800	1.88	3.77	4.71	7.54	9.41	11.77	14.12	16.95	18.83	23.54	28.24	32.95
2000	2.09	4.19	5.23	8.37	10.26	13.08	15.69	18.84	20.92	26.15	31.38	36.61
2500	2.62	5.23	6.54	10.47	13.08	16.35	19.61	23.55	26.15	32.67	39.23	45.76
2800	2.93	5.86	7.32	11.72	14.64	18.31	21.97	26.37	29.29	36.61	43.93	51.25
3000	3.14	6.28	7.85	12.56	15.69	19.62	23.54	28.26	31.38	39.23	47.07	54.92
3200	3.35	6.7	8.37	13.4	16.74	20.92	25.1	30.14	33.47	41.84	50.21	58.58
3500	3.66	7.33	9.15	14.65	18.31	22.89	27.46	32.97	36.61	45.76	54.92	64.07
4000	4.19	8.37	10.46	16.75	20.92	26.16	31.38	37.68	41.84	52.33	62.76	73.22
4500	4.7	9.42	11.77	18.84	23.54	29.43	35.3	42.4	47.07	58.84	70.61	82.43
5000	5.23	10.47	13.08	20.93	26.15	32.7	39.23	47.1	52.33	65.38	78.5	-
5400	5.65	11.3	14.12	22.94	28.24	35.31	42.36	50.67	56.48	70.61	84.78	-
6000	6.28	12.56	15.69	25.12	31.38	39.24	47.07	56.52	62.76	78.5	-	-
7000	7.33	14.66	18.31	29.31	36.61	45.78	54.92	65.94	73.22	91.58	-	-
8000	8.37	16.75	20.92	33.94	41.48	52.32	62.76	75.36	83.73	-	-	-
9000	9.42	18.84	23.54	37.68	47.07	58.86	70.61	84.78	94.2	-	-	-
10000	10.47	20.93	26.17	41.86	52.33	65.4	78.5	94.2	-	-	-	-
12500	13.08	26.17	32.71	52.33	65.42	81.75	98.13	-	-	-	-	-
15000	15.7	31.4	39.25	62.8	-	-	-	-	-	-	-	-
17500	18.32	36.63	45.79	73.26	-	-	-	-	-	-	-	-
20000	20.93	41.87	52.33	83.73	-	-	-	-	-	-	-	-
22500	23.55	47.1	58.88	94.2	-	-	-	-	-	-	-	-
25000	26.17	52.33	65.42	104.66	-	-	-	-	-	-	-	-

HOW TO READ THIS TABLE

Select your brush diameter, then move down until you reach desirable peripheral speed in m/s, after check on the left side of the table the value for the RPM. Check on page 419 the maximum operating speed per type of brush.



MAXIMUM OPERATING SPEED

TYPE	DIAMETER (mm)	MAX RPM
	80	10000
	100	8000
	125	6000
	150	6000
	180	6000
WHEEL BRUSHES	200	4500
	250	3600
	250 - 1 row	3500
	300	3000
	60/65/75	11000
	60/65/75	11000
	60/65/75	10000
CUP BRUSHES	75	9300
COL PIOSITES	80/100	8500
	125/150	6500

TYPE	DIAMETER (mm)	MAX RPM
	100	11000
	100/115	11000
BEVEL BRUSHES	115	10000
	100	11000
	115	11000
T	125	10000
TWIST KNOTTED WHEEL BRUSHES	150/180	8500
	200	6500
	20	20000
	30	20000
	40	18000
SHAFT MOUNTED	50	15000
WIRE BRUSHES	60	15000
	70	15000
	80	12000

The maximum RPM ratings are safety ratings not recommended operating speeds. The optimum operating speed is determined by the application and in most cases lower operating speeds will prove more efficient and achieve the best result. As a general guide we recommend the following peripheral speeds when working on the materials listed with:

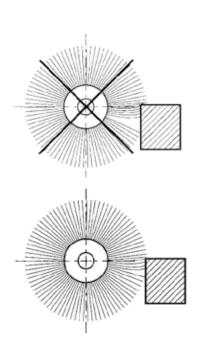
APPLICATION	CRIMPED WIRE	TWIST KNOTTED
STEEL	30m/s	35-40m/s
NON-FERROUS	18-20m/s	-
PLASTIC	15m/s	-

BRUSHING PRESSURE

- Let the tip of the wire brush do the work. Operate the brush with the lightest pressure so only the tips of the wire come in contact with the work
- If heavy pressure is used, wires will be over stressed, resulting in a wiping action, and if this is continued, the life of the brush will be shortened due to wire fatigue
- Apply the work to the face of the brush ensuring as much of the brush face as possible is in full contact. Applying the work to the side or edge of the brushing tool will result in wire breakage and shortened brush life
- Reversing the wheel brush rotation periodically will tend to increase the life of the brush. This results in the sharpening of the wire tips or ends, ensuring faster cutting action

SIZE OF WIRE

- Use the finest size of wire suitable for the application
- Finer wire size will perform better and last longer than heavier



TROUBLESHOOTING

Several factors can influence a brush application. If the selected brush does not achieve the expected result, the following table may provide solutions for the most common problems faced by a user. For further information, please contact our technical department.

PROBLEM	RECOMMENDED ACTIONS
	Increase trim length
Brush is too aggressive	Reduce wire diameter
	Reduce operating speed
	Reduce trim length
Brush is not aggressive enough	Increase wire diameter
	Increase operating speed
Astion of householders not totally manager and	Reduce trim length
Action of brush does not totally remove scale	Increase wire diameter
	Increase trim length
Finish is too coarse	Reduce wire diameter
Finish is too coarse	Increase operating speed
	Choose a nylon abrasive brush
Finish is too smooth	Reduce trim length
Finish is too smooth	Increase wire diameter
Action of brush is not uniform	Reduce brushing pressure
Action of brush is not uniform	Automate operations to avoid human inaccuracy
	Reduce brushing pressure
Wire breaks more than usual	Reduce wire diameter
	Reduce operating speed
	Reduce wire diameter
Life of the brush is too short	Increase brush diameter
	Reduce brushing pressure

SAFETY & STORAGE

Safety goggles or full face protection with side shields must be worn by all operators and others in the immediate area of power brush operations.

- Keep all machine guards in place
- Observe all speed restrictions indicated on brushes
- Appropriate protective clothing and equipment must be used
- Brushes should be carefully checked when removed from the original carton. Do not use if rusted or damaged
- Store brushes in the original carton. Wire brushes should not be exposed to heat, high humidity, acids, fumes or liquids that can result in deterioration of the wire filaments, and subsequently, premature failure of the wires. Also, check for distortion of brush fill that can cause imbalance and excessive vibration when the brush is running
- Check maximum spindle speed. Do not mount and operate the brush if spindle RPM exceeds the maximum safe free speed for which the brush is rated. Spindle length should be sufficient to permit a full nut mounting
- Before starting the machine, rotate the wire brush with a gloved hand to determine that the brush has been correctly mounted and turns freely



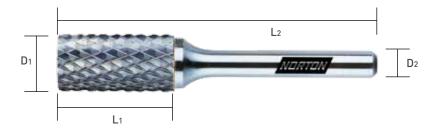
TUNGSTEN CARBIDE BURRS

State of the art, "Inox" and "Steel" cut styles and round edge burrs brings innovation to the Norton carbide burr offering. The specially designed geometries suit growing demands for stainless steel, steel and cast steel offering fast stock removal and long service life, providing optimum efficiency.

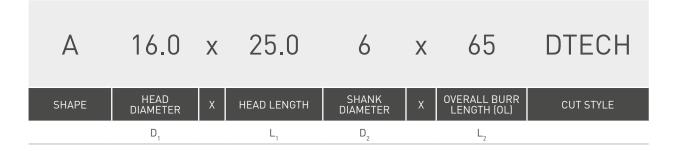
This extended line of carbide burrs covers a variety of teeth and cutting shapes providing optimum results in preparing and removing welds, chamfering, deburring in the shipbuilding, automotive, foundry and aviation industries.

Carbide burrs can be used with hand-held tools or CNC machines. Each carbide burr is packed individually in a plastic case.

UNDERSTANDING THE PRODUCT



BURR DIMENSIONS & DESCRIPTION



CUT STYLES



Developed cutting geometry - generating high stock removal on stainless steel and on Ferritic, Austenitic and Martensitic based materials, ensuring production savings and reduced downtime, reducing heat build-up at the cutting edge and workpiece.

Specially designed geometry to suit growing market demands for steel and cast steel applications, producing large chips with increased stock removal.

Better stock removal. Stronger tooth formation (decreased tooth wedge angle), longer tool life and reduced chipping.



Universal cutting style, fast material removal, smooth finish and granular chip break.

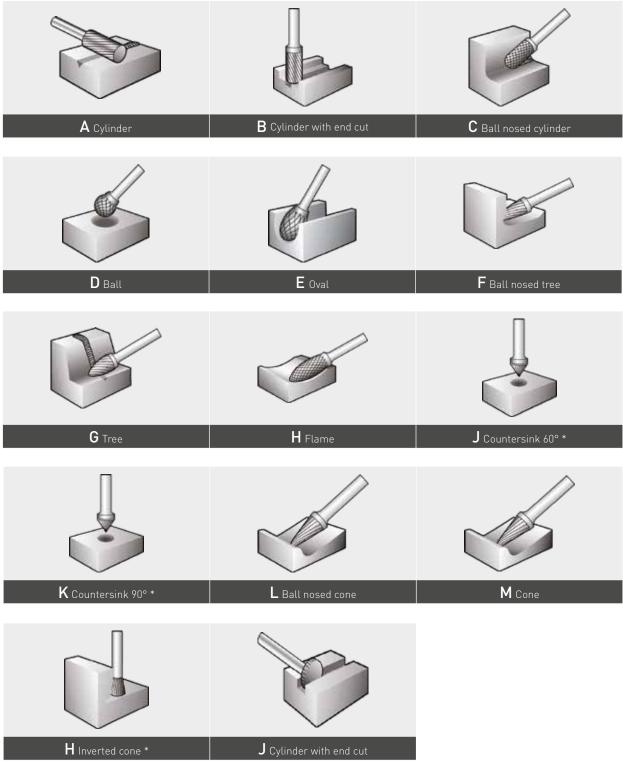
For deburring of aluminium alloys and plastic wide tooth formation, easy chip

PRODUCT RECOMMENDATION GUIDE

Highly recommended ✓✓ Recommended ✓	INOX	STEEL	DTECH DOUBLE CUT EXTRA	D DOUBLE CUT	ALU ALUMINIUM SPECIAL
Stainless steel	11		✓	✓	
Tempered steel		//	✓	✓	
Steel		//	✓	✓	
Cast Iron			//	✓	
Titanium				//	
Nickel				//	
Copper/ copper alloys				//	
Aluminium					/ /
Plastics / wood					//



APPLICATION BY SHAPE



FOR STAINLESS STEEL +++++

- Cut Inox style for high stock removal on stainless steel
- Reduced heat generation on the workpiece
- Aggressive cut creates large chips for a faster finish
- Work faster with reduced downtime for production savings



PRODUCT SHAPE	$D_1xL_1xD_2xL_2$ (mm)	PK QTY	ART NO.
A CYLINDER			
	6x18x6x50	1	66261121900
	8x19x6x64	1	66261121901
14.111	10x19x6x64	1	66261121902
	13x25x6x70	1	66261121911
C BALL NOSED CYLINDER			
	6x18x6x50	1	66261121912
CHILD'S	8x19x6x64	1	66261121920
- Children	10x19x6x64	1	66261121921
	13x25x6x70	1	66261121922
D BALL			
180	6x5x6x50	1	66261122103
	8x6x6x52	1	66261122107
	10x8x6x54	1	66261122108
	13x11x6x56	1	66261122109
F BALL NOSED TREE			
	6x18x6x50	1	66261122110
	8x20x6x65	1	66261122111
	13x25x6x70	1	66261122115
G TREE			
	8x19x6x64	1	66261122118
	13x25x6x70	1	66261122120
- Adding			
L BALL NOSED CONE			
	8x25x6x70	1	66261122122
	13x32x6x77	1	66261122125
Contraction of the Contraction o			
INOX KIT			
e.	A 13x25x6x70	1	
100 M 180	C 13x25x6x70	1	
(2)(3)(4)(3)(2)	F 13x25x6x70	1	66261122126*
	G 13x25x6x70	1	
	L 13x32x6x77	1	



FOR STEEL ++++

- Cut Steel style for best results on steel
- Reduced heat generation on the workpiece
- Aggressive cut creates large chips for a faster finish
- Work faster with reduced downtime for production savings



PRODUCT SHAPE	$D_1xL_1xD_2xL_2$ (mm)	PK QTY	ART NO.
B CYLINDER WITH END CUT			
	6x18x6x50	1	66261121688
STATE OF	10x19x6x64	1	66261121692
- Ships	13x25x6x70	1	66261121694
C BALL NOSED CYLINDER			
	6x18x6x50	1	66261121748
CHILIN:	8x19x6x64	1	66261121749
Shelling.	10x19x6x64	1	66261121750
CONTRACTOR NO.	13x25x6x70	1	66261121751
D BALL			
	6x5x6x50	1	66261121753
100	8x6x6x52	1	66261121755
	10x8x6x54	1	66261121756
F BALL NOSED TREE			
	6x18x6x50	1	66261121759
STORES.	8x20x6x65	1	66261121760
2000	10x19x6x64	1	66261121747
	13x25x6x70	1	66261121762
G TREE			
	8x19x6x64	1	66261121764
- Carlon	10x19x6x64	1	66261121765
The state of the s	13x25x6x70	1	66261121766
L BALL NOSED CONE			
	10x30x6x76	1	66261121768
THE PERSON	13x32x6x77	1	66261121769
Contraction of the Contraction o			
STEEL KIT			

STEEL KIT				
	А	A 13x25x6x70 1 C 13x25x6x70 1 F 13x25x6x70 1 G 13x25x6x70 1 L 13x32x6x77 1		
100 A 100	С	13x25x6x70	1	
	F	13x25x6x70	1	66261121783
The same of the sa	G	13x25x6x70	1	
	L	13x32x6x77	1	

FOR CAST IRON & SOFT STEELS

DOUBLE CUT EXTRA COATED #++++

- 'DTech' Double cut extra style, coated with TiLAN (titanium aluminium nitride) for better sliding characteristics
- Reduced heat generation on the workpiece
- Excellent chip removal and reduced wear of teeth
- Reduces cutting pressure required due to improved lubrication

DOUBLE CUT EXTRA

- 'DTech' Double cut extra cut style
- Good stock removal and strong tooth formation thanks to decreased tooth wedge angle
- Longer tool life and reduced chipping
- A number of sizes available for a variety of applications

PRODUCT SHAPE	$D_1xL_1xD_2xL_2$ (mm)	PK QTY	DOUBLE CUT EXTRA COATED	DOUBLE CUT EXTRA
B CYLINDER WITH END CUT				
	10x19x6x65	1	-	07660739844*
	12x25x6x70	1	-	60157638174
and distribution				
C BALL NOSED CYLINDER				
	10x19x6x65	1	-	07660739841
	12x25x6x70	1	-	60157638175
F BALL NOSED TREE				
	12x30x6x75	1	69957383321*	63642587067
The state of the s				
L BALL NOSED CONE				
	10x9x6x53	1	69957383279	07660707832
- Annual Control				

* Made-to-order



DOUBLE CUT EXTRA KITS FOR SPECIAL APPLICATIONS



KIT	SHAPE	$D_1xL_1xD_2xL_2$ (mm)	PK QTY	ART NO.
BURRS KIT x10 CUT DTECH	А	10x19x6x65	1	
	А	12x25x6x70	1	
	С	10x19x6x65	1	
114777	С	12x25x6x70	1	
TALES!	L	12x30x6x75	1	7//0720070
	E	10x16x6x60	1	7660739870
	G	10x19x6x65	1	
	G	12x25x6x70	1	
	D	12x10.8x6x55	1	
	F	12x25x6x70	1	
SOFT STEEL X4 PEICE KIT	С	12x25x6x70	1	
O Wr	D	10x9x6x53	1	
	F	12x25x6x70	1	66254428281
	L	12x30x6x75	1	
				_

FOR TITANIUM, NICKEL, COPPER & COPPER ALLOYS

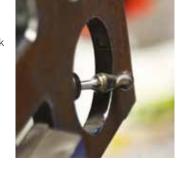
DOUBLE CUT EXTRA COATED #++++

- "D" Double cut style, coated with TiLAN (titanium aluminium nitride) for better sliding characteristics
- Universal cutting style for fast material removal, smooth finish and granular chip break
- Excellent chip removal and reduced wear of teeth
- Reduces cutting pressure required due to improved lubrication

METAL DOUBLE CUT

- Unique geometry improves operator control and reduces the size of chips
- Increased cut rate and longer life on tough applications
- "D" Double cut style
- Universal cutting style for fast material removal

Formerly BDX



PRODUCT SHAPE	$D_1xL_1xD_2xL_2$ (mm)	PK QTY	DOUBLE CUT EXTRA COATED	METAL DOUBLE CUT
A CYLINDER				
	3x13x3x38	1	-	63642586518
	6x19x6x50	1	-	66261146394
ASSESSACE	8x19x6x65	1	-	66261146396
	10x19x6x65	1	-	66261146496
	10x25x6x162	1	-	63642535764
	12x25x6x70	1	69957383219	66261146497
	16x25x6x70	1	-	60157638148
CYLINDER WITH END CUT				
	3x13x3x38	1	-	60157638140
	6x19x6x50	1	-	63642586641
	8x19x6x65	1	-	7660707804
	8x19x6x175	1	-	63642535757
	10x19x6x65	1	-	66261146498
	12x25x6x70	1	-	66261146499
	16x25x6x70	1	-	66261146500
BALL NOSED CYLINDER				
	3x13x3x38	1	-	63642586710
	6x13x6x162	1	-	63642535773
	6x16x6x80	1	-	66261197806
A BASSON STATE	6x19x6x50	1	69957383234	66261146521
The same	8x19x6x65	1	-	66261146524
	10x19x6x65	1		66261146526
	12x19x6x65	1	-	60157638153
	12x25x6x70	1	69957383241	66261146531
	16x25x6x70	1	-	66261146532

Formerly BDX



PRODUCT SHAPE	$D_1xL_1xD_2xL_2$ (mm)	PK QTY	DOUBLE CUT EXTRA COATED	METAL DOUBLE CUT
D BALL				
	6x5.4x6x50	1	-	66261146533
	8x7.2x6x52	1	-	66261146534
	10x9x6x53	1	69957383279	66261146535
	12x10.8x6x55	1		66261146536
E OVAL				
	6x10x6x50	1	-	63642586892
	10x16x6x60	1	-	60157638159
	12x22x6x67	1	-	60157638162
F BALL NOSED TREE				
	6x16x6x50	1	69957383296*	66261146537
	6x18x6x150	1	-	66623391628
	8x20x6x150	1	-	66623382151
THE SECOND	10x19x6x65	1	-	66261146539
The second second second	12x25x6x70	1	69957383301	66261146540
	12x25x8x70	1	-	60157638172
	16x25x6x70	1	-	66261146541
G TREE				
	3x12x3x38	1		60157638163
400	6x16x6x50	1	69957383305*	66261146542
The second second	10x19x6x65	1	69957383307	66261146545
And the second	12x25x6x70	1	-	66261146547
	16x25x6x70	1	-	66261146548
H FLAME				
	8x19x6x65	1	-	60157638160
The state of the s	12x32x6x77	1	69957383312	63642587971
Separate September				
L BALL NOSED CONE				
	6x16x6x50	1	-	60157638156
The same of the sa	8x19x6x69	1	-	66261146549
	10x27x6x75	1	-	66261146550
	12x30x6x75	1	69957383320	66261146552
M CONE				
	6x19x6x50	1	-	63642587137
	10x16x6x65	1	-	63642587133
No. of the last of	12x22x6x70	1	-	60157638149

^{*} Made-to-order Formerly BDX

CARBIDE BURRS

MINI CARBIDE BURRS KITS

KIT	SHAPE	$D_1xL_1xD_2xL_2$ (mm)	PK QTY	ART NO.
MINI BURRS KIT x10	А	3x13x3x38	1	
CUT D NORTON	В	3x13x3x38	1	
	М	3x11x3x38	1	
	С	3x13x3x38	1	
	L	3x8x3x38	1	
	Н	3x8x3x38	1	7660708036
	E	3x6x3x38	1	
	G	3x13x3x38	1	
	D	3x2.7x3x39	1	
	F	3x13x3x38	1	
MINI BURRS KIT x 5 CUT D	А	10x19x6x65	1	
	С	12x25x6x70	1	
TOUSYAMI	F	12x25x6x70	1	63642553618
	G	10x19x6x65	1	
	L	12x30x6x75	1	
MINI BURRS KIT x 5	С	12x25x6x70	1	
BRASS, BRONZE, COPPER	D	10x9x6x53	1	
P-PU	F	12x25x6x70	1	66254428265
the the the the	L	12x30x6x75	1	
NEW DOUBLE CUT KIT	В	10x19x6x65	1	
BUA 9	С	10x19x6x65	1	
	D	10x9x6x53	1	69957365977
	E	10x16x6x60	1	
	G	10x19x6x65	1	





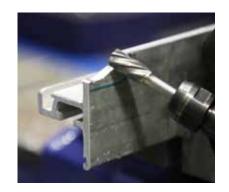
FOR CAST IRON & SOFT STEELS

ALU COATED #++++

- 'ALU' cut style, coated with TiLAN (titanium aluminium nitride) for better sliding characteristics
- Reduced heat generation on the workpiece
- Excellent chip removal and reduced wear of teeth
- Reduces cutting pressure required due to improved lubrication

ALU

- 'ALU' cut style, for de-burring aluminium alloys and plastic
- A number of sizes available for a variety of applications
- Wide tooth formation for easy chip flow



PRODUCT SHAPE	$D_1xL_1xD_2xL_2$ (mm)	PK QTY	ALU COATED	ALU
A CYLINDER				
	10x19x6x65	1	-	60157638195
	12x25x6x70	1	-	63642586517

B CYLINDER WITH END CUT			
	10x19x6x65	1 -	07660739845

10x19x6x65	1	-	60157638182
12x25x6x70	1	69957383278*	07660707846

F BALL NOSED TREE				
	10x19x6x65	1	-	63642586951
1990	12x25x6x70	1	69957383303	60157638181
- TO- 100 - 100 - 1				

L BALL NOSED CONE				
	6x16x6x50	1	-	63642587095*
	12x30x6x75	1	69957383325	63642587101

* Made-to-order

ALU BURR KIT FOR CAST IRON & SOFT STEELS



KIT	SHAPE	$D_1xL_1xD_2xL_2$ (mm)	PK QTY	ART NO.
ALUMINIM KIT	С	12x25x6x70	1	
	D	10x9x6x53	1	
	F	12x25x6x70	1	66254428260
	L	12x30x6x75	1	

* Made-to-order

RECOMMENDED OPERATING SPEEDS (RPM)

MATERIAL TYPE	PRODUCT DIAMETER					
MATERIAL TIPE	3mm	6mm	10mm	12mm	16mm	
Steel	60000 - 90000	45000 - 60000	30000 - 40000	22500 - 30000	18000 - 24000	
Tempered steel	60000 - 90000	30000 - 45000	19000 - 30000	15000 - 22500	12000 - 18000	
Stainless steel	60000 - 90000	30000 - 45000	19000 - 30000	15000 - 22500	12000 - 18000	
Casting	45000 - 90000	22500 - 60000	15000 - 40000	11000 - 30000	9000 - 24000	
Titanium	60000 - 90000	30000 - 45000	19000 - 30000	15000 - 22500	12000 - 18000	
Nickel	60000 - 90000	30000 - 45000	19000 - 30000	15000 - 22500	12000 - 18000	
Copper & copper alloys	45000 - 90000	22500 - 60000	15000 - 40000	11000 - 30000	9000 - 24000	
Aluminium	30000 - 90000	15000 - 70000	10000 - 50000	7000 - 38000	6000 - 30000	
Plastics	30000 - 90000	15000 - 70000	10000 - 50000	7000 - 38000	6000 - 30000	
Carbon or glass fibres	64000 - 117000	32000 - 59000	19000 - 35000	16000 - 30000	12000 - 22000	

Recommended speeds are for standard shank length of 45mm, maximum overhang 10mm. Maximum recommended speed for extra-long burrs is 15000 RPM.

RECOMENDATIONS FOR USE

- It may be necessary to adjust the rates shown to achieve optimum performance
- Running below the optimum speed will encourage chipping
- Harder materials or sticky metals such as, titanium, require slower speeds
- Running above optimum speed will cause tooth wear
- Smaller burrs require faster speeds
- · Allowing the tool to become too hot may cause the braze to melt and detach the head of the shank
- · Apply constant movement and light pressure when in use
- Do not sink the burr for more than one third of its periphery



NORTON NORBEVEL

Norton provides cutting heads for bevelling and rounding metal, designed to be used with electric and pneumatic machines to make light work of heavy duty bevelling and radius work, up to a depth of 12mm.

FOR BEVELLING, NORBEVEL PROVIDES:

BETTER WORKING CONDITIONS

Lightweight and almost vibration-free. The chips are large enough to immediately drop to the ground. No hazardous dust particles and/or combustion gases are released.

A MORE CONSISTENT AND ACCURATE ANGLE

NorBevel-6 and NorBevel-12 machines provide a more consistent and accurate angle to the metal for a stronger welded joint.

A MACHINE QUALITY FINISH WITHOUT CONTAMINATION

A better quality weld joint is created through reduced encapsulation of impurities in the weld, as NorBevel does not contaminate the metal.

SPEED AND FLEXIBILITY

Approximately 1,2m of bevelling can be done in one minute. In a matter of seconds, the machine can be adjusted and the bevel heads replaced.

NO FINISHING AND NO DISCOLORATION

A perfect end result straight away, without finishing. Discoloration is prevented through reduced-sparking that adds hardly any heat to the material.

FOR ROUNDING, NORBEVEL PROVIDES:

UNIFORM QUALITY

A larger bonding surface is created for paint and coatings due to the uniform radius. Cable feed glands are no longer required to prevent chafing when feeding through cables, wiring and/or piping.

A QUALITY FINISH

Only with NorBevel you can quickly achieve high levels of constant quality when rounding metal.

SPEED AND FLEXIBILITY

Rounding small openings from a diameter of 18 mm is easy due to the compact and lightweight machine design. Rounding metal now has an unprecedented degree of flexibility.

For NorBevel machines, please get in touch with your Norton sales representative to find the latest solution for your application.



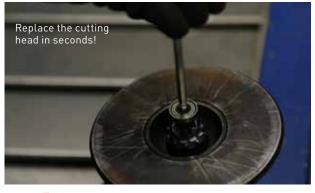
The NorBevel 12 cutting heads have been designed for heavy duty bevelling and radius work up to a depth of 12mm. All heads can be used on the Norton NorBevel

EBA-12 and ABA-12 machines which are adjustable for adapting bevelling depth.

HEADS FOR NORBEVEL-12 FOR ELECTRIC AND PNEUMATIC MACHINES

RADIUS / ANGLE	PK QTY	LASER-CUT STEEL & STAINLESS STEEL	STEEL	ALUMINIUM, PLASTIC, BRASS & SOFT METALS
R2	1	66261136479	66261107707	66261113318
R3	1	66261136480	66261107799	66261113319
R4	1	-	66261107801	66261113320
R5	1	66261152485*	-	-
R8	1	66261152489*	-	66261152484
30°	1	66261146205	66261107805	66261113321
45°	1	66261136503	66261107809	66261113323
30°	1	66261146212	66261107841	66261146169
45°	1	66261146216	66261107844	66261146171
60°	1	-	66261107845	-
	R2 R3 R4 R5 R8 30° 45° 30°	ANGLE QTY R2 1 R3 1 R4 1 R5 1 R8 1 30° 1 45° 1 30° 1 45° 1	ANGLE QTY & STAINLESS STEEL R2 1 66261136479 R3 1 66261136480 R4 1 - R5 1 66261152485* R8 1 66261152489* 30° 1 66261146205 45° 1 66261146212 45° 1 66261146216	ANGLE QTY & STAINLESS STEEL STEEL R2 1 66261136479 66261107707 R3 1 66261136480 66261107799 R4 1 - 66261107801 R5 1 66261152485* - R8 1 66261152489* - 30° 1 66261146205 66261107805 45° 1 66261136503 66261107841 45° 1 66261146212 66261107844 45° 1 66261146216 66261107844

* Made-to-order





Recommended maximum cut depth is 4mm per pass





For lighter bevelling and rounding to a depth of 6mm the cutting heads have been designed for heavy duty bevelling and radius work up to a depth of 12mm. All heads can be used on the Norton NorBevel EBA-12 and ABA-12 machines which are adjustable for adapting bevelling depth.

HEADS FOR NORBEVEL-06 FOR ELECTRIC AND PNEUMATIC MACHINES

MAX DEPTH (mm)	RADIUS / ANGLE	PK QTY	LASER-CUT STEEL & STAINLESS STEEL	STEEL	ALUMINIUM, PLASTIC, BRASS & SOFT METALS
6mm	R2	1	66261136486	66261107851	66261113306
170-	R3	1	66261136502	66261107852	66261113309
	R4	1	66261146174	66261107853	66261113310
6mm	30°	1	66261146179	66261107856	66261113311
	45°	1	66261136504	66261107858	66261113312
	60°	1	-	66261107859	-



Recommended maximum cut depth is 4mm per pass



For cleaning a variety of materials and highlighting and rubbing wood. Washable and reusable. Won't rust, shred or splinter. Compatible with water based finishes.

STANDARD



- Made from strands of ultra-fine steel filaments
- For use on wood, paint, metal, stone, marble and glass
- Can be used with a chemical stripper
- Ideal for cleaning and fine finishing



WEIGHT	GRADE	PK QTY	ART NO.
1kg	0000	12	63642593149
1kg	000	12	63642593151
1kg	00	12	63642593153
1kg	0	12	63642593154









Conditions of Sale-General Conditions for the Supply of Goods and Associated Services (Feb 2021)

Conditions of Sale-General Conditions for the Supply of Goods and Associated Services (Feb 2021)

1. (a) In these conditions 'the Company' means Saint-Gobain High Performance Solutions UK Ltd (trading as Saint-Gobain Abrasives) and 'the Customer' means the individual, firm, company or other party with whom the Company contracts. 'Supply' includes (but is not limited to) any supply under a contract of sale. 'International Supply Contract' means such a contract as is described in section 26(3) of the Unfair Contract Terms Act 1977

(b) No order in pursuance of any quotation or otherwise shall be binding on the Company unless and until such order is accepted by the Company. Any contract made between the Company and the Customer (herein called 'the Contract') shall be subject to these conditions and save as aftermentioned no representative or agent of the Company has authority to agree any terms or make any representations inconsistent with them or to enter into any contract except on the basis of them; any such term representation or contract will bind the Company only if in writing and signed by a director.

(c) Unless otherwise agreed in writing by the Company these conditions shall override any terms and conditions stipulated or referred to by the Customer in his order or pre-contract negotiations.

(d) Any description contained in the Company's catalogues, samples, price lists or other advertising material is intended merely to present a general picture of the Company's products and services and shall not form a representation or be part of the Contract

(e) In the event that the Company has not given a written acknowledgement of the Customer's order these conditions, provided the Customer shall have had prior notice of them, shall nonetheless apply to the Contract.

[f] In the event that the Customer orders any goods by telephone, any subsequent written order received from the Customer will be deemed to be a confirmation of the order given on the telephone if and only if the written order is (i) marked with the Company's reference number given to the Customer on the telephone and (ii) marked 'Confirmation Only'. Any written order not so marked will be deemed to be a further order from the Customer and may be accepted accordingly.

 $\mbox{[g]}$ The Company reserves the right to correct any employee clerical or typographical errors made at any time.

2. [a] Where goods are made to the Customer's specification, instructions or design, the Customer undertakes full responsibility for the suitability and accuracy of the specification, instructions or design and undertakes to indemnify the Company against any infringement of any patent, design rights, registered design, trade mark, trade name, copyright or other intellectual property rights and any loss, damage or expense which it may incur by reason of such infringement in any country and the Customer undertakes further to indemnify the Company for any loss damage or expense in respect of any liability arising under or by reason of the provisions of the Consumer Protection Act 1987 in relation to the specification or design of such goods.

(b) The Customer warrants that it will pass on to all third parties to whom it may supply the goods all information as to the use and safe handling of the goods as may have been passed on to the Customer by the Company.

3. [a] Subject to any agreement to the contrary the Company's quotations are provisional and may be altered to take account of any changes taking place between the date of quotation and the Company's acceptance of the Customer's order in the price of raw materials, rates of wages and other costs of production or in the Customer's specification, instructions or design or in the event that the

Customer orders part only of the quantity referred to in any quotation.

(b) The Company shall be entitled to increase its prices at any time to take account of any increase in the cost to the Company of purchasing any goods or materials or manufacturing working on or supplying any goods or services (including any such increase arising from any error or inadequacy in any specification, instructions or design provided by the Customer or any modification carried out by the Company at the Customer's request) and such increased prices ruling at the date of despatch by the Company shall be substituted for the previous Contract price. All prices quoted are exclusive of VAT and the Customer shall pay any and all taxes duties and other government charges payable in respect of the goods or services.

4. (a) Unless otherwise agreed in writing by the Company, the Company shall deliver the goods by the means most convenient to the Company to the address or addresses specified by the Customer or (in the event that the Customer fails to

specify an address) to any address at which the Customer resides or carries on business and off-loading shall be at the Customer's risk.

[b] If the Contract is an International Supply Contract it shall be deemed to incorporate the latest edition of Incoterms current at the date of the Contract save that in the event of any inconsistency between incoterms and any express term of the Contract the latter shall prevail. The Company shall be under no obligation to give the Customer the notice specified in section 32 [3] of the Sale of Goods Act 1979.

(c) Save in the Case of International Supply Contracts and subject to any agreement in writing by the Company, the risk in goods which the Company agrees to supply shall pass to the Customer on the relevant date as defined in sub paragraph 5 (a) hereof or the date (if earlier) on which, the goods being ready for delivery, delivery is postponed at the Customer's request.

(d) The Company shall not be liable for any loss of or damage sustained by any goods left with the Company howsoever caused and whether or not attributable to negligence on the part of the Company or negligence or wilful default on the part of any servant or agent of the Company.

(e) Should the Company be delayed in or prevented from making delivery of the goods or carrying out the services due to war, governmental or parliamentary restrictions, strike, lock-outs, fire, floods, explosions, labour disturbances, trade disputes, damage to or destruction of the goods, breakdown of machinery, shortage of labour or of raw materials or Act of God or due to any other cause whatsoever beyond the reasonable control of the Company the Company shall be at liberty to cancel or suspend the order placed by the Customer without incurring any liability for any loss or damage arising there from.

[f] While the Company will endeavour to deliver the goods or complete the services by any date or within any period agreed upon, such dates and periods are estimates only given in good faith and the Company will not be liable for any failure to deliver or complete by such a date or within such a period. Moreover, the Company shall be entitled to defer delivery until any monies due from the Customer have been received.

5. (a) For the purposes of this paragraph the goods shall mean the whole or any instalment of the goods which the Company has agreed to supply or to which the Company has agreed to carry out work and the relevant date shall be the date on which (i) the Company despatches the goods or (ii) the Customer takes delivery of the goods at the Company's premises, whichever is the earlier, or (iii) (in the case of services) the services or any part thereof are carried out.

(b) Unless otherwise specified in writing by the Company payment for the goods or services or any part thereof shall be made by the customer net cash not later than the end of the month following the month in which the relevant date falls. Time for payment shall be of the essence of the Contract. Without prejudice to any other rights of the Company interest will be payable on all overdue accounts at Barclays Bank PLC base rate plus 4% and for the purpose of paragraphs 6 and 8 hereof the full purchase price of the goods or services shall include any interest payable hereunder.

(c) Queries or inaccuracies regarding the invoice will only be entertained if the Customer has given the Company written notice of such queries or inaccuracies within 14 days of the invoice date.

(d) The Customer shall make all payments due in full without any deduction by way of set-off, counterclaim, discount or abatement, unless the Company expressly agrees otherwise.

6. (a) If the Customer shall fail to make any payment when it becomes due or shall enter into any composition or any arrangement with his creditors or if being an incorporated company shall have an administrative receiver or administrator appointed or shall pass a resolution for winding up or a Court shall make an order to that effect or if there shall be any breach by the Customer of any of the terms and conditions hereof the Company may defer or cancel any further deliveries and treat the Contract as determined but without prejudice to its right to the full purchase price for goods delivered and services provided and damages for any loss suffered in consequence of such determination.

(b) Cancellation by the Customer will only be accepted at the discretion of the Company and in any case on condition that any costs or expenses incurred by the Company up to the date of cancellation and all loss or damage resulting to the Company by reason of such cancellation will be paid by the Customer to the Company forthwith. Acceptance of such cancellation will only be binding on the Company if in writing.

CONDITIONS OF SALE

(c) A charge will be made for any costs incurred by the Company due to suspension or deferment of any order by the Customer or in the event that the Customer defaults in collecting, or giving instructions for the delivery of, any goods.

7. (a) No claim for damage in transit, shortage of delivery or loss of goods will be entertained unless the Customer shall have given to the Company written notice of such damage, shortage or loss with reasonable particulars thereof within 14 days of receipt of the goods or (in the case of total loss) of receipt of the invoice or other notification of despatch. The Company's liability, if any, shall be limited to replacing or (in its discretion) repairing such goods and it shall be a condition precedent to any such liability that the Customer shall if so requested have returned damaged goods to the Company within 14 days of such request. The Customer shall not be entitled to make any claim against the Company for consequential loss arising out of such damage shortage or loss as aforesaid.

(b) Save as otherwise provided in these conditions the Company's liability in respect of any defect in or failure of goods supplied or work done is limited to replacing or (in its discretion) repairing or paying for the repair or replacement of goods which within 12 months of delivery to the Customer are found to be defective by reason of faulty or incorrect design workmanship parts or materials and carrying out again any services which the Company has failed properly to perform in accordance with the Contract. In the event of any error in any weight, dimension, capacity, performance or other description or information which has formed a representation or is part of a contract the Company's liability in respect of any direct loss or damage sustained by the Customer as a result of such error shall not exceed the price of the goods or services in respect of which the description or information is incorrect. Conditions precedent to the Company's liability hereunder shall be that as soon as reasonably practicable the Customer

(i) shall have given to the Company reasonable notice of the defect, failure or error

(iii) shall have either returned the goods to the Company or provided authority for the Company's servants or agents to inspect them, as the Company may request.

The Company shall have no other or further liability in respect of any direct, indirect or consequential loss or damage sustained by the Customer arising from or in connection with any such defect failure or error as aforesaid.

(c) Where the Company agrees to repair or replace goods or carry out again the services in accordance with the foregoing provisions of this paragraph any time specified for delivery under the Contract shall be extended for such period as the Company may reasonably require.

(d) The Company shall have no liability in respect of any failure of goods caused, whether wholly or in part, by any modification to the goods (save for trimming or dressing the goods for use) carried out by or for the Customer (other than by the Company) without the Company's prior written approval.

(e) Save for such terms as may be implied in the Contract by section 12 of the Sale of Goods Act 1979 or section 2 of the Supply of Goods and Services Act 1982 all conditions, warranties and other terms express or implied, statutory or otherwise, are expressly excluded, save insofar as contained herein or as otherwise expressly agreed by the Company in writing PROVIDED that if and insofar as any legislation or any order made thereunder shall make or have made it unlawful to exclude or purport to exclude from the Contract any term or shall have made unenforceable any attempt to exclude any such term, the foregoing provisions of this paragraph will not apply to any such term.

[f] Nothing in this agreement shall limit the Company's liability for death or personal injury caused as a result of the negligence of the Company.

8. The following provisions shall apply to all goods which under the Contract (other than an International Supply Contract) the Company agrees to supply to the Customer. No failure by the Company to enforce strict compliance by the Customer with such provisions shall constitute a waiver thereof and no termination of the contract shall prejudice limit or extinguish the Company's rights under this paragraph.

(ii) Property in the goods shall not pass to the Customer until full payment has been received by the Company for the goods and any other goods supplied by the Company or any of its associated companies.

(iii) The Customer undertakes that until payment has been made in accordance with 8i) above- not to remove, deface, or cover up any identification marks that the goods are the property of the Company

- to store the goods separately from those belonging to the Customer and others

- to allow the Company, its agents and employees, unrestricted access to the Customer's premises or any other location where the goods are stored, for the purpose of removal of the goods.

(iii) The Customer is hereby granted a license by the Company to incorporate the goods in any other products.

(iv) The Customer is hereby licensed to sell on the goods and any products incorporating any of them. The Customer shall, immediately upon receipt of the proceeds of sale, and whether or not payment has become due under paragraph 5 hereof, remit to the Company the full purchase price of the goods sold on less any part thereof which has already been paid and until such amount has been so remitted shall hold such amount as trustee and agent for the Company.

(v) The Customer shall maintain all appropriate insurance in respect of the goods from the date or dates on which the risk therein passes to him. In the event of any loss or damage occurring while the goods remain the property of the Company the Customer shall immediately on receipt of the insurance monies, remit to the Company the full purchase price of the goods lost or damaged less any part thereof which has already been paid and until such amount has been so remitted shall hold such amount as trustee and agent for the Company.

(vi) The licences granted under sub-paragraphs (ii) and (iii) above shall be terminable forthwith at any time upon notice by the Company to the Customer.

9. In the case of International Supply Contract property in the goods shall pass to the Customer upon delivery.

10. Save as hereinbefore provided and subject to the provisions of section 2(i) of the Unfair Contract Terms Act 1977 the Company shall not be liable to the Customer for any damage or for any direct or consequential loss incurred by the Customer in consequence of any negligence on the part of the Company or negligence or wilful default on the part of its servants or agents or in connection with the supply of any goods or the design or manufacture thereof or in the carrying out of any work or the provision of any information.

11. Nothing in these Conditions shall exclude or restrict any liability that the Company may have by virtue of the Consumer Protection Act 1987.

12. (a) The Customer shall be responsible for complying with any legislation or regulations governing the importation of the goods supplied by the Company under the Contract into the country of destination and for the payment of any duties on them

(b) The Customer shall be liable for and shall indemnify and hold the Company harmless from any and all liability, loss, claims, damages and costs, which the Company may sustain or incur, arising out of or in any way connected with the Customer's failure to comply with paragraphs 12(a) and/or 15 hereof.

13. Without affecting any other right or remedy available to it, the Company may terminate any Contract with the Customer with immediate effect by giving written notice to the Customer if the Customer commits a material breach of any term of these Conditions and/or the Contract which breach is irremediable or (if such breach is remediable) fails to remedy that breach within a period of seven (7) days after being notified in writing to do so.

14. The Customer shall ensure that in any dealings with the Company, neither it or its employees or agents shall commit any offence under the Bribery Act 2010 ["the Act"] including not engaging in any activity, practice or conduct which would constitute an offence under sections 1, 2 or 6 of the Act. The Customer shall inform the Company immediately it becomes aware of any actions between the parties that could constitute an offence under the Act.

15. It is the Company's and the Company's group's policy to comply with all applicable sanctions and legal requirements for the import and export of goods, technology and services. The Company is committed to ensuring compliance with all regulatory and licensing requirements relating to international trade. The Company does not permit the supply of any of its goods to any individuals, companies or organisations that are subject to any trade, economic or financial sanctions, embargoes or similar restrictive measures administered, enacted or enforced by the UK, EU, UN or USA ("Sanctioned Entities"). By entering into this Contract the Customer agrees not to re-sell or otherwise transfer the goods supplied by the Company, either directly or indirectly, to any Sanctioned Entities.

16. (a) For the purposes of this paragraph 16, (a) "Applicable Data Protection Laws" means (i) to the extent the UK GDPR applies, the law of the United Kingdom or of a part of the United Kingdom which relates to the protection of personal data; (ii) to the extent the EU GDPR applies, the law of the law of the European Union or any member state of the European Union to which the Supplier is subject, which relates to the protection of personal data, in each case, as updated, amended or replaced from time to time; (b) "EU GDPR" means the General Data Protection Regulation ((EU) 2016/679), as it has effect in EU law; (c) "UK GDPR" has the meaning given to it in section 3(10) (as supplemented by section 205(4)) of the Data Protection Act 2018; and (d) the terms "Data Subject", "Personal Data", "processing", "processor" and "controller" shall have the meanings set out in the UK GDPR.

(b) Each party shall comply with the provisions and obligations imposed on it by the Applicable Data Protection Laws when processing Personal Data in connection with these Conditions. Such processing shall continue for so long as these Conditions are in force and shall be in respect of the following:

(i) Categories of data: Contacts within each of the parties and the ultimate customer details;

(ii) Types of personal data: names, addresses, email addresses, telephone numbers and other contact details;

(iii) Purpose and nature of processing: (i) manage the Contracts between the parties including ordering, fulfilment and billing; and (ii) fulfilment of such Contracts by delivering goods (where relevant).

(c) To the extent that a party processes any Personal Data on behalf of the other party, the processing party shall: (i) comply with the provisions and obligations imposed on a processor by the Applicable Data Protection Laws, and any stipulations set out in the Applicable Data Protection Laws as to what shall be included in the contract between the parties shall form a part of, and are incorporated into, these Conditions as if they were set out in full, and any reference to "documented instructions" (or similar) shall include the provisions of these Conditions; and (ii) not disclose any Personal Data to any Data Subject or to a third party other than at the written request of the other party or as expressly provided for in these Conditions.

(d) You agree that we may engage third party providers including any advisers, contractors, or auditors to Process Personal Data ("Sub-Processors"). We shall ensure that our contract with each Sub-Processor shall impose obligations in relation to the Processing of Personal Data on the Sub-Processor that are materially equivalent to the obligations to which we are subject to under these Conditions in relation to the Processing of Personal Data.

(e) If either party receives any complaint, notice or communication which relates to the processing of Personal Data by the other party or to either party's compliance with the Applicable Data Protection Laws, or if any Personal Data processed in connection with these Conditions is subject to a personal data breach (as defined in the UK GDPR), it shall immediately notify the other party and provide the other party with reasonable co-operation and assistance in relation to any such complaint, notice, communication or personal data breach.

17. The proper law of all contracts with the Company shall be English Law which shall govern in all respects the construction and effect of such contracts and of these Conditions. The Customer agrees that in the event of any dispute arising out of the Contract or the performance thereof he will submit to the exclusive jurisdiction of the English Courts.

Returns

You must contact our customer service team within 14 days of receiving your order. We do not accept sale and return without prior agreement in writing, where a 25% or £25 handling fee (whichever is higher) will be issued for returns that are agreed.

- It is the customer's responsibility to arrange and cover the costs for shipment, which will need to be returned to our returns depot – this could be located in the UK or EU. Any delivery charges incurred will not be refunded.
- Please ensure the returns document with the returns number, accompanies the
 product when returned. Once you have packaged your items ready for shipping,
 clearly write the returns number on the outside of the packaging. Failure to do so
 could cause delays to any refunds or resolving your query.
- Any returned items need to be returned unused, with no signs of tampering and in the original packaging, which must not be damaged.
- If the returned products are damaged, show signs of tampering or being used, or are damaged in transit in a way that you could have foreseen (such as not being sent back in the original packaging), we withhold the right to refuse any returns (or partial returns).
- Full refunds will only be issued once we have received the products and they have been checked to ensure they have not been damaged or tampered with in any way. This means they should be in their original packaging, unused without any signs of damage and with a copy of the invoice included. We will confirm that we have received the item and that the product has met our required return conditions please allow 28 days for your account to be credited.

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