



SURFACE SOLUTIONS

INDUSTRIAL APPLICATIONS

2024



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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 & belts, bonded grinding wheels and diamond & CBN tools are used throughout the production process to produce knee & hip joints, prosthetics and medical instruments.



ENERGY

The Norton Oil & Gas 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 & 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 not only help to improve your personal comfort and contribute to a greener environment 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 and sanding and finishing applications.



NORTON RAZORSTAR

SAINT-GOBAIN

INTRODUCING **RAZORSTAR®**

FIBRE DISCS AND BELTS FEATURING ENGINEERED SHAPED CERAMIC GRAIN

SEE PAGE 54 FOR FIBRE DISCS **AND PAGE 187 FOR BELTS**



HIGHER CUT RATE



LONGER LIFE



COOLER CUT

SHARPER THAN EVER



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.

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SUSTAINABILITY IS AT THE CORE OF WHAT WE DO, WE HAVE CLEAR COMMITMENTS **BUILT AROUND FIVE PILLARS**:

SUSTAINABILITY AS A DRIVER FOR GROWTH



- Decarbonisation of our customers' applications
- By 2030 100% of products covered by Environmental product declaration / Life Cycle Assessment (ISO 14040)
- Circular economy, recycling services, eco-innovation

LIMIT OUR ENVIRONMENTAL IMPACT



- By 2030 reduce energy consumption and CO₂ emissions by -33% (Scope 1 and 2)
- -50% water withdrawal and reuse by 2030
- Reduction of waste to landfill, and reuse and recycle
- Increased biodiversity and reduced pollution
- -80% of non-valorised residues by 2030

TAKE ACTIONS ACROSS THE SUPPLY CHAIN



- Reduction of -16% CO₂ value chain emissions by 2030 (Scope 3)
- Decarbonizing our transportation
- 100% of packaging recyclable, >30% of recycled or bio-sourced packaging content by 2030

SOLUTIONS WITH END-USERS' SAFETY, HEALTH, COMFORT AND WELLBEING AT HEART

- Customer centricity on safety, health, comfort & wellbeing
- Surface solutions to reduce vibration, noise, dust, VOC
- Greener solutions that respect the planet and the people
- 100% REACH compliant

ENCOURAGE EMPLOYEE ENGAGEMENT



- Awareness and education programs
- Ambassador networks and employee ideation

To understand more and to see practical examples of the steps that we've taken and targets that we work to, for each of these five pillars, please ask your sales representative or visit:

www.nortonabrasives.com

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	МТО	MIU
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
- Save favourite lists to make ordering quicker and easier

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

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SAINT-GOBAIN

PASSING OUR KNOWLEDGE



















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.









At Norton, we're always looking for new ways to bring you value. Whether that's through our product range or additional services that increase abrasive knowledge and understanding, our aim is to help boost your abrasive sales!

JOIN US!

Our virtual live seminars, held by our Norton Application Engineer, Paul Gray, aim to enrich your abrasive expertise through a live demonstration of our products and processes, followed by a Q&A session where you can 'Ask The Expert' any questions you have related to the subject.

Visit Nortonabrasives.com to find out what's on and join us for the next Live event!





YouTube

Find us on YouTube: Norton Abrasives EMEA' and click the 'Metal Fabrication' playlist to get answers to real life problems, select the best product for the job, and much more. Hit 'subscribe' to never miss a new release!



Social Media

Keep up to date with what's happening at Norton via Facebook, Instagram and Linkedln. Share your creations with us using the hashtag #Nortonabrasives, you might even get featured on one of our pages!

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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 digial 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 highly specialized industry, the Norton training service provides specialized 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.

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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. Norton, the industry's most comprehensive Cutting-off and Grinding product line.

UNDERSTANDING THE PRODUCT

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



PRODUCT SELECTION GUIDE

CUTTING DISCS FOR ANGLE AND STRAIGHT GRINDERS

Highly recommended 🗸	NORTON QUANTUM3	X-TREME PRO	X-TREME	VULCAN	FOUNDRY X	DIALAST	RAIL	STARLINE	1-2-3	ALU	MULTI MATERIAL
MATERIALS	ZO								-	⋖	ΣΣ
Steel / construction steel	INNUVATION ✓	+++++	+++++ 	++++ 	++++ \[\]	++++ /	++++ 	+++ \			
Low alloy						<u></u>					
High alloy	· /			•	•						<u>*</u>
Thin sheets, plates, profiles	· /			/				/			
Stainless steel / inox	1	√	1	✓					/		/
Cast iron					✓	/					
Non ferrous										/	/
Titanium	1									/	/
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	To the second			C	7230 A		
MATERIALS	NORTON QUANTUM3	X-TREME	VULCAN	DIALAST	FOUNDRY X	STARLINE	1-2-3	ALU	MULTI MATERIAL
	INNOVATION	+++++	++++	++++	++++	+++			
Steel / construction steel	✓	✓	✓	✓	✓	✓	✓		✓
Low alloy	✓	✓	✓		✓	✓	✓		✓
High alloy	✓	✓							
Thin sheets, plates, profiles	✓	1	✓			1			1
Stainless steel / inox	✓	1	✓				1		1
Cast iron				1	1				
Non ferrous								1	1
Titanium	✓		✓					1	✓
Stone concrete			✓						1
Tiles / ceramics			✓						✓
Glass ceramics PVC			✓						✓





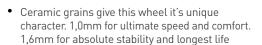
CUTTING DISCS & GRINDING WHEELS FOR METAL FABRICATION & WELDING

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

ULTRA THIN 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



CORDLESS COMPATIBLE METAL INOX





	TYPE	DIA (mm)	TxB (mm)	SPEC	PK QTY	ART NO.
DISCS						
		115	1,0x22,23*	NQ 60 ZZ	25	66253371347
			1,3x22,23*	NQ 60 ZZ	25	66253371348
			1,6x22,23*	NQ 46 ZZ	25	66253371349
	TYPE 41	125	1,0x22,23*	NQ 60 ZZ	25	66253371350
11			1,3x22,23*	NQ 60 ZZ	25	66253371351
			1,6x22,23*	NQ 46 ZZ	25	66253371352
		180	1.6x22,23	NQ 46 ZZ	25	66253371354
mark .		230	1.9x22,23	NQ 46 ZZ	25	66253371355
3	TYPE 42	115	0.8x22,23	NQ 60 ZZ	25	66252846642
		125	0.8x22,23	NQ 60 ZZ	25	66252846643

S MADE FROM 100% RECYCLED PLASTIC.

X-TEND included



AIRTIGHT PACKAGING

Stops atmosphere & 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





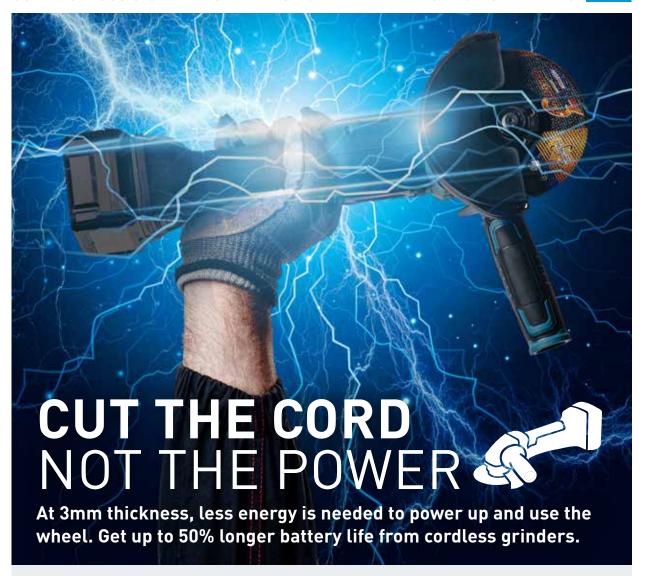




	TYPE	DIA (mm)	TxB (mm)	SPEC	PK QTY	ART NO.
CUTTING DISCS						
QUARTURA CARROLLE		125	2,0x22,23	NQ 36 Y	25	66252848856
	TYPE 41	125	2,5x22,23	NQ 24 P	25	66252845954
		150	2,5x22,23	NQ 24 P	25	66252846123
		230	2,5x22,23	NQ 24 P	25	66252846173
The state of the s		125	2,5x22,23	NQ 24 P	25	66252832258
0000000	TYPE 42	150	2,5x22,23	NQ 24 P	25	66252846125
2300083H		180	2,5x22,23	NQ 24 P	25	66252845041
The state of the s		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 & 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						
	TYPE 27	115	3,0x22,23	NQ 30 S	10	66252846608
OUALTURA GOOD		125	3,0x22,23	NQ 30 S	10	66252846609



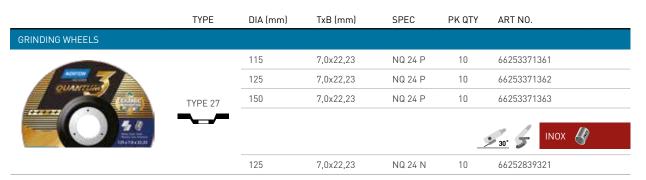
NORTON QUANTUM3 INNOVATION



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
OUANTURS		230	7,0x22,23	NQ 24 P	10	66253371365
	TYPE 27					
ACCITON						
		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 WHEEL

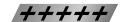
- Fast grinding formula, gets the job done quickly
- Improved grinding control ensures precision and accuracy
- Easy access in hard to grind areas, corners and inside tight grooves
- Smoother feel, reduced fatigue and improved operator comfort
- Boost the amperage on cordless grinders due to light weight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





	TYPE	DIA (mm)	TxB (mm)	SPEC	PK QTY	ART NO.
COMBINATION WHEELS						
TYP		125	4,2x22,23	NQ 24 R	20	66253371357
	TVDE 05	150	4,2x22,23	NQ 24 R	20	66253371358
	TYPE 27	180	4,2x22,23	NQ 24 R	20	66253371359
UTG COMPANY OF THE PROPERTY OF		230	4,2x22,23	NQ 24 R	20	66253371360

NEW X-TREME PRO HEAVY DUTY **+++++**



- Longest 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
	TYPE 41		2.0x22.23	ZA36X	25	66252846981
A STORY II IIII		150	1.6x22.23	ZA46X	25	66252846982
		180	1.6x22.23	ZA46X	25	66252846983
		230	1.9x22.23	ZA46X	25	66252846984







	TYPE	DIA (mm)	TxB (mm)	SPEC	PK QTY	ART NO.
GRINDING WHEELS						
		125	4,2x22.23	A30V	20	66252846985
	TVDE OF		7,0x22.23	A30V	10	66252846986
TYPE 27	TYPE 27	150	7,0x22.23	A30V	10	66252846987
	180	4,2x22.23	A30V	20	66252846988	
		230	7,0x22.23	A30V	10	66252846990



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





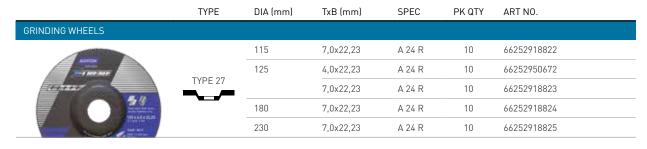


	TYPE	DIA (mm)	TxB (mm)	SPEC	PK QTY	ART NO.
CUTTING DISCS						
		115	1,0x22,23	A 60 V	25	66252919427
			1,6x22,23	A 46 V	25	66252920339
			2,0x22,23	A 36 V	25	66252920340
		125	1,0x22,23	A 60 V	25	66252920341
			1,3x22,23	A 60 V	25	66252837992
			1,6x22,23	A 46 V	25	66252920342
			2,0x22,23	A 36 V	25	66252920343
	TYPE 41		2,5x22,23	A 36 V	25	66252920350
		150	1,6x22,23	A 46 V	25	66252920344
			2.0x22,23	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
		230	2,5x22,23	A 36 V	25	66252918818









CUTTING DISCS & GRINDING WHEELS FOR METAL FABRICATION & WELDING

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
MILLAN			1,6x22,23	A 46 T Inox	25	66252833401
		125	1,0x22,23	A 60 T Inox	25	66252833402
			1,6x22,23	A 46 T Inox	25	66252833403
matten	TYPE 41		2,5x22,23	A 30 S Inox	25	66252833409*
8890		150	1,6x22,23	A 46 T Inox	25	66252833404
		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
	TVDE /0	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





	TYPE	DIA (mm)	TxB (mm)	SPEC	PK QTY	ART NO.
GRINDING WHEELS						
		115	6,4x22,23	A 30 S Inox	10	66252925513
	TYPE 27	125	6,4x22,23	A 30 S Inox	10	66252925514
****		230	6,4x22,23	A 30 S Inox	10	66252925517

VULCAN

- Great price versus performance ratio
- The general purpose range of cutting discs

ORDLES OMPATI





	TYPE	DIA (mm)	TxB (mm)	SPEC	PK QTY	ART NO.
CUTTING DISCS						
		115	1,0x22,23	A 60 S	25	66252925431
VUICAN			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
115.123.1721)			3,0x22,23	A 30 S	25	66252925447
H 4.22	TYPE 41	125	1,0x22,23	A 60 S	25	66252925433
00000000			1,6x22,23	A 46 S	25	66252925434
Median.			2,0x22,23	A 30 S	25	66252925438
			2,5x22,23	A 30 S	25	66252925443
			3,0x22,23	A 30 S	25	66252925448
		150	2,0x22,23	A 30 S	25	66252925439



CUTTING DISCS						
		180	1,6x22,23	A 46 S	25	66252925435
VIIICAN			2,0x22,23	A 30 S	25	66252925440
5.4			2,5x22,23	A 30 S	25	66252925445
	TYPE 41		3,0x22,23	A 30 S	25	66252925449
115,223,2221		230	1,9x22,23	A 46 S	25	66252925436
00003930			2,0x22,23	A 30 S	25	66252925441
			2,5x22,23	A 30 S	25	66252925446
			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
	T)/DE / 0		3,2x22,23	A 30 S	25	66252925495
	TYPE 42	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	1,9x22,23 NEW	A 46 S	25	66252849388
			2,5x22,23	A 30 S	25	66252925493
			3,2x22,23	A 30 S	25	66252925498

* Made-to-order

VULCAN FAST CUT



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

	TYPE	DIA (mm)	TxB (mm)	SPEC	PK QTY	ART NO.
GRINDING WHEELS						
Manual District		180	6,4x22,23	A 30 P	10	66252830805
	TYPE 27	230	6,4x22,23	A 30 P	10	66252830807



CUTTING DISCS & GRINDING WHEELS FOR METAL FABRICATION & WELDING

NEW VULCAN COMFORT ADVANTAGE



- Improved comfort in use
- Reduced vibration
- Smoother wheel wear for reduced chipping
- Higher metal removal rates
- Suitable for low power machines
- Lower pressure needed, reduces operator fatigue
- Reduces work piece burn









	TYPE	DIA (mm)	TxB (mm)	SPEC	PK QTY	ART NO.
GRINDING WHEELS						
WALCON		115	6,4x22,23	A 30 P	10	66252830803
	TYPE 27	125	6,4x22,23	A 30 P	10	66252830804

VULCAN

- Great price versus performance ratio
- The general purpose range of grinding wheels









	TYPE	DIA (mm)	TxB (mm)	SPEC	PK QTY	ART NO.
GRINDING WHEELS						
		115	6,4x22,23	A 30 S	10	66252925522
VIIICAN		125	4,0x22,23	A 30 S	20	66252925519
50			6,4x22,23	A 30 S	10	66252925523
	T) (D.E. 0.E.		8,0x22,23	A 30 S	10	66252925524
1B HAS THE	TYPE 27	150	6,4x22,23	A 30 S	10	66252925525
0000		180	6,4x22,23	A 30 S	10	66252925526
- D-00			8,0x22,23	A 30 S	10	66252925527
		230	4,0x22,23	A 30 S	20	66252925521
			6,4x22,23	A 30 S	10	66252925529





	TYPE	DIA (mm)	TxB (mm)	SPEC	PK QTY	ART NO.
CUTTING DISCS						
WUICAN WUICAN		115	3,2x22,23	C 30 R	25	66252925500
	TYPE 42	125	3,2x22,23	C 30 R	25	66252925501
		230	3,2x22,23	C 30 R	25	66252925503







	TYPE	DIA (mm)	TxB (mm)	SPEC	PK QTY	ART NO.
GRINDING WHEELS						
NOTES VILLEAN		115	6,4x22,23	C 30 R	10	66252925533
	TYPE 27	125	6,4x22,23	C 30 R	10	66252925534
		180	6,4x22,23	C 30 R	10	66252925535
		230	6,4x22,23	C 30 R	10	66252925537



STARLINE



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

CORDLESS COMPATIBLE	METAL INOX	

	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 46 R	25	66252837244
Steeled !			2,5x22,23	A 30 P	25	66252837249
20		125	1,0x22,23	A 60 R	25	66252837245
Q11-13-2221			1,6x22,23	A 46 R	25	66252837246
10000330	TYPE 41		2,5x22,23	A 30 P	25	66252837250
		180	1,6x22,23	A 46 R	25	66252837247
No.			2,5x22,23	A 30 P	25	66252837251
		230	1,9x22,23	A 46 S	25	66252843278
			2,0x22,23	A 36 R	25	66252837248
_			2,5x22,23	A 30 P	25	66252837253
		115	3,2x22,23	A 30 P	25	66252837275
	TYPE 42	125	3,2x22,23	A 30 P	25	66252837276
		230	3,2x22,23	A 30 P	25	66252837278





	TYPE	DIA (mm)	TxB (mm)	SPEC	PK QTY	ART NO.
GRINDING WHEELS						
TYPE 27		115	6,4x22,23	A 24 Q	10	66252837263
	TYPE 27	125	6,4x22,23	A 24 Q	10	66252837264
		180	6,4x22,23	A 24 Q	10	66252837268
		230	6,4x22,23	A 24 Q	10	66252837269



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







TYPE DIA (mm) TxB (mm) SPEC PK QTY ART NO.

TYPE 27 125 3,0x22,23 C 30 S 10 66252846611





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 Marketon		115	1,0x22,23	C 60 T	25	66252833258
	TYPE 41		1,6x22,23	C 46 T	25	66252828951
MULTI		125	1,0x22,23	C 60 T	25	66252918924
			1,6x22,23	C 46 T	25	66252828952
125mm Add - Brat		180	1,6x22,23	C 46 T	25	66252926730
Willy LA a 23, 20mm Hi min		230	1,9x22,23	C 46 T	25	66252918925





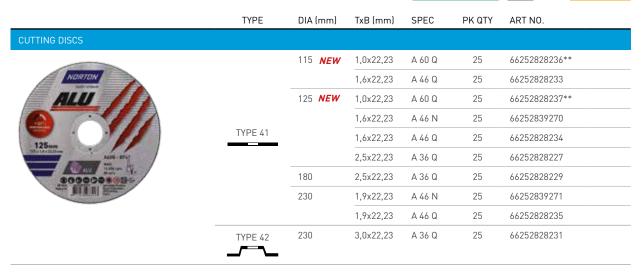
NORTON ALU

- 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















* Made-to-order

^{**} Up to +30% performance improvement

CUTTING DISCS & GRINDING WHEELS FOR METAL FABRICATION & WELDING

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



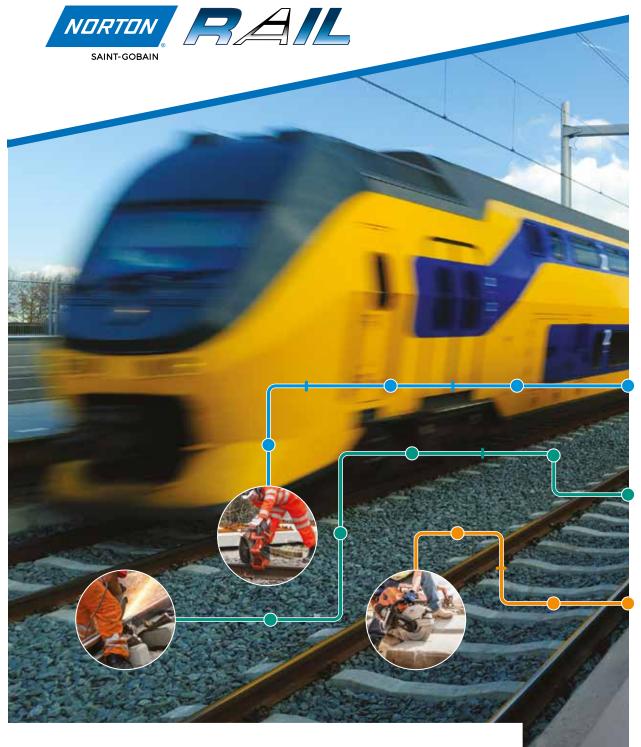
	TYPE	DIA (mm)	TxB (mm)	SPEC	PK QTY	ART NO.
COMBINATION WHEELS						
	TYPE 27	115	2,2x22,23	A 46 S	25	66252829704
125mm		125	2,2x22,23	A 46 S	25	66252921592







	TYPE	DIA (mm)	TxB (mm)	SPEC	PK QTY	ART NO.
CUTTING DISCS						
		125	1,0x22,23	A60T	25	66252846501
NO.	TYPE 41		1,6x22,23	A46T	25	66252846502



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.

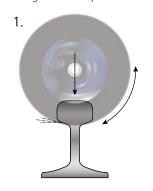
Bore dimensions of the cutting wheel can be adjusted using reduction rings that come with the original machine.

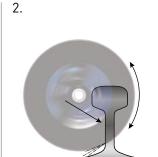
UNDERSTANDING THE PRODUCT

- 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



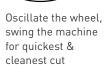




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KEY:

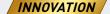
Direction of cut







NORTON QUANTUM3 RAIL INNOVATION







- Designed for comfort, built to last and 'made to bite'
- 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 Common of the						

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

TYPE

TYPE 41

DIA (mm)

356

406

- Low vibration, consistent performance throughout wheel life
- Hard, medium and soft wheels available

SPEC

ZA 24 Q Zirconia Medium

ZA 24 Q Zirconia Medium

• High quality cut to help generate a perfect weld

TxB (mm)

4,0x25,4

4,0x25,4



ART NO.

66252830924

66252833665

PK QTY





	UTTING DISCS
1	The last of the la
1	# 100 P

RAIL









TYPE	DIA (mm)	TxB (mm)	SPEC	PK QTY	ART NO.
	350	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





CUTTING DISCS & GRINDING WHEELS FOR FOUNDRY

Cast iron used in foundry applications requires a specific type of cutting and grinding wheel to achieve a quick 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						
- Annual -	TYPE 41	230	2,5x22,23	ZAC24S FOUNDRY X	25	66252839350*

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						
		125	7,0x22,23	ZA24T LONG LIFE	10	66253371176
AGPTON		180	7,0x22,23	ZA24T LONG LIFE	10	66253371162
FAUL DRY	TYPE 27		7,0x22,23	ZA20R COMFORT	10	66253370493*
51	~_	230	7,0x22,23	ZA24T LONG LIFE	10	66253371175
1M+72+2223			7,0x22,23	ZA20R COMFORT	10	66252842546*
R & HOUSE						

* Made-to-order



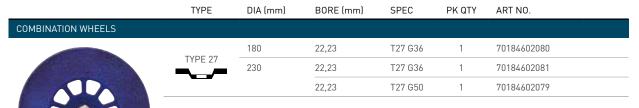
High Frequency machines will not reduce in revolutions when grinding pressure is increased. When using high pressure on standard or non-reinforced wheels and machines, the risk of wheel breakage is high. Also, under low pressure, non-reinforced wheels can show cracks due to fatigue within the abrasive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

DIALAST

- Long product life reduces downtime and wheel changes, reducing cost and increasing throughput
- Reduces dust and debris as fewer sparks are generated, minimising clean-up
- Diamond grit brazed to the face of the steel core decreases the risk of breakage for safer grinding

















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
VERCAN	TYPE 41		3,5x22,23	A 30 S	10	66252925458



FOR CHOP SAWS

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

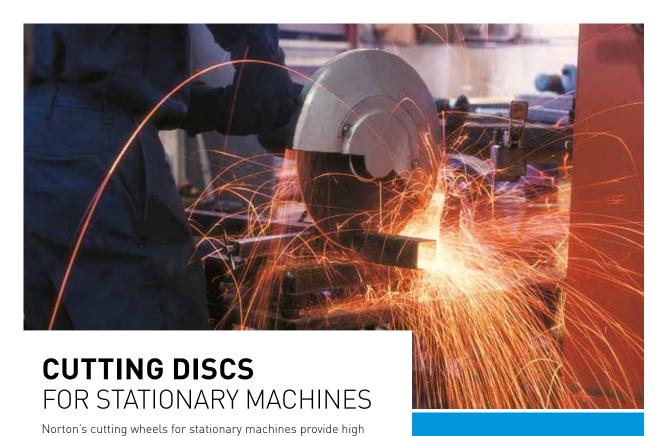






	TYPE	DIA (mm)	TxB (mm)	SPEC	PK QTY	ART NO.
CUTTING DISCS						
		300	2,8x25,4	A 30 S	10	66252925460
	TYPE 41	356	3,0x25,4	A 30 S	10	66252925462
VIRCAN	111 L 41	400	3,2x25,4	A 30 S	10	66252925464
51			3,2x32,0	A 30 S	10	66252925465*
Manager Rev						***

^{*} Made-to-order



value and high performance in construction, fabrication and foundry industries.

VULCAN

- Long wheel life with quick and free cutting
 Double, full external mechanical
- Cuts without burning, blueing or splintering the metal
- Use under constant power in heavy cut-off applications

 Double, full external mechanical reinforcement for excellent safety and stability



	TYPE	DIA (mm)	TxB (mm)	SPEC	PK QTY	ART NO.
CUTTING DISCS						
		400	4,5x32,0	C 30 R	10	66252925484
- VARCAN						METAL 🥏
						METAL 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
		356	3,5x25,4	A 30 S	10	66252925469
			3,5x32,0	A 30 S	10	66252925470
VERCEN			3,5x32,0*	A 30 S	10	66252925476
		400	3,5x25,4	A 30 S	10	66252925477
			4,0x25,4	A 30 S	10	66252925472
			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 Operating Speed 100m/s

TECHNICAL INFORMATION

SHAPE SPECIFICATION SYSTEM

BF 27



DEPRESSED CENTRE GRINDING WHEELS

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

Application: grinding

BF 41

FLAT CUTTING DISCS

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

Application: cutting-off

BF 42

DEPRESSED CENTRE CUTTING DISCS

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

Application: cutting-off

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 masl (ISO 7010)



protective gloves (ISO 7010)



Wear eye protection (ISO 7010)



Wear ear protection (ISO 7010)



instruction manual/ booklet (ISO 7010)



Only permitted for grinding at an angle greater than 10°



Only suitable for totally enclosed machines



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)



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

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)		TING SPEED (RPM) 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

TECHNICAL INFORMATION

SAFETY ADVICE

D₀s

Always handle & store wheels carefully. Cutting discs should be stacked horizontally & 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 & ensure that it is correctly positioned & securely fitted. It should cover at least one half of the wheel & protect the operator in the unlikely event of a wheel breakage. NON-REINFORCED CUTTING DISCS SHOULD ONLY BE USED ON FIXED MACHINES & 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 & ensure that they are undamaged, clean & 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 & 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 & 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 & grinding operations clear. It is very dangerous if an operator trips & 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 & 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 & you are not well balanced



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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 operations needs.

This extensive product range includes products designed for all types of application, 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 W - Special (Cork)	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

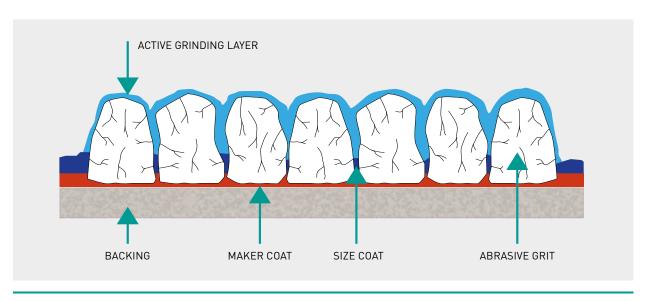
Whether paper, cloth, vulcanised fibre or polyester film, the backing must be smooth enough for uniform adhesive coating, stong enough to withstand grinding pressures and flexible enough to conform to contours if necessary.

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 hardenable 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 sizer, 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







CLOSED COAT

SPECIAL COATED SURFACE TREATMENT NO-FIL TREATMENT

In order to provide even further resistance to loading, some Opencoat 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

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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. Wherever 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 make 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 of 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.

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INTRODUCTION TO BEARTEX **NON-WOVEN PRODUCTS**

Beartex consists of a backing in "non-woven" nylon fibers 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
Bear-Tex	Flat Stock	F	0 - No Grain	0 - No Grit	Consecutive
Rapid Blend-Unified	Utitized / 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 work-piece 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 Chromium
- Brass
 - Stainless Steel • Ceramics
- Tantalum Fibreglass
 - Wood

- Copper
- Zinc • Glass
- Plywood
- Nickel
- Titanium
- Plastic

APPLICATIONS INCLUDE

- Deburring
- Blending
- · Defuzzing plywood
- · Decorative finishes
- Cleaning
- Polishing
- Dulling laminates
- Scrubbing
- Highlighting
- Imparting satin
- Scouring
- Deflashing plastics

 Removing raised wood fibres



DISCS FOR ANGLE GRINDERS

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Flap discs	60	Rapid Prep
Semi-flexible discs	65	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 a 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 unitized 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

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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 fiberglass parts Removing weld marks and weld splatter Removing small flashings and parting lines Removing small flashings and parting lines Removing paint/graffiti from concrete/stone Removing weld marks and weld splatter Removing weld marks and weld splatter Removing small flashings and parting lines Removing blemishes after welding Cleaning and preparing welds Removing blemishes after welding Removing blemishes after w	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 fiberglass parts Removing paint/graffiti from concrete/stone Removing weld marks and weld splatter Stainless steel deburring and cleaning Removing small flashings and parting lines Surface preparation before coatings/plating Cleaning and preparing welds Papid Prep A/O medium Cleaning and preparing welds Papid Prep A/O medium Cleaning and preparing welds Papid Prep A/O fine Removing bemishes after welding stainless seel Cleaning and finishing all metal parts Papid Prep A/O fine Removing bemishes on stainless on stainless seel Final finishing and polishing Papid Blend NEX 25F Final finishing/polishing where high		++++	++++	+++
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Removing parting lines and seams on fiberglass parts Removing paint/graffiti from concrete/stone Removing weld marks and weld splatter Removing steel deburring and cleaning Removing small flashings and parting lines Surface preparation before coatings/plating Pure A/O coarse Surface preparation before coatings/plating Removing welds Removing weld marks and weld splatter Removing small flashings and parting lines Removing small flashings and parting lines Removing small flashings and parting lines Pure A/O medium Rapid Prep A/O medium Light cleaning Vortex Rapid Prep A/O medium Rapid Prep A/O medium Cleaning and preparing welds Vortex Rapid Prep A/O fine Removing blemishes after welding Nortex Rapid Prep A/O fine Removing blemishes after welding Removing blemishes after welding Pure A/O fine Removing blemishes on Rapid Blend NEX 25F Final finishing and polishing Rapid Blend NEX 25F Final finishing hypolishing where high Rapid Blend NEX 25F Rapid Blend NEX 25F Rapid Blend NEX 25F	Removing coatings, epoxy/glue, paint		-	
Removing paint/graffiti from concrete/stone Removing weld marks and weld splatter - Vortex Rapid Blend 5A medium Rapid Prep A/O coarse Removing small flashings and parting lines - Vortex 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 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 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 Creating decorative finishes on stainless steel - Vortex Rapid Prep A/O very fine NEX 2SF Final finishing and polishing - Vortex Rapid Prep Rapid Blend NEX 2SF Final finishing and polishing where high	Removing rust, oxidation, corrosion and residue		-	
Removing weld marks and weld splatter - 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 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 Removing blemishes after welding - Vortex Rapid Prep A/O fine Removing blemishes after welding - 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 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 Rapid Blend NEX 2SF Final finishing 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 stainless steel - Vortex Rapid Prep A/O fine Blending and finishing all metal parts - 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 Rapid Blend NEX 2SF	Removing weld marks and weld splatter	-		
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 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 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 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 Blending and finishing all metal parts - Vortex Rapid Prep A/O very 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 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/0 fine - A/0 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 NEX 2SF Final finishing and polishing Creating decorative finishes on Stainless Steel Creating decorative finishes on Stainless Stainless Steel Creating decorative finishes on Stainless S		-	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 and potishing A/O very fine NEX 2SF Final finishing/polishing where high 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 🗸 🗸 Recommended 🗸





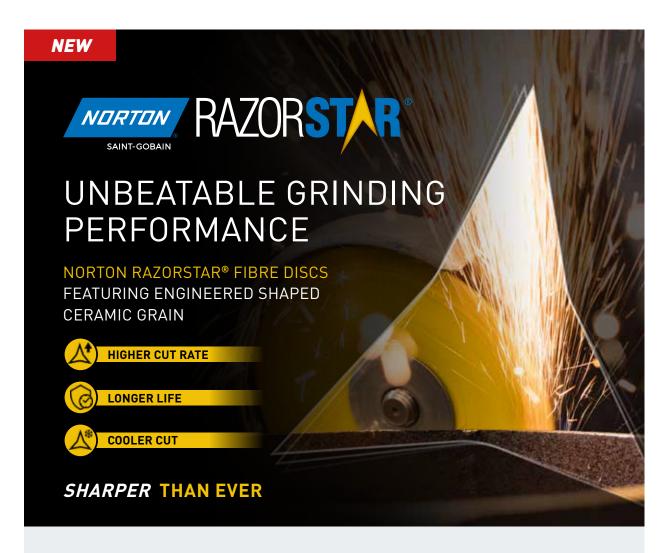






MATERIALS	NEW NORTON RAZORSTAR®	NORTON QUANTUM F996	NEW BLAZE X F970X	NORZON F827	METAL F100
	INNOVATION	++++	++++	++++	+++
Stainless steel, inox	11	√ √	1		
Titanium, inconel & super alloys	11	//	1		
Carbon, construction & mild steel	11	✓	11	✓	✓
Cast iron	✓	✓	1	✓	✓
Non-ferrous metal (brass/aluminium)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

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NEW NORTON RAZORSTAR®

INNOVATION

- A breakthrough innovation of razor-sharp ceramic grain with a tough microstructure cuts faster and removes more material. This is combined with the highest percentage of grains applied to the backing in an upright position for razor-sharp cutting
- The sharp grain and topsize layer combine to significantly reduce heat generation, resulting in less thermal damage of the work piece
- Unique, patented grain geometry means new, sharp cutting edges are exposed as the grain fractures during grinding providing consistent cut rate and unparalleled disc life









SIZE (mm)	GRIT	MAX. RPM	PK QTY	ART NO.
115x22	36+	13300	25	66254434179
125x22	36+	12000	25	66254434181
180x22	36+	8600	25	66254434506

NORTON RAZORSTAR® BACK-UP PDAS

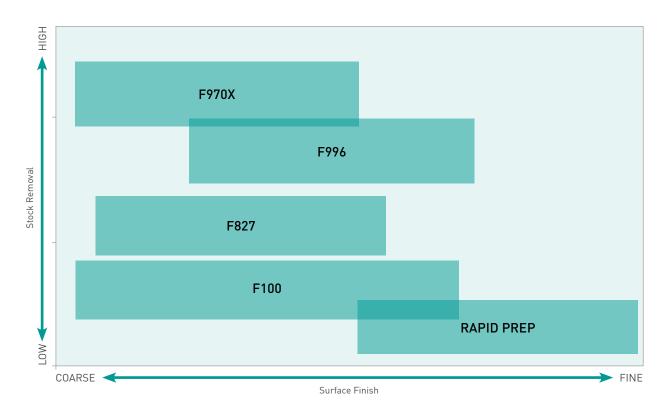
- The curved ribs keep the pad and abrasive cooler while retaining a level of flexibility across the pad
- For tougher grinding operations
- Conforms ISO 15636
- Grits 36+ and finer

SIZE (mm)	THREAD	DENSITY	MAX. RPM	PK QTY	ART NO.
115	M14	Rigid	13300	5	'TBC
125	M14	Rigid	12200	5	'TBC
180	M14	Rigid	8600	5	'TBC





PRODUCT COMPARISON CHART



NORTON QUANTUM F996 #++++



- Ideal for cool grinding on stainless steel and heat-resistant steels
- Exceptionally high material removal & long life
- Especially suitable for heavy duty applications
- Generates an excellent surface finish

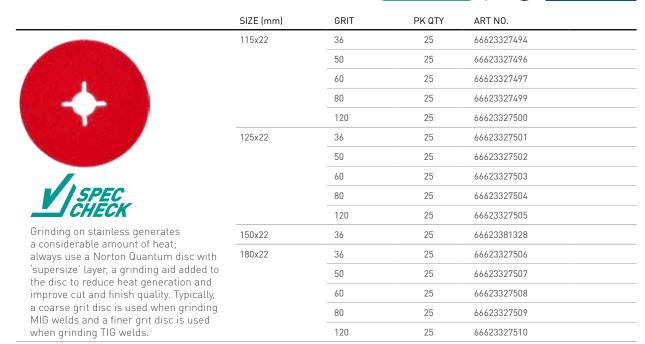












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BLAZE X STEEL F970X +++++



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

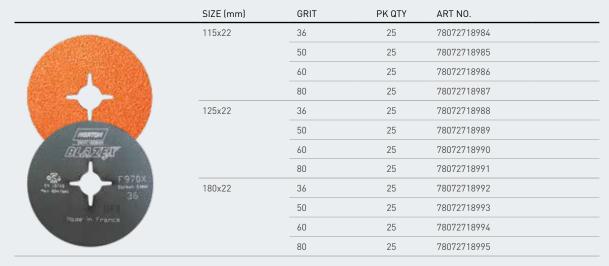
• Specially designed for use on carbon steel, indicated on the back of every disc, for easy disc identification.













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.



NORZON F827



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











	SIZE (mm)	GRIT	PK QTY	ART NO.
	115 x 22	24	25	69957360048
		36	25	63642539615
		50	25	69957360053
		60	25	63642539616
		80	25	63642539617
		120	25	63642533055
	125 x 22	24	25	63642539619
		36	25	63642536483
		50	25	63642539620
		60	25	69957360057
		80	25	63642539622
		120	25	63642533056
	180 x 22	24	25	63642533062
		36	25	63642533063
		50	25	63642533064
		60	25	63642533065
		80	25	63642533066
		120	25	63642533068

F100 METAL



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

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

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SIZE (mm)

FIBRE DISCS FOR ANGLE GRINDERS

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
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

mm)	THREAD	DENSITY	MAX. RPM	PK QTY	ART NO.
	M14	Hard	13300	5	69957382828
	M14	Medium	13300	5	69957382825
	M14	Hard	12200	5	69957382829
_	M14	Medium	12200	5	69957382826
	M14	Hard	8500	5	69957382830
_	5/8	Medium	8500	5	63642588345
_	M14	Medium	8500	5	69957382827
	M14	1	4edium	Medium 8500	Medium 8500 5





FIBRE DISC BACK-UP PAD DENSITY GUIDE





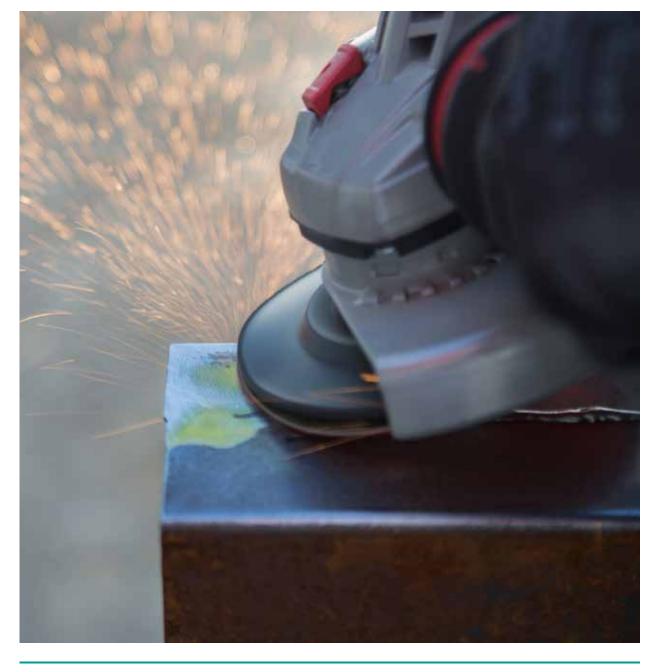




HARD DENSITY suitable for coarse applications and higher stock removal such us chamfering, welded seam or deburring work.



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



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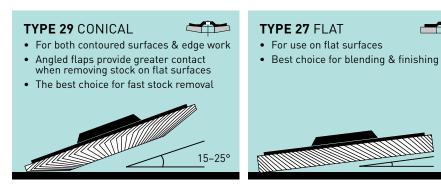


Norton flap discs are engineered for light stock removal, edge chamfering, deburring, blending and finishing, reducing processing time and lowering total abrasive costs. Flap discs cut faster and provide a better finish than fibre discs while having the added benefit of longer life thanks to the flap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

PRODUCT SELECTION GUIDE

Highly recommended 🗸 🗸 Recommended 🗸				To Vice		
MATERIALS	NORTON QUANTUM R996	X-TREME PRO R928	X-TREME R860	VULCAN R842	STARLINE	NEW NORTON ALU
	++++	+++++	+++++	++++	+++	
Stainless steel, inox & duplex	11	11	✓			
Inconel, titanium & super alloys	11	11	✓	✓		
Carbon, construction & mild steels	11	//	11	11	✓	
Cast Iron		✓	11	11	//	
Non-ferrous metal (brass/aluminium)					//	//
Hard & soft wood					//	

DISC SHAPES





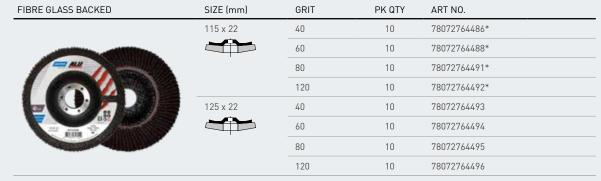
NEW NORTON ALU MESH FLAP DISC

- The mesh structure allows faster material removal without clogging and reduces heat generation during use for better part quality and minimal material loss.
- Good stock removal on aluminium alloys
- Also removes old paint, corrosion and strips wood









* Made-to-order

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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.

FIBRE GLASS BACKED	SIZE (mm)	GRIT	PK QTY	ART NO.
	115 x 22	40	10	78072723630
		60	10	78072723632
		80	10	78072723633
		120	10	78072723634
	125 x 22	40	10	78072723652
		60	10	78072723653
		80	10	78072723654
		120	10	78072723655
	180 x 22	40	10	78072723810
		80	10	78072723812



For heavy & fast material removal, has long life



Perfect for fast edge chamfering and de-burring



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



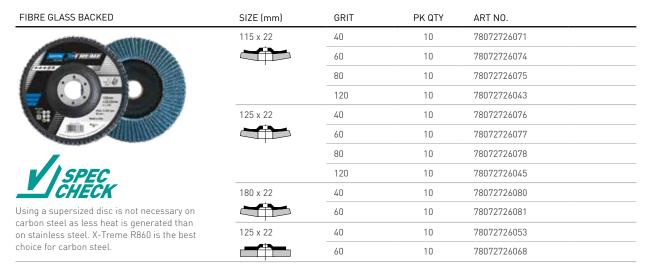
X-TREME R860 +++++



- 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







SIZE (mm)	GRIT	PK QTY	ART NO.
115 x 22	40	10	66254461027
	60	10	66254461029
	80	10	66254461031
125 x 22	40	10	66254445878
	60	10	66254445879
	80	10	66254461033



FIBRE GLASS BACKED

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

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FLAP DISCS FOR ANGLE GRINDERS

VULCAN R842



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







SIZE (mm)	GRIT	PK QTY	ART NO.
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
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 & versatile Zirconia Alumina abrasive
- Wide selection of grit sizes and diameters
- Best price-performance ratio











FIBRE GLASS BACKED



115x22
'

SIZE (mm)



	GRIT	PK QTY	ART NO.
_	40	10	66254492267
	60	10	66254492268
	80	10	66254492270
	120	10	66254492269
-	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



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 & 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 & cast irons
- Ideal for use in construction markets for aggressive grinding, leveling and cleaning of surface perfections





SIZE (mm)	GRIT	PK QTY	ART NO.
125 x 22	16	25	66261083476
	24	25	7660719292
	36	25	7660719293
	60	25	7660719294
	80	25	7660719295
180 x 22	16	25	66261083479
	24	25	7660719296
	36	25	7660719297
	60	25	7660719298
	80	25	7660719299

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

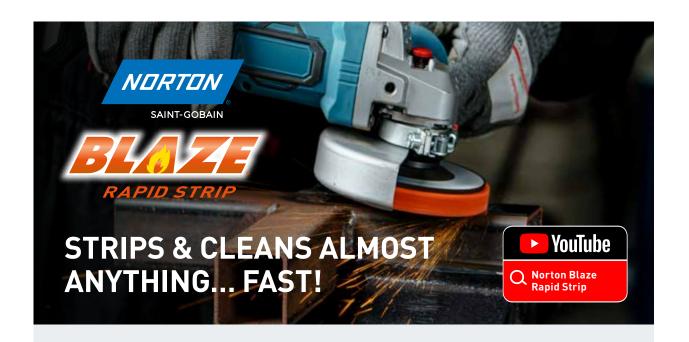


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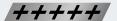


RAPID STRIP DEPRESSED CENTRE DISCS FOR ANGLE GRINDERS

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 fibers and extra coarse silicon carbide grain make light work of removing rust, weld splatter, 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 & residue, corrosion, light weld splatter, dirt, mill scale & other similar surface contaminants
- Blaze lasts up to twice as long as other ceramic discs Extremely versatile; stiff enough to withstand thanks to the Norton SG grain
- Leaves a thoroughly cleaned surface that ensures excellent adhesion for subsequent processes such as coating, painting and soldering
 - 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 fibers, 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	115x22	R4101	10	12000	66261009649
R4101 H	125x22	R4101	10	12000	66261030655

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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 unitized 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 small blending applications
- Cuts faster than standard Rapid Blend products, with minimal effect on finish



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



VORTEX RAPID BLEND

DPC TYPE 27 & TYPE 29 CONICAL

- For light weld bead and weld splatter removal, heavy deburring and finishing applications
- 2 in 1 action: can cut like an 80 grit flap disc & 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 wide range of sizes and specs for various applications. Undersized backing plate gives longer usable diameter



	SHAPE	DIM DIAxTxH (mm)	CAP CODE	GRADE	PK QTY	MAX RPM	ART NO.
A CONTRACTOR OF THE PARTY OF TH		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
		125x12x22	U2305	VORTEX 5AM	10	12000	63642531710
	4		U2305	VORTEX 3AM	10	7500	63642531717

BEARTEX HIGH STRENGTH DISCS



TYPE 27 DISCS

• Comformable and flexible Heavy Duty material for contours and unusual shapes.

Accesses awkward areas



SHAPE	DIAxTxB (mm)	CAP CODE	GRADE	PK QTY	MAX RPM	ART NO.
	115x12x22	F2303	HSMA	10	12000	66261020549
	125x12x22	F2303	HIGH STRENGTH HSMA	10	12000	78072702394

HMSA = High Strength Disc





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RAPID BLEND DEPRESSED CENTRE DISCS FOR ANGLE GRINDERS

RAPID BLEND

NEX DPC TYPE 27 & TYPE 29 CONICAL

- A unitized construction with varying weave from open structure for deburring to tighter for finishing
- Fine silicon carbide & 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
		1151022	U4401	NEX3SF	10	12000	66254461726
		115x12x22	U2401	NEX2AF	10	12000	66261020547
			U2301	NEX2AM	10	12000	66261020548
		125x12x22	U4401	NEX2SF	10	12000	66254496320
			U4401	NEX3SF	10	12000	77696067125
		125x6x22	U4401	NEX2SF	10	12000	77696067118
		1051000	U4401	NEX2SF	10	12000	63642531722
		125x12x22	U4401	NEX3SF	10	12000	63642531723

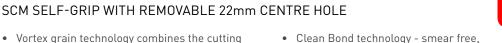


FOR ANGLE GRINDERS

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





- 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



YouTube

Norton Vortex

Rapid Prep



DIA (mm)	CAP CODE	GRADE	PK QTY	ART NO.
115	S2103	Extra coarse	25	66623378971
	S2203	Coarse	25	66623378974
	S2303	Medium	25	66623378977
	S2403	Fine	25	66623333607
	S2503	Very fine	25	66623378980
125	S2103	Extra coarse	25	66623378972
	S2203	Coarse	25	66623378975
	S2303	Medium	25	66623378978
	S2403	Fine	25	66623333609*
	S2503	Very fine	25	66623378981
178	S2103	Extra coarse	25	66623378973
	S2203	Coarse	25	66623378976
	S2303	Medium	25	66623378979
	S2403	Fine	25	66623334955*
	S2503	Very fine	25	66623334969*

* Made-to-order

TO ACHIEVE A LINEAR DIRECTIONAL LINE FINISH ON A RAG (making it more versatile) SEE OUR RANGE OF SATINEX QC M14 WHEELS - PAGE 127

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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 & 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	DIAxT (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 duability 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)

VORTEX RAPID PREP

SCM FIBRE BACKED 22mm CENTRE HOLE

• For better durability on sharp edge work

	DIAxH (mm)	CAP CODE	GRADE	TYPE	PK QTY	ART NO.
	100x16	S2103	Extra coarse	Vortex fibre	10	78072700356
		S2203	Coarse	Vortex fibre	10	78072700358
Extra coarse		S2303	Medium	Vortex fibre	10	78072700359
	115x22	S2103	Extra coarse	Vortex fibre	10	78072700363
		S2203	Coarse	Vortex fibre	10	78072700364
Coarse	Con	S2303	Medium	Vortex fibre	10	78072700365
	127x22	S2103	Extra coarse	Vortex fibre	10	78072700368
		S2203	Coarse	Vortex fibre	10	78072700369
		S2303	Medium	Vortex fibre	10	78072700371
Medium	180x22	S2103	Extra coarse	Vortex fibre	10	78072700376
		S2203	Coarse	Vortex fibre	10	78072700378
		S2303	Medium	Vortex fibre	10	78072700381

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^{*} Made-to-order

RAPID PREP SURFACE BLENDING DISCS FOR ANGLE GRINDER

RAPID PREP XHD CERAMIC SCM

SCM FIBRE BACKED 22mm CENTRE HOLE

• For better durability on sharp edge work

		DIAxH (mm)	CAP CODE	GRADE	TYPE	PK QTY	ART NO.
		115x22	S9244	Coarse	XHD Fibre back	10	78072700366
ATT AND	XHD Medium		S9344	Medium	XHD Fibre back	10	78072700367
		127x22	S9244	Coarse	XHD Fibre back	10	78072700374
			S9344	Medium	XHD Fibre back	10	78072700375
XHD Coarse		180x22	S9244	Coarse	XHD Fibre back	10	78072700382
			S9344	Medium	XHD Fibre back	10	78072700383

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





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 & 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.
115x22	F2504	Very fine A	XFLD (Plain)	10	4900	66254481898
TTSXZZ	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

Brown 55x160x38 Pre-polishing Cleaning very dirty material (alu & non ferrous) 1 7660739107 Green 55x160x38 Gloss Aluminium & stainless steel 1 7660739108 White FEx160x38 Super birth gloss Polishing stainless steel 1 7660739108	 COLOUR	WxLxH (mm)	FINISH	GUIDE	PK QTY	ART NO.
	Brown	55x160x38	Pre-polishing	Cleaning very dirty material (alu & non ferrous)	1	7660739107
White FFV1/0v20 Cuperhigh place Poliching stainless steel alu 9 pap formus 1 7//0720100	Green	55x160x38	Gloss	Aluminium & stainless steel	1	7660739108
writte 55x100x50 Super high gloss Pousiling stainless steet, atd & non-terrous 1 7600737109	White	55x160x38	Super high gloss	Polishing stainless steel, alu & non-ferrous	1	7660739109
Blue 55x160x38 General high gloss All metals & hard plastics 1 7660739112	Blue	55x160x38	General high gloss	All metals & hard plastics	1	7660739112

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NOTES			



DISCS FOR MINI ANGLE GRINDERS

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

8	Rapid	Blend Speedlok Discs
3	Rapid	Prep Speedlok Discs

Speedlok	Bu	ffing	&	Polishing	Discs

38
90
0



SPEEDLOK DISCS FOR MINI ANGLE GRINDERS

The tool-free fastening system enables quick disc changes to maximize productivity and minimise downtime. Ideal for light to medium pressure grinding, blending & finishing on small or difficult to access areas including tool and mold construction, automotive, aeronautical & aerospace industry and equipment and pressure vessel construction. The SpeedLok fastener makes it quick & 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 centered and vibration free. These discs optimize 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 R860	NORZON + R801	METAL ARY/ARX19
	++++	++++	++++	++++	+++
Stainless steel, inox	11	//	-	✓	
Titanium, inconel & super alloys	11	//		✓	
Carbon, construction & mild steel	11	//	//	11	✓
Cast iron	✓	✓	//	11	✓
Non-ferrous metal (brass/aluminium)			✓		✓
Hard wood			//	11	✓
Soft wood					✓
Composite materials					✓
Stone, concrete					✓
Glass, plastic					✓
				*^^/-	ailable on request

^{*}Available on request

QUICK CHANGE DISC ATTACHMENTS & TIPS





TS ATTACHMENT A <u>turn-o</u>n/turn-off style fastener.



TR ATTACHMENT Twist on & twist off in 2½ turns.

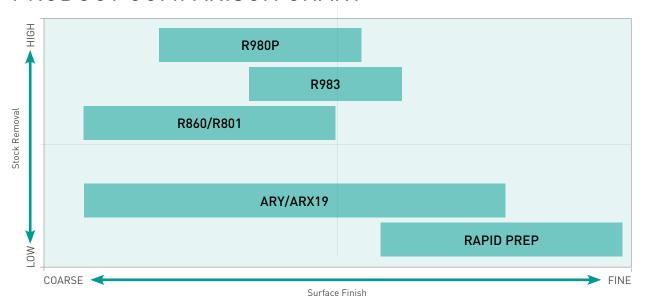


TIP Avoid gouging on contours by using a smaller size holder than the diameter of the discs, such as





PRODUCT COMPARISON CHART





- The best choice for part cut & 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	TS ATTACHMENT
	25	36	11500 - 26800	100	66261094895	
		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
-/10050		50	5700 - 13400	50	63642597045	69957390699
CHECK		60	5700 - 13400	50	63642597050	69957390700
Grinding on stainless		80	5700 - 13400	50	63642597052	69957390701
generates a considerable		120	5700 - 13400	50	66261136868	66261136986
amount of heat; always use a Norton Blaze disc with a	75	36	3800 - 8900	50	63642597053	69957390702
supersize layer to reduce		50	3800 - 8900	50	63642597057	69957390703
heat build up and improve cut quality. Typically, a coarse grit disc is used		60	3800 - 8900	50	63642597060	69957390704
		80	3800 - 8900	50	63642597062	69957390705
when grinding MIG welds and a finer grit disc is used when grinding TIG welds.		120	3800 - 8900	50	66261136980	

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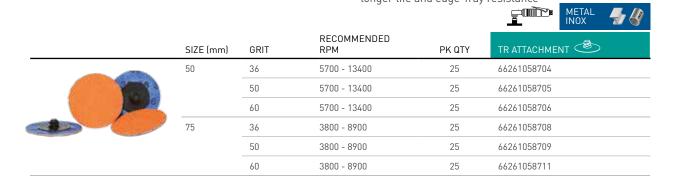
SPEEDLOK DISCS FOR MINI ANGLE GRINDERS

BLAZE F980 FIBRE +++++



• The Best choice for very tough applications

Heaviest fibre backing for greater stock removal, longer life and edge-fray resistance



RED HEAT R983 +++++



- 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 & improved backing for excellent cut rate and longer life

					METAL INOX
	SIZE (mm)	GRIT	RECOMMENDED RPM	PK QTY	TR ATTACHMENT
51	50	36	5700 - 13400	50	66261151081
		60	5700 - 13400	50	66261151083
		80	5700 - 13400	50	66261148410
		120	5700 - 13400	50	66261151084
	75	36	3800 - 8900	50	66261151085

BENEFITS OF USING A QUICK CHANGE DISC









NORZON R860



- 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 steel and stainless steel				CORDLESS COMPATIBLI	F	ERR. NON ERROUS, INOX 🕏 🥼 🚱
	SIZE (mm)	GRIT	RECOMMENDED RPM	PK QTY	TR ATTACHMENT	TS ATTACHMENT
an 3	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
		80	3800 - 8900	50	63642560888	69957360313
		120	3800 - 8900	50	66261137003	

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 & finish
- Heavy Y-weight polyester backing provides excellent durability and grain adhesion
- Premium, self-sharpening zirconia alumina plus grain with ensures the disc remains sharper for longer, increasing usage time and driving down overall process cost

METAL ____

• High removal rate when used on stainless steel

					inux 🚨
	SIZE (mm)	GRIT	RECOMMENDED RPM	PK QTY	TR ATTACHMENT
35 36	50	36	5700 - 13400	50	63642556405
		60	5700 - 13400	50	63642556407
		80	5700 - 13400	50	63642587207
		120	5700 - 13400	50	63642587208
	75	36	3800 - 8900	50	63642587245
		60	3800 - 8900	50	63642556411
		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 aluminum oxide discs
- Good cut rate and improved life on moderatelydemanding applications
- Resistant to edge wear and fraying

					FERR. N WOOD	ION FERR. 🐇 🧄
	SIZE (mm)	GRIT	RECOMMENDED RPM	PK QTY	TR ATTACHMENT	TS ATTACHMENT
24.20	38	60	7600 - 17600	50		63642586596
() all		80	7600 - 17600	50		63642586607
		120	7600 - 17600	50		63642586608
		180	7600 - 17600	50		63642586609
	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
-/10050		320	5700 - 13400	50	63642586695	63642586681
V SPEC CHECK	75	60	3800 - 8900	50	63642586731	63642586699
		80	3800 - 8900	50	63642586733	63642586705
Our most versatile SpeedLok disc. Traditional aluminium		120	3800 - 8900	50	63642586735	63642586708
oxide discs are a good starting specification for general		180	3800 - 8900	50	63642586738	
purpose grinding.		320	3800 - 8900	50		63642586718

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 minimize downtime by increasing productivity.

The SpeedLok fastener makes it quick & 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 centered 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 & tool wear.

PRODUCT SELECTION GUIDE

Highly recommended 🗸 🗸 Recommended 🗸

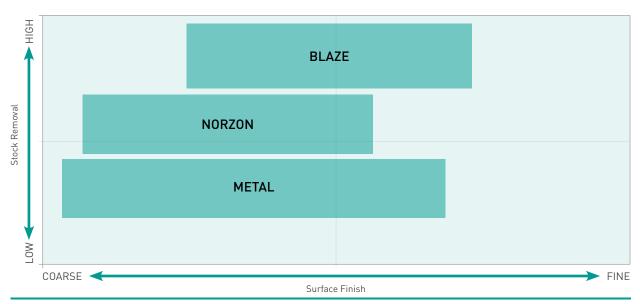






	BLAZE	NORZON	METAL
	++++	++++	+++
Stainless steel, inox & duplex	11	✓	
Inconel, titanium & super alloys	11	✓	
Carbon steel, construction steel & mild steel	11	//	✓
Cast iron	✓	//	✓
Non-ferrous metal (brass/aluminium)		//	✓
Hard & soft wood		//	✓

PRODUCT COMPARISON CHART



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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 & 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

METAL METAL

				001:11 7111		IIIOX == 0
	SIZE (mm)	GRIT	RECOMMENDED RPM	PK QTY	TR ATTACHMENT	BACK-UP PAD
	50	40	11500 - 15000	10	66261120104	
500		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 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 R860



- 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 aluminum and other soft materials

	SIZE (mm)	GRIT	RECOMMENDED RPM	PK QTY	TR ATTACHMENT	BACK-UP PAD
503	50	40	11500 - 15000	10	66261180892	
		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	



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	



METAL R265 +++



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

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10



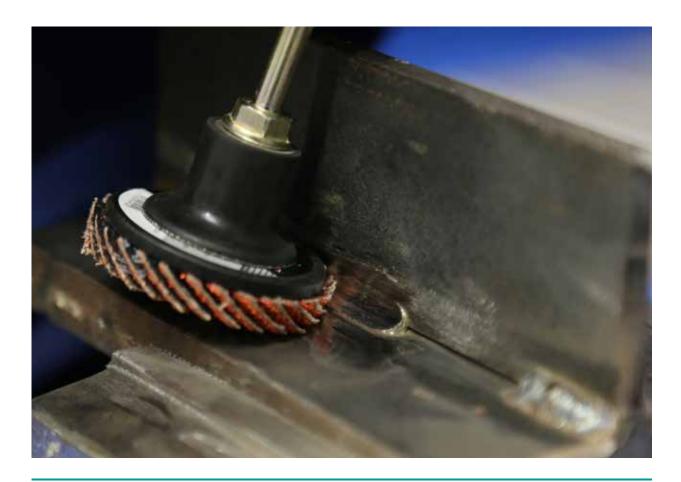
MADE-TO-ORDER PRODUCT AVAILABILITY

80

CAP CODE	GRAIN / GRIT	36	40	50	60	80	120
Blaze R980P	Ceramic with supersize	•	•	•	•	•	
Norzon R860	Zirconia	•	•		•	•	
Metal R265	Aluminium oxide	•	•		•	•	•

7500 - 10000

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	1			
Heavy deburring	√	11			
Light deburring		//	✓		
Light finishing			11	✓	11
Blending			11	✓	✓
Finishing			✓	/ /	11

MOST AGGRESSIVE LEAST CONFORMABLE LEAST AGGRESSIVE MOST CONFORMABLE



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





- 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





DIA (mm)	CAP CODE	GRADE	MAX. RPM	PK QTY	TR ATTACHMENT	TR+ ATTACHMENT
50	R9101	X Coarse SG	20000	25	66623303912	
75	R9101	X Coarse SG	15000	25	66261096557	
100	R9101	X Coarse SG	8000	5		66623303921

Use with TR+ Holder

RAPID STRIP



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

TR+ RAPID STRIP Use with TR+ Holder 63642585751 100 R4101 X Coarse SG 8000

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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 grindlines 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
- Special resin chemistry resists shedding when used on sharp edges, making it ideal for deburring, no smearing
- Longer life than other surface blending discs (up to 8x) means fewer disc changes for less down time 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



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 & threads, blending alloys, polishing & 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
486/25	50	U2301	2 A Medium	22000	10	63642585684
ASF 2SF 2SF 2		U2301	6 A Medium	22000	10	63642585725
2SF 2SF 2SF 2S		U4401	2 S Fine	22000	10	63642585677
F 2SF		U4401	3 S Fine	22000	10	66254473613
ZSF F 2SF		U2401	4 A Fine	22000	10	63642585679
29F 29F 29F 29	75	U2301	2 A Medium	18000	10	63642585697
7 29E 29F		U2301	6 A Medium	18000	10	63642585726
100		U4401	2 S Fine	15000	10	63642585691
		U4401	3 S Fine	15000	10	66254473614
		U2401	4 A Fine	15000	10	63642585695

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FOR MINI 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



- For cleaning and conditioning, gain higher material removal, longer life and consistent, smear-free finishes, even on high nickel content alloys
- Proprietary engineered Vortex aluminum 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 1 step
- Up to 4x longer life than competitor products, material removal level is maintained throughout disc life, reducing the need for rework & 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
and the same		S2203	Coarse	50	66623378340
		S2303	Medium	50	66623378342
		S2403	Fine	50	66623378345
		S2503	Very fine	50	66623378347
	75	S2103	Extra coarse	25	66623378337
THE PARTY OF THE P		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



NEW VORTEX RAPID PREP SCM

• Small size for hard to reach areas!



SIZE DIA (mm)	CAP CODE	GRIT GRADE	PK QTY	TR ATTACHMENT
25	S2108	ACRS	50	78072750699
	S2208	AMED	50	78072750700
	S2308	AVF	50	78072750701

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
- 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
ALCO STATE OF THE PARTY OF THE	50	S2108	Extra coarse	50	66623378355
A STATE OF THE PARTY OF THE PAR		S2208	Coarse	50	66623378359
		S2308	Medium	50	66623378363
5		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

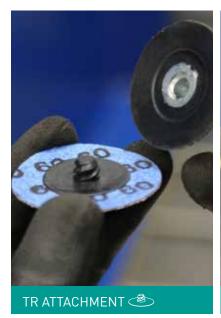
RAPID POLISH



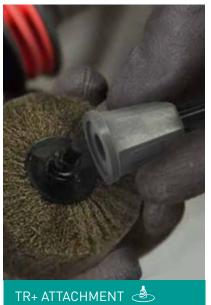
- Polishing is the final stage in the process, to achieve a glossy, high shine finish
- Use on all metals including stainless steel & aluminium
- · Removes fine scratches
- Impart a high quality mirror shine



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







Norton quick change pads are premium backup pads designed for use with Speedlok discs. With different attachment types available and densities, we have the solution to fit your quick change disc.







Material Application All materials **Machine**Mini angle grinder & Die Grinder

ProcessGrinding & finishing for small areas with challenging tool access

RUBBER BACK-UP PADS FOR MINI ANGLE GRINDER

6mm SPINDLE

- Balanced to ensure operator comfort.
- Resilient rubber pad for longer life.
- Hardened shaft for strength.

- Metal thread for secure disc connection.
- Improved packaging with euro slot for easier display.
- Separated shaft to mount for flatter packaging and easier display

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
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.

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SPEEDLOK BUFFING & POLISHING DISCS FOR MINI ANGLE GRINDERS

BACK-UP PADS FOR ANGLE GRINDERS

TR ATTACHMENT (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 pad Suitable for use with rubber back-up pads for use on an angle grinder

 - Female M14, male thread 1/4 20 UNC

TYPE	DENSITY	MAX. RPM	PK QTY	ART NO.
M14 Adaptor	Metal	12000	1	63642587997





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





Remove the metallic spindle and screw the adaptor to use the rubber back-up directly on the angle 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.

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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 discs 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 A0XC 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 discs 50mm Medium SL3	66623378342	5	-
Rapid Prep speedlok discs 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

98	Screenback Discs
00	Plain Discs
	Roartoy Floor Pag

109 110



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.

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 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







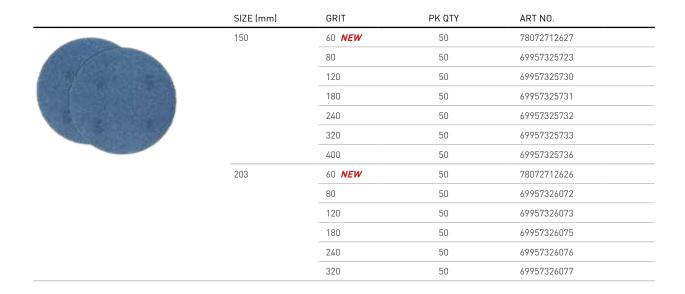
CERAMIC ADVANTAGE

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

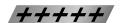


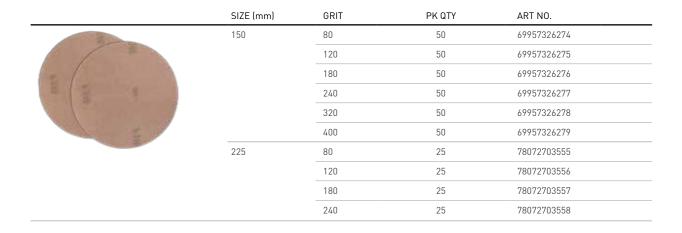
NEW MESHPOWER DISCS CERAMIC #++++





NEW MESHPOWER DISCS ALUMINIUM OXIDE #++++





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 & painted surfaces, stripping primer, varnish & paint, sanding plastic & fibreglass, light weld blending & deburring and sanding bare wood.

PRODUCT SELECTION GUIDE

Highly recommended ✓✓
Recommended ✓
Suitable ○



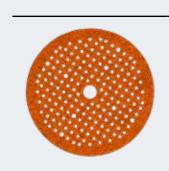
MATERIALS	APPLICATIONS	NEW NORTON BLAZE A995 Multi-Air	NORTON PRO PLUS A975	BLUE FIRE NORZON H835F	NORTON PRO A275	H231	NORTON PRO FILM Q275	H425*
		INNOVATION	+++++	+++++	++++	++++	++++	++++
Metal	Coarse sanding	//		//		✓		
	Finishing	//		//		✓		
Hard wood	Coarse sanding	11		//	0	✓		✓
	Finishing	✓	//	✓	✓	11	✓	✓
Soft wood	Coarse sanding	✓		✓	✓	11		✓
	Finishing	✓	//	✓	✓	✓	✓	✓
Filler	Aluminium / metal	✓	✓	11	✓		✓	
	Polyester	✓	11	✓				
Varnish /	Coarse sanding	11		✓	11	1		
paint / primer	Finishing	11	11	✓	1	0	✓	
Composites /	Ероху	11	11	11		1		
coatings	Acrylic	11	11		1			
	Fibre glass	11		11		1		
	Finishing	✓	11		1		✓	
Plaster	Coarse sanding					1		0
	Finishing				//	0		
Stone & glass	Coarse sanding					0		11
	Finishing					0		11
							*Available	as MTO only



NEW BLAZE A995 MULTI-AIR

INNOVATION /

- Ultra-premium ceramic aluminium oxide grain boosts performance with extremely sharp edges and removes over 30% more material with considerably less dust
- An all-new exclusive backing design provides extraordinary strength with tear resistance well beyond any flexible paper in the market
- Unique Norton Multi-Air® hole configuration provides a consistent cut throughout the product's life and maximum dust extraction for a cleaner work environment and less potential for contamination in the shop
- Norton No-Fil® water-based stearate coating ensures you get the superior finish you need without user fatigue, rework and endless consumption of discs through changeovers

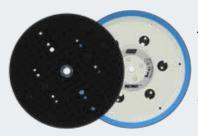




DIAxH (mm)

GRIT	PK QTY	ART NO.
40	50	78072756399
60	50	78072756400
80	50	78072756402
120	50	78072756403
150	50	78072756404
180	50	78072756405
220	50	78072756406
320	50	78072756407
400	50	78072756408

NORTON MULTI-AIR BACK-UP PADS

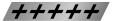


DIA (mm)	DENSITY	PK QTY	ART NO.	
150	Hard	1	07660719198	
	Medium	1	63642585872	

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SELF-GRIP & BEARTEX DISCS

NORTON PRO PLUS A975 +++++

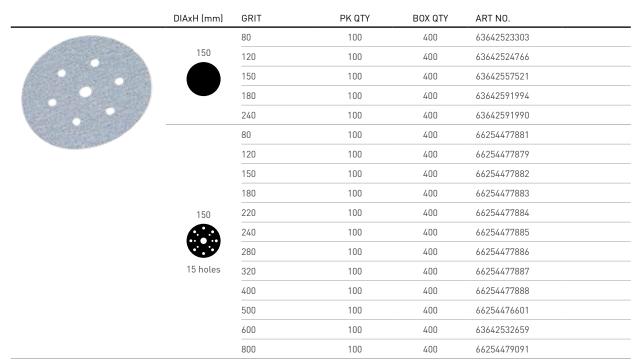


- Norton SG ceramic grain blended with premium heat-treated aluminium oxide abrasive for higher & faster cut rate with uniform scratch pattern
- Fibre reinforced latex paper is flexible yet tear resistant
- No-fil® treatment reduces clogging during use and extends the life of the disc
- Also available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









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



BLUE FIRE NORZON H835 +++++



- Latest Norzon grain design with self-sharpening grain for great cut rate & 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 & edge chipping









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

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



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SELF-GRIP & BEARTEX 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.
4700		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



H231 ++++

- Aluminium oxide abrasive for roughing, intermediate sanding & finishing of solid wood on floor & 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 & 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
	105	60	100	100	63642516174
	125	80	100	100	63642516175
		120	100	100	63642516176
新世 级5-456 65 8		180	100	100	63642537389
计是第二次 万层	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
	130	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

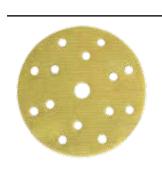


- Heat-treated aluminium oxide grain for fast material removal and excellent performance on paint, varnish and fillers
- Flexible film backing is resistant to tearing and provides a consistent scratch pattern which reduces rework
- No-Fil® layer on the abrasive prevents dust build-up during sanding for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



PAINT/VARN, HARD & SOFT WOOD







DIAxH (mm)

15 holes

GRIT	PK QTY	BOX QTY	ART NO.
80	100	400	77696085879
120	100	400	77696088028
150	100	400	77696088145
180	100	400	77696088146
220	100	400	77696088147
240	100	400	77696088149
320	100	400	77696088150
400	100	400	77696088151
500	100	400	77696088152
600	100	400	77696088153
800	100	400	77696088154
1000	100	400	77696088155
1200	100	400	77696088156
1500	100	400	77696088388

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SELF-GRIP & BEARTEX DISCS

BEARTEX

- 3 dimensional disc that conforms to work surface & 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

DENSITY

М8

5/16

• In Self Grip and Plain backing



	DIAxH (mm)	GRADE	CAP CODE	PK QTY	ART NO.						
and a street	150	BEARTEX SELF-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 SELF-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	BEARTE:	X 	++						
	150	BEARTEX SE	LF-GRIP PLAIN DISC	5							
		F2316	Medium A Heavy duty	20	66261121312						

SELF-GRIP BACK-UP PADS

PRODUCT SELECTION GUIDE BACK-UP PADS

AT LIGATION	DENSITI
Heavy duty sanding, best for flattening surfaces or dimensioning	HARD Blue Rubber
Scruffing, shaping, sanding & finishing For use on filler, primer, paint, clear coat, wood, plaster, composites & metal	MEDIUM Black Rubber
Final sanding, to obtain the best finishes	SOFT Orange Foam / Rubber
MACHINE	ATTACHMENT TYPE
Electrical angle grinder	M14
Flectrical & pneumatic grinders (US tools)	5/8

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.

Festo orbital sander

Other orbital sanders

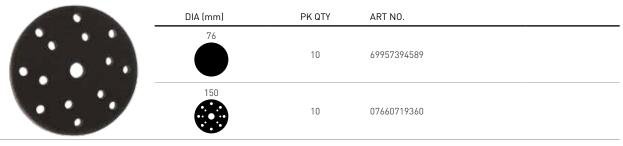
ΔΡΡΙ ΙΟΔΤΙΩΝ



	DIM DIAxH (mm)	THREAD	DENSITY	PK QTY	ART NO.
	76	5/16"	Medium	6	63642567810*
Self-Grip standard	No holes				
an way has making	125	5/16"	Medium	3	69957350739
TANDER WAS	A				
	8 holes				
_	125	M14	Medium	3	69957350744
	123	141.14	Mediaiii	3	07737330744
*The 76mm back-up pad is a universal attachment	No holes				
system for both Self-Grip	150	5/16 & M8	Medium	1	66623338436
and self-adhesive discs. It provides the maximum					
flexibility and optimal finishing results. The	No holes				
Self-Grip DUO combines an innovative design	150	M14	Medium	3	63642567812
of gripping structures					
in the shape of flat- top mushrooms which	No holes				
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 work piece. Use the foam interface between the Norton self-grip back-up pad and the self-grip abrasive disc.



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HOLE PATTERNS FOR DISCS AVAILABLE AS MADE-TO-ORDER Other sizes and hole paterns available on request 115mm 125mm 150mm ø115mm ø125mm ø125mm with 8 holes ø150 mm 8 holes ø10 mm ø150mm with 6 holes on hole circle ø120 mm with no holes with no holes ø10 mm on hole circle ø90 mm ø10 mm on hole circle ø80 mm + 1 centre hole ø10 mm + 1 centre hole ø17 mm + 1 centre hole ø17 mm ø150mm ø150mm ø225mm ø150mm ø150mm with 180 holes ø203 mm 8 holes ø225 mm 10 holes with 17 holes ø12 mm on hole circle ø105 mm + 1 centre hole ø18 mm ø12 mm

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.



Norton offers a complete solution of screenback discs to suit the most common applications including ceiling and wooden floor sanding.

PRODUCT SELECTION GUIDE

Highly recommended
Recommended
MATERIALS APPLICATIONS Q43N Q421

+++
+++

APPLICATIONS	Q43N	Q421
	+++	+++
Surface preparation	√ √	✓
Surface preparation	✓	/ /
Between coats	✓	//
	Surface preparation Surface preparation	Surface preparation Surface preparation

Q43N +++

- Sharp silicon carbide grain for aggressive and fast cut
- Open-mesh structure for reduced clogging & longer life
- Ideal for wall & 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 & 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

PAINT/VARN, PLASTER & FILLER, HARD WOOD & SOFT WOOD	
---	--

DIAxH (mm)	GRIT	PK QTY	ART NO.
	60	10	66261120519
	80	10	63642536521
406	100	10	66261120517
	120	10	66261120516
	150	10	63642536524
	180	10	63642515105
	220	10	63642552254

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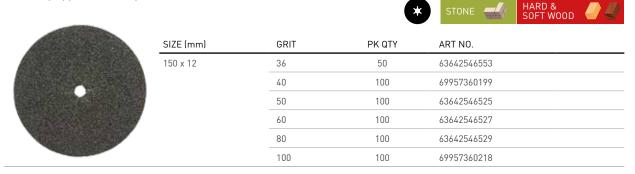
PRODUCT SELECTION GUIDE

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

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 & finishing of solid wood on floor



		<u>'</u>
GRIT	PK QTY	ART NO.
40	10	63642540076
50	10	63642540078
60	10	63642540079
	40 50	40 10 50 10

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

63642540080



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 selfgrip discs for further information about range.

MADE-TO-ORDER PRODUCT AVAILABILITY

80

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 paterns 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.

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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	.00R PADS 25mn	n 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	r pads come with	n an 89mm removable centrepiece		
THIN LINE FLO	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, & 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 & 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



WHEELS

Flap wheels
Convolutes wheels
Rapid Strip wheels

114	Rapid Blend unitised wheels	14
132	Small unitised wheels / Mounted points	14
138	High strength discs	14



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 abrasive products.

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

PRODUCT SELECTION GUIDE

Highly recommended 🗸 🗸 Recommended 🗸







MATERIALS	NORTON QUANTUM	NORZON R822	METAL R207Plus
	++++	++++	+++
Stainless steel, inox & duplex	//	✓	
Inconel, titanium & super alloys	//	✓	
Carbon steel, construction steel & mild steel	//	//	/ /
Cast iron	✓	//	11
Non-ferrous metal (brass /aluminium)			11
Hard & soft wood		11	✓
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









Grinding on stainless generates a considerable amount of heat; using a Norton Pink flap wheel improves cut, finish and reduces heat generation and workpiece burn.

DIM DIAxWxS (mm)	GRIT	PK QTY	ART NO.	RECOMMENDED SPEED (RPM)
30x15x6	40	10	66261154243	9500 - 15900
	60	10	66261154300	
	80	10	66261154301	
40x20x6	40	10	66261154302	7100 - 12000
	60	10	66261154305	
	80	10	66261154306	
60x30x6	40	10	66261154315	4800 - 7900
	60	10	66261154316	
	80	10	66261154318	
	120	10	66261154320	
80x50x6	40	10	66261154340	3600 - 6000
	60	10	66261154341	

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

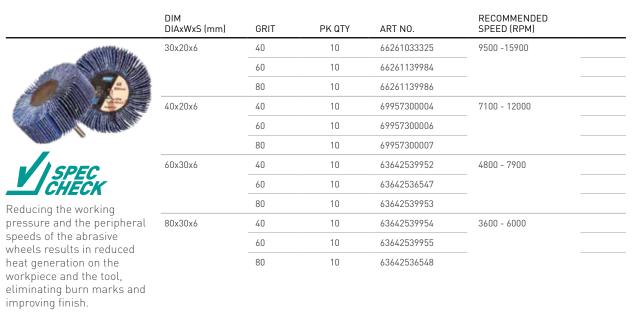
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FLAP WHEELS WITH SPINDLE

NORZON R822

- Self-sharpening ZIRCONIA ALUMINA grain for use on stainless steel and resistant alloys
- Ideal for grinding, shaping, blending, edge breaking & 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





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 geneartion of premium aluminium oxide grain provides an aggressive cut yet long product life
- Conforms to the workpiece thanks to the flexible cotton backing

				- Stander	& NON FERR.	
	DIM DIAxWxS (mm)	GRIT	PK QTY	ART NO.	RECOMMENDED SPEED (RPM)	
6mm SHAFT						
	20x10x6	40	10	77696007699	14300 - 23900	
A War and the second		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		

^{† +25%} performance upgrade



6mm SHAFT					
MINI STALL	30x15x6	40	10	66261056890	9500 - 15900
	557.575	60	10	63642513148	
		80	10	63642561466	
		120	10	63642551593	
	30x30x6	40	10	66261138108	9500 - 15900
A CONTRACTOR OF THE PARTY OF TH		60	10	66254410858	
		80	10	66261063210	
	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	
		120	10	63642546758	
	60x20x6	40	10	63642536738	4800 - 7900
		60	10	63642531869	
		80	10	63642531866	
		120	10	63642531862	
	60x30x6	40	10	63642536737	7100 - 12000
		60	10	63642531868	
		80	10	63642531865	
		120	10	63642531861	
		240	10	63642546694	
		320	10	63642546727	
	80x30x6	40	10	69957360911	5700 - 9500
		60	10	63642531867	
		80	10	63642533096	
A 112		120	10	63642534250	
+25%	80x50x6	40	10	69957360914	5700 - 9500
UPGRADE		60	10	63642559718	
5% performance upgrade		80	10	69957360916	
		120	10	69957360917	

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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.



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

DIAMETER (mm)	MINIMUM ORDER QUANTITY
20	250 pieces
25	250 pieces
30	250 pieces
40	250 pieces
50	250 pieces
60	250 pieces
80	250 pieces



BEARTEX SPINDLE MOUNTEDFLAP 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





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BEARTEX SPINDLE MOUNTED FLAP WHEELS

APPLICATION GUIDE

	COARSE (GRII	COARSE (GRINDING)					
COATED GRIT	40	60	80	120	180	240	320
NON-WOVEN GRADE	COA	ARSE	ME	DIUM	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

NON-WOVEN FLAP WHEEL

BEARTEX FLAP WHEELS HEAVY DUTY



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









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



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







DIM DIAxWxS (mm)	GRADE	INTERLEAVED GRIT	CAP CODE	PK QTY	ART NO.
30x20x6	Medium A	-	F2300	10	66261032155
	Fine A	-	F2401	10	66261032160
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



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



• Where a quick change facility in a continous operation is beneficial







DIM DIAxWxS (mm)	GRADE	CAP CODE	PK QTY	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

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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 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





use compressed air to power the tool. Because moisture in compressed air will rust the air





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

KIT 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 0 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	_
6mm 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	

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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









DIM DIAxWxTH (mm)	GRIT	PK QTY	ART NO.	RECOMMENDED SPEED (RPM)
125x20 M14	60	5	69957307356	6700 - 8300
	80	5	69957307359	



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)
125x20 M14	40	5	66261121426	6700 - 8300
	60	5	66261121427	
	80	5	66261121428	
	120	5	66261121429	
	180	5	66261121432	

+25% performance upgrade

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





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BEARTEX WHEELSFOR SATINEX MACHINES

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 & 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 & 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		



NEW SATINEX QUICK MOUNTING/CHANGING M14

- With M14 threaded attachment
- Use easily on a variable speed right angle grinder for greater convenience to achieve linear finish
- Use below in a simple 2 or 3 step solution to remove marks then finish





APPLICATION	DIM DxTxB (mm)	CAP CODE	GRADE	MAX RPM	PK QTY	ART NO.
Blending / removing scratches and marks	110x50xM14	F2200	Coarse A +80	5700	2	78072761576
Blending / fine grainings		F2200	Coarse A	5700	2	78072761571
Final finishing	-	F2400	Fine A	5700	2	78072761579
Blending / removing scratches and marks	110x100xM14	F2200	Coarse A +80	5700	1	78072761577
Blending / fine grainings	_	F2200	Coarse A	5700	1	78072761574
Final finishing	-	F2400	Fine A	5700	1	78072761581

NEW STEEL TAPE

• For masking or protecting the surface when joint mitering

SIZE	DESCRIPTION	PK QTY	ART NO.
50mm x 2M	Steel tape for stainless fabricators	1	69957311590

NEW GUARD & HANDLE EXTENSION

- For variable speed right angle grinder
- Converts the grinder quickly and easily into a linear finishing tool



SIZE	DESCRIPTION	PK QTY	ART NO.
MB650SV	Guard and handle extension	1	66261122513





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BEARTEX WHEELS FOR SATINEX MACHINES

SATINEX NON WOVEN





APPLICATION	DIM DxTxB (mm)	CAP CODE	GRADE	MAX RPM	PK QTY	ART NO.
Blending /	110x100x19	F2200	Coarse A	5700	1	63642557218
satin finishing		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



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 aluminum 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, optimizing 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)	
150x50x25	40	1	66261140555	4800 - 5400	
165x25x32	40	2	63642547170	4300 - 4900	
	80	2	63642546730		
	120	2	63642546742		
165x50x32	40	1	66261140608	4300 - 4900	
	60	1	63642561961		
	80	1	63642546731		
	120	1	63642546743		

Formerly BDX R207Plus

MADE-TO-ORDER PRODUCT AVAILABILITY

FLW DIAMETER (mm)	25	30	40	50	80	100	Minimum order quantity
150	٠	•	•	•	•	•	10pcs
165	•	•	•	•	•	•	10pcs
200	•	•	•	•	•	•	10pcs
250	•	•	•	•	•	•	10pcs
300	•	•	•	•	•	•	10pcs
355	•	•	•	•	•	•	10pcs

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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.

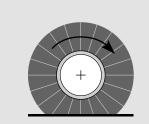
INTERLEAVED FLAP WHEELS

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.

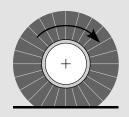
Ideal for deburring and grain finishing on stainless steel. Available in both spindle and flange mounted versions. Flange mounted interleaved wheels can be shaped to match the profile, e.g. a wood moulding.

DENSITIES

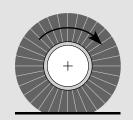
The different densities facilitate a versatility ranging from soft cushioning pads to hard cleaning and finishing tools. The density of a wheel can be increased (hardened) by adding more flaps, as shown below:



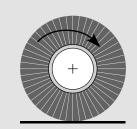
SD: Soft density



MD: Medium density



HD: Hard density



HDEX: Extra Hard density



BEARTEX 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 more coarse 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 matt 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, alumium 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 metals Wood, 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. Ideal for use on contoured surfaces & parts with awkward geometry
- Gentle cushioning action achieves a consistent & uniform finish with no risk of gouging

• Suitable for a wide range of applications including corrosion removal, cleaning & surface finishing







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

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

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 & densities using Norton's made to order facility. Please contact your local sales or customer service representative for more information.

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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™ 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



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 & final/decorative finishing
- Generates uniform satin and antique finishes
- Ideal for blending & 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

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CONVOLUTE WHEELS FOR BENCH & PEDESTAL GRINDERS

RAPID FINISH GENERAL PURPOSE RED



• Multi-use General Purpose product - starting point for all Convolute wheel applications



DxWxB (mm)	GRADE	MCC	DENSITY	PK QTY	ART NO.
SILICON CARB	IDE				
150x13x25	Fine	C4415	8	1	66261162172
150x25x25	Medium	C4315	8	1	66261162180
	Fine	C4415	7	1	66261162183
	Fine	C4415	8	1	66261162187
	Fine	C4415	9	1	66261162188
200x10x76	Medium	C4315	8	1	78072720077
200x13x76	Fine	C4415	8	1	69957313858
200x20x76	Medium	C4315	8	1	78072711539
200x25x76	Fine	C4415	6	1	66261162193
	Fine	C4415	7	1	66261162194
	Fine	C4415	8	1	66261162195
	Fine	C4415	9	1	66261162196
200x50x76	Fine	C4415	8	1	66261162198
250x13x127	Fine	C4415	8	1	69957300944
250x25x127	Fine	C4415	8	1	66261162200
300x25x127	Fine	C4415	8	1	66261169792
	105				
ALUMINUM OX	IDE				
150x25x25	Medium	C2315	8	1	66261162179

Wider sizes and specs available upon request





RAPID FINISH SERIES 1000 LONG LIFE



GRADE

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

DxWxB

(mm)

REF

CODE

ABRASIVE

TYPE

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

ART NO.

• Smear proof & cool cutting on light deburring applications

DENSITY



(,,,,,,	OODL		OTOTOL	1.100	DENTON	α	71111110.
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	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
	D17	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
050-10-107	D18	SiC	Medium	C4308	8	4	66261019005*
250x12x127	5.0						

* 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 & form holding are of primary importance



DxWxB (mm)	REF CODE	ABRASIVE TYPE	GRADE	мсс	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

WHEEL BORE (mm)	SIZE OF REDUCED BORE WITH BUSHING (mm)	FOR WHEEL DIAMETER (mm)	PK QTY	ART NO.
25	10	100 to 150	2	66261080522*
	13	-	2	66261080523
	16	-	2	66261080524*
-	20	-	2	66261080525*
-	22	-	2	66261080526*
50	13	150	2	66261080527*
-	16	-	2	66261080528
-	25	-	2	66261080529*
-	32	-	2	66261080530*
76	25	200	2	66261080531
-	32	-	2	66261080532
-	50	-	2	66261080514*
125	32	-	2	66261080534*
	30RE (mm) 25	30RE (mm) WITH BUSHING (mm) 25 10 13 16 20 22 50 13 16 25 32 76 25 32 50	BORE (mm) WITH BUSHING (mm) DIAMETER (mm) 25 10 100 to 150 13 - 16 - 20 - 22 - 50 13 150 16 - 25 - 32 - 76 25 200 - 32 - 50 32 - 50 32 - 50 - 50 - 50 - 50 - 50 - 50 - 50 - 5	BORE (mm) WITH BUSHING (mm) DIAMETER (mm) QTY 25 10 100 to 150 2 13 - 2 16 - 2 20 - 2 22 - 2 50 13 150 2 25 2 2 - 2 32 - 2 32 - 2 32 - 2 32 - 2 50 32 - 2 50 32 - 2 50 32 - 2 50 32 - 2 50 32 - 2 50 32 - 2 50 32 - 2 50 32 - 2 50 32 - 2 50 32 - 2 50 32 - 2 50 32 - 2 50 32 - 2 50 32 - 2 50 32 - 2

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

^{*} Made to order



UNDERSTANDING THE PRODUCT

FAMILY NAME	PRODUCT REFERNCE	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
	D1 8 S LL	6,7,8,9	SiC	Medium	C4308
	D1 9 S LL	6,7,8,9	SiC	Medium	C4308
SERIES 4000	D4 8 A	8,9	Alox	Medium	C2306
	D4 8 S	8,9	SiC	Fine	C4406
	D4 9 S	8,9	SiC	Fine	C4406

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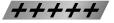


RAPID STRIP WHEELSFOR DIE GRINDERS

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 & residue, corrosion, light weld splatter, dirt, mill scale & 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 subsequent 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



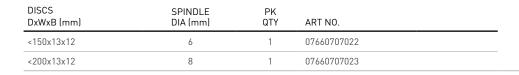
- General purpose wheels for removing coatings such as varnish on wood, metal and plastics
- Nylon fibre, flexible resin and extra coarse grain combine to provide aggressive performance, long life and improved
- Leaves a thoroughly cleaned surface, ready for the next stage of the process; coating, painting 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 - STA	NDARD (1 WHEEL)							
75x13x6	R4101	10	10000	63642557741				
100x13x6	R4101	10	8000	63642557742				
150x13x8	R4101	10	6000	63642557743				
SPINDLE MOUNTED - LARGE AREA (2 WHEELS GANGED)								
75x25x6	R4101	5	10000	63642557744*				
100x25x6	R4101	5	8000	63642557745*				
150x25x8	R4101	5	6000	63642557746*				









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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 gauging. 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-metalic so won't contaminate the workpiece.

VORTEX RAPID BLEND CLOSED

- For light weld bead and weld splatter removal, heavy deburring and finishing applications
- Proprietary engineered Vortex aluminum 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





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 U3205 VOR-5AM 30 9000 4625(499403)	DxWxB (mm)	CAP CODE	GRADE	PK QTY	RPM	ART NO.
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	STANDARD					
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	50x6x6	U2305	VOR-7AM	60	22100	66261080270
75x6x6 U2305 VOR-5AM 40 18000 66254414832 U2305 VOR-7AM 40 18000 66261199696 75x13x6 U2305 VOR-7AM 20 18000 66261080267	75x3x6	U2305	VOR-5AM	40	18000	66261093448
U2305 VOR-7AM 40 18000 66261199696 75x13x6 U2305 VOR-7AM 20 18000 66261080267		U2305	VOR-7AM	40	18000	66261191445
75x13x6 U2305 VOR-7AM 20 18000 66261080267	75x6x6	U2305	VOR-5AM	40	18000	66254414832
		U2305	VOR-7AM	40	18000	66261199696
135v(v22 112205 VOD 5AM 20 0000 (4257/09402	75x13x6	U2305	VOR-7AM	20	18000	66261080267
120000 VOK-DAIM 20 YUUU 60204468002	125x6x22	U2305	VOR-5AM	20	9000	66254488602
150x6x25 U2305 VOR-5AM 8 7500 66254414167	150x6x25	U2305	VOR-5AM	8	7500	66254414167
U2305 VOR-7AM 8 7500 66254407225		U2305	VOR-7AM	8	7500	66254407225
SPINDLE MOUNTED WHEELS						
150x13x8 U2305 3AM 10 8000 66623375067	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 & 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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SMALL UNITISED WHEELS / MOUNTED POINTS

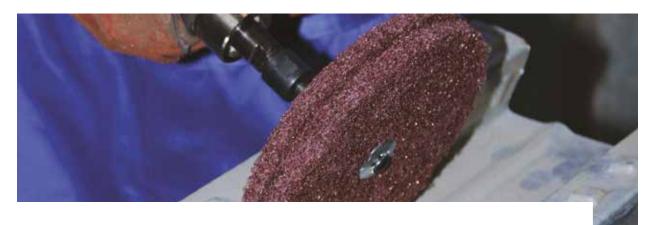
- · Reaches into small and awkward areas for deburring, dimensioning, cleaning and finishing.
- Ideal for 3D Printed components as a final clean up.
- Soft and gentle, so less risk of surface damage.
- Various sizes and options available for use in areas difficult to access.
- Can also be mounted on a normal low speed drill for many cleaning and 'touch-up' tasks.

SMALL UNITISED WHEELS / MOUNTED POINTS



	DIM DIAxTxS (mm)	SPEC + CAP CODE	GRADE/SHAPE	APPLICATION	PK QTY	RPM	ART NO.
	30x6x3	VORTEX U2305	MEDIUM 7A / WHEEL	Deburring/ Blending	10	16000	78072757523
	6x12x3	VORTEX U2305	MEDIUM 7A / POINT	Deburring/ Blending	10	16000	78072757528
	10x12x3	VORTEX U2305	MEDIUM 7A / POINT	Deburring/ Blending	10	16000	78072757529
Albert	10x12x3	NEX U4401	FINE 3S / POINT	Finishing, soft action	10	16000	78072757530
	30x15x3	HEAVY DUTY F2316	MEDIUM A HD / WHEEL 3 layers	Cleaning/ Blending flexible, conformable	10	16000	78072757594

Other sizes/specs available upon request, also with 6mm dia spindle.



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. Ganging increases versatility.

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*

* 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

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

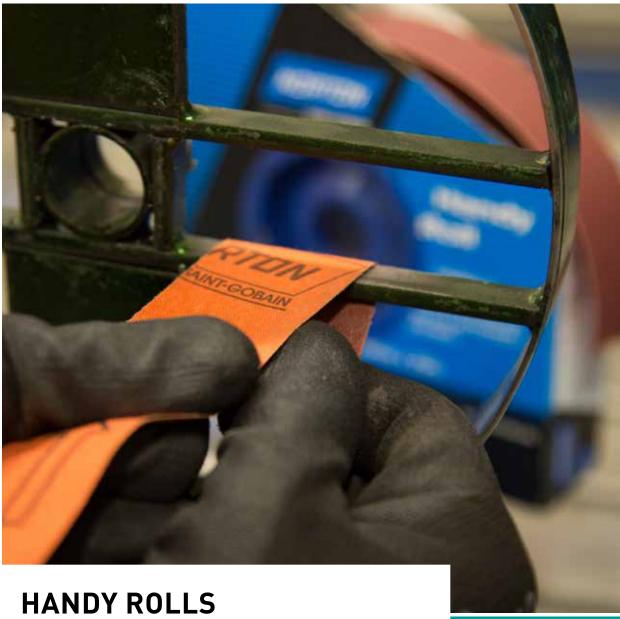


ROLLS

Handy rolls
Paper & cloth rolls
Norton Mach Power rolls

146	Beartex rolls
150	Rotolo Foam rolls

1	56	
1	58	



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,	✓	✓	11
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 & metal
- For general purpose maintenance applications offers extra durability and even wear
- Flexible cotton backing ideal for sanding profiled surfaces & round steel parts
- Dispenser unit for easy storage and product protection





	DIM WxL (mm/m)	GRIT	PK QTY	ART NO.
	25mmx25m	40	1	63642531849
		50	1	63642531850
		60	1	63642531823
		80	1	63642531820
Manuty Manuty		100	1	63642531815
		120	1	63642531811
Bonkilla		150	1	63642531808
		180	1	63642531805
		220	1	63642531802
		240	1	63642531799
		320	1	63642531796
		400	1	63642531793
		600	1	63642560206
	38mmx25m	40	1	63642531828
		50	1	63642531826
		60	1	63642531824
		80	1	63642531821
		100	1	63642531817
		120	1	63642531812
		150	1	63642531809
		180	1	63642531806
		220	1	63642531803
		240	1	63642531800
		280	1	63642536425
		320	1	63642531797
		400	1	63642531794
		600	1	63642539150
	50mmx25m	40	1	63642531829
		50	1	63642531827
		60	1	63642531825
		80	1	63642534758
V SPEC		100	1	63642531818
- CHECK		120	1	63642531814
R222 handy rolls are designed		150	1	63642531810
for manual applications.		180	1	63642531807
The high flexibility of the cloth in combination with the wide grit range, from coarse to		220	1	63642531804
		240	1	63642531801
fine, provides an excellent tool		280	1	63642536426
for a variety of applications		320	1	63642531798
including deburring, rust removal & finishing metal.		400	1	63642531795
		600	1	63642534757

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

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- Superior conformability to flat and complex surfaces and better finishes
- Dispenser unit for easy storage and product protection

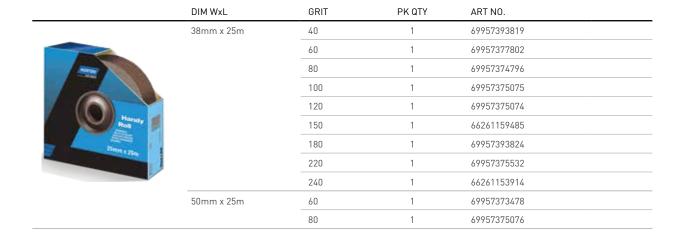














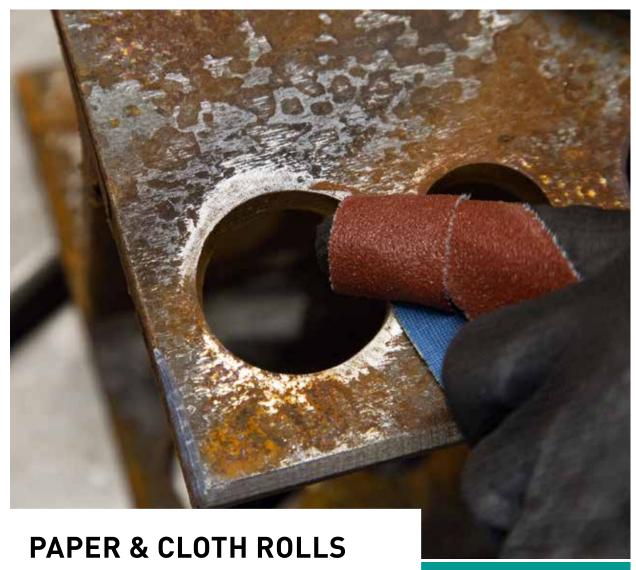
FERR. & NON FERR.

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 aluminum oxide grain gives a performance boost, cleaning, blending deburring and finishing in record time
- Ideal to access awkward corners and recesses



DIM WxL (mm/m)	GRADE	CAP CODE	PK QTY	ART NO.	
38mm x 5m	F2316 Heavy Duty MED A	F2316	1	66261129709	



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	
		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	✓	11	0		



H231 +++++

- Aluminium oxide grain for long life
- Open grain distribution and anti-static properties helps reducing 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 & coating sanding (for automotive & 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 & 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.
	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
FSC		150	2	66623372556
rsc		180	2	66623372559

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



FSC® CERTIFICATION

Utilizing 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.



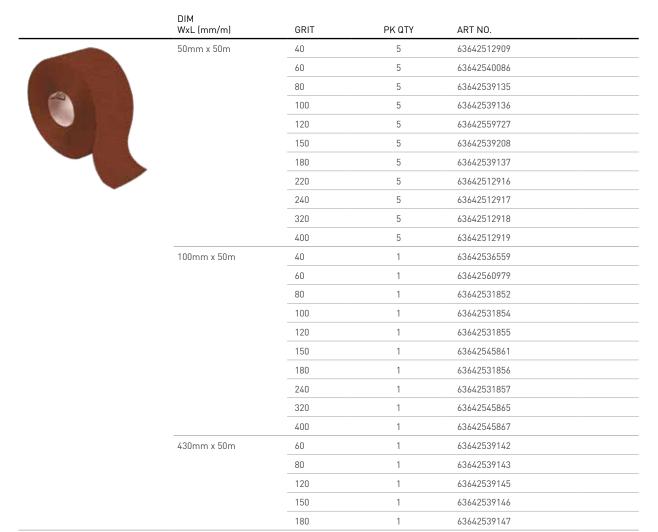
R222 ++++

- 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 & round steel parts
- Long life in wood & metal applications









K20N

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



	DIM WxL (mm/m)	GRIT	PK QTY	ART NO.
	50mm x 50m	60	5	69957380137
		80	5	69957377805
		100	5	69957376896
		120	5	69957372227
		220	5	69957380131
		240	5	69957377806
	100mm x 50m	80	1	69957375536
		100	1	69957375528
Dimensions Key: DIM = Dimensions, W = Width,		120	1	69957375529
		150	1	69957375530
L = Length		180	1	69957375531

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

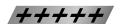


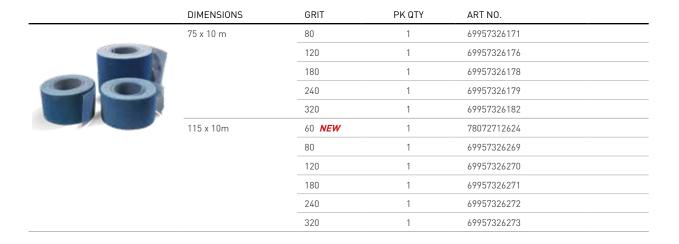
NORTON MESHPOWER ROLLS

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 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 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
	NEW 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

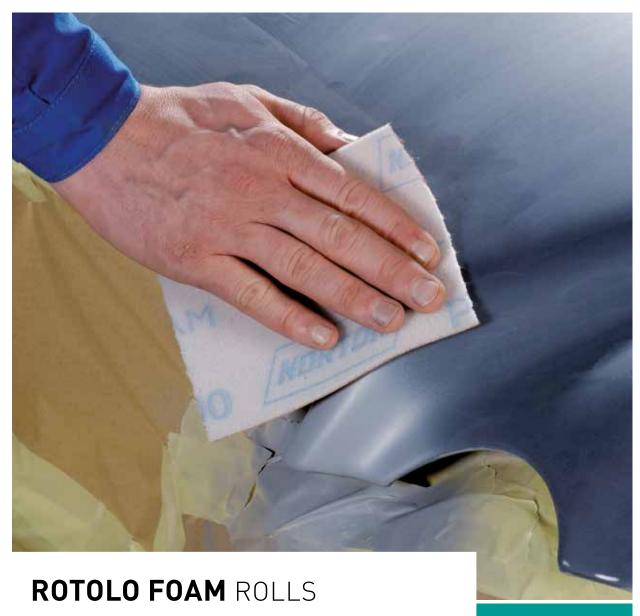
- Ideal storage and space saver with self dispensing function
- Rotolo rolls precut every 150mm for easy pad size use
- Thinner web (Thinflex version) cuts faster, saves time, with no added effort from the user. Product can be scrunched, rolled and saves shelf space



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 & curves, providing an outstanding finish on primers & 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 Aluminum 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



	DIM WxL (mm x m)	GRIT	COLOUR	PK QTY	ART NO.
	115mm x 25m	120	Apple Green	2	63642535316
		150	Orange	2	63642557584
		180	Purple	2	63642557599
		220	Red	2	63642557600
		240	Electric Blue	2	63642557602
		280	Grey	2	63642557604
4071111		320	Salmon	2	63642557606
		360	Pink	2	63642557607
		400	Yellow	2	63642557608
		500	Dark Blue	2	63642557611
		600	Fuchsia	2	63642557612
		800	Turquoise	2	63642557613
		1000	White	2	63642557616
		1500	Green	2	63642557617

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 40	PAINT/VARN.	# 2

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

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

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

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NOTES			

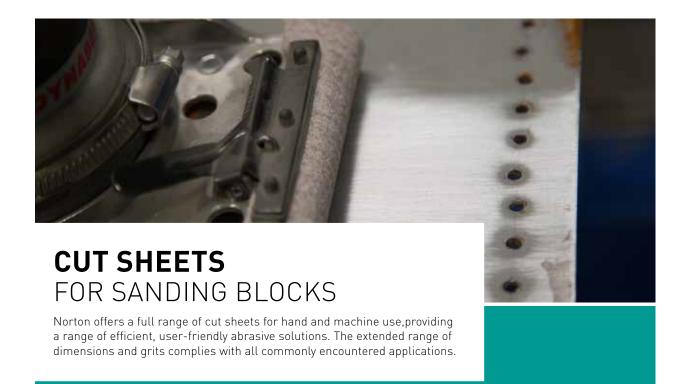


SHEETS & SPONGES

Cut sheets Norton Meshpower 67 Sheets & hand pads71 Beartex sheets & hand padsAbrasive sponges

173 167

169



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 11 Coarse sanding / 0 Finishing 11 / 11 / / Soft Wood 11 / / Coarse sanding Finishing 11 11 / / Filler Aluminium/Metal 11 / 1 / 0 0 Polyester 11 / 11 Varnish / Paint / 0 11 / 11 Coarse sanding Primer 11 0 Finishing 11 / Composites / Coatings Sanding // / 11 / 0 Finishing // / 11 0 11 11 Plaster Coarse sanding Finishing 11 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 80 × 133mm MeshPower



8 holes ø 10mm

115 × 280mm with no holes

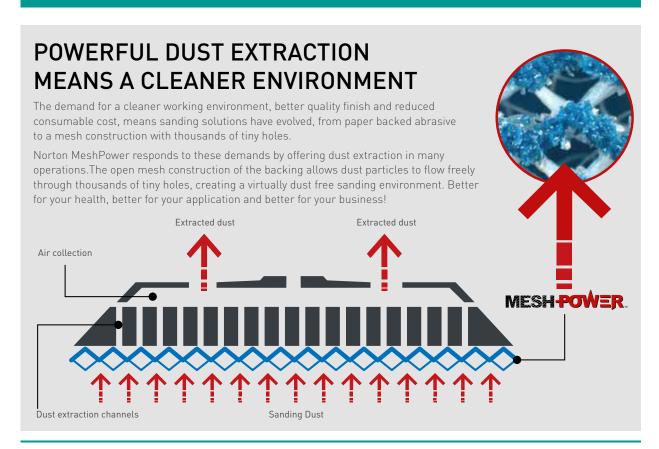


NORTON MESHPOWER SHEETS

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



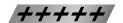




CERAMIC ADVANTAGE

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

NEW MESHPOWER CUT SHEETS M920 CERAMIC +++++



	DIM WxL (mm)	GRIT	PK QTY	ART NO.
	70x125	80	50	69957325770
	-	120	50	69957325772
		180	50	69957325773
		240	50	69957325774
		320	50	69957325775
	70x198	80	50	69957325962
		120	50	69957325963
		180	50	69957325964
		240	50	69957325965
		320	50	69957325966
	70x420	80	50	69957325986
		120	50	69957325987
		180	50	69957325988
		240	50	69957325990
		320	50	69957325991
	115x230	80	50	69957326057
		120	50	69957326062
		180	50	69957326063
		240	50	69957326065
		320	50	69957326068

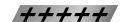
NEW MESHPOWER CUT SHEETS M220 ALUMINIUM OXIDE



	DIM WxL (mm)	GRIT	PK QTY	ART NO.
70x420	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 & faster cut rate with uniform scratch pattern
- Resists clogging during use thanks to the No-Fil® steerate layer







ווע	VI V	/VXI	L (n	nm.
80	x 1	133		
•	•	•	•	
•	•	•	•	

GRIT	PK QTY	ART NO.
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 & tear resistance







GRIT	PK QTY	ART NO.
80	50	63642558002
100	50	63642585263
120	50	63642585272
150	50	63642558005
180	50	63642585274
220	50	63642585281
240	50	63642585284
320	50	63642558006

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 make to order availability







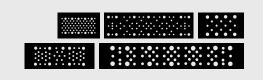
DIM W x L (mm)

GRIT	PK QTY	ART NO.
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 mm



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

Utilizing 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.



Norton offers a comprehensive range of paper, cloth & waterproof sheets for manual applications, used in all commonly encountered industrial applications.

PRODUCT SELECTION GUIDE

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

 $\label{thm:condition} \mbox{More products available in the Norton Automotive Aftermarket catalogue}$

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



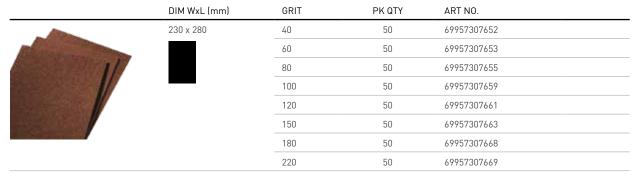
	DIM WxL (mm)	GRIT	PK QTY	ART NO.	
- Aller	230 x 280	40	25	63642531776	_
		50	25	63642531777	
1/		60	25	63642531778	
		80	50	63642531779	
		100	50	63642531780	
		120	50	63642531781	
		150	50	63642531782	
		180	50	63642531783	
		220	50	63642531785	
		240	50	63642531786	
		280	50	63642531788	
		320	50	63642531789	
		400	50	63642531790	
		600	50	63642534613	

K20N CLOTH SHEETS +++



- Aluminium oxide abrasive for aggressive cutting action on all dry sanding applications
- Heavy & 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

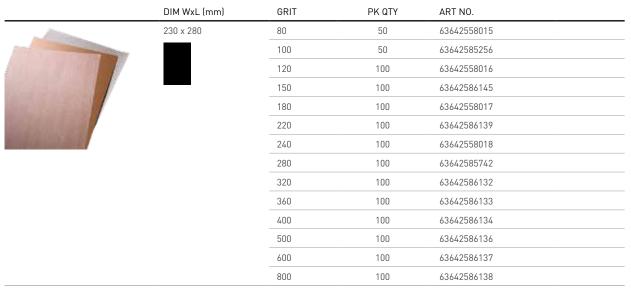


NORTON PRO A275 PAPER SHEETS



- 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 & 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 & plastic
- · Waterproof paper backing for wet and dry sanding

DIM Wx 230 x 28	L (mm)	GRIT		
230 x 28		OIXII	PK QTY	ART NO.
A STATE OF THE PARTY OF THE PAR	80	60	50	63642532956
		80	50	63642532988
		100	50	63642532989
4		120	50	63642532990
		150	50	63642532991
		180	50	63642532957
19		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

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







DIM WxL (mm)

GRIT PK QTY ART NO. 60 50 77696081101	
00 50 50 50 50 50 50 50 50 50 50 50 50 5	
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 2 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	Medium A	F2302	20	63642557491
		Medium A	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-CL	JT)				
	150x230	Very Fine A Long Life	F2504	20	66261018293
		Ultra Fine S	F4807	20	66261018294

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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 OF	RDER OF DEC	REASING AGGRE	SSIVENESS)	
F2316	Medium A	Aluminium oxide	Stainless steel	Rust removalBlendingDeburringBluing removal	 Aggressive & durable Long life Ideal replacement for coated abrasive steel wool & wire brushes
F2300	Medium A	Aluminium oxide	Metals & ceramics	Cleaning, deburringRust removalCoating removal	 Strong & open construction Resists loading Long life Ideal for achieving a matt satin finish
F2401	Fine	Aluminium oxide	Wood & plastics	 Cleaning & Intermediate finishing of ferrous & non-ferrous metals Defuzzing wood, denibbing laquers, paints & plastic 	 Coarser & stiffer than very fine pad Ideal for achieving a matt satin finish
F2560/ F2529	Very fine	Aluminium oxide	General purpose	Rust removalAutomotive primer keyingDefuzzing 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 & plastics	 General purpose cleaning, surface preparation prior to painting Removal of light stains & 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 	ResiliantConforms well to surface contours
F4660/ F4807/ F4605		Silicon carbide	General purpose	 Keying clear coat, finishing metal, deburring plastics, finishing aluminium Doors & window frames, blending paint, scuffing varnishes & 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 & highlighting wood 	Highly conformableTear resistantIdeal 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

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

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 & contours, providing a uniform finish
- Washable & robust can be reused, extending product life

ONE SIDED ABRASIVE



 DIM WxLxH (mm)	GRIT	PK QTY	ART NO.
140x115x6	60	20	63642550599
	100	20	63642550601
	180	20	63642550602
	220	20	63642550603
	280	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







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 provising 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	176	Narrow belts	18
Portable belts	183	Rapid Prep belts	19



FOR FILE BELT MACHINES

Norton offers a wide range of file belts designed to 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 O			D	A			
	VIKING R996	SG R929	RAPIDPREP	NORZON R822	NORZON R817	R445	R230
	+++++	+++++	++++	++++	++++	+++	+++
Stainless steel, inox & duplex	11	11	11	✓			
Inconel, titanium & super alloys	11	11	//	✓			
Carbon, construction & mild steels		11	//	✓			
Cast iron		✓	✓	11			
Non-ferrous metal (brass/aluminium)					11	0	0
Hard & soft wood					11		✓
Composite materials						//	0
Stone, concrete						//	
Glass, plastic						11	
Rubber, plastic					11		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 maneuverability 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	

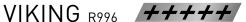
NEW PNEUMATIC FILE BELT KIT

- · 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



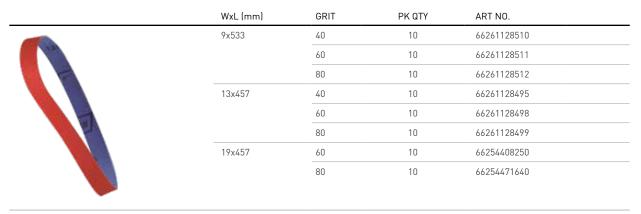
KIT CONTENTS ITEM ART	NO. PK QTY	ART NO.
File belt machine 77696091	766 1	
Ceramic File belt 10x330mm P60 66261144	369 20	
Ceramic File belt 10x330mm P80 66623303	270 20	
Rapid Prep File belt 10x330mm Coarse 69957360	172 10	78072707299
Rapid Prep File belt 10x330mm Medium 63642578	004 10	
Rapid Prep File belt 10x330mm Very Fine 69957360	176 10	
NORTON TOOL BAG SIZE: 56x31x45cm 69957343	696 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

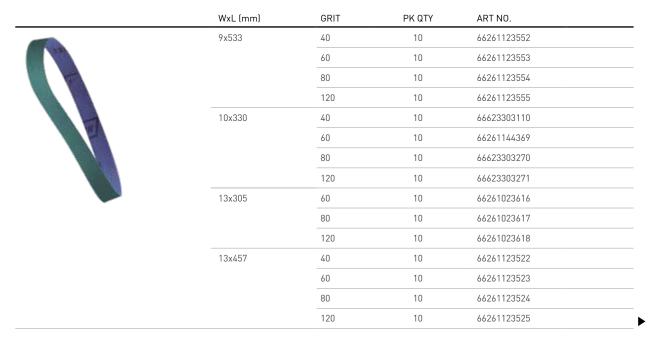






- Made with premium SG abrasive grain, perfect for heat sensitive metals
- High content of active filler for cool cut, no burn marks on the metal part
- Excellent performance at low & medium pressure
- X-weight polyester cloth, extremely durable even on aggressive applications





Dimensions Key: W = Width, L = Length



WxL (mm)	GRIT	PK QTY	ART NO.
13x610	40	10	66261123636
	60	10	66261123638
19x457	40	10	66254487679
	60	10	66254480427
	80	10	66254481839
20x520	40	10	66623303272
	60	10	66261029755
	80	10	66623303275
	120	10	66623303276

RAPIDPREP 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
	13x457	40	10	66261141253
		60	10	66261141254
		80	10	66261141255
		120	10	66261141256
	13x610	60	10	63642539830
	19x457	40	10	66623330766
		60	10	63642539828
		80	10	63642539836
	20x520	40	10	66261141266
		60	10	66261141267
		80	10	66261141269
		120	10	66261141270*
	30x533	40	10	63642538962
		60	10	63642538963
		80	10	63642538964

Dimensions Key: W = Width, L = Length

* Made-to-order



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

	NON FERR. PLASTIC, RUBBER & LEATHER		Carried
--	--	--	---------

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



- 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

NON FERR. STONE, GLASS

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

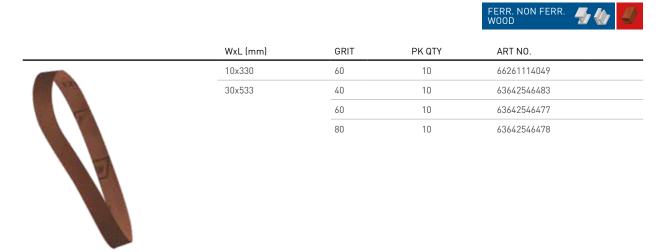
Dimensions Key: W = Width, L = Length

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FILE BELTS FOR FILE BELT MACHINES

R230

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



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 but joints for easy mounting and smoother work.

PRODUCT SELECTION GUIDE

SG R929 NORZON R817 R230 MATERIAL +++++ ++++ ++++ Metal ✓✓ ✓	
Metal 🗸	
Hard wood ✓✓ ✓	
Soft wood 🗸 🏑	

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PORTABLE BELTS FOR PORTABLE BELT MACHINES



- 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 & medium pressure







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

NORZON R817



WxL (mm) 200x750

- 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



GRIT	PK QTY	ART NO.
40	10	69957355996*
60	10	69957371516
80	10	69957371517
100	10	66261182174
120	10	69957371513

* Made-to-order



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









	WxL (mm)	GRIT	PK QTY	ART NO.	
	75x457	40	10	63642538877	
		60	10	63642539426	
		80	10	63642539422	
		120	10	63642539415	
14	75x533	40	10	63642546289	
		60	10	63642546257	
		80	10	63642534248	
		100	10	63642546273	
		120	10	63642530701	<u> </u>

Dimensions Key: W = Width, L = Length





WxL (mm)	GRIT	ART NO.		
75x610	60	10	63642546473	
	80	10	63642567329	
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	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

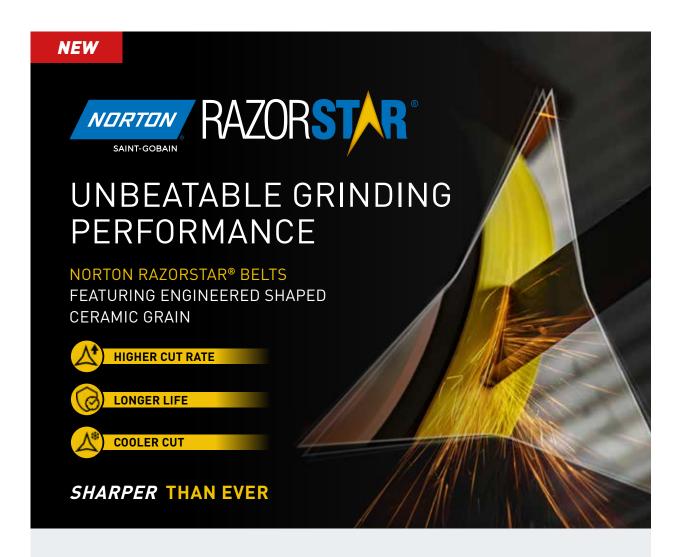
SIZE (mm)	MINIMUM ORDER QUANTITY						
All portable belts	100 pieces						

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PRODUCT SELECTION GUIDE

<i>NEW</i> NORTON RAZORSTAR®	VIKING R996	RED-X R976	SG R929	BLUEFIRE R895	NORZON R822	W445	R445	R293
INNOVATION	+++++	+++++	+++++	++++	++++	++++	+++	+++
//	//	✓	0	✓	✓			
11	11	1	0		1			
//			11	//	✓		0	0
✓			//	1	11		0	0
✓			11	1			0	0
							11	0
						11	0	
	INNOVATION	INNOVATION			\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	AFW NORYDN AFW AFW	



NEW NORTON RAZORSTAR®

INNOVATION /

- A breakthrough innovation of razor-sharp ceramic grain with a tough microstructure cuts faster and removes more material. This is combined with the highest percentage of grains applied to the backing in an upright position for razor-sharp cutting
- Unique, patented grain geometry means new, sharp cutting edges are exposed as the grain fractures during grinding providing consistent cut rate and unparalleled belt life
- The sharp grain and topsize layer combine to significantly reduce heat generation, resulting in less thermal damage of the work piece.



VDT NU



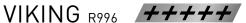


WXL (mm)	GRII	PKUIY	ART NU.
50x2000	36+	10	66254427525
50x2500	36+	10	66254422505
50x3500	36+	10	66254422506
50x4000	36+	10	66254422507
75x2000	36+	10	66254427271
75x2500	36+	10	66254427524
75x3000	36+	10	66254422509
75x3500	36+	10	66254422510
75x4000	36+	10	66254422512

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Wyl (mm)

NARROW BELTS FOR BACKSTAND MACHINES



- The best choice for use on stainless steel, inconels, chromium cobalt, titanium and extremely hard materials
- The excellent 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	36	10	66254403822	
	40	10	66254403847	
	60	10	66254411262	
	80	10	66254449025	
50x2500	40	10	66254408229	
	60	10	66254416129	
50x3500	36	10	66254404039	
	80	10	66254456931	
50x4000	36	10	66254404064	
	40	10	66254404065	
	60	10	66254405015	
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	

Dimensions Key: W = Width, L = Length





- 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	60	10	66254401458
	120	10	66254408387
50x3500	36	10	66254409222
	40	10	66623385396
	60	10	66261071965
50x4000	36	10	66261055060
	80	10	66254401290
75x2000	36	10	66623319745
	40	10	66261067686
	60	10	66261060879
	80	10	66254403117*
	120	10	66254404255
75x2500	40	10	66254402279
	60	10	66254433345
	80	10	66254407537
	120	10	66254407535

Dimensions Key: W = Width, L = Length

* Made-to-order

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NARROW BELTS FOR BACKSTAND MACHINES

SG R929 ++++

- 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 & medium pressure the metal part
- X-weight polyester cloth, extremely durable even on aggressive applications





WxL (mm)	GRIT	PK QTY	ART NO.	
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	
	60	10	69957350905	
	80	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



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.





GRIT	PK QTY	ART NO.
36	10	78072724738
40	10	78072724739
60	10	78072724741
80	10	78072724742
40	10	78072724755
60	10	78072724756*
80	10	78072724757
120	10	78072724758
	36 40 60 80 40 60 80	36 10 40 10 60 10 80 10 40 10 60 10 80 10

Dimensions Key: W = Width, L = Length

* Made-to-order

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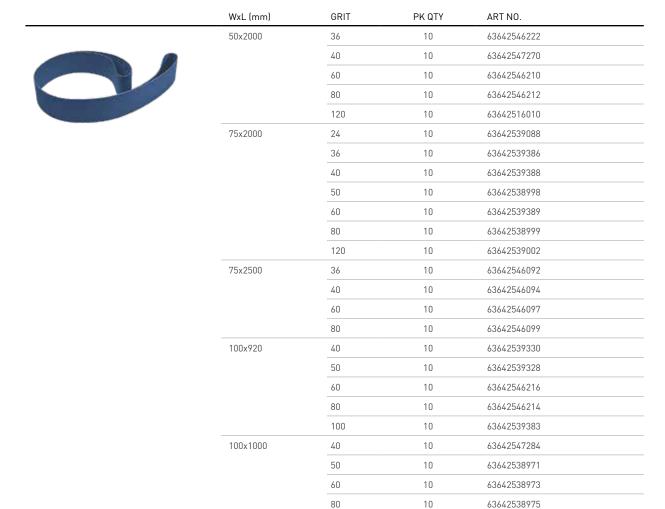
NARROW BELTS FOR BACKSTAND MACHINES

NORZON R822



- 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





150x2000

Dimensions Key: W = Width, L = Length



W445

- 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

R293 +++



- 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
75x2000	36	10	63642547942
	40	10	63642564728
	60	10	63642548528
	80	10	63642548275
75x2500	36	10	63642546130
	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

Dimensions Key: W = Width, L = Length

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- 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

NON FERR.

				STUNE, GLASS
	WxL (mm)	GRIT	PK QTY	ART NO.
	100x2000	60	10	69957355675
		80	10	69957355677
		120	10	69957355681
	100x3350	60	10	63642546593
		80	10	63642546594
		120	10	63642546597
		150	10	63642546599
		180	10	63642546600
		220	10	63642546602
		240	10	63642546603
		400	10	63642546616

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 work piece.

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 & corrosion
- Paints and scale
- Blending mill marks
- Tool marks
- Uneven edges
- Appliying decorative finishes

MACHINE USED

- File belt sander
- Portable sander
- · Backstand machine

ABRASIVE GRAIN

- Vortex engineered aluminum oxide
- Aluminium oxide

GRIT RANGE

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

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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/0 ####

Better 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 & rework

RAPID PREP A/O



Good choice for finishing and blending applications



- 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
NEW 10x330	Coarse	S2238	10	69957360172
	Medium	S2338	10	63642578004
	Very fine	S2538	10	69957360176
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



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RAPID PREP A/O RF SURFACE BLENDING NARROW BELTS





Dimensions Key: W = Width, L = Length

More sizes available on a Made-to-order

VORTEX RAPID PREP RF SURFACE BLENDING NARROW BELTS MADE-TO-ORDER









GRIT	CAP CODE	PK QTY	ART NO.	
9x533i	mm			
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	++++
10x330				
40	R929	10	66623303110	++++
	R822	10	66261144347	++++
60	R929	10	66261144369	++++
	R822	10	66261144348	++++
	R230	10	66261114049	+++
80	R929	10	66623303270	++++
	R822	10	66261144349	++++
120	R929	10	66623303271	++++
120	R822	10	66261144350	++++
13x30		10	00201144000	7777
60	R929	10	66261023616	++++
80	R929	10	66261023617	++++
120	R929	10	66261023618	++++
13x45		10	00201023010	77777
40	R996	10	66261128495	
40				++++
	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	++++
13x610				
40	R929	10	66261123636	+++++
60	R929	10	66261123638	++++
	R822	10	63642539830	++++
15x47	ōmm			
80	R445	50	63642539677	+++
19x45	7mm			
40	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	++++

GRIT	CAP CODE	PK QTY	ART NO.	
20x520	lmm			
40	R929	10	66623303272	++++
	R822	10	66261141266	++++
60	R929	10	66261029755	++++
	R822	10	66261141267	++++
	R445	50	66254425393	+++
80	R929	10	66623303275	++++
	R822	10	66261141269	++++
	R445	50	63642567304	+++
120	R929	10	66623303276	++++
	R822	10	66261141270*	++++
	R445	50	63642547790	+++
30x533	lmm			
24	R817	50	69957383624	++++
40	R822	10	63642538962	++++
	R817	50	63642556322	++++
	R230	10	63642546483	+++
60	R822	10	63642538963	++++
	R445	50	63642519009	+++
	R230	10	63642546477	+++
80	R822	10	63642538964	++++
	R445	50	69957379493	+++
	R230	10	63642546478	+++
120	R445	50	69957371884	+++
34x435	imm			
24	R817	50	63642545273	++++
36	R817	50	63642568989	++++
40	R817	50	63642549470	++++
50x800	lmm			
60	R929	10	66261023832	++++
80	R929	10	66261023833	++++
120	R929	10	66261023834	+++++
75x457	'mm			
40	R230	10	63642538877	+++
60	R230	10	63642539426	+++
80	R230	10	63642539422	+++
120	R230	10	63642539415	+++
75x533				
40	R230	10	63642546289	+++
60	R230	10	63642546257	+++
80	R230	10	63642534248	+++
100	R230	10	63642546273	+++
120	R230	10	63642530701	+++
75x610				
60	R230	10	63642546473	+++
80	R230	10	63642567329	+++
100x61		4.5	4044054455	
40	R230	10	63642546295	+++
60	R230	10	63642560145	+++
			10110=====	
80	R230	10	63642529798	+++
80 100 120		10 10 10	63642529798 63642546242 63642529797	+++

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BELTS BY DIMENSION

GRIT	CAP CODE	PK QTY	ART NO.	
100x62	20mm			
40	R230	10	63642546457	+++
60	R230	10	63642534465	+++
80	R230	10	63642529799	+++
100	R230	10	63642534770	+++
120	R230	10	63642546452	+++
100x69	90mm			
40	R230	10	63642537627	+++
60	R230	10	63642537544	+++
80	R230	10	63642537546	+++
100	R230	10	63642537548	+++
120	R230	10	63642537632	+++
200x75	50mm			
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	++++
.20	R230	10	63642558814	+++
50x160			00012000011	
40	R929	10	66261023879	++++
50	R929	10	66261023880	++++
60	R929	10	66261023881	++++
80	R929	10	66261023882	++++
50x200)0mm			
36+	NORTON RAZORSTAR®	10	66254427525	++++
36	R996	10	66254403822	++++
	R929	10	69957350787	++++
	R822	10		
			63642346222	++++
	R293		63642546222	++++
40	R293 R996	10	63642546943	++++
40	R996	10 10	63642546943 66254403847	+++
40	R996 R929	10 10 10	63642546943 66254403847 69957350790	+++ ++++ ++++
40	R996 R929 R822	10 10 10 10	63642546943 66254403847 69957350790 63642547270	+++ ++++ ++++ ++++
40	R996 R929 R822 R293	10 10 10 10 10	63642546943 66254403847 69957350790 63642547270 63642551489	+++ ++++ ++++ ++++ +++
	R996 R929 R822 R293 R929	10 10 10 10 10 10	63642546943 66254403847 69957350790 63642547270 63642551489 69957350792	+++ ++++ ++++ ++++ +++
40	R996 R929 R822 R293 R929	10 10 10 10 10 10 10	63642546943 66254403847 69957350790 63642547270 63642551489 69957350792 66254411262	+++ ++++ ++++ ++++ +++ ++++
	R996 R929 R822 R293 R929 R976	10 10 10 10 10 10 10	63642546943 66254403847 69957350790 63642547270 63642551489 69957350792 66254411262 66254401458	*** **** **** **** **** **** ****
	R996 R929 R822 R293 R929 R996 R976	10 10 10 10 10 10 10 10 10	63642546943 66254403847 69957350790 63642547270 63642551489 69957350792 66254411262 66254401458 69957350793	+++ ++++ ++++ ++++ ++++ ++++ ++++
	R996 R929 R822 R293 R929 R996 R976 R929	10 10 10 10 10 10 10 10 10	63642546943 66254403847 69957350790 63642547270 63642551489 69957350792 66254411262 66254401458 69957350793 63642546210	+++ ++++ ++++ +++ +++ ++++ ++++ ++++
60	R996 R929 R822 R293 R929 R996 R976 R929 R822 R293	10 10 10 10 10 10 10 10 10 10 10	63642546943 66254403847 69957350790 63642547270 63642551489 69957350792 66254411262 66254401458 69957350793 63642546210 63642546878	+++ ++++ ++++ ++++ ++++ ++++ ++++
	R996 R929 R822 R293 R929 R996 R976 R929 R822 R293 R822 R293	10 10 10 10 10 10 10 10 10 10 10 10	63642546943 66254403847 69957350790 63642547270 63642551489 69957350792 66254411262 66254401458 69957350793 63642546210 63642546878 662544449025	*** **** **** ** *** *** *** *** *** *** *** *** *** *** *** *** ** *** *** *** *** *** *** *** *** *** *** *** *** **
60	R996 R929 R822 R293 R929 R996 R976 R929 R822 R293 R996 R979	10 10 10 10 10 10 10 10 10 10 10 10	63642546943 66254403847 69957350790 63642547270 63642551489 69957350792 66254411262 66254401458 69957350793 63642546210 63642546878 66254449025 69957350794	*** **** **** ** *** *** *** *** *** *** *** *** *** *** *** *** ** *** *** *** *** *** *** *** *** *** *** *** *** ** *** *** *** *** *** *** *** *** *** *** *** *** **
80	R996 R929 R822 R293 R929 R996 R976 R929 R822 R293 R996 R976 R929 R822 R293	10 10 10 10 10 10 10 10 10 10 10 10 10	63642546943 66254403847 69957350790 63642547270 63642551489 69957350792 66254411262 66254401458 69957350793 63642546210 63642546878 66254449025 69957350794 63642546212	+++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++
60	R996 R929 R822 R293 R929 R996 R976 R929 R822 R293 R996 R929 R822 R293	10 10 10 10 10 10 10 10 10 10 10 10 10 1	63642546943 66254403847 69957350790 63642547270 63642551489 69957350792 66254411262 66254401458 69957350793 63642546210 63642546878 66254449025 69957350794 63642546212 63642546212	+++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++
80	R996 R929 R822 R293 R929 R996 R976 R929 R822 R293 R996 R976 R929 R822 R293	10 10 10 10 10 10 10 10 10 10 10 10 10	63642546943 66254403847 69957350790 63642547270 63642551489 69957350792 66254411262 66254401458 69957350793 63642546210 63642546878 66254449025 69957350794 63642546212	+++ ++++ ++++ ++++ ++++ ++++ ++++ ++++ ++++

GRIT	CAP CODE	PK QTY	ART NO.	
50x250	00mm			
36+	NORTON RAZORSTAR®	10	66254422505	++++
40	R996	10	66254408229	++++
60	R996	10	66254416129	+++++
50x350	00mm			
36+	NORTON RAZORSTAR®	10	66254422506	++++
36	R996	10	66254404039	++++
	R976	10	66254409222	++++
40	R976	10	66623385396	++++
60	R976	10	66261071965	++++
80	R996	10	66254456931	+++++
50x400	00mm			
36+	NORTON RAZORSTAR®	10	66254422507	++++
36	R996	10	66254404064	++++
	R976	10	66261055060	++++
	R293	10	63642539981	+++
40	R996	10	66254404065	++++
	R293	10	63642539982	+++
60	R996	10	66254405015	++++
	R293	10	63642539985	+++
	R976	10	66254401290	+++++
75x200	00mm			
24	R996	10	69957364735	++++
	R822	10	63642539088	++++
36+	NORTON RAZORSTAR®	10	66254427271	++++
36	R996	10	66254410065	++++
	R929	10	69957350796	++++
	R976	10	66623319745	++++
	R895	10	78072724738	++++
	R822	10	63642539386	++++
	R293	10	63642547942	+++
40	R996	10	66254407955	++++
	R976	10	66261067686	++++
	R929	10	69957350797	++++
	R895	10	78072724739	++++
	R822	10	63642539388	++++
	R293	10	63642564728	+++
50	R929	10	69957350798	++++
	R822	10	63642538998	++++
60	R996	10	66254407954	++++
	R976	10	66261060879	+++++
	R929	10	69957350799	+++++
	R895	10	78072724741	++++
	R822	10	63642539389	++++
	R293	10	63642548528	+++
80	R996	10	66254456158	++++
	R976	10	66254403117*	++++
	R929	10	69957350800	++++
	R895	10	78072724742	++++
	R822	10	63642538999	++++
	R293	10	63642548275	+++
100	R929	10	66261024222	+++++
120	R976	10	66254404255	+++++
	R929	10	69957350801	+++++
	R822	10	63642539002	++++



GRIT	CAP CODE	PK QTY	ART NO.		GRIT	CAP CODE	
75x25	00mm				100x2	000mm	
24	R996	10	69957364736	++++	36	R929	
36+	NORTON RAZORSTAR®	10	66254427524	++++	40	R929	
36	R996	10	66254403849	++++	60	R929	
	R929	10	69957350882	++++		R445	
	R822	10	63642546092	++++	80	R929	
	R293	10	63642546130	+++		R445	
40	R996	10	66254403887	++++	120	R929	
	R976	10	66254402279	++++		R445	
	R929	10	69957350883	++++	*	W445	
	R822	10	63642546094	++++	100x3	000mm	
50	R929	10	69957350884	++++	40	R293	
60	R996	10	66254403891	++++	100x3	350mm	
	R976	10	66254433345	++++	60	R445	
	R929	10	69957350888	++++	80	R445	
	R822	10	63642546097	++++	120	R445	
	R293	10	63642551507	+++	150	R445	
80	R976	10	66254407537	++++	180	R445	
	R929	10	69957350898	++++	220	R445	
	R822	10	63642546099	++++	240	R445	
120	R976	10	66254407535	++++	400	R445	
	R929	10	66261023977	++++	*	W445	
75x30	00mm				140x3	300mm	
36+	NORTON RAZORSTAR®	10	66254422509	++++	*	W445	
75x35	00mm				150x2	000mm	
36+	NORTON RAZORSTAR®	10	66254422510	++++	36	R929	
75x40	00mm					R822	
36+	NORTON RAZORSTAR®	10	66254422512	++++	40	R929	
100x9	20mm					R895	
40	R822	10	63642539330	++++		R822	
	R293	10	63642548306	+++	60	R929	
50	R822	10	63642539328	++++		R895	
60	R822	10	63642546216	++++		R822	
	R293	10	63642548307	+++	80	R929	
80	R822	10	63642546214	+++		R895	
	R293	10	63642551544	+++		R822	
100	R822	10	63642539383	++++	120	R895	
	R293	10	63642551546	+++		500mm	
120	R293	10	63642551547	+++	40	R929	
180	R293	10	63642551549	+++	60	R929	
100x1	000mm				80	R929	
40	R929	10	69957350903	++++			
	R822	10	63642547284	++++			
50	R822	10	63642538971	++++			
60	R929	10	69957350905	++++			
	R822	10	63642538973	++++			
80	R929	10	69957350906	++++			
	R822	10	63642538975	++++			

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10 63642538977

10 63642536388 ++++

100

120

R822

R822

GRIT	CAP CODE	PK QTY	ART NO.	
100x20	000mm			
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	++++
100x30	00mm			
40	R293	10	63642551511	+++
100x33	350mm			
60	R445	10	63642546593	+++
80	R445	10	63642546594	+++
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	++++
140x33	300mm			
*	W445	10	66254415118	++++
150x20)00mm			
36	R929	10	69957350809	+++++
	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	++++
150x25	500mm			
40	R929	10	66261023984	+++++
60	R929	10	66261023992	++++
80	R929	10	66261023993	++++

*No abrasive grain

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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	+++
10x330				
Coarse	S2238	10	69957360172	+++
Medium	S2338	10	63642578004	+++
Very Fine	S2538	10	69957360176	+++
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	+++

*	Made	to:	ord	er
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GRIT	CAP CODE	PK QTY	ART NO.	
50x2000mm	1			
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	+++
100x3500mi	n			
Coarse	S2228	5	63642531760	+++
Medium	S2328	5	63642531761	+++
Fine	S2428	5	63642531764	+++
Very Fine	S2528	5	63642531784	+++
150x2000mi	n			
Coarse	S2228	5	63642531787	+++
Medium	S2328	5	63642531813	+++
Fine	S2428	5	63642531816	+++
Very Fine	S2528	5	63642531819	+++



SPECIALTIES

Spirabands and Cones Cartridge and Spiral rolls Sanding stars 204

208

212



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 & cones perform best at a recommended speed of 20-30m/s to optimize 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 & duplex	//	✓
Inconel, titanium & super alloys	//	✓
Carbon steel, construction steel & mild steel	//	//
Cast iron	√	/ /
Non-ferrous metal (brass/aluminium)		✓
Hard & 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		
		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		
	45x30	36	100	66254402667	9250 - 10500	7660705196
		60	100	66261031600		

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

* Made-to-order

NORZON R822



- A great choice for carbon steel and welds
- Prevents loading on aluminum
- 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	50	100	63642528507	29400 - 36500	7660705185
		80	100	63642528508		
	15x30	36	100	66261034127	25000 - 31500	7660705182
		50	100	63642528509	_	
		60	100	66623386740		
		80	100	63642528496		

Formerly X-Treme R822

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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		
		80	100	66261180967		
	45x30	36	100	63642528498	9250 - 10500	7660705196
		50	100	63642528514	-	
		60	100	63642545928	-	
		80	100	63642528515	-	
	51x25	50	100	66261180974	7500 - 9300	7660705184
		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
		50	100	63642536572		
No. of the last of		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			
	13x25x6	1	7660705185
ſ	15x30x6	1	7660705182
ALL POS	22x20x6	1	63642562578
	25x25x6	1	7660705183
TEAPY	30x30x6	1	7660707918
	38x25x6	1	7660717568
	45x30x6	1	7660705196
	51x25x6	1	7660705184
	60x30x6	1	7660717631

	DIM DBxDTxH (mm)	PK QTY	ART NO.	
CONE MANDRELS				
4	20x14x63	1	7660740439	
	36x22x60	1	7660740441	



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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 a recommended speed of 6-9 m/s to optimize stock removal and surface finish whilst avoiding thermal load of the workpiece and tool wear.

PRODUCT SELECTION GUIDE

Highly recommended 🗸 🗸 Recommended 🗸





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

CARTRIDGE & SPIRAL ROLLS FOR DIF GRINDERS

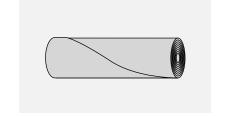
SHAPE RECOMMENDATION GUIDE

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.

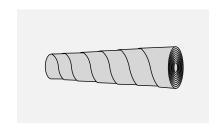


SPIRAL ZSPI

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.





- 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
- Ceramic alumina grain for the highest productivity Improved bond system retains the grain for 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						
	6x38x3	80	50	66261128986	19000 - 28600	63642556791
		120	50	66261128995		
	10x38x3	80	50	66261128988	11500-17200	63642556791
6		120	50	66261128997		
	13x38x3	60	50	66261128975	8800 - 13200	63642556791
		80	50	66261128990		
		120	50	66261128999		
SPIRAL ZSPI						
	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

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CARTRIDGE & SPIRAL ROLLS FOR DIE GRINDERS

STEEL MANDREL FOR CARTRIDGE ROLLS

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					

Pilot Shank Diameter

Dimensions Key: DIM = Dimensions, DIA = Pilot diameter, L = Pilot length

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						
2002	10x38x3	60	50	66261128886	11500 - 17200	63642556791
		80	50	66261128901		
		120	50	66261128912	_	
	13x38x3	60	50	66261128891	8800 - 13200	63642556791
		80	50	66261128904	_	
		120	50	66261128914		

	DIM BSxLxB (mm)	GRIT	PK QTY	ART NO.	RECOMMENDED SPEED (RPM)	MANDREL CODE
SPIRAL ZSPI						
- 9	10x38x3	80	50	66261129113	11500 - 17200	63642556790
	13x38x3	80	50	66261129117	8800 - 13200	63642556791
		120	50	66261129124		

Dimensions Key: DIM = Dimensions, BS = Base diameter, L = Length, B = Bore Formerly BDX R265



MADE-TO-ORDER PRODUCT AVAILABILITY

PRODUCT / GRIT	60	80	120
BLAZE R920	·	•	•
R422	٠	•	•
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 & finishing difficult to access metal applications, irregular shaped components, holes, radi 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 optimizing 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 & duplex	//
Inconel, titanium & super alloys	//
Carbon steel, construction steel & mild steel	//
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 PLYES	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



Coated Abrasives / 213 www.nortonabrasives.com

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

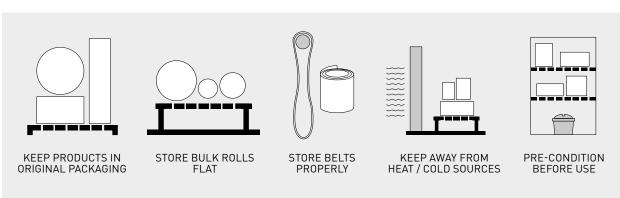
All coated abrasives should be handled carefully. Damage can be caused by mishandling, which should be avoided. Coated abrasives should be stored in dry, frost free conditions. They should be kept away from heat sources, cold, damp walls, doors or windows and should not be in direct contact with the floor. Temperatures and humidity should be between 18°C and 22°C and 45%-65% relative humidity. Coated abrasives should not 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. Center 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 $% \left(1\right) =\left(1\right) \left(1\right)$

Continue to use a product if vibration occurs. True or replace it

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

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

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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)



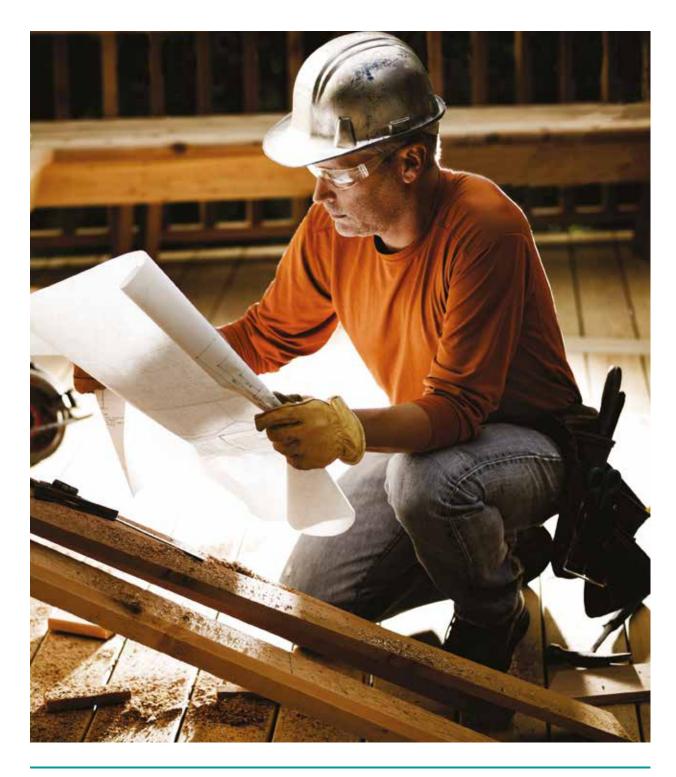
Refer to instruction manual/ booklet (ISO 7010)



Only suitable for wet grinding



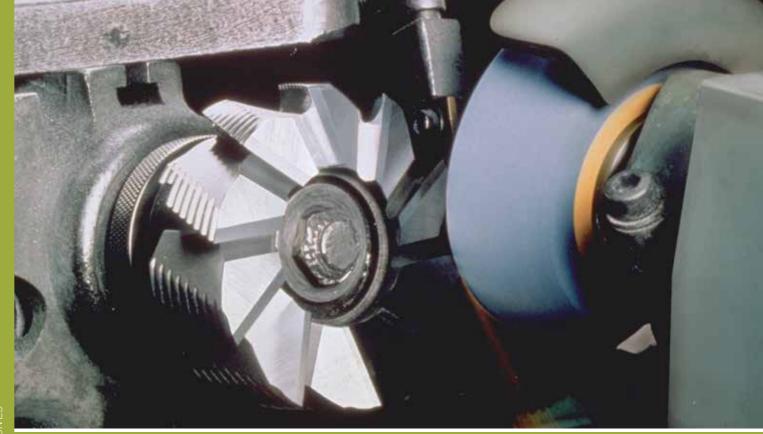
Do not use for wet grinding (ISO 7010)





BONDED ABRASIVES

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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



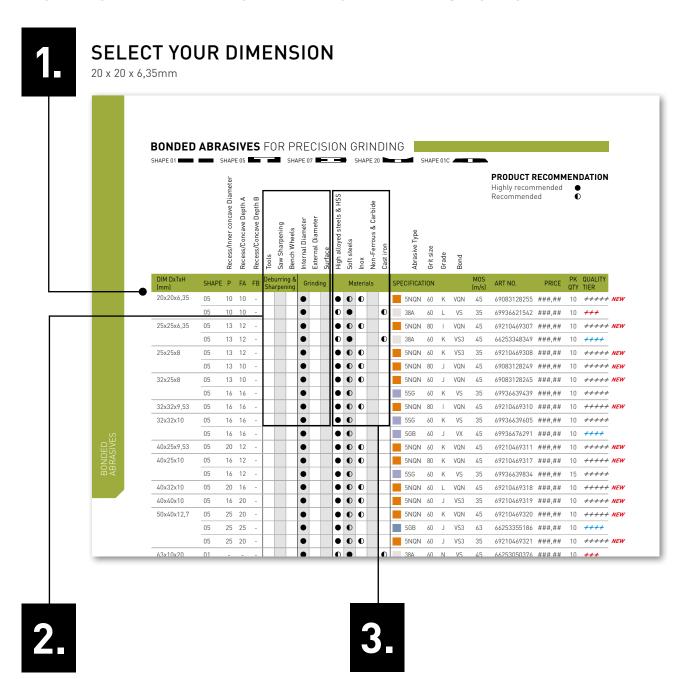
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HOW TO READ THE GRINDING WHEEL SECTION



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

CERAMIC BLENDS



The new, proprietary, nano-crystalline ceramic grain from Saint-Gobain offers unparalleled grinding productivity across multiple applications.

The new micro-structure of the grain features a significant crystal size reduction compared to previous generation ceramic grains.

The unique formulation and reduced crystal size allows the grain to microfracture and self-sharpen more efficiently.

This keeps the wheel sharper for longer, reducing heat, wear flats, and minimizing the need for dressing.

NQ Blends

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.

SG Blends

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.

ALUMINIUM OXIDE TYPES

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.

32A

Sharp, monocrystalline 32A aluminum oxide purple grain, the most versatile abrasive for medium- to heavy-stock removal on the market.

19A

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.

This is a particularly tough form of aluminium oxide suitable for grinding high tensile strength materials, specifically off-hand grinding (bench

grinding wheels) and sharpening stones.

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.

86A

Pink aluminium oxide is a highly refined form of alumina which makes it 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.

SILICON CARBIDE TYPES



Green silicon carbide with highest purity. It is ideal for grinding cemented carbide cutting tools, fired ceramics and glass, where it provides advanced performance.

37C



Black silicon carbide. 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.



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 GRI	NDING									
				T00	L GRINE	DING									
					THRE	AD GRIN	NDING								
	N	ON-REIN	NFORCED	ORGAN	IC										
											RE	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:



New innovative bond with improved versatility for multiple applications and alloys. Used for precision grinding operations with Aluminium Oxide abrasives.

VITRIUM @

VITRIUM³ REVOLUTIONARY BOND TECHNOLOGY

The Vitrium³ bond platform features an exclusive chemistry that delivers an entirely new grain adhesion

	science, providing cool cutting, long and precise profile holding across a wide range of precision grinding applications.
VS	Historical entry level bond, available with both aluminum oxide and silicon carbide.
VX / VXP	Equivalent to VS bond, for ceramic only.
VQN / VQNP	These bonds are associated with Norton Quantum technology - a 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 un-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.

SURFACE FINISH

Recommended

		←			GRIT	SIZE ——			
CENTRE LINE AVERAGE (CLA)	SURFACE FINISH RA (MICRONS)	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	METRIC (mm)	0,75	0,50	0,40	0,25	0,20	0,18	0,13	0,10
RADIUS	IMPERIAL (Inches)	,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

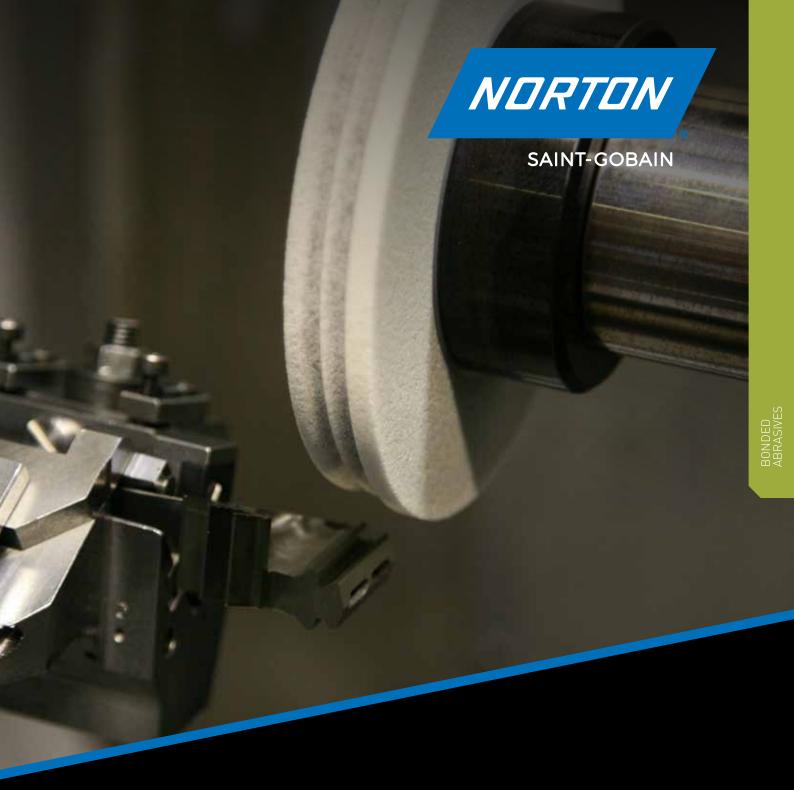
ACHIEVING IMPROVED SURFACE FINISHES

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)
- 4 Product specification
- 5 Maximum operating speed
- 6 Article number; for use when re-ordering
- oSa certified The Organisation for Safety of Abrasives
- 8 European safety standard EN 12413





PRECISION GRINDING

Straight wheels	233
Straight & tapered cups	240
Dishes	249
Cylinders	250
Segments	25

PRECISION GRINDING APPLICATIONS

Thanks to Norton's technical expertise, bond and abrasive grain formulations are optimized 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 maximize 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 very from heavy rapid stock removal, to precision contour grinding.



EXTERNAL CYLINDRICAL GRINDING

Norton's leading technology, provides you with the best precision, formholding vitrified wheels to maximize 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 PEDESTRAL GRINDING

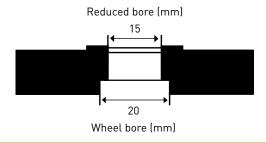
Bench and pedestral grinding application refers to offhand deburring and sharpening of parts and tools. The wheels are mounted on bench grinders or pedestal grinders and covers three types of abrasives to answer all deburring, shaping and sharpening needs: aluminum oxide for high speed tool steels and 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

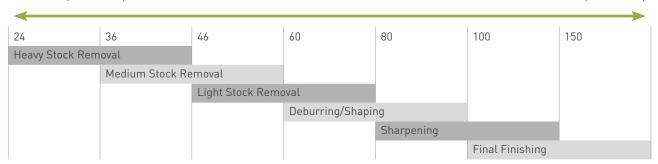


WHEEL BORE (mm)	REDUCED TO (mm)	ART NO.
50,8	35	7660704766
32	25	7660717540
32	20	7660717538
31,75	15,88	7660704757
31,75	12,7	7660704755
20	16	7660717530
20	15	7660717529
20	13	7660717527
20	12	7660717525
20	10	7660717524
16	6	510008919



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 center of the wheel, pointing in the direction of wheel travel
- Point of contact should be slightly below centerline 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

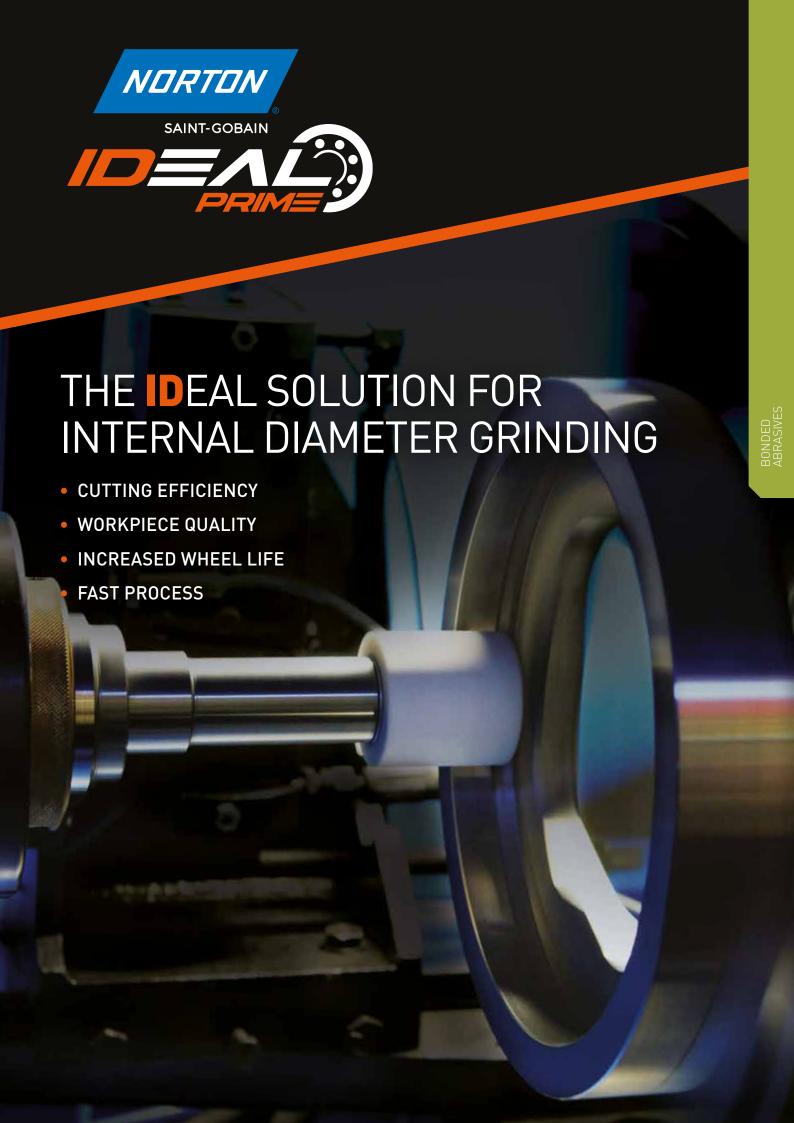
- Use our specially designed Norton SG diamond tools when dressing ceramic wheels
- When first using a Norton SG tool, make 3 to 5 passes at .005" infeed to ensure full face contact between the dressing tool and wheel face
- Reduce normal dressing infeed by half. Do not exceed infeed of .002" per pass
- 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 maximize productivity of the ceramic abrasive
- To optimize 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:

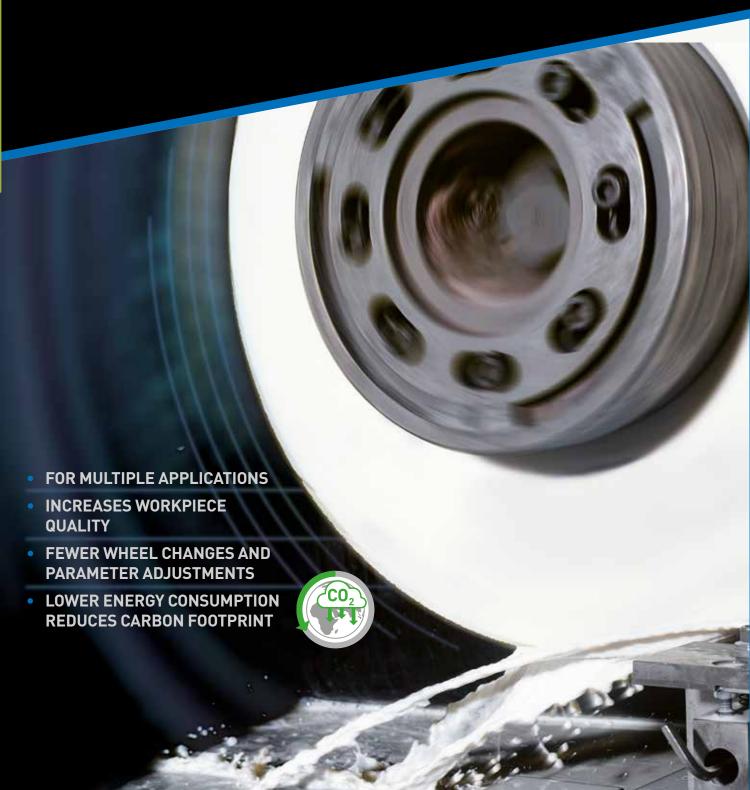
- 1. Diamond dressing tool condition (check if worn or dull, rotate tool or replace if necessary)
- 2. Coolant direction, volume and filtration
- 3. Wheel dressing procedures (dress more open to free up cut rate, dress more closed to improve finish)

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





A VERSATILE GRINDING SOLUTION











NQN INNOVATION

Norton's Latest, Innovative ceramic grain

- Unparalleled sharpness reducing cycle times
- Improved cutting efficiency results in reduced power draw
- Micro-fracturing grain leads to improved part quality and geometry
- Self-sharpening grain technology stays sharper for longer, lowering dress requirements and significantly improving wheel life

NQ +++++

Engineered microcrystaline 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

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 capabilies on very hard steels







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

GF *++++*

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

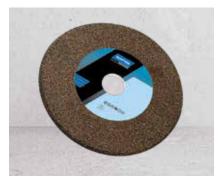
A blend of brown and white aluminium oxides for good price vs. performance ratio

- 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

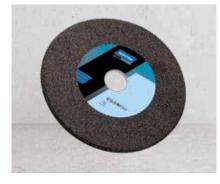
32A +++

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







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 good price vs. performance ratio

39C

Highest purity green silicon carbide abrasive

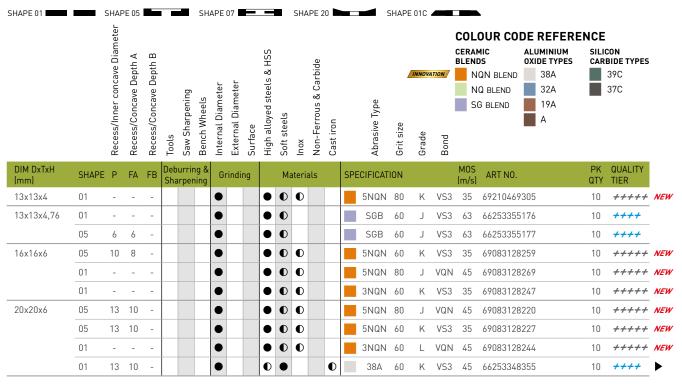
- The most friable conventional abrasive grain. Harder and more friable than aluminium oxide abrasive
- For all general purpose bench and pedestal applications on non-ferrous materials and carbide tools
- Ideal for high precision grinding and sharpening applications
- Good cut rate and finish on metal carbide and non-ferrous hard or heat sensitive materials

37C

High purity black silicon carbide abrasive

- Harder and more friable than aluminum oxide abrasive
- Suitable for roughing operations in coarse grit and resinoid wheels
- Ideal for grinding and sharpening applications on non-ferrous metals





HSS = High Speed Steel Steel hardened = Over 50Rc

Steel soft = Up to 50Rc

SHAPE 05 SHAPE 07 SHAPE 01C

> PRODUCT RECOMMENDATION Highly recommended Recommended

Recess/Inner concave Diameter Recess/Concave Depth A Recess/Concave Depth B

High alloyed steels & HSS **External Diameter** Internal Diameter Saw Sharpening Bench Wheels

Non-Ferrous & Carbide

Abrasive Type

DIM DxTxH					Deburrir	na 8.												MOS		DV	QUALITY
(mm)	SHAPE	Р	FA	FB	Deburrir Sharper		Gr	inding		М	laterials	;		SPECIFICA	TION			MOS (m/s)	ART NO.		TIER
20x20x6,35	05	10	10	-			•		•	0	•			5NQN	l 60	K	VQN	45	69083128255	10	+++++ NEW
	05	10	10	-			•		0	•		•	D	38A	60	L	VS	35	69936621542	10	+++
25x25x6,35	05	13	12	-			•		•	0	•			5NQN	l 80	I	VQN	45	69210469307	10	+++++ NEW
	05	13	12	-			•		0	•		•	D	38A	60	K	VS3	45	66253348349	10	++++
25x25x8	05	13	12	-			•		•	0	0			5NQN	l 60	K	VS3	35	69210469308	10	+++++ NEW
	05	13	10	-			•		•	0	0			5NQN	I 80	J	VQN	45	69083128249	10	+++++ NEW
32x25x8	05	13	10	-			•		•	0	0			5NQN	l 60	J	VQN	45	69083128245	10	+++++ NEW
	05	16	16	-			•		•	0				5SG	60	K	VS	35	69936639439	10	+++++
32x32x9,53	05	16	16	-			•		•	•	•			5NQN	l 80	I	VQN	45	69210469310	10	+++++ NEW
32x32x10	05	16	16	-			•		•	0				5SG	60	K	VS	35	69936639605	10	+++++
	05	16	16	-			•		•	0				SGB	60	J	VX	45	69936676291	10	++++
40x25x9,53	05	20	12	-					•	0	•			5NQN	I 60	K	VQN	45	69210469311	10	+++++ NEW
40x25x10	05	16	12	-			•		•	0	0			5NQN	I 80	K	VQN	45	69210469317	10	+++++ NEW
	05	16	12	-			•		•	0				5SG	60	K	VS	35	69936639834	15	++++
40x32x10	05	20	16	-			•		•	0	0			5NQN	l 60	L	VQN	45	69210469318	10	+++++ NEW
40x40x10	05	16	20	-			•		•	0	0			5NQN	l 60	J	VS3	35	69210469319	10	+++++ NEW
50x40x12,7	05	25	20	-			•		•	0	0			5NQN	l 60	K	VQN	45	69210469320	10	+++++ NEW
	05	25	25	-			•		•	0				SGB	60	J	VS3	63	66253355186	10	++++
	05	25	20	-			•		•	0	0			5NQN	l 60	J	VS3	35	69210469321	10	+++++ NEW
63x10x20	01	-	-	-			•		0	•		(D	38A	60	N	VS	45	66253050376	10	+++
63x40x12,7	05	32	20	-			•		•	0	0			5NQN	I 80	I	VQN	45	69210469323	10	+++++ NEW
	05	32	20	-			•		0	•		(D	38A	60	L	VS	45	69936621565	10	+++
76x25x12,7	01	-	-	-			•				•			39C	80	-	٧	45	66253052726	10	+++
76x32x20	05	42	16				•		•	0	•			5NQN	l 60	J	VQN	45	69210469324	10	+++++ NEW
80x25x12,7	01	-	-	-							•			39C	60	М	٧	45	66253051624	10	+++
	01	-	-	-			•				•			39C	60	М	٧	45	66253051623	10	+++
	01	-	-	-			•					•		37C	60	N	V	35	69936668764	10	+++
100x10x20	01	-	-	-	•				0	•		•	D	38A	60	М	VS	35	69936640015	1	+++
100x10x32	01	-	-	-	•						•			39C	80	L	VS	45	66253050380	2	+++
100x13x32	01	-	-	-	•				0	•		(D	38A	60	L	VS	45	66253050409	1	+++
100x20x32	01	-	-	-	•				0	•		(D	38A	60	L	VS	45	66253050413	1	+++
125x6x32	01	-	-	-	•				0	•		(D	38A	60	L	VS	45	66253050440	2	+++
125x10x32	01	-	-	-	•				0	•		(D	38A	60	L	VS	45	69936675731	1	+++
125x13x32	01	-	-	-	•				•	0				3SG	60	J	VX	45	66253050290	2	++++
125x16x32	01	-	-	-	•				0	•		(D	38A	60	М	VS	45	66253050237	1	+++
	01	-	-	-	•						•			39C	80	L	VS	45	66253050393	2	+++
	01	-	-	-	•				0	•		(D	38A	60	L	VS	45	69936675736	1	+++
	01	-	-	-	•						•			39C	80	L	VS	45	69936667443	2	+++
	01	-	-	-		•				•				А	46	N	VS	45	69936675558	1	+++

HSS = High Speed Steel

Steel hardened = Over 50Rc



COLOUR CODE REFERENCE

	U	LOOK CO	IVE! FIVE	 -
		RAMIC ENDS	JMINIUM DE TYPES	 ICON RBIDE TYPES
TION		NQN BLEND	38A	39C
		NQ BLEND	32A	37C
		SG BLEND	19A	

Recess/Inner concave Diameter
Recess/Concave Depth A
Recess/Concave Depth B
Tools

Tools
Saw Sharpening
Bench Wheels
Internal Diameter
External Diameter
Surface
High alloyed steels & HSS

Soft steels
Inox
Non-Ferrous & Carbide
Cast iron

Non-rerrous &
Cast iron
Abrasive Type
Grit size

			å	å	Ϋ́	卢	Š	ā	드	ú	Š	工	Š	드	Ž	ర		¥	Ð		ă				
150x4x30	DIM DxTxH (mm)	SHAPE	Р	FA	FB				G	rindir	ng		М	ateria	als		SP	ECIFIC <i>A</i>	ATION				ART NO.		
150x4x30 01	150x4x20	01	-	-	-	•						0	•			•		38A	60	L	VS	45	69936675591	1	+++
150x4x32		01	-	-	-	•						0	•			•		38A	100	М	VS	45	69936640219	1	+++
150x6x31 150x13x31,75 1	150x4x30	01	-	-	-	•						0	•			•		38A	80	N	VS	45	69936639730	1	+++
150x6x31,75 01	150x4x32	01	-	-	-		•					0	•			•		38A	80	L	VS3	63	66243541079	5	++++
150x6x31,75 01		01	-	-	-		•						•					19A	60	М	VS	63	69936674920	2	+++
1		01	-	-	-	•								•	•			39C	120	K	VS	45	66253050248	2	+++
1	150x6x31,75	01	-	-	-			•				0	•			•		38A	80	L	VS	35	69936621582	1	+++
150x13x31,75 150x13x31,75 17 17 17 17 17 17 17	150x6x32	01	-	-	-		•					•	0					3SG	60	L	VX	45	66253055040	2	++++
150x13x32 2		01	-	-	-		•					0	•			•		38A	60	L	VS	35	69936675741	2	+++
150x8x32		01	-	-	-		•						•					19A	60	М	VS	63	69936675964	2	+++
150x10x32 10		01	-	-	-		•								•			39C	120	K	VS	45	69936675617	2	+++
150x10x32	150x8x32	01	-	-	-	•						•	0					3SG	60	J	VX	45	66253055041	2	++++
150x10x32	150x8x32	01	-	-	-	•						0	•			•		38A	60	L	VS	45	69936675743	1	+++
150x13x31,75 17 2 2 3 4 4 4 4 4 4 4 4 4		01	-	-	-	•						0	•			•		38A	120	J	VS	45	69936675748	1	+++
150x13x31,75 170 1 1 1 1 1 1 1 1 1	150x10x32	01	-	-	-	•						•	0					3SG	60	L	VX	45	66253050280	2	++++
150x13x31,75 10 - - - - - - - - -		01	-	-	-	•						0	•			•		38A	60	М	VS	45	69936641112	1	+++
150x13x31,75		01	-	-	-	•						0	•			0		38A	80	М	VS	45	66253050373	1	+++
150x13x31,75		01	-	-	-	•						0	•			•		38A	120	J	VS	45	69936675749	1	+++
150x13x31,75 01		01	-	-	-	•								•	•			39C	80	K	VS	45	66253050357	2	+++
150x13x32 01		01	-	-	-	•								•	•			39C	120	K	VS	45	69936675629	2	+++
150x13x32	150x13x31,75	01	-	-	-			•				•	0	0				3SG	60	K	VS	50	69936622862	1	++++
01 0 0 0 0 38A 60 L VS 35 69936675757 1 +++ 01 0 0 0 0 38A 80 L VS 45 69936675759 1 +++ 150x16x32 01 0 0 0 0 38A 120 J VS 45 69936675760 1 +++ 01 0 0 0 0 38A 120 J VS 45 69936675760 1 +++ 01 0 0 0 0 38A 120 J VS 45 69936675760 1 +++ 01 0 0 0 0 38A 60 L VX 45 66253050367 2 +++++ 01 0 0 0 0 38A 60 L VS 45 69936675763 1 +++ 01 0 0 0 0 38A 60 L VS 45 69936675763 1 +++ 01 0 0 0 0 38A 80 L VS 45 69936675764 1 +++ 01 0 0 0 0 38A 80 L VS 45 69936675767 1 +++ 150x20x31,75 01 0 0 0 0 38A 60 K VS 45 69936675659 2 +++ 150x20x31,75 01 0 0 0 0 38A 60 K VS 45 69936673764 1 ++++ 150x20x31,75 01 0 0 0 0 38A 60 K VS 45 69936673764 1 ++++		01	-	-	-			•						•	•			39C	60	K	VS	35	69936621564	1	+++
01 0	150x13x32	01	-	-	-	•						•	0					3SG	60	L	VX	45	66253050142	2	++++
150x16x32		01	-	-	-	•						0	•			0		38A	60	L	VS	35	69936675757	1	+++
150x16x32		01	-	-	-	•						0	•			0		38A	80	L	VS	45	69936675759	1	+++
01 • • • • • • • • • • • • • • • •		01	-	-	-	•						0	•			0		38A	120	J	VS	45	69936675760	1	+++
01 0 0 0 0 38A 46 L VS 45 69936675763 1 +++ 01 0 0 0 0 38A 80 L VS 45 69936675764 1 +++ 01 0 0 0 0 38A 80 L VS 45 69936675767 1 +++ 01 0 0 0 0 38A 80 L VS 45 6993667567 2 +++ 01 0 0 0 0 0 39C 120 K VS 45 69936675659 2 +++ 150x20x31,75 01 0 0 0 0 38A 60 K VS 35 69936623474 1 ++++	150x16x32	01	-	-	-	•						•	0					3SG	60	L	VX	45	66253050367	2	++++
01 0		01	-	-	-	•						•	0					3SG	60	H12	VXP	45	69936677177	2	++++
01 0		01	-	-	-	•						0	•			0		38A	46	L	VS	45	69936675763	1	+++
01 0		01	-	-	-	•						0	•			0		38A	60	L	VS	45	69936675764	1	+++
01		01	-	-	-	•						0	•											1	+++
01		01	-	-	-	•								•	•			39C	80	L	VS	45	69936675657	2	+++
150x20x31,75 01 • • • • • • • • • • • • • • • •			-	-	-	•								•	•						VS	45			+++
01	150x20x31,75	01	-	-	-	•						0	•			•		38A	60	K	VS3	63	66253353966	1	++++
		01	-	-	-	İ		•						•	•			39C		K		35		1	+++
		01	-	-	_	t		•						•	•									1	+++

SHAPE 01 SHAPE 05 SHAPE 07 SHAPE 20 SHAPE 01C

> PRODUCT RECOMMENDATION Highly recommended Recommended

cess/Inner concave Diameter gh alloyed steels & HSS ecess/Concave Depth B cess/Concave Depth A

on-Ferrous & Carbide ternal Diameter ernal Diameter w Sharpening nch Wheels

rasive Type

		Rec	Rec	Rec	Tool	Saw	Ben	Intel	Exte	Sur	High	Soft	Inox	Non	Cast		Abr	Grit	Gra	Bon				
DIM DxTxH (mm)	SHAPE	Р	FA	FB		urrin		Gr	indin	ıg		Ма	ateri	als		SP	PECIFICA	TION			MOS (m/s)	ART NO.		QUALITY TIER
150x20x32	01	-	-	-	•						•	•					3SG	60	K	VX	45	66253050155	2	++++
	01	-	-	-	•						•	0					SGB	100	J	VX	45	66253049895	2	++++
	01	-	-	-	•						•	•			0		38A	46	М	VS	45	66253050372	1	+++
	01	-	-	-	•						•	•			0		38A	60	L	VS	45	69936641391	1	+++
	01	-	-	-	•						•	•			0		38A	80	L	VS	45	69936639416	1	+++
	01	-	-	-	•						•	•			0		38A	100	J	VS	45	66243570493	1	+++
	01	-	-	-			•					•					А	36	Р	VS	45	69936641366	1	+++
	01	-	-	-			•					•					А	60	Ν	VS	45	69936641368	1	+++
	01	-	-	-	•								•	•			39C	60	K	VS	45	69936641411	2	+++
	01	-	-	-	•								•	•			39C	80	L	VS	45	69936641413	2	+++
	01	-	-	-	•								•	•			39C	120	K	VS	45	69936641414	2	+++
150x25x20	01	-	-	-			•						•	•			39C	80	K	VS	35	69936641429	1	+++
150x25x32	01	-	-	-	•						•	•			0		38A	60	K	VS	45	66253050452	1	+++
	01	-	-	-			•					•					А	36	Q	VS	45	66253050265	1	+++
	01	-	-	-			•					•					А	46	Ν	VS	45	69936641370	1	+++
	01	-	-	-	•								•	•			39C	60	K	VS	45	69936675661	2	+++
	01	-	-	-	•								•	•			39C	80	K	VS	45	66253050278	2	+++
	01	-	-	-	•								•	•			39C	120	K	VS	45	69936675664	2	+++
175x4x51	01	-	-	-	•							•					19A	60	М	VS	63	66253052709	6	+++
180x6x31,75	01	-	-	-		•					0	•			0		38A	60	K	VS3	63	66253353968	2	++++
180x6x32	01	-	-	-			•				•	•					3SG	120	K	VS	35	69936676015	1	++++
	01	-	-	-		•					•	•			0		38A	60	L	VS	45	69936675784	2	+++
180x10x32	01	-	-	-	•						•	•			0		38A	80	J	VS	45	69936675781	1	+++
180x13x31,75	01	-	-	-			•				•	•	0				3SG	46	K	VS	50	69936623227	1	++++
	01	-	-	-			•				•	0	0				3SG	60	K	VS	50	69936623231	1	++++
	01	-	-	-			•				•	•					SGB	46	K	VX	50	69936623240	1	++++
	01	-	-	-			•				•	•					SGB	60	K	VX	50	69936623255	1	++++
	01	-	-	-	•						•	•			0		38A	46	K	VS3	63	66253353972	1	++++
	01	-	-	-	•						•	•			0		38A	60	K	VS3	63	66253353974	1	++++
	01	-	-	-			•				•	•			0		38A	100	L	VS	35	69936623220	1	+++
	01	-	-	-			•						•	•			39C	100	J	VS	35	69936623248	1	+++
180x13x32	01	-	-	-	•				П		•	0	0				2NQN	46	1	VS3	45	69210469326	2	+++++ N
	01	-	-	-	•						•	0					3SG	80	J	VX	45	66253054892	2	++++
	01	-	-	-	•						•	0					3SG	120	J	VX	45	66253054874	2	++++
	01	-	-	-	•						•	•					SGB	60	J	VX	45	69936639148	2	++++
	01	-	-	-	•						0	•			0		38A	60	L	VS	45	69936675797	1	+++
	01	-	-	-	•						0	•			0		38A	80	L	VS	45	69936675801	1	+++
	01	-	-	-	•						•	•			0		38A	120	J	VS	45	69936675802	1	+++
180x16x32	01	-	-	-			•				•	0	0				3SG	60	H12	VXP	35	69936677179	1	++++
	01	-	-	-			•				•	•			0		38A	46	J	VS	35	69936675806	1	+++
	01	-	-	-	•						0	•			0		38A	60	K	VS	45	66253050453	1	+++



COLOUR CODE REFERENCE ecess/Inner concave Diameter CERAMIC BLENDS ALUMINIUM OXIDE TYPES SILICON CARBIDE TYPES igh alloyed steels & HSS ecess/Concave Depth A Recess/Concave Depth B Ion-Ferrous & Carbide NQN BLEND 38A 37C 32A NQ BLEND xternal Diameter nternal Diameter 19A aw Sharpening SG BLEND ench Wheels brasive Type Α oft steels gond

		Re	Re	Re	T00	Sa	Ber	Int	Ext	Sur	Hig	Sof	ln ₀	Š	Cas		Abı	Gri	Gra	Bor				
DIM DxTxH (mm)	SHAPE	Р	FA	FB		urrir arper		Gr	indir	ng		M	ateri	als		SP	ECIFICA	ATION			MOS (m/s)	ART NO.		QUALITY TIER
180x20x31,75	01	-	-	-			•				•	•	0				3SG	46	K	VS	50	69936623242	1	+++++
	05	100	6	-			•				•	•	0				3SG	60	J	VS	35	69936639808	1	+++++
	01	-	-	-			•				•	0					SGB	60	K	VX	50	69936623480	1	++++
	01	-	-	-			•				0	•			0		38A	46	L	VS	35	69936623312	1	+++
	01	-	-	-			•				0	•			0		38A	60	L	VS	35	69936623472	1	+++
	01	-	-	-			•						•	•			39C	60	Κ	VS	35	69936623477	1	+++
180x20x32	01	-	-	-			•				•	•	0				3SG	60	H12	VXP	35	66243593654	1	+++++
	01	-	-	-	•						•	•					SGB	46	H10	VXP	45	69936638723	2	++++
	01	-	-	-	•						•	0					SGB	60	K	VX	45	66253049878	2	++++
	01	-	-	-			•					•					А	46	Ν	VS	45	69936641372	1	+++
	01	-	-	-	•								•	•			39C	60	K	VS	45	69936641415	2	+++
	01	-	-	-	•								•	•			39C	80	L	VS	45	69936676582	2	+++
	01	-	-	-	•								•	•			39C	120	K	VS	45	69936675666	2	+++
180x25x31,75	05	105	13	-			•	П			•	0	0				3SG	46	K	VS	50	69936621519	1	+++++
	05	105	13	-			•				•	0	0				3SG	60	K	VS	50	69936621570	1	+++++
	05	105	12	-	•						0	•			0		38A	46	K	VS3	63	66253354036	1	++++
	05	105	12	-	•			П			0	•			0		38A	60	K	VS3	63	66253354035	1	++++
180x25x32	01	-	-	-	•			П			0	•			0		38A	60	L	VS	45	69936675812	1	+++
	01	-	-	-			•	П				•					А	46	N	VS	45	69936675564	1	+++
	01	-	-	-	•			П					•	•			39C	60	K	VS	45	69936675667	2	+++
	01	-	-	-	•			П					•	•			39C	80	L	VS	45	69936667101	2	+++
200x2x32	01	-	-	-		•		П			0	•			0		38A	80	L	VS3	50	66243541085	5	++++
200x3x32	01	-	-	-		•		П			•	0					SGB	80	K	VS3	50	66253354588	5	++++
200x4x32	01	-	-	-		•		П			•	0					SGB	80	K	VS3	63	66243541087	5	++++
200x6x31,75	01	-	-	-			•	П			0	•			0		38A	120	1	VS	35	69936640156	1	+++
200x6x32	01	-	-	-		•		П			•	0					SGB	60	K	VS3	63	66243541086	5	++++
	01	-	-	-		•		П			•	0					SGB	120	J	VX	45	69936677029	2	++++
	01	-	-	-		•		П			0	•			0		38A	80	N	VS	45	69936639662	2	+++
	01	-	-	-		•		П						•	Г		39C	120	K	VS	45	69936675636	2	+++
200x8x32	001C	-	-	-		•					0	•			0		38A	60	L	VS3	35	69210431430	5	++++
200x10x32	01	-	-	-	•			П			•	0			Г		SGB	60	J	VX	45	69936639157	2	++++
	01	-	-	-	•						•	0					SGB	80	J	VX	45	69936639158	2	++++
	01	-	-	-	•						0	•			0		38A	60	L	VS3	63	66253348277	1	++++
	01	-	-	-	•						0	•			0		38A	120	J	VS	45	69936675819	1	+++
	01	_	-	-			•						•	•			39C	100	K	VS	35	69936639461	1	+++
	01	_	-	-	•								•	•			39C	120	K	VS	45	69936675637	2	+++
200x13x31,75	01	_	-	-			•				•	0	0				3SG	46	K	VS	50	69936623236	1	++++
	01	_	-	-			•				•	•	0				3SG	60	K	VS	50	69936623241	1	++++
	01	_	-	-		•					0	•			0		38A	120	1	VS	35	69936641286	4	+++
200x13x32	01	-	-	-	•						•	0					SGB	60	J	VX	45	69936639160	2	++++

aw Sharpening

SHAPE 05 SHAPE 07 SHAPE 01C

> PRODUCT RECOMMENDATION Highly recommended Recommended

lecess/Inner concave Diameter tecess/Concave Depth B tecess/Concave Depth A

External Diameter nternal Diameter ench Wheels

ligh alloyed steels & HSS Ion-Ferrous & Carbide

brasive Type

		Re	Re	Re	ĕ	Sa	Be	пţ	X	Sul	Ξ̈́	Sof	<u>n</u>	ž	Ö		Abı	Gri	Gr	Bo					
DIM DxTxH (mm)	SHAPE	Р	FA	FB		ourri arpe	ng & ning	Gr	indi	ng		M	ateri	als		SPE	ECIFICA	ΓΙΟΝ			MOS (m/s)	ART NO.		QUALITY TIER	
	01	-	-	-	•						•	•					SGB	120	J	VX	45	69936676608	2	++++	
	01	-	-	-	•						0	•			0		38A	60	L	VS3	63	66253348352	1	++++	
	01	-	-	-	•						0	•			0		38A	60	J	VS	45	69936675821	1	+++	
	01	-	-	-	•								•	•			39C	80	J	VS	45	69936676152	2	+++	
200x16x76,2	01	-	-	-	•						0	•			0		38A	60	L	VS	45	69936675827	1	+++	
200x20x20	01	-	-	-	•								•	•			39C	80	K	VS	45	69936641417	2	+++	
	01	-	-	-	•								•	•			39C	80	М	VS	45	69936640220	2	+++	
200x20x31,75	01	-	-	-			•				•	0	0				3SG	46	K	VX	50	69936623774	1	+++++	
	01	-	-	-			•				•	0					SGB	70	H12	VXP	50	69936623902	1	++++	
	01	-	-	-	•						0	•			0		38A	46	K	VS3	63	66253354039	1	++++	
	01	-	-	-	•						0	•			0		38A	60	K	VS3	63	66253354038	1	++++	
200x20x32	01	-	-	-	•						•	0	0				3NQN	46	J	VQN	45	69210469327	2	+++++	NEW
	01	-	-	-	•						•	•	0				2NQN	60	ı	VS3	45	69210469328	2	+++++	NEW
	01	-	-	-	•						•	•					3SG	60	H12	VXP	45	69936677181	2	+++++	
	01	-	-	-	•						•	•					SGB	60	H10	VXP	45	69936639172	2	++++	
	01	-	-	-	•						•	•					SGB	46	Н	VX	45	69936639171	2	++++	
	01	-	-	-	•						•	•					SGB	60	K	VX	45	66253049887	5	++++	
	01	-	-	-	•						0	•			•		38A	46	Ν	VS	45	69936641400	1	+++	
	01	-	-	-	•						0	•			•		38A	46	K	VS	45	66253051075	1	+++	
	01	-	-	-	•						0	•			0		38A	60	Ν	VS	45	69936667154	1	+++	
	01	-	-	-			•				0	•			•		38A	60	L	VS	35	69936641402	1	+++	
	01	-	-	-	•						0	•			0		38A	60	K	VS	45	66253051077	1	+++	
	01	-	-	-	•						0	•			•		38A	80	K	VS	45	66253051080	1	+++	
	01	-	-	-			•					•					Α	46	Ν	VS	45	69936641375	1	+++	
	01	-	-	-			•					•					А	60	Ν	VS	45	69936666929	1	+++	
	01	-	-	-	•								•	•			39C	60	K	VS	45	69936641418	2	+++	
	01	-	-	-	•								•	•			39C	80	K	VS	45	69936676351	2	+++	
	01	-	-	-	•								•	•			39C	120	K	VS	45	69936641421	2	+++	
	01	-	-	-	•										•		37C	60	K	VK	35	69210431674	5	+++	
200x20x50	01	-	-	-	•						•	•					3SG	60	J	VX	45	66253050362	2	+++++	
	01	-	-	-	•						0	•			•		38A	46	K	VS	45	69936641104	2	+++	
	01	-	-	-			•				0	•			0		38A	60	J	VS	35	69936639462	1	+++	
200x20x50,8	01	-	-	-	•						•	•					3SG	60	H12	VXP	45	66243593696	2	+++++	
	01	-	-	-	•						•	•					3SG	46	112	VXP	45	66253052711	2	+++++	
	01	-	-	-						•	•	•					3SG	46	K	VS	50	69936623654	2	+++++	
	01	-	-	-	•						0	•			•		38A	46	J	VS	45	69936675832	1	+++	
	01	-	-	-	•						0	•			•		38A	60	Н	VS	45	69936675834	1	+++	
	01	-	-	-	•						0	•			0		38A	60	K	VS	45	66253049967	1	+++	
200x20x51	01	-	-	-	•						•	•					SGB	60	J	VX	45	69936639251	2	++++	•

HSS = High Speed Steel

Steel hardened = Over 50Rc



COLOUR CODE REFERENCE

ALUMINIUM OXIDE TYPES CERAMIC BLENDS SILICON CARBIDE TYPES 39C NQN BLEND 38A 37C NQ BLEND 32A SG BLEND 19A

Α

Recess/Inner concave Diameter Recess/Concave Depth A Recess/Concave Depth B

External Diameter Internal Diameter Saw Sharpening Bench Wheels

High alloyed steels & HSS Soft steels Surface

Non-Ferrous & Carbide

Abrasive Type

Grit size

		<u>~</u>	<u>~</u>	<u>~</u>		Ś		드	ய்	Ś	I	S	드	_	O		⋖	9	Ю	В				_
DIM DxTxH (mm)	SHAPE	Р	FA	FB		urrin Irpen		Gr	rinding	g		Ма	ateria	als		SP	ECIFICA	TION			MOS (m/s)	ART NO.	PK QTY	QUALITY TIER
	01	-	-	-	•				Ш				•	•			39C	60	K	VS	45	69936640176	2	+++
200x20x76,2	01	-	-	-	•						•	•					3SG	46	Н	VX	45	66253050156	2	+++++
	01	-	-	-	•						•	•			0		38A	60	L	VS	45	69936675836	1	+++
200x25x20	01	-	-	-			•				•	•			•		38A	60	М	VS	35	69936641405	1	+++
	01	-	-	-			•						•	•			39C	80	K	VS	35	69936641422	1	+++
200x25x31,75	05	110	10	-			•				•	•	•				3SG	60	G	VSPF	35	69936640304	1	+++++
	05	105	13	-			•				•	•	0				3SG	60	K	VS	50	69936621575	1	++++
	01	-	-	-			•						•	•			39C	60	K	VS	35	69936623912	1	+++
	01	-	-	-			•					•					А	36	Р	VS	35	69936623910	1	+++
	01	-	-	-	•							•					А	60	Ν	VS	35	69936623913	2	+++
	01	-	-	-			•						•	•			39C	100	K	VS	35	69936623599	1	+++
200x25x32	01	-	-	-	•						•	•					3SG	60	J	VX	45	66253054889	2	+++++
	01	-	-	-	•						•	•					SGB	60	K	VX	45	66253049888	2	++++
	01	-	-	-	•						•	•			•		38A	46	Ν	VS	45	69936641406	1	+++
	01	-	-	-	•						•	•			•		38A	46	L	VS	45	69936627127	1	+++
	01	-	-	-	•						•	•			•		38A	60	М	VS	45	66253051079	1	+++
	01	-	-	-	•						•	•			•		38A	60	L	VS	45	69936641407	1	+++
	01	-	-	-	•						•	•			•		38A	80	Ν	VS	45	69936675847	1	+++
	01	-	-	-	•						•	•			•		38A	80	K	VS	45	66253051082	1	+++
	01	-	-	-			•					•					А	24	R	VS	45	69936676374	1	+++
	01	-	-	-			•					•					А	30	Р	VS	45	69936641382	1	+++
	01	-	-	-			•					•					А	36	Р	VS	45	69936641383	1	+++
	01	-	-	-			•					•					А	46	М	VS	45	66253050271	1	+++
	01	-	-	-	•								•	•			39C	46	L	VS	45	69936675639	2	+++
	01	-	-	-	•								•	•			39C	60	K	VS	45	69936641424	2	+++
	01	-	-	-	•								•	•			39C	80	K	VS	45	66253050276	2	+++
	01	-	-	-	•						•	•			•		38A	100	J	VS	45	66243570496	1	+++
	01	-	-	-	•								•	•			39C	100	J	VS	45	66253050375	2	+++
	01	-	-	-	•								•	•			39C	120	K	VS	45	69936641428	2	+++
200x25x50	05	110	10	-						•	•	•					3SG	60	Ι	VS	35	69936639454	2	+++++
200x25x50,8	01	-	-	-	•						•	•					SGB	46	K	VX	45	66253050183	2	++++
200x25x51	01	-	-	-	•						•	•			•		38A	46	K	VS	45	66253051086	1	+++
	01	-	-	-	•						•	•			•		38A	60	L	VS	45	69936640125	1	+++
200x25x76,2	01	-	-	-	•						•	•			•		38A	46	Ν	VS	45	69936675841	1	+++

SHAPE 01 SHAPE 05 SHAPE 07 SHAPE 01C

PRODUCT RECOMMENDATION

Highly recommended Recommended

Recess/Inner concave Diameter High alloyed steels & HSS Recess/Concave Depth B Recess/Concave Depth A

Non-Ferrous & Carbide External Diameter nternal Diameter Saw Sharpening **Bench Wheels**

Abrasive Type Grit size

		Re	Re	Re	P	Sa	Be	흐	Ě	Su :	Ī	So	<u>=</u>	žć	3		Ab	Ģ	Ģ	Bo				
DIM DxTxH (mm)	SHAPE	Р	FA	FB		burri arpei		Gri	indin	g		Mat	eria	ls	S	PE	CIFICA	TION			MOS (m/s)	ART NO.		QUALITY TIER
	01	-	-	-	•					•	D	•		•			38A	46	L	VS	35	69936675842	1	+++
	01	-	-	-	•					•	D	•		•			38A	60	L	VS	35	69936675845	1	+++
	01	-	-	-			•					•					А	46	Ν	VS	45	69936675568	1	+++
	01	-	-	-	•					•	D	•		•			38A	60	Ν	VS	45	69936675846	1	+++
	01	-	-	-	•							-	•	•			39C	60	K	VS	45	69936675672	2	+++
	01	-	-	-	•								•	•			39C	80	L	VS	45	69936675673	2	+++
	01	-	-	-	•								•	•			39C	120	K	VS	45	69936675674	2	+++
200x32x32	01	-	-	-	•					(0					SGB	60	K	VX	45	66253049892	2	++++
	01	-	-	-	•					(D	•		•			38A	46	М	VS	45	66253052712	1	+++
	01	-	-	-	•					(D	•		•			38A	60	L	VS	45	69936675855	1	+++
	01	-	-	-			•					•					А	36	Р	VS	45	69936666932	1	+++
200x32x32	01	-	-	-			•					•					А	46	N	VS	45	69936640814	1	+++
	01	-	-	-			•					•					А	60	N	VS	45	69936690246	1	+++
	01	-	-	-	•							-	•	•			39C	60	K	VS	45	69936640293	2	+++
	01	-	-	-	•							-	•	•			39C	80	K	VS	45	69936667106	2	+++
	01	-	-	-	•	,							•	•			39C	120	K	VS	45	69936675677	2	+++
200x32x51	01	-	-	-	•					-	D	•		•			38A	60	L	VS	45	69936640245	1	+++
200x32x76,2	01	-	-	-	•					-	D	•		•			38A	46	N	VS	45	69936675849	1	+++
	01	-	-	-	•	,				(D	•		•			38A	60	N	VS	45	69936675854	1	+++
	01	-	-	-			•					•					А	46	N	VS	45	66243593707	1	+++
	01	-	-	-	•								•	•			39C	80	K	VS	45	69936675644	2	+++
200x40x20	05	110	25	-			•						•	•			39C	80	J	VS	35	69936640285	1	+++
200x40x50,8	01	-	-	-	•					-	D	•		•			38A	46	Т	VS	45	69936681707	1	+++
225x5x60	01	-	-	-	•	,				-	D	•		•			38A	54	J	VS	45	69936675859	1	+++
225x20x51	01	-	-	-	•	,				-	•	0					3SG	60	H12	VXP	45	69936676452	2	++++
	01	-	-	-	•					(0					SGB	60	Н	VX	45	69936640943	2	++++
	01	-	-	-	•					-	D	•		•			38A	46	ı	VS	45	69936640871	1	+++
225x25x76,2	01	-	-	-	•	,				-	•	0	T				3SG	46	Н	VX	45	66243570377	2	++++
	01	-	-	-	•					-	•	0					3SG	60	H12	VXP	45	66243593705	2	++++
230x5x31,75	01	-	-	-	•	,						•					19A	54	J	VS	40	69936623905	2	+++
230x25x32	01	-	-	-			•				T		•	•			39C	80	K	VS	35	69936639374	1	+++
230x25x50,8	01	-	-	-	•	,				(D	•	T	•			38A	60	Н	VS	45	69936639829	1	+++
250x10x32	01	-	-	-	•					(D	•		•			38A	60	М	VS	63	69936675931	1	+++
	01	-	-	-	İ	•				(D	•		•			38A	60	L	VS3	35	69210431945	5	++++
250x13x32	01	-	-	-	•					(D	•		•			38A	60	L	VS3	63	66253348353	1	++++
250x25x31,75	01	-	-	-			•					•					A	46	N	VS	35	69936623914	1	+++
	01	-	-	-			•						•	•		=	39C	60	K	VS	35	69936623664	1	+++
250x25x32	01	-	-	-	•					(D	•		•		Ī	38A	60		VS	45	66253049927	1	+++
	01	-	-	-			•					•					A	46	N	VS	45	69936641386	1	+++
	01	-	_	_	•								•	•		=	39C	80	L	VS	45	69936675679	1	+++





ALUMINIUM OXIDE TYPES CERAMIC BLENDS SILICON CARBIDE TYPES 39C NQN BLEND 38A 32A 37C NQ BLEND 19A SG BLEND

Α

Recess/Inner concave Diameter Recess/Concave Depth A Recess/Concave Depth B

External Diameter Internal Diameter Saw Sharpening Bench Wheels Surface

High alloyed steels & HSS Non-Ferrous & Carbide Soft steels

Abrasive Type **Grit size** Grade Bond

	DIM DxTxH			ш.	œ	Inch		=	ш	'' 	T	0)	=		0		∢	9	Ю	ш	MOS		DIZ	OLIALITY	
250x25x76x76x76x76x16x16x16x16x16x16x16x16x16x16x16x16x16		SHAPE	Р	FA	FB			Gr	inding			Ma	ateri	ials		SF	ECIFICAT	ΓΙΟΝ				ART NO.			
250x25x76,2 25	250x25x76	01	-	-	-				0		•	•	0				2NQN	60	G	VS3	35	69210469332	1	+++++	NEW
		01	-	-	-				0			•					32A	60	-1	VS	35	69936639898	2	+++	
	250x25x76,2	01	-	-	-				0		•	•	•				2NQN	46	G	VS3	35	69210469333	1	+++++	NEW
		01	-	-	-	•					•	•					3SG	46	K	VS	45	69936623668	1	++++	
		01	-	-	-	•					•	•					3SG	54	F11	VXP	45	69936676054	1	++++	
1		01	-	-	-	•					•	•					3SG	60	K	VX	45	66253055045	1	+++++	
Di		01	-	-	-	•					•	•					SGB	46	K	VX	45	66253050124	1	++++	
1		01	-	-	-	•					•	•					SGB	60	K	VX	45	66253050126	1	++++	
		01	-	-	-	•					•	•					SGB	70	H12	VXP	45	69936623901	1	++++	
250x32x3762 1		01	-	-	-	•					•	•			0		38A	46	K	VS3	63	66253354041	1	++++	
250x32x32		01	-	-	-	•					0	•			0		38A	60	K	VS3	63	66253354040	1	++++	
1		01	-	-	-	•					0	•			0		38A	80	L	VS	45	69936623651	1	+++	
1	250x32x32	01	-	-	-	•					•	0					SGB	60	K	VX	45	66253050162	1	++++	
1		01	-	-	-	•					0	•			0		38A	60	Ν	VS	45	69936667158	1	+++	
1		01	-	-	-		•					•					А	36	Р	VS	45	69936666943	1	+++	
1		01	-	-	-		•					•					А	60	М	VS	45	69936642130	1	+++	
250x32x76,2 01 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		01	-	-	-	•							•	•			39C	60	K	VS	45	69936639837	1	+++	
250x40x32		01	-	-	-	•							•	•			39C	80	K	VS	45	69936640845	1	+++	
01	250x32x76,2	01	-	-	-	•					•	0					3SG	46	Н	VX	45	66253055046	1	++++	
250x40x51	250x40x32	01	-	-	-		•					•					А	36	Q	VS	45	69936666945	1	+++	
250x40x76		01	-	-	-		•					•					А	60	Ν	VS	45	69936666946	1	+++	
250x40x76,2	250x40x51	01	-	-	-				0						•		37C	60	K	VK	35	69210431004	3	+++	
250x40x76,2	250x40x76	01	-	-	-				0		0	•			0		38A	46	L	VS3	35	69210432025	3	++++	
01 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		01	-	-	-				0		0	•			0		38A	60	L	VS3	35	69210431657	3	++++	
300x25x127	250x40x76,2	01	-	-	-	•					•	•					3SG	46	1	VX	45	66253050259	1	+++++	
01		01	-	-	-	•					•	0					3SG	46	G12	VXPC	45	69936676056	1	++++	
01	300x25x127	01	-	-	-						•	0	0				3NQN	60	K	VQN	45	69210469335	1	+++++	NEW
01		01	-	-	-				•		•	•	0				2NQN	60	J	VS3	45	69210469336	1	++++	NEW
01		01	-	-	-				•		•	•					3SG	46	K	VV1	50	69210469422	1	++++	NEW
01		01	-	-	-						•	•					3SG	60	H12	VV1P	45	69210469625	1	++++	NEW
01 -		01	-	-	-				•		0	•					SGA	46	K	VV1	50	69210469425	1	++++	NEW
01		01	-	-	-						0	•					SGA	60	K	VV1	50	69210469426	1	++++	NEW
01 -		01	-	-	-						•	•					SGB	60	K	VV1	45	69210469427	1	++++	NEW
01 -		01	-	-	-						0	•					SGA	80	L	VV1	50	69210469428	1	+++++	NEW
01		01	-	-	-						0	•			0		38A	60	K	VS3	63	66253354042	2	++++	
01		01	-	-	-						0	•			0		38A	60	K	VV1	50	69210469429	1	+++++	NEW
01 1 3 3 9 8 0 J VS 4 5 6 9 9 3 6 4 0 3 4 3 4 7 4 7 4 7 4 7 4 7 1 4 4 7 4 7 1 1 1 1 1 1 1 1 1 1		01	-	-	-						0	•			0		38A	80	L	VV1	50	69210469521	1	++++	NEW
		01	-	-	-				•				•	•			39C	60	K	VS	45	69936623687	1	+++	
01 • • • • 3 9C 120 K VS 35 69936675646 1 +++		01	-	-	-								•	•			39C	80	J	VS	45	69936640343	1	+++	
		01	-	-	-								•	•			39C	120	K	VS	35	69936675646	1	+++	•

HSS = High Speed Steel

Steel hardened = Over 50Rc

SHAPE 05 SHAPE 07 SHAPE 01C

> PRODUCT RECOMMENDATION Highly recommended

Recommended

cess/Inner concave Diameter gh alloyed steels & HSS cess/Concave Depth A cess/Concave Depth B ternal Diameter w Sharpening

on-Ferrous & Carbide ternal Diameter nch Wheels oft steels

rasive Type

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| | 01 01 01 01 01 01 01 01 01 01 01 01 01 0 | SHAPE P 01 - | SHAPE P FA 01 - - 01 < | SHAPE P. FA FB 01 - - - 0 | SHAPE P FA FB Chance 01 - - - - 01 - - - - 01 - - - - 01 - - - - 01 - - - - 01 - - - - 01 - - - - 01 - - - - 01 - - - - 01 - - - - 01 - - - - 01 - - - - 01 - - - - 01 - - - - 01 - - - - 01 - - - - 01 - - <td< td=""><td>SHAPE P FA FB Deburring Sharpening 01 -</td><td>SHAPE P FA FB Deburring & Sharpening 01 - - - 01 - - - 01 - - - 01 - - - 01 - - - 01 - - - </td><td>SHAPE P FA FB Deburring Sharpening Gri 01 -</td><td>SHAPE P FA FB Deburring & Sharpening Sharpening Grindurg 01 -</td><td>SHAPE P FA FB Cburring & Sharpening Crinding 01 -</td><td>SHAPE P FA FB Deburring sharpening sharp</td><td>SHAPE P FA FB Deburting & Sharpening & Grinding Crinding Matter No. 0</td><td>SHAPE P. FA FB Schurpening Griden Signature Columnation Signature Signature<!--</td--><td>Name</td><td>SHAPE P FA FB Deburring & Sharpening Grinding Waterials SP 01 -<</td><td>SHAPE P FA FB Deburring & Sharpening Grindow Swaterials SPECIFICATION 01 -</td><td>SHAPE P FA BB Obstanting & Sharpening & Sha</td><td>SHAPE P FA FB Deburning & STAPPRING Grinding Waterials SPECIFICATION STAPPRING Colorate in StAPPRING STAPPRING Colorate in StAPPRING SASG 60 K Colorate in StAPPRING Colorate in StAPPRING<td> Shape P Fa Fa Fa Shape S</td><td> Shape P</td><td> State Paris File File File File State /td><td> State Stat</td><td> Second S</td></td></td></td<> | SHAPE P FA FB Deburring Sharpening 01 - | SHAPE P FA FB Deburring & Sharpening 01 - - - 01 - - - 01 - - - 01 - - - 01 - - - 01 - - - | SHAPE P FA FB Deburring Sharpening Gri 01 - | SHAPE P FA FB Deburring & Sharpening Sharpening Grindurg 01 - | SHAPE P FA FB Cburring & Sharpening Crinding 01 - | SHAPE P FA FB Deburring sharpening sharp | SHAPE P FA FB Deburting & Sharpening & Grinding Crinding Matter No. 0 | SHAPE P. FA FB Schurpening Griden Signature Columnation Signature Signature </td <td>Name</td> <td>SHAPE P FA FB Deburring & Sharpening Grinding Waterials SP 01 -<</td> <td>SHAPE P FA FB Deburring & Sharpening Grindow Swaterials SPECIFICATION 01 -</td> <td>SHAPE P FA BB Obstanting & Sharpening & Sha</td> <td>SHAPE P FA FB Deburning & STAPPRING Grinding Waterials SPECIFICATION STAPPRING Colorate in StAPPRING STAPPRING Colorate in StAPPRING SASG 60 K Colorate in StAPPRING Colorate in StAPPRING<td> Shape P Fa Fa Fa Shape S</td><td> Shape P</td><td> State Paris File File File File State /td><td> State Stat</td><td> Second S</td></td> | Name | SHAPE P FA FB Deburring & Sharpening Grinding Waterials SP 01 -< | SHAPE P FA FB Deburring & Sharpening Grindow Swaterials SPECIFICATION 01 - | SHAPE P FA BB Obstanting & Sharpening & Sha | SHAPE P FA FB Deburning & STAPPRING Grinding Waterials SPECIFICATION STAPPRING Colorate in StAPPRING STAPPRING Colorate in StAPPRING SASG 60 K Colorate in StAPPRING Colorate in StAPPRING <td> Shape P Fa Fa Fa Shape S</td> <td> Shape P</td> <td> State Paris File File File File State /td> <td> State Stat</td> <td> Second S</td> | Shape P Fa Fa Fa Shape S | Shape P | State Paris File File File File Stat | Second S |

HSS = High Speed Steel

Steel hardened = Over 50Rc



COLOUR CODE REFERENCE

lecess/Inner concave Diameter CERAMIC BLENDS ALUMINIUM OXIDE TYPES SILICON CARBIDE TYPES igh alloyed steels & HSS ecess/Concave Depth A ecess/Concave Depth B Ion-Ferrous & Carbide NQN BLEND 38A 37C 32A NQ BLEND xternal Diameter Saw Sharpening Bench Wheels nternal Diameter 19A SG BLEND brasive Type Α oft steels 3rit size

		Recess/Ir	Recess/C	Recess/C	Tools	Saw Shar	Bench W	Internal [External I	Surface	High allo	Soft steel	Inox	Non-Ferr	Cast iron		Abrasive	Grit size	Grade	Bond					
DIM DxTxH (mm)	SHAPE	Р	FA	FB	Debu	urrin rpen		Gr	indii	ng		Ma	ater	ials		SF	PECIFICA	TION			MOS (m/s)	ART NO.		QUALITY TIER	
300x50x127	01	-	-	-						•	•	•					SGB	46	H11	W1P	45	69210469652	1	+++++	NEW
	01	-	-	-						•	•	•					SGB	46	G10	W1P	45	69210469627	1	+++++	NEW
	01	-	-	-						•	•	•			0		38A	46	J	VV1	50	69210469456	1	++++	NEW
350x50x127	01	-	-	-					•	•	0	•			•		38A	80	L	VS3	35	69210431072	2	++++	
355x25x127	01	-	-	-					•	•	•	•					3SG	60	L	VV1	50	69210469457	1	++++	NEW
	01	-	-	-					•	•	•	•					3SG	60	K	VV1	50	69210469458	1	++++	NEW
	01	-	-	-					•	•	0	•					SGA	46	J	VV1	50	69210469459	1	+++++	NEW
	01	-	-	-					•	•	•	•					SGB	60	L	VV1	50	69210469460	1	+++++	NEW
	01	-	-	-					•	•	0	•			0		38A	60	L	VV1	50	69210469461	1	++++	NEW
355x32x127	01	-	-	-					•	•	•	0	0				2NQ	60	J	VS3	45	66253348373	1	+++++	
	01	-	-	-						•	•	0					SGB	54	E12	W1P	45	69210469658	1	+++++	NEW
	01	-	-	-					•	•	0	•			0		38A	60	L	VV1	50	69210469462	1	+++++	NEW
355x40x127	01	-	-	-					•	•	•	0	0				2NQ	46	G	VS3	45	66253348367	1	++++	
	01	-	-	-					•	•	•	0					3SG	60	L	VV1	50	69210469463	1	++++	NEW
	05	215	13	-					•	•	•	0					3SG	60	K	VV1	50	69210469464	1	+++++	NEW
	01	-	-	-					•	•	•	0					3SG	60	K	VV1	50	69210469465	1	+++++	NEW
	01	-	-	-					•	•	•	0					SGB	46	J	VV1	50	69210469466	1	++++	NEW
	01	-	-	-						•	•	0					SGB	46	G10	W1P	45	69210469628	1	++++	NEW
	05	215	13	-					•	•	0	•					38A	60	L	VV1	50	69210469467	1	++++	NEW
	01	-	-	-					•	•	0	•			0		38A	46	J	VV1	50	69210469468	1	+++++	NEW
	01	-	-	-					•	•	0	•			0		38A	60	L	VV1	50	69210469469	1	+++++	NEW
	01	-	-	-			•					•					А	24	Q	VS	45	69936675586	1	+++	
	01	-	-	-			•					•					А	46	Ν	VS	45	69936675587	1	+++	
	01	-	-	-					•	•	L		•	•			39C	60	K	VS	45	69936675685	1	+++	
355x50x127	01	-	-	-					•	•	•	0	0				3NQ	46	Н	VQN	45	66253262049	1	+++++	
	01	-	-	-	Ш				•	•	•	0	0				2NQ	46	G	VS3	45	66253348366	1	+++++	
	01	-	-	-					•	•	•	0					3SG	46	J	VV1	50	69210469470	1	+++++	NEW
	01	-	-	-						•	•	0					3SG	46	F12	W1P	45	69210469634	1	+++++	NEW
	01	-	-	-					•	•	•	0					SGB	46	J	VV1	50	69210469471	2	+++++	NEW
	01	-	-	-						•	0	•					SGA	54	G12	W1P	50	69210469635	1	+++++	NEW
	01	-	-	-						•	•	0					SGB	54	G10	W1P	45	69210469632	1	+++++	NEW
	01	-	-	-					•	•	•	0					SGB	60	K	VV1	50	69210469472	1	+++++	NEW
	01	-	-	-					•	•	0	•			0		38A	46	K	VV1	50	69210469473	1	+++++	NEW
	01	-	-	-					•	•	0	•			0		38A	46	- 1	VV1	50	69210469474	1	+++++	NEW
	01	-	-	-					•	•	0	•			•		38A	60	L	VV1	50	69210469475	1	+++++	NEW
	07	190	12	13	Ш				•	•	0	•			•		38A	60	L	VV1	50	69210469476	1	+++++	NEW
	01	-	-	-	Ш				•	•	0	•			•		38A	60	K	VV1	50	69210469477	1	+++++	NEW
	01	-	-	-	Ш		•					•					А	36	0	VS	45	69936675589	1	+++	
400x25x127	01	-	-	-	Ш				•	•	•	0					SGB	60	K	VV1	50	69210469478	1	+++++	NEW
400x50x127	01	-	-	-					•	•	0	•			•		38A	60	L	VS3	45	69210431108	1	++++	•

SHAPE 01 SHAPE 05 SHAPE 07 SHAPE 20 SHAPE 01C

nal Diameter

ecess/Inner concave Diameter ecess/Concave Depth A ecess/Concave Depth B bols
aw Sharpening ench Wheels

Surrace
High alloyed steels & HSS
Soft steels
Inox
Non-Ferrous & Carbide
Cast iron

Abrasive Type Grit size Grade

		Recess	Recess	Recess	Tools	Saw Sh	Bench \	Interna	Externa	Surface	High al	Soft ste	lnox	Non-Fe	Cast irc		Abrasiv	Grit siz	Grade	Bond				
DIM DxTxH (mm)	SHAPE	Р	FA	FB		urrir ırper		Gr	indir	ng		Ма	ateri	als		SP	ECIFICAT	TION			MOS (m/s)	ART NO.		QUALITY TIER
400x50x203	01	-	-	-					•		0	•			0		38A	60	L	VS3	45	69210431757	1	++++
406x25x127	01	-	-	-					•	•	•	•					3SG	60	L	VV1	50	69210469479	1	+++++ NEW
	01	-	-	-						•	0	•					SGA	80	110	VV1P	50	69210469637	1	+++++ NEW
	01	-	-	-					•	•	•	•			0		38A	60	L	VV1	50	69210469480	1	+++++ NEW
406x32x127	01	-	-	-					•	•	•	•			0		38A	60	L	VV1	50	69210469481	1	+++++ NEW
406x40x127	01	-	-	-					•	•	•	•					3SG	60	L	VV1	50	69210469482	1	+++++ NEW
	01	-	-	-					•	•	•	0					SGB	60	K	VV1	50	69210469483	1	+++++ NEW
	20	215	8	-					•	•	0	•					GF	60	K	VX	50	66243469015	1	++++
	01	-	-	-					•	•	0	•			0		38A	60	J	VS3	45	66253348356	1	++++
	20	215	13	-					•	•	0	•			0		38A	60	Ν	VS	35	66243448167	1	+++
	05	215	13						•	•	0	•			0		38A	60	М	VV1	50	69210469484	1	+++++ NEW
	05	215	13	-					•	•		•					32A	60	K	VV1	50	69210469485	1	+++++ NEW
	05	215	13	-					•	•			•	•			39C	60	J	VS	50	66243468572	1	+++
	01	-	-	-					•	•			•	•			39C	80	K	VS	45	66243466414	1	+++
406x50x127	01	-	-	-					•	•	•	0					3SG	46	Н	VV1	50	69210469486	1	+++++ NEW
	01	-	-	-						•	•	0					5SG	46	G12	VV1P	45	69210469677	1	+++++ NEW
	05	215	13	-					•	•	•	•					3SG	46	I	VV1	50	69210469487	1	+++++ NEW
	05	215	13	-						•	•	•					3SG	46	F12	VV1P	35	69210469679	1	+++++ NEW
	01	-	-	-						•	•	•					3SG	54	F12	VV1P	45	69210469681	1	+++++ NEW
	05	215	13	-						•	•	0					3SG	54	E12	VV1P	35	69210469682	1	+++++ NEW
	05	215	13	-						•	•	0					3SG	54	D12	VV1P	35	69210469683	1	+++++ NEW
	20	215	13	-					•	•	•	0					3SG	60	K	VS	35	66243448204	1	+++++
	05	215	13	-						•	0	•					SGB	54	E12	VV1P	35	69210469659	1	+++++ NEW
	01	-	-	-						•	•	0					SGB	46	G10	VV1P	45	69210469645	1	+++++ NEW
	01	-	-	-					•	•	•	•					SGB	46	Н	VV1	50	69210469488	1	+++++ NEW
	05	215	13	-						•	•	•					SGB	46	F12	VV1P	35	69210469660	1	+++++ NEW
	01	-	-	-					•	•	•	•					SGB	60	K	VV1	50	69210469489	1	+++++ NEW
	01	-	-	-						•	0	•					SGA	80	110	VV1P	50	69210469661	1	+++++ NEW
	05	215	13	-					•	•	0	•					SGB	46	I	VV1	50	69210469490	1	+++++ NEW
	05	215	13	-						•	0	•					SGB	46	F12	VV1P	45	69210469684	1	+++++ NEW
	05	215	13	-					•	•	0	•					SGB	60	L	VV1	50	69210469491	1	+++++ NEW
	20	215	8	-					•	•	0	•					GF	60	L	VX	50	66243468989	1	++++
	20	215	8	-					0	•	0	•					GF	60	K	VX	50	66243468991	1	++++
	01	-	-	-						•	0	•			0		38A	46	111	VV1P	45	69210469685	1	+++++ NEW
	05	215	13	-					•	•	0	•			0		38A	46	I	VV1	50	69210469492	1	+++++ NEW
	05	215	13	-						•	0	•			0		38A	46	F12	VV1P	45	69210469663	1	+++++ NEW
	20	215	13	-					•	•	0	•			0		38A	60	K	VS	35	66243448201	1	+++
	20	215	13	-					•	•	•	•			0		38A	60	М	VS	35	66243448116	1	+++
	05	215	13	-					•	•		•					32A	46	J	VV1	50	69210469493	1	+++++ NEW
	05	215	13	-					•	•		•					32A	46	ı	VV1	50	69210469494	1	+++++ NEW
	05	215	13	-						•		•					32A	46	F12	VV1P	45	69210469676	1	+++++ NEW
	01	-	-	-			•					•					А	24	Q	VS	45	66243467496	1	+++



COLOUR CODE REFERENCE

CERAMIC BLENDS ALUMINIUM OXIDE TYPES

SILICON CARBIDE TYPES 39C

NQN BLEND NQ BLEND SG BLEND

38A 32A 19A Α

37C

Recess/Inner concave Diameter Recess/Concave Depth A Recess/Concave Depth B

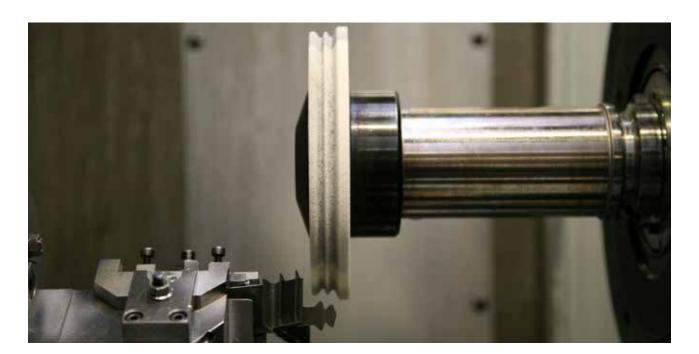
External Diameter Internal Diameter Saw Sharpening Bench Wheels

High alloyed steels & HSS Non-Ferrous & Carbide Soft steels Surface

Abrasive Type

Grit size Grade Bond

DIM DxTxH (mm)	SHAPE	Р	FA	FB	urring rpeni	·	Grin	ding		М	ater	ials		SP	PECIFICA	TION			MOS (m/s)	ART NO.		QUALITY TIER	
406x63x127	07	215	12	12				•	0	•					SGB	46	F12	W1P	45	69210469689	1	++++	NEW
	20	215	13	-					0	•					GF	60	L	VX	50	66243468993	1	++++	
406x76x127	07	215	12	25				•	•	0					3SG	54	E12	W1P	45	69210469690	1	++++	NEW
	07	215	12	25				•	•	0					SGB	46	F12	W1P	45	69210469691	1	++++	NEW
	07	215	13	25				•	0	•					SGB	46	- 1	VV1	35	69210469495	1	++++	NEW
	07	215	13	25				•	0	•					SGB	46	F12	W1P	45	69210469692	1	++++	NEW
	07	215	12	25				•	0	•			0		38A	46	F	VV1	50	69210469693	1	++++	NEW
	07	215	12	25				•		•					32A	46	I	VV1	50	69210469687	1	++++	NEW
406x100x152,4	07	220	15	15				•	•	0					3SG	54	E12	VXP	35	66243449287	1	++++	
	07	220	15	15				•	0	•					GF	46	1	VX	35	66243449285	1	++++	
457x50x127	20	215	8	-			•	•	0	•					GF	60	L	VX	50	66243468995	1	++++	
	01	-	-	-				•	0	•			0		38A	60	L	VS	45	66243466558	1	+++	
	20	215	13	-					0	•			0		38A	60	М	VS	50	66243448676	1	+++	
457x50x203,2	01	-	-	-					0	•					SGA	60	K	VX	50	61463694560	1	++++	
457x63x127	20	215	13	-			•	•	0	•					GF	60	L	VX	50	66243468996	1	++++	
457x80x203,2	07	290	13	13				•	•	0					SGB	46	F12	VXP	35	66243468578	1	++++	
	07	280	13	13				•	0	•					GF	46	F12	VXP	35	66243469018	1	++++	
508x50x203,2	01	-	-	-					•	0					3SG	60	K	VX	45	66253055088	1	++++	
	01	-	-	-					0	•					SGA	80	110	VXP	50	61463699663	1	++++	
	01	-	-	-					0	•			0		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

PRODUCT RECOMMENDATION

Highly recommended Recommended

• •

Rim Width
Back Thickness
Tools
Saw Sharpening
Bench Wheels
Internal Diameter
External Diameter

External Diameter
Surface
High alloyed steels & HSS
Soft steels
Inox
Non-Ferrous & Carbide

Abrasive Type Grit size Grade Bond

				— о, ш	0,		0, _		_		4	_	_					
DIM DxTxH (mm)	SHAPE	W	Е	Deburring & Sharpening	Grinding		Mate	rials		SPI	ECIFI	CATI	ON		MOS (m/s)	ART NO.	PK QTY	QUALITY TIER
63x40x20	6	10	10	•	•	•	•		0		38A	60	J	VS3	45	66253348322	10	++++
80x32x20	11	6	8	•		•	•				SGB	60	L	VX	45	66253050137	6	++++
80x40x20	6	10	10	•	0	•	•				SGB	60	L	VX	45	66253050098	10	++++
	6	6	10	•	0	•	•				SGB	60	J	VX	45	66243570391	10	++++
	6	6	8	•	0	0	•		0		38A	60	L	VS3	63	66253348323	6	++++
	6	8	8	•	0	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	•		•	•				3SG	60	K	VX	45	66253050110	2	++++
	11	8	10	•		0	•		0		38A	60	Κ	VS	45	69936686170	2	+++
	11	8	10	•		•	•		0		38A	60	L	VS	45	69936688495	2	+++
100x40x31,75	11	6	13	•		•	•				3SG	60	K	VS	32	69936624043	2	++++
	11	6	13	•		0	•		0		38A	46	J	VS3	35	66253358217	2	++++
	11	6	13	•		0	•		0		38A	60	J	VS3	35	66253358216	2	++++
	11	6	13	•		0	•		0		38A	60	J	VS3	32	66253348630	2	++++
100x40x32	11	13	13	•		•	0				2NQ	46	J	VS3	45	66253348633	2	++++
	11	8	10	•		•	•				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	+++
100x50x20	6	10	10	•	•	•	•				3SG	60	K	VX	45	66253049965	2	++++
	6	10	13	•	0	•	0				3SG	60	L	VX	45	66253049960	2	+++++

HSS = High Speed Steel

Steel hardened = Over 50Rc



High alloyed steels & HSS **COLOUR CODE REFERENCE** Non-Ferrous & Carbide CERAMIC BLENDS ALUMINIUM OXIDE TYPES SILICON CARBIDE TYPES External Diameter Internal Diameter Saw Sharpening NQN BLEND 38A Bench Wheels Abrasive Type 37C 32A NQ BLEND Rim Width Soft steels 19A SG BLEND Α

		<u>~</u>	B	은	Sa	å .	흐	Ě.	ਰ Ξ	ç	<u> </u>	ž	Ca		Ab	Ģ	9	B				
DIM DxTxH (mm)	SHAPE	W	Е		urring arpenir		Grii	nding		N	1ater	rials		SP	ECIFI	CATI	ION		MOS (m/s)	ART NO.	PK QTY	QUALITY TIER
100x50x20	6	10	13	•					•	C)				3SG	80	L	VX	45	66253049966	2	+++++
	6	10	10	•				•	•	C)				3SG	60	J	VX	45	66253050069	2	++++
	6	8	10	•				•	•	C)				SGB	60	K	VX	45	69936641284	2	++++
	6	10	10	•				•	0	•)		0		38A	60	J	VS3	45	66253348327	2	++++
	6	10	10	•				•	0	•			0		38A	60	I	VS3	45	66253348629	2	++++
	6	10	13	•				•	0	•)		0		38A	80	J	VS3	45	66253348324	2	++++
	6	10	10	•				•	0	•			0		38A	120	18	VS3	45	66253358793	2	++++
	6	10	10	•				•	0	•)		0		38A	46	K	VS	45	69936644193	2	+++
	6	10	13	•				•	0	•			0		38A	60	L	VS	45	69936639450	2	+++
	6	10	13	•				•	0				0		38A	60	М	VS	45	69936639460	2	+++
	6	10	10	•				•	0	•)		0		38A	80	J	VS	45	69936639600	2	+++
	6	10	13	•				•			•	•			39C	80	J	VS	45	69936640131	2	+++
100x50x32	6	10	10	•				•	•	C)				3SG	60	K	VX	45	66253050073	2	+++++
	6	10	10	•				•	0	•)		0		38A	60	K	VS	45	69936674859	2	+++
125x40x31,75	6	13	13	•				•	0)		0		38A	60	J8	VS3	45	66253358795	2	++++
	11	8	10	•					0	•)		0		38A	60	J6	VS3	35	66253358219	2	++++
125x40x32	11	8	10	•					•	C)				SGB	46	J	VX	45	69936682429	2	++++
	11	8	10	•					0	•			0		38A	46	K	VS	45	69936686175	2	+++
	11	8	10	•					0	•)		0		38A	60	K	VS	45	69936686176	2	+++
125x45x20	11	6	13	•					•	C)				3SG	46	K	VX	45	66253055954	2	+++++
	11	6	13	•					•	C)				SGB	60	K	VX	45	69936686736	2	++++
125x50x32	6	13	13	•				•	•	C)				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	•				•		C)				SGB	60	K	VX	45	69936640579	2	++++
	6	25	16	•				•			•	•			39C	60	J	V	45	69936668305	2	+++
150x40x32	6	16	13	•				•					0		38A	46	Н	VS	45	69936674872	2	+++
	6	16	13	•				•	0	•			0		38A	60	K	VS	45	69936674875	2	+++
150x50x32	6	16	16	•				•		C)				3SG	46	K	VX	45	66253050068	2	+++++
	11	10	13	•					•	C)				SGB	46	J	VX	45	66253050133	2	++++
	6	16	16	•					•	C)				SGB	60	K	VX	45	66253050076	2	++++
	11	10	13	•					•	C)				SGB	60	K	VX	45	66253050134	2	++++
	11	10	13	•					0	•			0		38A	46	K	VS	45	69936686177	2	+++
	6	16	16	•				•	0	•			0		38A	60	K	VS	45	69936674879	2	+++
	11	10	13	•					0)		0		38A	60	Κ	VS	45	69936682576	2	+++
150x50x65	6	20	16	•					0	•			0		38A	60	L	VS	45	69936639480	2	+++
	6	20	16	•				•			•	•			39C	80	J	VS	32	69936639798	2	+++
150x60x32	6	10	16	•				•	•	C)				SGB	54	K	VX	45	66253050099	2	++++
150x63x32	6	13	13	•				•	•	C)				SGB	46	J	VX	45	66253054727	2	++++
	6	16	16	•				•	0	•			0		38A	36	I	VS	45	69936640369	2	+++
	6	16	16	•						•			0		38A	46	J	VS	45	69936674881	2	+++
150x63x50,8	6	16	16	•				•	•	C)				SGB	36	Н	VX	45	66253050080	2	++++
	6	16	16	•						C)				SGB	60	J	VX	45	66253050082	2	++++

PRODUCT RECOMMENDATION

Highly recommended

Pocommended

O

Internal Diameter External Diameter Saw Sharpening Bench Wheels 3ack Thickness

ligh alloyed steels & HSS

nox Non-Ferrous & Carbide

Abrasive Type

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DIM DxTxH (mm)	SHAPE	W	Е	Deburring & Sharpening	Grinding		Ma	aterials		SPE	ECIFIC	CATI	ION		MOS (m/s)	ART NO.	PK QTY	QUALITY TIER
150x80x32	6	20	20		•		•				SGB	46	Н	VX	45	66253050096	2	++++
	6	20	20	•	•		•				SGB	46	G10	VXP	45	69936676357	2	++++
	6	20	20	•	•	•	•		•		38A	46	Н	VS	45	69936674905	2	+++
	6	20	20	•	0	0	•		0		38A	46	I	VS	45	69936658606	2	+++
165x63x32	6	10	13	•	•	•	•		•		38A	46	F12	VXP	45	66253051529	2	+++
175x75x76,2	6	20	20	•	•	•	0				SGB	46	G11	VXP	45	66253050097	2	++++
	6	20	20	•	0	0	•		0		38A	36	I	VS	45	69936681747	2	+++
180x40x76,2	6	32	13	•	•	0	•		0		38A	46	М	VS	45	69936674884	2	+++
180x63x50,8	6	16	16	•	•	•	•				SGB	46	J	VX	45	66253050084	2	++++
	6	16	16	•	•	0	•		•		38A	36	Н	VS	45	69936674887	2	+++
180x76x32	6	16	16	•	0	0	•		0		38A	36	I	VS	45	69936639449	2	+++
180x76x78	6	16	16	•	•	•	•				3SG	36	1	VX	45	66253049962	2	+++++
	6	16	16	•	•	0	•		0		38A	36	ı	VS3	45	66253348321	2	++++
	6	16	16	•	•	0	•		•		38A	36	J	VS	45	69936639817	2	+++
	6	16	16	•	•	0	•		0		38A	46	Н	VS	45	69936639616	2	+++
180x80x32	6	16	16	•	0	0	•		•		38A	46	Н	VS	45	69936674889	2	+++
200x40x32	6	45	15	•	•	0	•		0		38A	46	L	VS	45	66243570536	2	+++
	6	45	15	•	•	0	•		0		38A	60	L	VS	45	66243570537	2	+++
200x40x76,2	6	40	13	•	•	•	•				SGB	60	L	VX	45	66253050087	2	++++
	6	40	13	•	•	0	•		0		38A	46	М	VS	45	69936674890	2	+++
	6	40	13	•	•			•			39C	60	J	V	45	69936668347	2	+++
200x63x50,8	6	20	20	•	•	0	•		0		38A	46	Н	VS	45	69936674898	2	+++
200x82x78	6	16	20	•	•	•	0				3SG	36	- 1	VX	45	66253049964	2	+++++
	6	16	20	•	•	•	0				SGB	36	H10	VXP	45	69936679013	2	++++
	6	16	20	•	•	0	•		0		38A	36	Н	VS3	45	66253348319	2	++++
	6	16	20	•	•	0	•		•		38A	46	Н	VS3	45	66253348325	2	++++
300x63x127	6	40	20	•	•			•			39C	60	J	V	45	69936668365	1	+++



SHAPE KEY



PRODUCT RECOMMENDATION

Highly recommende Recommended

COLOUR CODE REFERENCE

0

SILICON CARBIDE TYPES

39C

37C

Rim Width
Back Thickness
External Flat Diameter
Internal Flat Diameter
Rim Depth
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

CERAMIC BLENDS ALUMINIUM OXIDE TYPES

NOVATION NO. BLEND 38A

NQ BLEND 32A

SG BLEND 19A

A

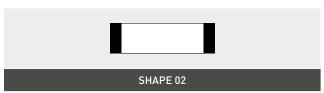
	_			_		1 07 = = = 07	_	0, _	_	_		` `	_					
DIM DxTxH (mm)	W	Е	J	K	U	Deburring & Grinding		Matei	rials		SPE	CIFICATI	ON		MOS (m/s)	ART NO.	PK QTY	QUALITY TIER
100x13x12,7	5	7	45	50	2,5		0			0		38A 60	K	VS	45	69936624605	2	+++
100x13x20	5	7	41	41	3,2		•	•				3SG 60	Κ	VX	45	66253050236	2	+++++
	5	7	41	41	3,2		0	•		0		38A 60	J	VS3	45	66253348382	2	++++
125x13x20	6	7	61	61	3,2	•	•	0 0				2NQ60	J	VS3	45	66253348378	2	+++++
	6	7	61	61	3,2	•	•	•				3SG 60	J	VX	45	69936686768	2	+++++
	6	7	61	61	3,2		0	•		•		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	•	•	•				SGB46	K	VS3	45	66253348384	2	++++
	8	9	56	56	3,2	•	•	•				SGB60	K	VS3	45	66253348379	2	++++
150x13x32	7	9	86	86	3,2	•	•	•				3SG 60	K	VX	45	66253050239	2	+++++
	7	9	86	86	3,2	•	0	•		0		38A 46	K	VS	45	69936686194	2	+++
	7	9	86	86	3,2	•	0	•		0		38A 60	J	VS3	45	66253348380	2	++++
150x20x32	8	9	87	87	3,2	•	•	•				SGB60	K	VX	45	66253050245	2	++++
200x20x32	10	12	90	90	3,2	•	0	•		0		38A 60	K	VS	45	69936686215	2	+++
200x32x32	10	12	92	92	3,2	•	•	•				SGB46	ı	VX	45	66253050253	2	++++

HSS = High Speed Steel

Steel hardened = Over 50Rc



SHAPE KEY



PRODUCT RECOMMENDATION

Highly recommended Recommended

Saw Sharpening
Bench Wheels
Internal Diameter
External Diameter

High alloyed steels & HSS
Soft steels
Inox
Non-Ferrous & Carbide

Abrasive Type
Grit size
Grade
Bond

COLOUR CODE REFERENCE CERAMIC ALUMINIUM OXIDE TYPES NQN BLEND 38A SILICON CARBIDE TYPES 39C

| NQN BLEND | 38A | NQ BLEND | 32A | SG BLEND | 19A | A

D	19A A	
		QUALIT TIER
0//00		

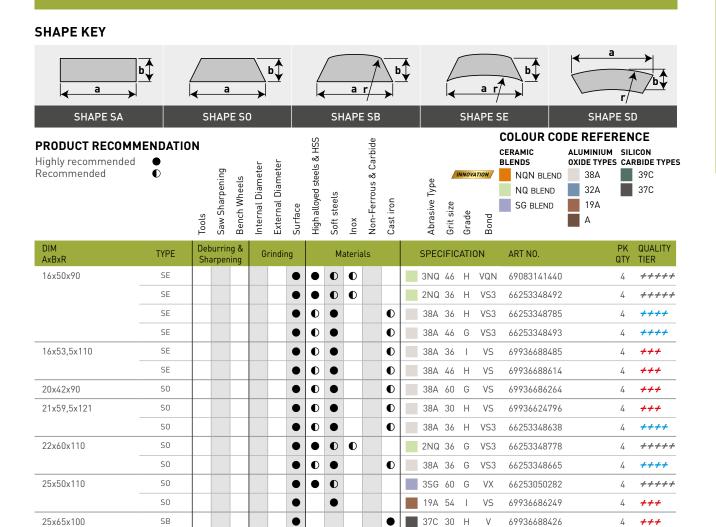
37C

DIM DxTxH (mm)	Deburring & Sharpening		3 1		Grinding		Materials					SPECIFICATION				MOS (m/s)	ART NO.	PK QTY	QUALITY TIER
200x100x160						•	•	•					SGB46	Н	VX	45	69936686693	1	++++
						•	•	•			•		38A 46	G	VS3	45	66253348386	1	++++
254x100x204						•	•	•			•		38A 46	G	VS3	45	66253348387	1	++++

HSS = High Speed Steel

Steel hardened = Over 50Rc





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HSS = High Speed Steel	Steel hardened = Over 50Rc	Steel soft = Up to 50Rc
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SA

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S0

Bonded Abrasives / 251

3SG 36 E12 VXP

3SG 36 E12 VXP

٧S

VS3

VS

VQN

VS3

38A 30

38A 36

38A 30

3NQ 36 H

3SG 36 H

38A 30 H

38A 36 H

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0

69936688295

69936682296

69936682640

66253348783

69936688321

69936686253

69083141453

66253050287

66253348780

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4

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4

25x70x110

25x80x150

38x103x180

NOTES			
HOILS			



BENCH WHEELS

Why choose Norton Starline	25
Bench wheel recommendation guide	25
The Starline Range	25
Hand Dressers	25



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)

+++

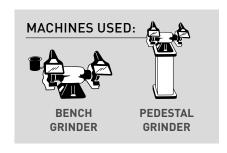
- High quality aluminum oxide withpremium vitrified bond
- Precision engineered grit size and hardness for maximum cut rate, finish and wheel life.



WHITE ALUMINIUM OXIDE (38A)

+++

- White aluminum oxide withpremium 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)

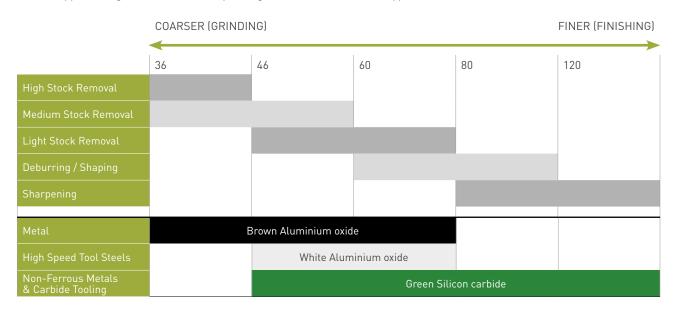
+++

- 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.

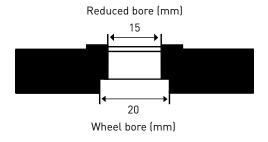


- For wheels diameter 200mm and smaller
- Before using the wheel for the first time, the face of the wheel needs to be 'opened' using a used wheel of a dressing stick
- All bench and pedestal wheels must be dressed to prevent loading. Loading can cause excessive heat, damage to the workpiece, and wheel 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, cuasing grinding breakage and injury. Fixed-based bench and pedestal grinders MUST he secured
- 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.



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.

COLOUR CODE REFERENCE
A
38A

39C

MACHINE TYPE	DIM DxTxH (mm)	ABRASIVE TYPE	GRIT	GRADE	BOND	MOS (m/s)	ART NO.	PK QTY
BENCH /	125x20x32	A	46	N	VS	45	66253195830	1
PEDESTAL WHEELS		A	60	N	VS	45	66253289860	1
		38A	60	N	VS	45	66253338189	1
		39C	80	K	VS	45	66253338040	1
	150x20x31.75	A	46	Ν	VS	45	61463626365	1
		A	60	Ν	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	38A	60	N	VS	45	66253338092	1
		39C	60	K	VS	45	66253338044	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
	200x20x31.75	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	K	VS	45	66253338051	1
		39C	60	К	VS	45	66253338052	1
		39C	80	К	VS	45	66253338053	1
		39C	120	К	VS	45	66253338185	1



MACHINE TYPE	DIM DxTxH (mm)	ABRASIVE TYPE	GRIT	GRADE	BOND	MOS (m/s)	ART NO.	PK QTY
BENCH /	200x25x31.75	39C	60	K	VS	45	61463626370	1
PEDESTAL WHEELS	200x25x32	A	36	0	VS	45	66253338025	1
		A	46	N	VS	45	66253338026	1
		38A	46	N	VS	45	66253338142	1
		38A	60	N	VS	45	66253338065	1
		38A	80	Ν	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	39C	60	K	VS	45	61463626373	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	N	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	N	VS	45	66253338188	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
	300x40x127	A	60	N	VS	45	66253338032	1
	300x40x127	39C	60	K	VS	45	66253338077	1
	300x40x127	39C	80	K	VS	45	66253338078	1
	300x40x31.75	A	36	0	VS	45	66253386235	1
	350x50x127	A	36	0	VS	45	66253338102	1
		38A	46	N	VS	45	66253338072	1
		38A	60	N	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



SPEC 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.

Bonded Abrasives / 257 www.nortonabrasives.com

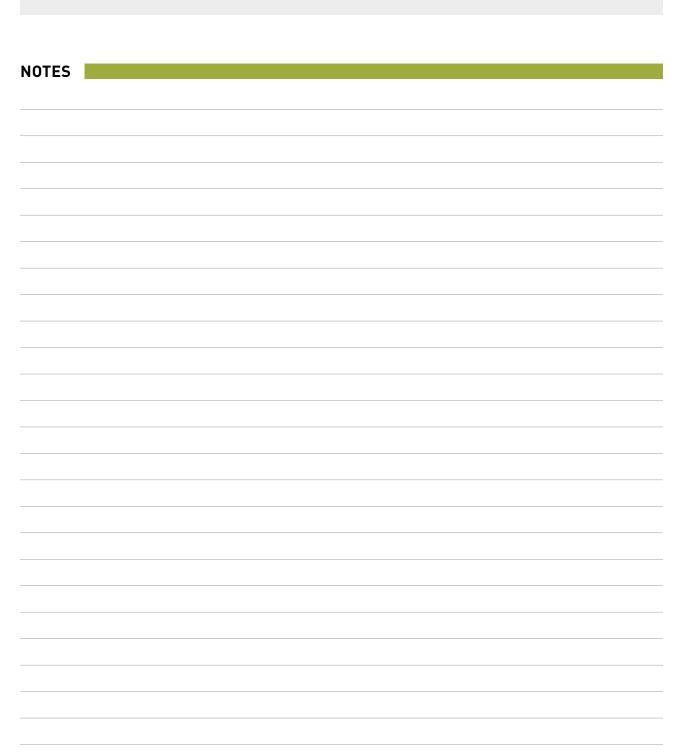
HAND DRESSER ++++



- High diamond concentration
- Grit 18/25 SPC

- High wear resistance and long product life time
- Suitable for face and side dressing





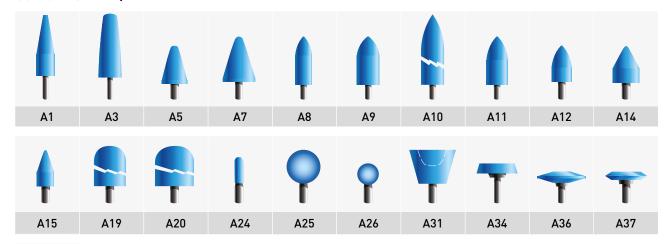


MOUNTED POINTS

Vitrified mounted points Organic mounted points 262

BONDED ABRASIVES MOUNTED POINTS & WHEELS

CONICAL SHAPE / A





CONICAL SHAPE / B





CYLINDRICAL SHAPE / W

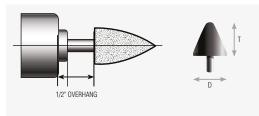
CYLINDRICAL SHAPE / C







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.

Size

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.



The Norton 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 mounted points cut cooler, and provide up to 30% higher metal removal rates.



NQ CERAMIC ++++

Norton Quantum ceramic grain was devoloped from Norton patented Seeded-Gel technology. The revolutionary ceramic grain multiplies the cutting efficiency by controlling breakdown at micrometric level.

- Reduce wasted down time with less product changeover, increasing productivity ratio saving total abrasive cost.
- Higher metal removal rate and a smooth grinding experience thanks to reduced vibrations through the machine.
- 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.







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



SHAPE OGIVE (A)

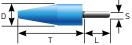
COLOUR CODE REFERENCE

86A

37C 38A

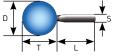
39C

NQ



	T IL									
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	+++
A3	22x70	6x40	5NQ	46	R	VS3	69078664025	14000	10	++++
A3	22x70	6x40	5NQ	60	R	VS3	69078663919	14000	10	+++++
A3	22x70	6x40	38A	36	Т	VM	69936623827	14000	10	+++
A3	22x70	6x40	86A	36	0	VS	66253055021	14000	10	+++
A3	22x70	6x40	38A	60	R	VM	69936643931	14000	10	+++
A3	22x70	6x40	86A	60	0	VS	66253055212	14000	10	+++
A5	20x28	6x40	5NQ	46	R	VS3	69078664027	30000	10	++++
A5	20x28	6x40	5NQ	60	R	VS3	69078663924	30000	10	++++
A5	19x29	6x40	38A	60	R	VM	69936613862	30000	10	+++
A5	20x28	6x40	86A	60	0	VS	66253055094	30000	10	+++
A7	30x50	6x40	5NQ	36	R	VS3	69078664028	13000	10	++++
A7	30x50	6x40	5NQ	60	R	VS3	69078664029	13000	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	5NQ	60	R	VS3	69078663906	18000	10	++++
A11	22x45	6x40	38A	36	T	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	86A	60	0	VS	66253055214	18000	10	+++
A12	20x32	6x40	5NQ	60	R	VS3	69078663913	30000	10	+++++
A12	20x32	6x40	86A	60	0	VS	66253055096	30000	10	+++
A15	6x25	6x40	5NQ	80	R	VS3	69078663914	30000	10	++++
A15	6x25	6x40	86A	90	0	VS	66253055126	30000	10	+++
A25	Ø25	6x40	5NQ	46	R	VS3	69078664031	25000	10	+++++
A25	Ø25	6x40	5NQ	60	R	VS3	69078663917	25000	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	+++
A38	25x25	6x40	86A	60	0	VS	66253054946	25000	10	+++

SHAPE BALL (B)

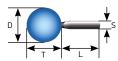


SHAPE	DIM DxT (mm)	SPINDLE SxL (mm)	ABRASIVE TYPE	GRIT SIZE	GRADE	BOND	ART NO.	MOS (RPM)	PK QTY	QUALITY TIER
B46	4x8	6x40	38A	90	S	VM	69936626240	90000	10	+++
B52	10x20	3x40	38A	90	S	VM	69936643938	41000	10	+++
B52	10x20	3x40	86A	90	0	VS	66253055232	41000	10	+++
B52	10x20	3x40	5NQ	60	R	VS3	69078664033	58000	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	+++

^{*}Shape not available in the US ANSI code

BONDED ABRASIVES MOUNTED POINTS & WHEELS

SHAPE BALL (B)

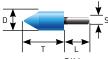






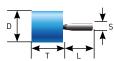
SHAPE	DIM DxT (mm)	SPINDLE SxL (mm)	ABRASIVE TYPE	GRIT SIZE	GRADE	BOND	ART NO.	MOS (RPM)	PK QTY	QUALITY TIER
B97	4x10	3x40	38A	90	Q	VM	69936623856	90000	10	+++
B97	4x10	3x40	86A	90	0	VS	66253055141	90000	10	+++
B97	4x10	3x40	5NQ	90	R	VS3	69078663941	54000	10	++++
B121	Ø13	3x40	38A	90	S	VM	69936623857	58000	10	+++
B122	Ø10	3x40	38A	90	Q	VM	69936623858	58000	10	+++
B122	Ø10	3x40	5NQ	90	R	VS3	69078663926	61000	10	++++
B123	5x5	3x40	38A	90	R	VM	69936630653	73000	10	+++
B123	5x5	3x40	86A	90	0	VS	66253055207	73000	10	+++

SHAPE CYLINDRICAL (C)



SHAPE	DIM DxT (mm)	SPINDLE SxL (mm)	ABRASIVE TYPE	GRIT SIZE	GRADE	BOND	ART NO.	MOS (RPM)	PK QTY	QUALITY TIER
C262	16x32	3x40	38A	90	S	VM	69936634345	25000	10	+++

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	3x40	5NQ	80	R	VS3	66253478592	105000	10	++++
W144	3x6	3x40	5NQ	100	R	VS3	66253478593	105000	10	++++
W144	3x6	6x40	38A	90	S	VM	69936623859	90000	10	+++
W144	3x6	6x40	86A	90	0	VS	66253055147	90000	10	+++
W145	3x10	3x40	5NQ	100	R	VS3	66253478596	105000	10	++++
W149	4x6	3x40	86A	90	Р	VS	66253055150	80000	10	+++
W153	5x10	3x40	5NQ	60	R	VS3	66253477243	80000	10	++++
W153	5x10	6x40	5NQ	60	R	VS3	66253479001	62000	10	++++
W153	5x10	6x40	38A	90	Q	VM	69936623863	73000	10	+++
W153	5x10	6x40	86A	90	0	VS	66253055160	73000	10	+++
W154	5x13	3x40	5NQ	100	R	VS3	66253477249	70500	10	++++
W154	5x13	6x40	38A	90	Q	VM	69936623864	70000	10	+++
W154	5x13	6x40	86A	90	0	VS	66253055162	70000	10	+++
W162	6x10	6x40	5NQ	60	R	VS3	66253479004	62000	10	++++
W162	6x10	3x40	86A	60	Р	VS	66253055166	61000	10	+++
W162	6x10	M4M	38A	90	S	VM	69936637877	61000	10	+++
W163	6x13	6x40	86A	60	0	VS	66253055210	54000	10	+++
W163	6x13	6x40	86A	90	0	VS	66253055167	54000	10	+++
W164	6x20	6x40	38A	90	S	VM	69936623869	41000	10	+++
W169	8x10	3x40	5NQ	80	R	VS3	66253478607	61500	10	++++
W169	8x10	6x40	86A	60	0	VS	66253055398	61000	10	+++
W170	8x13	3x40	86A	60	0	VS	66253055248	54000	10	+++
W171	8x20	6x40	5NQ	60	R	VS3	66253477399	57500	10	+++++
W171	8x20	3x40	86A	60	0	VS	66253055171	41000	10	+++
W171	8x20	6x40	38A	90	S	VM	69936630875	41000	10	+++



39C

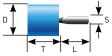
NQ

CYLINDRICAL (W)

COLOUR CODE REFERENCE

37C 38A

86A



A			_₩
D			— S
_	← →	←→	T

SHAPE	DIM DxT (mm)	SPINDLE SxL (mm)	ABRASIVE TYPE	GRIT SIZE	GRADE	BOND	ART NO.	MOS (RPM)	PK QTY	QUALITY TIER
W175	10x10	3x40	5NQ	60	R	VS3	66253477402	54000	10	+++++
W175	10x10	3x40	5NQ	80	R	VS3	66253478609	54000	10	+++++
W175	10x10	3x40	86A	90	0	VS	66253055173	61000	10	+++
W176	10x13	6x40	38A	60	R	VM	69936623872	54000	10	+++
W176	10x13	6x40	86A	60	Р	VS	66253055315	54000	10	+++
W176	10x13	6x40	38A	90	R	VM	69936623873	54000	10	+++
W176	10x13	6x40	38A	90	S	VM	69936637874	54000	10	+++
W177	10x20	6x40	5NQ	46	R	VS3	66253477415	46500	10	++++
W177	10x20	6x40	5NQ	80	R	VS3	66253478612	46500	10	+++++
W177	10x20	3x40	86A	60	Q	VBEM	66253055092	41000	10	+++
W177	10x20	6x40	38A	90	S	VM	69936626743	41000	10	+++
W179	10x32	3x40	86A	60	0	VS	66253055223	25000	10	+++
W179	10x32	6x40	38A	60	R	VM	69936637875	25000	10	+++
W17-*	13x3	3x40	5NQ	100	R	VS3	66253480329	28000	10	+++++
W***	13x40	3x40	38A	46	S	VM	66243451690	20000	10	+++
W***	13x40	3x40	86A	90	Р	VS	66253055131	20000	10	+++
W195	16x20	3x40	86A	60	0	VS	66253055091	47000	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	5NQ	36	R	VS3	66253478269	20000	10	++++
W197	16x50	6x40	38A	46	S	VM	69936631541	18000	10	+++
W204	20x20	6x40	38A	60	R	VM	69936623841	42000	10	+++
W204	20x20	6x40	86A	60	0	VS	66253055134	42000	10	+++
W205	20x25	6x40	5NQ	46	R	VS3	66253478279	25000	10	++++
W205	20x25	6x40	5NQ	60	R	VS3	66253478280	25000	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	+++
W206	20x30	6x40	86A	60	0	VS	66253055013	30000	10	+++
W207	20x40	6x40	5NQ	36	R	VS3	66253478404	20000	10	++++
W218	25x13	6x40	5NQ	36	R	VS3	66253478412	30000	10	+++++
W220	25x25	6x40	5NQ	36	R	VS3	66253478419	30000	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	+++
W221	25x40	6x40	86A	36	0	VS	66253055016	19000	10	+++
W230	32x32	6x40	5NQ	36	R	VS3	66253478626	15000	10	+++++
W230	32x32	6x40	5NQ	46	R	VS3	66253478443	15000	10	++++
W230	30x30	6x40	86A	36	0	VS	66253055221	17000	10	+++
W230	30x30	6x40	38A	36	Т	VM	69936635225	17000	10	+++
W230	30x30	6x40	38A	60	R	VM	69936623849	17000	10	+++
W230	30x30	6x40	86A	60	0	VS	66253055138	17000	10	+++
W232	30x50	6x40	86A	60	0	VS	66253055300	11000	10	+++
W236	40x12	6x40	86A	60	0	VS	66253055304	25000	10	+++
W238	40x40	6x40	86A	36	Р	VS	66253055019	12000	10	+++

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BONDED ABRASIVES MOUNTED POINTS & WHEELS

NORTON MOUNTED POINTS DISPLAY

- Ideal for showcasing mounted points with 3mm and 6mm shaft
- Dimensions: 315 (w) x 245 (d) x 240 (h) mm
- Lock option for added security

KIT CONTENTS	ART NO.
Norton Mounted Points Display	00410140348







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 aluminum 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.

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BONDED ABRASIVES MOUNTED POINTS & WHEELS

GRAIN COLOUR CODE

NZ



SHAPE	DIM DxT (mm)	SPINDLE DxT (mm)	ABRASIVE TYPE	GRIT SIZE	GRADE	BOND	ART NO.	MOS (RPM)	PK QTY	QUALITY TIER
A1	20x65	6x40	NZ	24	U	BXR1	61463689077	15000	10	++++
A3	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	А	36	Q	В	66253053225	30370	20	+++
W188	13x40	6x40	NZ	24	U	BXR1	61463689090	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	А	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	++++





DRESSING STICKS & SHARPENING STONES

Dressing sticks	27
Bench & combination oil stones	27
Abrasive & precision files	27
Abrasive slips and specialties	27



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, reducedmaintenance 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 STI	CKS FOR BONDED AB	RASIVE 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 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.



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 STO	DNES			
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	ES			
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





PRODUCT SELECTION

finish on precision machine parts, and in tool and die making.

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



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	IES				
SCYTHE STONE	240x35x13	TJ4	Scythe Stone	10	69936693133
-	254x32x19	JT930	Scythe Stone	5	61463687675
RUBBER STICK	200x10x20	-	A240FR96	5	69936625667



BONDED ABRASIVES ABRASIVE SLIPS & SPECIALTIES

CRYSTOLON

- Premium silicon carbide abrasive
- Fast cutting stone; ideal for general sharpening of cutting tools

ПΙΜ

• Fast stock removal for quick edge shaping with minimal

SHAPE	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

28

BONDED ABRASIVES ORGANIC WHEELS & 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





Back Thickness

Steels Non-Ferrous metals

Castiron

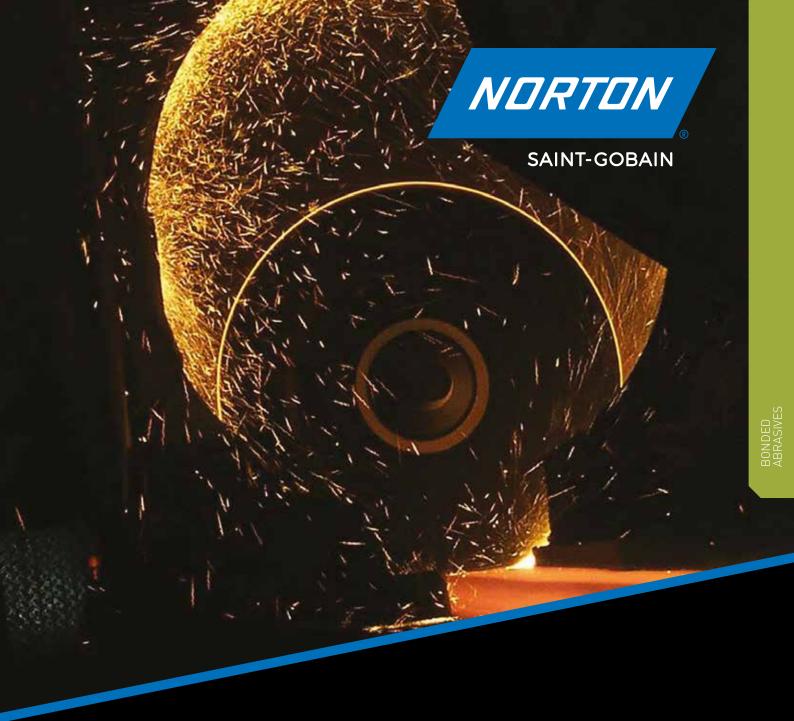
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	WHEELS														
SHAPE	DIM DxTxH (mm)	W	Е	M	lateria	als	SPEC	IFICA	TION			MOS (m/s)	PK QTY	ART NO.	QUALITY TIER
01	50x13x10			•		•	А	24	Т	-	B28	50	10	66253057649	+++
01	100x20x20	-	-	0		•	Α	24	R	-	B28	50	10	66253057660	+++
01	150x25x20	-	-	•		•	Α	24	Q	5	В3	50	5	69210432717	+++
01	150x32x20	-	-	•		•	А	24	Q	5	В3	50	5	69210433145	+++
01	200x20x32	-	-	•		•	А	24	Q	5	В3	50	5	69210431516	+++
01	300x30x32	-	-	•		•	А	24	Q	5	В3	50	1	69210433807	+++
01	400x50x127	-	-	•		•	А	24	Q	5	В3	50	1	69210431446	+++
01	500x50x127	-	-	•		•	Α	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	-	-	•		•	ZF7A	16	R	5	В3	50	1	66253057671	++++
01	508x60x127	-	-	•		•	ZF7A	20	Q	-	В3	50	1	66253057673	++++
01	600x60x203			•		•	ZF7A	16	Q	-	B38	63	1	66243570264	++++
01	760x80x304,8			•		•	ZF7A	14	R	-	B38	50	1	66253057675	++++
	CUPS														
SHAPE	DIM DxTxH (mm)	W	Е	М	lateria	als	SPEC	IFICA	ΓΙΟΝ			MOS (m/s)	PK QTY	ART NO.	QUALITY TIER
11	125x50x5/8"	25	19	•		•	А		Р	5	B5	50	1	66253065737	+++
11	125x50x5/8"	25	19		•		39C	16	Р	5	В5	50	4	69083141415	++++
11	125x50xM14	25	20		•		37C	16	Ν	5	В5	50	1	69210432282	+++
11	150x50xM14	40	20		•		37C	16	Ν	5	В5	50	1	69210432287	+++
				_	_										

Bonded Abrasives / 281 www.nortonabrasives.com

NOTES			
HOILS			



STRAIGHT CUT-OFF WHEELS

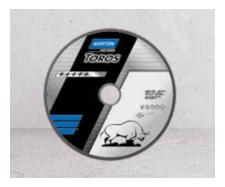
Non-Reinforced wheels

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, aluminum, 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

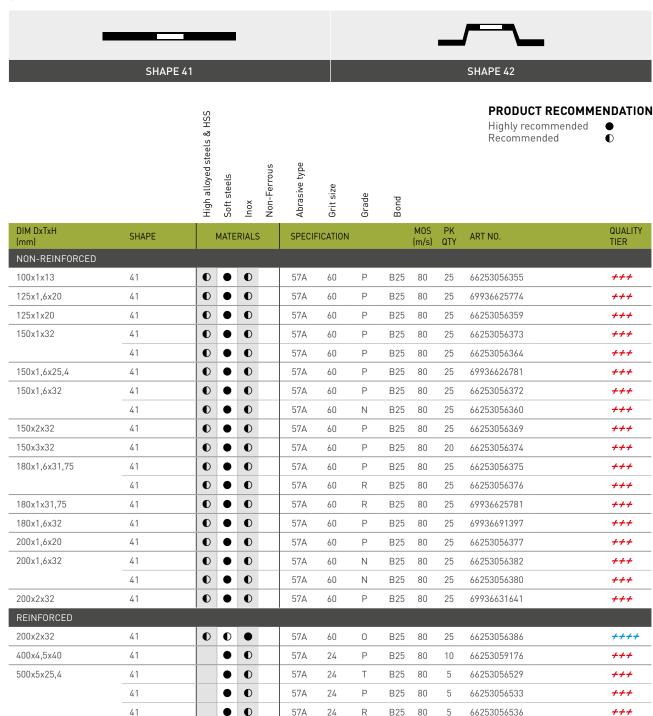
57A

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

BONDED ABRASIVES STRAIGHT NON-REINFORCED & REINFORCED CUT-OFF WHEELS

SHAPE KEY



57A

57A

20

24

R

Ρ

B25 80

B25 100

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500x6x76,2

42

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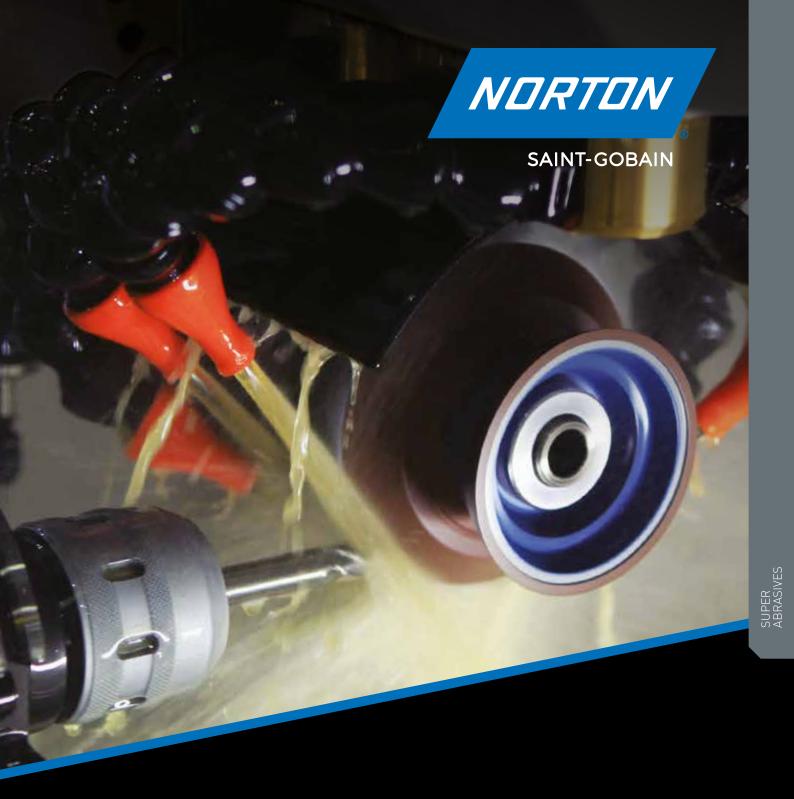
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SUPER ABRASIVES

Introduction	288	Diamond lapping compounds	310
DIAMOND & CBN GRINDING WHEELS for Machining round tools	289-314 292	Diamond files Diamond Dressers	311 312
for Round tool universal grinding for Sharpening saw blades	295 297		
for Sharpening HSS saw blades for General engineering	301 302		

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 & 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, & 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 & superior form holding in dry tool room and 1A1R cut-off operations in grinding glass & 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

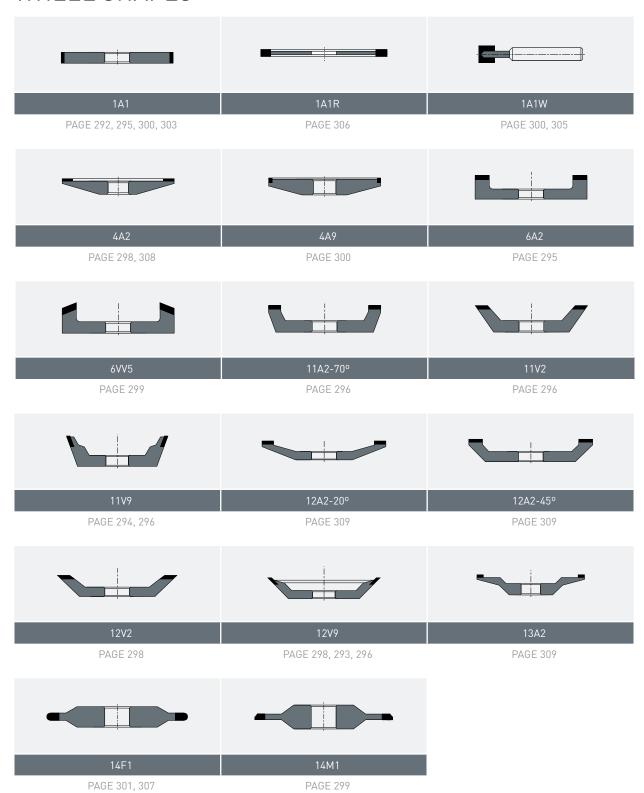
- Made with durable CBN abrasive which cuts easily through hard to grind steels, HRC50 and harder, resisting wear
- Engineered B-99 resin bond for free cutting capability and superior form holding
- Aztec IV bond for larger cutting depth
- Used for dry tool resharpening when heavy stock removal is required

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 comprehensives 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 e 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



CB107 W B99

DxTxX

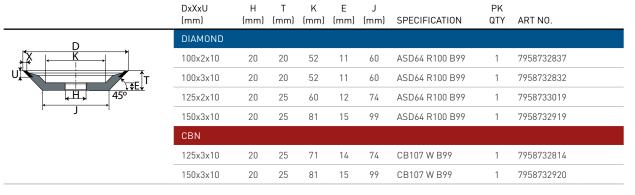
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12V9 GASHING



ADDITIONAL INFORMATION
Stiffened body

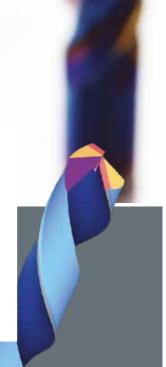




DIAMOND & CBN WHEELSFOR MACHINING ROUND TOOLS

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
X K
V,70° T
* \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\

J

DxXxU (mm)	H (mm)	T (mm)	K (mm)	E (mm)	J (mm)	SPECIFICATION	PK QTY	ART NO.
DIAMOND								
100x2x10	20	35	59	15	74	ASD64 R100 B99	1	7958732876
100x3x10	20	35	53	15	74	ASD64 R100 B99	1	7958732877
CBN								
100x3x10	20	35	53	15	74	CB107 W B99	1	7958732844

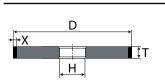
ADDITIONAL INFORMATION Stiffened body



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.

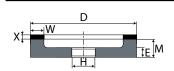
The lower the diamond or CBN concentration the more suited the product will be to grinding large contact areas. Aztec IV is a special free cutting resin bond which is designed for dry grinding operations and enables high material removal.

1A1 RE-SHARPENING



DxTxX (mm)	H (mm)	SPECIFICATION	PK 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

6A2 RE-SHARPENING



DxWxX (mm)	H (mm)	M (mm)	E (mm)	SPECIFICATION	PK QTY	ART NO.
DIAMOND						
100x6x4	20	23	10	ASD151 R75 B99	1	7958732881
100x12x2	20	18	10	ASD107 R50 B99	1	7958732879
125x6x5	20	25	10	ASD64 R75 B99	1	7958732922
150x10x2	20	23	10	ASD91 R50 B99	1	7958732932
150x15x2	32	23	10	ASD107 R50 B99	1	7958732933
150x20x2	20	20	10	ASD126 R75 B99	1	7958732934
CBN						
150x6x4	20	23	10	CB151 T B99	1	7958732936
150x6x4	32	23	10	CB151 T B99	1	7958732935

DIAMOND & CNC WHEELS FOR ROUND TOOL UNIVERSAL GRINDING

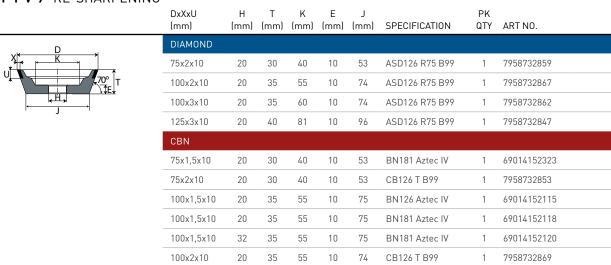
11A2-70° RE-SHARPENING

	DxWxX (mm)	H (mm)	M (mm)	K (mm)	E (mm)	J (mm)	SPECIFICATION	PK QTY	ART NO.
D	DIAMOND								
X X	100x5x4	20	20	75	10	88	ASD151 R75 B99	1	60157682163
70° M	CBN								
← 	100x5x4	20	20	75	10	88	CB126 T B99	1	60157682165

11V2 RE-SHARPENING

	DxWxX (mm)	H (mm)	M (mm)		E (mm)	J (mm)	SPECIFICATION	PK QTY	ART NO.
W D	DIAMOND								
XI	100x5x3	20	22	72	8	82	ASD91 R75 B99	1	7958733007
<u> </u>	100x5x3	20	22	72	8	82	ASD126 R75 B99	1	7958733011

11V9 RE-SHARPENING



12V9 RE-SHARPENING

	DxXxU (mm)	H (mm)	T (mm)	K (mm)	E (mm)	J (mm)	SPECIFICATION	PK QTY	ART NO.
D	DIAMOND								
X K	75x2x10	20	25	34	10	39	ASD64 R75 B99	1	7958732816
U	100x3x10	20	20	65	10	59	ASD46 R75 B99	1	7958732885

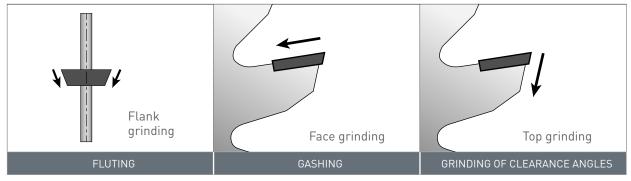


SAW BLADES

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	I	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	1	Universal resin bond for wet and dry grinding

BOND OVERVIEW CBN

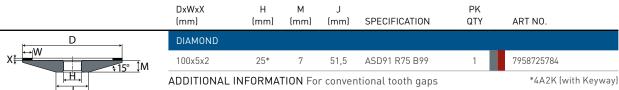
BOND	WEAR RESISTANCE	RECOMMENDATION FOR USE
ECO Curve		Profiling and re-sharpening of HSS saw blades



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

	DxWxX (mm)	H (mm)	M (mm)	(°)	E (mm)	SPECIFICATION	QTY	ART NO.
D	DIAMOND							
V W	125x4x2	32	11	30°	9	ASD46 R125 B99	1	60157682189
\tag{}M	125x4x2	32	11	30°	9	ASD76 R125 B99	1	60157682188
, ,	200x4x2	32	13	30°	11	ASD46 R125 B99	1	7958725781
	200x4x2	32	13	30°	11	ASD76 R125 B99	1	7958725780

ADDITIONAL INFORMATION For conventional tooth gaps

12V9 FACE GRINDING

	DxXxU (mm)	H (mm)	T (mm)	K (mm)	E (mm)	J (mm)	SPECIFICATION	PK QTY	ART NO.
D D	DIAMOND								
U TAE T	125x2,3x4	32	13	101	10	70	D46 ECO Face	1	69014148184
	150x2,3x4	32	13	126	10	95	D46 ECO Face	1	7958719191
	200x2,3x4	32	13	173	10	145	D46 ECO Face	1	69014148205

ADDITIONAL INFORMATION For conventional tooth gaps



6VV5 TOP GRINDING

	DxWxX (mm)	V (°)	H (mm)	T (mm)	E (mm)	SPECIFICATION	ADDITIONAL INFROMATION	PK QTY	ART NO.
	DIAMOND								
V°\ \	125x5x10	80	32	22	11	ASD126/46 R100/ R75 ECO TOP-P	For production, oil	1	7958725661
X	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° J J J J J J J J J J J J J J J J J J J	200x5x8	80	32	10	156	ASD126/46 R100/ R75 ECO TOP-AW	1	7958725786	
1 1/A H	ADDITIONAL INFORMATION D126/D46: U=2,5/2,5								

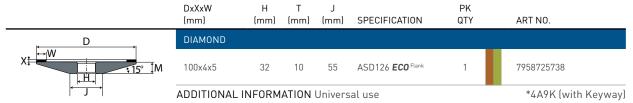


FOR SHARPENING OF TUNGSTEN CARBIDE TIPPED SAW BLADES

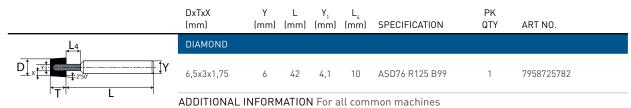
During the flank grinding process the cutting width of the circular saw blade is defined. Therefore, typically two 4A9 grinding wheels are simultaneously fed from both sides.

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



1A1W HOLLOW TOOTH GRINDING



COLOUR CODES FOR MACHINE MANUFACTURERS

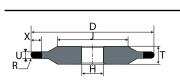


FOR SHARPENING HSS SAW BLADES

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

(mm)	(mm)	(mm)	(mm)	(mm)	SPECIFICATION	QTY	ART NO.
CBN							
200x1,3x6,5	0,65	32	8	169	CB107 ECO Curve	1	7958706686
200x1,6x7	0,8	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		For universal grinding (wet or dry)						
R75 B49		For universal grinding (dry)						
R50 B49		For universal grinding (dry)						



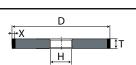
DIAMOND & CBN WHEELSFOR GENERAL ENGINEERING

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	76,2	ASD126 R75 B99	1	7958732804
300x10x3	127	ASD126 R75 B99	1	7958732824
300x15x3	127	ASD126 R75 B99	1	7958732810
300x20x3	127	AMD126 R50 B99	1	7958732812
400x15x3	127	ASD126 R50 B99	1	7958788923*
CBN				
200x10x3	51	CB126 T B99	1	7958732803
200x15x3	32	CB126 Q B99	1	7958732838
300x15x3	127	CB126 T B99	1	7958732808
300x20x3	127	CB126 Q B99	1	7958732815
350x20x3	127	CB126 Q B99	1	7958788928*
350x30x3	127	CB126 Q B99	1	7958788929*
400x20x3	127	CB126 Q B99	1	7958788932*

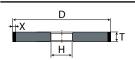


DIAMOND & CBN WHEELSFOR GENERAL ENGINEERING

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 chose 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.

DyTyX

1A1 ID GRINDING

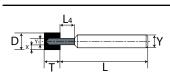


(mm)	(mm)	SPECIFICATION	QTY	ART NO.
DIAMOND				
15x12x2	6	ASD126 R100 B99	1	7958732728
20x10x2	6	ASD126 R100 B99	1	7958732950
30x10x3	10	ASD126 R75 B99	1	7958732956
40x15x3	10	ASD126 R75 B99	1	7958732971
CBN				
12x10x2	6	CB126 W B99	1	7958732722
15x12x2	6	CB126 W B99	1	7958732729
20x10x2	6	CB126 W B99	1	7958732948
20x15x2	6	CB126 W B99	1	7958732957
30x15x3	10	CB126 W B99	1	7958732937
40x15x3	10	CB126 W B99	1	7958732961
50x15x3	20	CB126 W B99	1	7958732981

ΡK



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	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

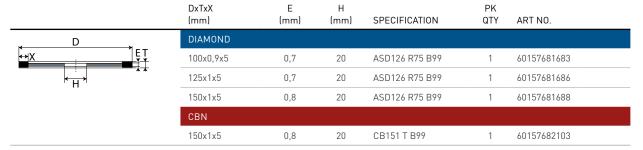
^{**} Available while stocks last



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

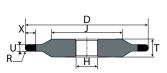




The 14F1 grinding wheels are designed for use on Weinig machines for grinding

14F1 PROFILE GRINDING

profile knives for the wood industry.



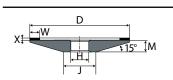
ADDITIONAL INFORMATION For Weinig machines

DxUxX (mm)			T (mm)	•	SPECIFICATION	PK QTY	ART NO.
CBN							
200x2x7	1	60	10	129	CB126 T B99	1	7958732990
200x4x7	2	60	10	134	CB151 W B99	1	7958732988



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						
125x5x2	20	7	84	ASD126 R75 B99	1	7958732870
125x5x2	32	7	84	ASD91 R75 B99	1	7958732866
150x5x2	20	9	94	ASD126 R75 B99	1	7958732864
150x5x2	32	9	94	ASD91 R75 B99	1	7958732855
CBN						
100x5x2	20	6	66	CB126 T B99	1	7958732884
150x5x4	20	9	94	CB107 T B99	1	7958732852



12A2-20° FACE GRINDING

	DxWxX (mm)	H (mm)	M (mm)	K (mm)	E (mm)	J (mm)	SPECIFICATION	PK QTY	ART NO.
D ,	DIAMOND								
W K	125x6x4	32	14	54	8	54	ASD91 R75 B99	1	60157682172
H 20°	150x5x2	20	16	68	9	68	ASD64 R50 B99	1	69014151397
∠ 	150x5x2	32	16	68	9	68	ASD126 R75 B99	1	69014151963
	CBN								
	150x5x4	20	16	68	9	68	CB126 Q B99	1	69014151412

13A2 FACE GRINDING

	DxWxX (mm)	H (mm)	M (mm)	K (mm)	E (mm)		SPECIFICATION	PK QTY	ART NO.
D D	DIAMOND								
XX TE M	125x5x4	20	19	50	9	73	ASD126 R75 B99	1	7958732991**

^{**} Available while stocks last

12A2-45° TOP GRIN	DING DxWxX (mm)	H (mm)	M (mm)	K (mm)	E (mm)	J (mm)	SPECIFICATION	PK QTY	ART NO.
	DIAMOND								
W K	100x5x2	20	23	54	10	56	ASD107 R50 B99	1	7958732999
± ± M ↓ H → 45°	100x6x3	20	20	64	10	62	ASD76 R75 B99	1	7958732968
$\downarrow \qquad \downarrow \qquad$	100x6x3	20	20	64	10	62	ASD126 R75 B99	1	7958732966
	125x6x3	32	23	83	10	81	ASD126 R75 B99	1	7958732969
	CBN								
	125x6x2	20	23	83	10	81	CB126 T B99	1	7958732970

Super Abrasives / 309 www.nortonabrasives.com



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	



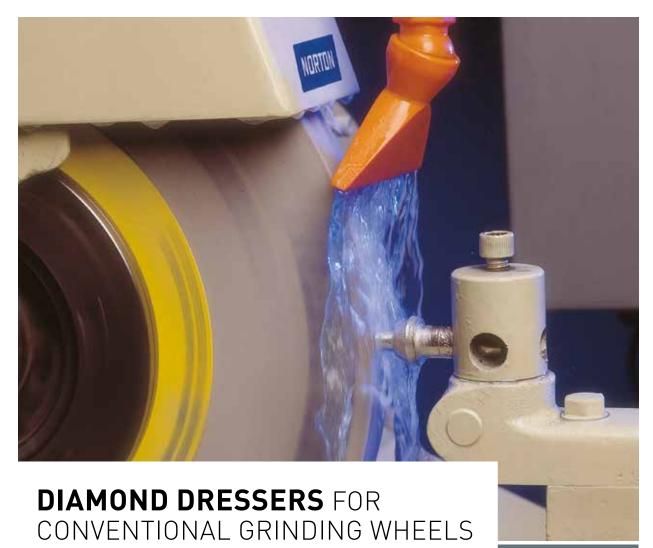


FILES

• Free cutting and very high wear resistant, requiring only low contact pressure

SHAPE	BASE BODY CROSSSECTION	LENGTH OF DIAMOND LAYER	TOTAL LENGTH	SHAFT Ø	GRIT SIZE	PK QTY	ART NO.
	5×1	70	140	3	D91	1	66260134227
	5×1	70	140	3	D126	1	66260134228
\triangle	3.5	70	140	3	D126	1	66260134231
	5x2	70	140	3	D91	1	66260110230
	5x2	70	140	3	D126	1	66260134235
\bigcirc	Ø 3	70	140	3	D126	1	66260134237

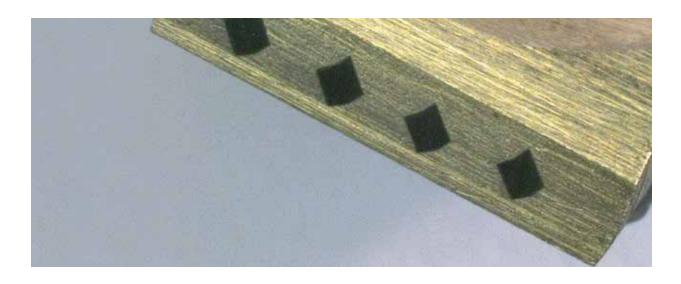




Norton-Winter stationary diamond dressing tools have a worldwide reputation for quality and technology. Ideal for profiling and straight dressing of all conventional grinding wheels.

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

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	in the second	The constant cross section given by synthetic diamonds, guarantees a constant dressing behaviour through the complete life of the dressing tool.
Dressing of profiles with blade tools		Profile grinding operation using blade tools are done either using natural diamonds or synthetic diamons in needle form, such form allows better rentention of the diamonds to the bond avoiding shortage on lifetime of the blades.

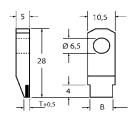
BLADE TOOL DRESSERS +++++

• Synthetic multi-crystaline diamond

 The most consistent dresser for demanding profiling and straight dressing

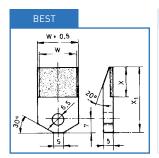
	UPC	DESCR.	BEST	BETTER	GOOD
Coarse (T=1,1mm)	66260336093	3584-0C/4	4 CVD logs		_
	66260337292	3584-0C/3		3 CVD logs	
	66260337491	3584-0C/2			2 CVD logs
	66260195223	3564-0C/4	4 CVD logs		
Fine (T=0.8mm)	66260337624	3564-0C/3		3 CVD logs	
(1 0,011111)	66260337490	3564-OC/2	-		2 CVD logs

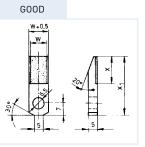




BLADE TOOL DRESSERS

- An economical dressing solution for all Alox and SiC wheels
- Natural diamond
- Needles are recommended for profile dressing







	UPC	DESCR.	BEST	GOOD
Profile Grinding	69014185756	TFC180-20-10-28*N1100 T645 E	20x28mm	
(Needle)	69014185757	TFD180-10-12-28*N1000 T645 E		10x28mm
Coarse	69014185716	TFCS140-20-10-28*D1181 T645 E	20x28mm	
	69014185737	TFDS140-10-12-28*D1181 T645 E		10x28mm
Medium	69014185718	TFCS115-20-10-28*D1001 T645 E	20x28mm	
Medium	69014185736	TFDS115-10-12-28*D1001 T645 E		10x28mm
Fine	69014185732	TFCS90-20-10-28*D711 T645 E	20x28mm	
rine	69014185735	TFDS90-10-12-28*D711 T645 E		10x28mm

SCREWED SHANKS FOR BLADE TOOL DRESSERS +++++



DIA (mm)	L (mm)	SHANK CODE	SPECIFICATION	PK QTY	ART NO.
12,065	40	MT1	HPB-H3	1	60157682832
9,045	25,5	MT0	HPB-H4	1	60157682907
11,11	50	Z11,11	HPB-H2	1	60157682910
10,00	50	Z10	HPB-HX	1	60157682911





SINGLE-POINT DRESSER

+++++

- 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

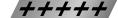


- Standard diamonds
- Ideal for applications where it is difficult to measure the performance of the dressing
- Economy product
- Suitable for dressing conventional abrasive wheels



		BEST			GOOD			
SHANK	SKETCH	UPC	DESCR.	CARAT	UPC	DESCR.	CARAT	
Cyl. 8mm		66260161755	BCSG10-8	1,0 ct	66260211029	SP05-C8x50-AA	0,5 ct	
Cyl. 10mm		66260161766	BCSG10-10	1,0 ct	66260211033	SP05-C10x50-AA	0,5 ct	
Cyl 11,11	7	66260157010	BCSG10-M7	1,0 ct	66260195005	BC5-7	0,5 ct	
Cyl 12mm		66260161777	BCSG10-12	1,0 ct	66260161774	BC5-12	0,5 ct	
MK0	MK0 % Sw8	69014119600	SP15-MK0	1,5 ct	69014119599	SP10-MK0	1,0 ct	
MK1	MK1 80 5 W11		SP15-MK1	1,5 ct	69014119594	SP10-MK1	1,0 ct	

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
	0,50	40°	DC 40/500	60157682901
	0,25	60°	DC 60/250	60157682905



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MULTI-POINT DRESSER +++++

- Economical and robust too
- Ideal for straight dressing at high speed with low technical demands



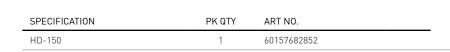
			COARSE		FINE			
SHANK		UPC	DESCR.	CARAT	UPC	DESCR.	CARAT	
Cyl. 8mm	30	66260329350	HIG5-11-11-Z8-40* D1001 H710	* 5,0 ct	66260386425	HPR058-5-8-Z8-20* D426 H710	1,0 ct	
Cyl. 10mm			HIG5-11-11-45- Z10/K-30 *D711 H710	5,0 ct	66260196236	HPR088-8-0- 8-Z10-50* D426 H710	2,4 ct	
Cyl 11,11		69014172027	HIG5-11-11-Z11-30 *D711 H710	5,0 ct	66260154289	HPR048-4-8- 40-Z11,11-30 * D76 H770	0,6 ct	
MK0	MK1 8	66260389441	HIG3,5-8-0-11- MK0-25,5 *D711 H710	3,5 ct	66260385998	HPR088-8-0-8- MK0-25,5* D426 H710	2,4 ct	
MK1		66260195959	HIG5-11-11- MK1-40 *D1001 H710	5,0 ct	66260196240	HPR088-8-8- MK1-40* D426 H770	2,4 ct	

HAND DRESSER +++++



- High diamond concentration
- Grit 18/25 SPC

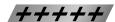
- High wear resistance and long product life time
- Suitable for face and side dressing







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



WHEELS FOR BRAKE CONTROLLED TRUING DEVICE #++++



DIA	T	В		PK	
(mm)	(mm)	(mm)	SPECIFICATION	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
13x25x150	38A 150 HVBE	10	61463605565	For SA wheels ≥D54
	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

DESIGN	AIION	01 01	(11)	ZLJ				
FEPA	US	IIC	DWMI	DIAMOND	CDN		RA (mm) SURFACE FIN	ISH
MICRONS	MESH	JIS	DWMI	DIAMOND	CBN	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						



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.

CONCE	ION*	NUMBER OF		ABRASIVE WEIGHT		
DIAMOND ABRASIVE		CBN ABRASIVE*	CARATS/cm ³		PER 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:

HIG	GH CONCENTRATION		MEDIUM OR LOW CONCE	NTRATION	
R	oughing operations		Finishing operati	on	
	Powerful machine		Low power mach	ine	
!	Small contact area		Large contact area		
Retention of	profile or sharp edges of who	eel	Cutting without temperature rise		
OPERATION	INTERNAL GRINDING	EXTERNAL GRINDING	SURFACE GRINDING	SHARPENING	
Diamond	100	75	50	50/75	
CBN	W	T	Q	Q/T	

NOTES			
NOILS			



DIAMOND TOOLS

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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.





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.





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.



CLASSIC

Norton Clipper Classic is a range of standard diamond tools for low frequency use, providing a good quality to performance ratio.



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	25,4	15/3,2	1	70184628999
₩.	350	25,4	15/3,2	1	70184628997
*	450	25,4	15/3,2	1	70184631020
♦	500	25,4	15/3,2	1	70184630416



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DIAMOND BLADES FOR CONCRETE & REINFORCED CONCRETE

PRO BETON SOFT II

- 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	70184631807
% %	300	25.4	12/2.8	70184631808
%	350	20	12/2.8	70184631809
% 1b	350	25.4	12/2.8	70184631590
%	400	20	12/3.2	70184631810
% %	400	25.4	12/3.2	70184631591
★	450	25.4	12/3.2	70184631602
★	500	25.4	12/3.8	70184632393
₩	600	25.4	12/4.4	70184632394





Cured concrete, kerbs, concrete pipes, bricks, block paving, flagstones and paving stones, washed gravel concrete slabs, natural stone, sandstone, limestone, flint.

PRODUCT SELECTION GUIDE

Highly Recommended 🗸 🗸 Recommended 🗸							
MATERIALS	EXTREME UNIVERSAL SILENCIO	PRO UNIVERSAL SILENCIO	PRO UNIVERSAL TP	PRO UNIVERSAL LASER	CLASSIC UNIVERSAL TURBO	CLASSIC UNIVERSAL LASER	X-LOCK UNIVERSAL LASER
	INNOVATION	++++	++++	++++	+++	+++	+++
Steel							
Granite	//						
Engineering bricks	11	✓		✓			/
Cured concrete	11	//		//	✓	//	
Clay/pipes/paviors	//						//
Marble	✓						
Hard paviors	11	//		//	✓	//	
Clay roof tiles	✓	✓		✓	✓	✓	1
Terrazo							
Facing bricks	11	//		//	✓	✓	//
Reinforced concrete	11	//		//	✓	//	
Concrete paving slabs	11	//		//	✓	//	//
Concrete pipes/kerbs	11	11		//	✓	//	//
Slate							
Limestone concrete	11	//		//	✓	✓	
Medium block paviors	11	//		//	✓	//	11
Concrete roof tiles	1	//		//	✓	//	1
Sandstone	11						
Asphalt over concrete							
Breeze blocks		//		//			
Tarmac top blocks							
Mortar jointing			//				

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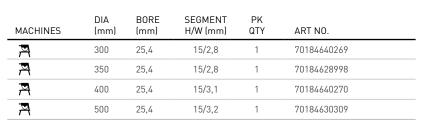
- A noise dampening layer is sandwiched between two sheets of steel which absorbs the cutting vibrations and sound of the product
- Patented 'off-set gullets' prevent whistling air flow around the diamond blade

when in use

 Each blade is fine-tuned to provide the best possible noise reduction and cutting performance on a particular machine application













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
Ħ	350	25,4	12/3,1	1	70184602811

PRO UNIVERSAL LASER



- Fast cutting
- Use 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
-	125	22,23	12/2,3	1	70184607684
-	150	22,23	12/2,2	1	70184607685
+	180	22,23	12/2,5	1	70184607686
A	180	30	12/2,5	1	70184607687
-	230	22,23	12/3,0	1	70184603038
	300	20	12/3,1	1	70184607689
C)L	300	25,4	12/3,1	1	70184607690
C)L	350	20	12/3,2	1	70184607691
C)L	350	25,4	12/3,2	1	70184607692
% A	350	25,4	10/2,8	1	70184611209
A	400	25,4	10/2,5	1	70184610679
%	400	25,4	10/3,2	1	70184625951
7	450	25,4	10/3,2	1	70184625952
A	500	25,4	10/3,2	1	70184625953



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DIAMOND BLADES FOR UNIVERSAL BUILDING MATERIALS

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
<u>+</u>	115	22,23	6,5/6,5	1	70184610305
<u>+</u>	125	22,23	6,5/4,5	1	70184610713
<u> </u>	125	22,23	6,5/6,5	1	70184610307
_	125	22,23	6,5/8,0	1	70184610716



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	
<u>ــــــــــــــــــــــــــــــــــــ</u>	230	22 23	10/2 6	1	7018/424818	







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
<u>+</u>	125	22,23	7/2,2	1	70184626835
-	180	22,23	7/2,5	1	70184626837
<u> </u>	230	22,23	10/2,5	1	70184626838



CLASSIC UNIVERSAL



• An economical solution

Use dry or wet

Sintered blade





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
-	180	22,23	10/2,2	1	70184626809
-	230	22,23	10/2,4	1	70184626810



UNIVERSAL X-LOCK LASER



- Featuring the innovative X-LOCK system for fast disc changeover and secure mounting. Just click it and carry on
- X-LOCK tools are also compatible for use on conventional angle grinders with spindle mount











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Multi-purpose blades for cutting concrete, reinforced concrete, roof tiles, paviours, blocks, granite, natural stone, asphalt, breeze blocks, sandstone and gridstone.

Highly Recommended ● Recommended ●







MATERIALS	INVINCIBLE	PRO 4x4 EXPLORER	PRO UNIVERSAL DUCTILE
	INNOVATION	++++	++++
Steel	✓	✓	✓
Granite	//	//	
Engineering bricks	/ /		
Cured concrete	//	//	
Clay / pipes / paviors	//	//	
Quarry tiles	//	//	
Marble	/ /	✓	
Hard paviors	/ /	✓	
Clay roof tiles	//		
Terrazo		//	
Facing bricks	//	✓	
Reinforced concrete	//	//	✓
Concrete paving slabs	//	//	✓
Concrete pipes / kerbs	//	//	✓
Slate	//	//	
Plastic tube & pipes			//
Composite and fibre tubes			//
Ductile iron			//
Metal Sheet and steel bar / rebar			//
Angle Iron			✓

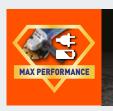


INVINCIBLE #HD

- 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 W	ITH A CAR	DBOARD DISPLA	λ Υ:	
_	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.





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additional benefits of this manufacturing process.

- 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
- 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
- Paviours and blocks
- Granite & 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
_	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
% A %	350	25,4	12/3,2	1	70184602093
% A %	400	25,4	12/3,2	1	70184602095
%	400	20	12/3,2	1	70184602094
A	450	25,4	12/3,2	1	70184602096



Segment wear indicator



Patented cutting depth indicator



PRO UNIVERSAL DUCTILE

- cutting of a wide variety of materials.
- Multi-material vacuum-brazed blades for dryconcrete, 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
36	300	20	3,4	1	70184694463
% A	350	25,4	3,4	1	70184694464
%	400	20	3,3	1	70184694691



Formerly Multi-Runner

PRO PIPE CUTTER



- For cutting and grinding plastic pipes
- Allows to cut and grind a plastic pipe in only one step
- Can be used on all materials







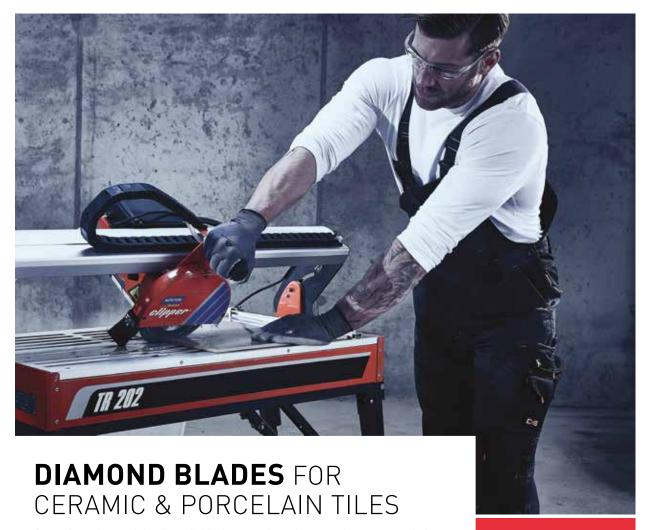








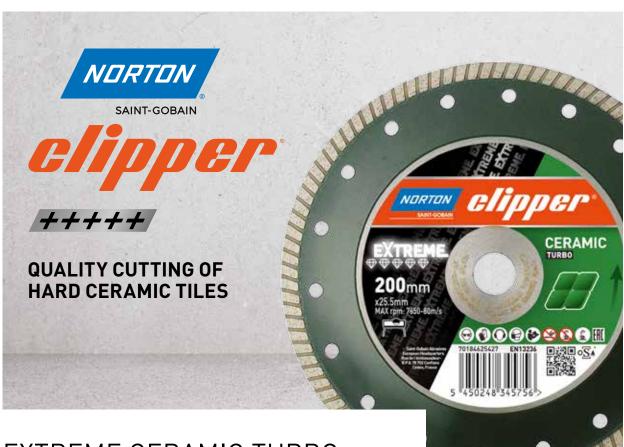
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Ceramic and porcelain tiles, vitrified reconstituted stone, glass, textured glass, glazed ceramic tiles, granite, marble, slate & hard natural stone.

PRODUCT SELECTION GUIDE

Highly recommended Recommended					
MATERIALS	EXTREME CERAMIC TURBO	PRO CERAMIC	PRO MARMO	CLASSIC CERAMIC	X-LOCK CERAMIC
	++++	++++	++++	+++	+++
Steel					
Granite	/ /	✓	11		11
Clay/pipes/paviors		✓			
Quarry tiles	/ /	✓		✓	//
Marble	✓	//	11	✓	✓
Terrazo	/ /	//			//
Facing bricks	✓				✓
Concrete pipes/kerbs	/ /				//
Slate	/ /	//		1	//



EXTREME CERAMIC TURBO

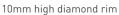
- This 10mm high continuous rim blade is the perfect choice for a high quality cut
- Premium diamond grade and free cutting metal bond make this blade perfect for cutting even the hardest tiles
- 1,4mm thickness for fast cutting and reduced material wastage
- The reinforced flange on the steel centre helps to keep the blade 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, terracota, granite, slate, reconstituted stone, floor and wall tiles

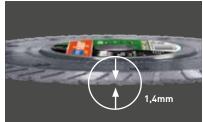


MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.
-	115	22,23	10/1,4	1	70184644759
-	125	22,23	10/1,4	1	70184644760
Ħ	200	25,4	10/1,4	1	70184625427
_	230	22,23	10/1,4	1	70184621973
戸 召	250	25,4	10/1,6	1	70184625428
F A	300	25,4	10/1,9	1	70184625429









1,4mm thick blade



Fast cutting continuous rim

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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 cuttin	g				
_	115	22,23	9/1,6	1	70184625942
-	125	22,23	9/1,6	1	70184625940
+	230	22,23	9/2,2	1	70184625946
Wet cutting only					
-	180	25,4/22,23	9/1,6	1	70184625561
	200	25,4	9/1,6	1	70184625093
	230	25,4	9/1,6	1	70184625096
⇒ ₹	250	25,4	9/1,6	1	70184625097
严 அ	300	25,4	9,5/2,0	1	70184625098
严 அ	350	25,4	9,5/2,0	1	70184625100



CLASSIC CERAMIC



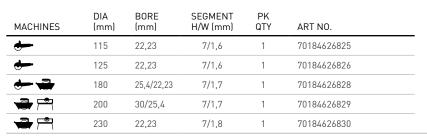
- Value for money continuous rimmed diamond blade
- Dry or wet cutting of medium hard tiles and ceramic tiles













X-LOCK CERAMIC



- Featuring the innovative X-LOCK system for fast disc changeover and secure mounting. Just click it and carry on
- X-LOCK tools are also compatible for use on conventional angle grinders with spindle mount







MACHINES	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.	
-	115	22,23	10/2,2	1	70184607943	
	125	22,23	10/2,4	1	70184607944	





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.	
-	50	6	2,4	1	70184629965	
-	115	22,23	2,4	1	70184626663	
<u>*</u>	125	22,23	2,4	1	70184626666	



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PRO ASPHALT II

- 12mm high segments
- Segments with under cutting protection for a longer life
- Laser cuts on the steel center indicating the way of rotation of the blade and the cutting depth of the blade (excepted on Ø 500 and 600mm).



MACHINES	POWER	DIA (mm)	BORE (mm)	SEGMENT H/W (mm)	PK QTY	ART NO.
***	< 20 hp	300	20	12/2,8	1	70184631578
ॐ	< 20 hp	300	25.4	12/2,8	1	70184631579
S	< 20 hp	350	20	12/3,2	1	70184631580
₩ ₹ ₩	< 20 hp	350	25.4	12/3,2	1	70184631581
₩ ₩	< 20 hp	400	25.4	12/3,2	1	70184631582
*	< 20 hp	450	25.4	12/3,2	1	70184631583
A 🐪	< 20 hp	500	25.4	12/3,8	1	70184631995
A 🐪	< 20 hp	600	25.4	12/3,8	1	70184631996



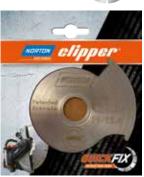
QUICK FIX

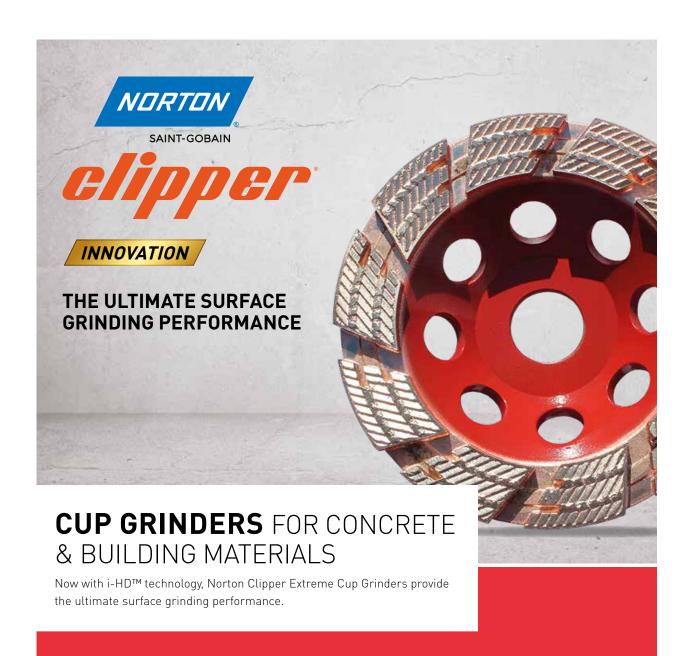
The system allows for blades bore to be adjusted to fit machines with different arbor/shaft diameters. There are 2 versions, the first allows a blade with a 25,4mm bore to be fitted to a machine with a 22,23mm arbor/shaft. The second allows a blade with either a 25,4mm or 22,23mm bore to be mounted on 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.
Chi.	25,4	22,23	70184623894
%	25,4/22,23	20	70184622589







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
- $i\text{-}\mathsf{HD}^\mathsf{TM}$ 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 08 for more information on merchandising displays

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CUP GRINDERS FOR CONCRETE & BUILDING MATERIALS

PRO CG

- 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)









CLASSIC CG



- An economical solution
- For surfacing and grinding hard construction and building materials (concrete, reinforced concrete, natural stone)
- Smaller segments have excellent performance on on hard materials
- 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

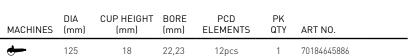


PRO CG-PCD LOW VIBRATION



- Designed for the fast removal of glue, epoxy resins & paint
- The embedded anti-vibration system provides comfort during use
- Use a concrete cup wheel after using PCD wheels to ensure a great finish





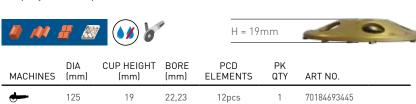




CLASSIC CG-PCD

- Cost-effective PolyCrystalline Diamond (PCD) cup wheel
- · Designed for the fast removal of glue, epoxy resins & paint

• Use a concrete cup wheel after using PCD wheels to ensure a great finish





EXTREME CUT'N GRIND +++++



- Multi-purpose tool for cutting and grinding of building materials
- $i-HD^{TM}$ 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







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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	DIA (mm)	USEFUL LENGTH (mm)	SEGMENT HEIGHT (mm)	PK QTY	ART NO.
<u> </u>	14	300	10	1	70184612947*
A V	18	300	10	1	70184612824
<u> </u>	22	300	10	1	70184612826
<u> </u>	25	300	10	1	70184612827
<u> </u>	28	300	10	1	70184612828
<u> </u>	30	300	10	1	70184612829
<u> </u>	32	300	10	1	70184612830
<u> </u>	35	300	10	1	70184612831
<u> </u>	40	300	10	1	70184612834
A -	51	300	10	1	70184612835

stones, block paving, washed gravel concrete slabs, natural stone, flint,





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 & 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)	USEFUL LENGTH (mm)	SEGMENT HEIGHT (mm)	PK QTY	ART NO.
/1	52	450	10	1	70184624870
<u>/</u> 1	62	450	10	1	70184624872
/1	72	450	10	1	70184624874
<u>/</u> 1	82	450	10	1	70184624876
/1	102	450	10	1	70184624880
<u>/</u> 1	107	450	10	1	70184624881
<u>/</u> 1	112	450	10	1	70184624882
/1	122	450	10	1	70184624883
/1	127	450	10	1	70184624884
<u>/</u> 1	132	450	10	1	70184624885
<u>/</u> 1	152	450	10	1	70184624887
<u>/</u> 1	162	450	10	1	70184624888
<u>/</u> 1	182	450	10	1	70184624890
/1	202	450	10	1	70184624892
<u>/</u> 1	252	450	10	1	70184624895
/1	300	450	10	1	70184624897



CLASSIC CB BETON



- Useful length: 450mm
- Connection: 1 1/4" UNC female thread
- Applications: for concrete and masonry walls
- Core drill with brazed segments
- Good value for money







MACHINES	DIA (mm)	USEFUL LENGTH (mm)	SEGMENT HEIGHT (mm)	PK QTY	ART NO.
<u>/</u> 1	51	450	10	1	70184613201
<u>/</u> 1	56	450	10	1	70184613202
<u>/</u> 1	61	450	10	1	70184613203
<u> </u>	66	450	10	1	70184613204
<u> </u>	71	450	10	1	70184613205
<u>/</u> 1	76	450	10	1	70184613206
<u> </u>	81	450	10	1	70184613207
<u> </u>	86	450	10	1	70184613208
<u> </u>	91	450	10	1	70184613209
<u> </u>	101	450	10	1	70184613210



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DRILLING CORE BITS FOR CONCRETE

MACHINES	DIA (mm)	USEFUL LENGTH (mm)	SEGMENT HEIGHT (mm)	PK QTY	ART NO.
<u> </u>	106	450	10	1	70184613211
<u> </u>	111	450	10	1	70184613212
<u> </u>	121	450	10	1	70184613213
<u> 1</u> 1	126	450	10	1	70184613214
<u>/</u> 1	131	450	10	1	70184613215
<u> 1</u> 1	141	450	10	1	70184613216
<u> </u>	151	450	10	1	70184613217
<u> </u>	161	450	10	1	70184613218
<u> </u>	171	450	10	1	70184613219
<u> </u>	181	450	10	1	70184613220
<u> </u>	191	450	10	1	70184613221*
<u> </u>	201	450	10	1	70184613222
<u> </u>	211	450	10	1	70184613223
<u> </u>	225	450	10	1	70184613252
<u>/</u> 1	251	450	10	1	70184613224
<u> </u>	271	450	10	1	70184613253*
/1	300	450	10	1	70184613225



Dimensions Key: DIA = Diameter

* Made to order





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.
S	28	150	7	1	70184620351
S	38	150	7	1	70184620352
S	52	150	7	1	70184620353
S	65	150	7	1	70184640268
S	78	150	7	1	70184620354
S	107	150	7	1	70184620355
S	117	150	7	1	70184620356
S	127	150	7	1	70184620357
No.	152	150	7	1	70184620358

Dimensions Key: DIA = Diameter

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DRILLING CORE BITS FOR UNIVERSAL BUILDING MATERIALS

• 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









MACHINES	DIA (mm)	USEFUL LENGTH (mm)	SEGMENT HEIGHT (mm)	PK QTY	ART NO.
No.	68	60	7	1	70184620422
- Same	82	60	7	1	70184620423

TECHNICAL INFORMATION

OPERATING SPEEDS

MAXIMUM OPERATING 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)



Wear eye protection (ISO 7010)



Wear ear protection (ISO 7010)



Refer to instruction manual/ booklet (ISO 7010)



Do not use for face arindina (ISO 7010)



Do not use for wet arindina (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 & 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 & 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 & 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 & let the blade do the work

UNDERCUTTING

Cause	Undercutting occurs when the steel core wears faster than the segment, i.e. where the segment & steel core meet. This is usually caused by materials that are highly abrasive. The cutting debris is not removed sufficiently & 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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SAFFTY ADVICE

D₀s

Read the safety instructions provided by the abrasives & 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 & transport products with care

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

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

Ensure that work rests are properly adjusted & secure

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

Ensure that the workpiece is secure $% \left(1\right) =\left(1\right) \left(

Wear appropriate personal protective equipment at all times

Avoid clogging & 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 & 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 & 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 & flat

Tighten the mounting device excessively

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

Continue to use a product if vibration occurs. True or replace it

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 & jewellery



STEP DRILLS

Introduction Step drills 350

351

INTRODUCTION

Norton step drills work optimally on metal sheets of up to 5mm thickness. However many different size holes can be drilled, with a clean finish every time. Prolong the life of Norton step drills by using with OneBond CO 500 Cutting Oil for faster cutting through metal sheets.

GENERAL INFORMATION

HSSM2 TIAIN COATED HSSM2 **TIN** COATED





+++++

++++

TiAIN (Aluminium Titanium Nitride) coating provides excellent performance; it is very hard and wear resistant with low heat conductivity. It has very good chemical stability and oxidation resistance. Recommended for use with heat resistant alloys, high alloy steel, stainless steel, titanium alloys and NiCo alloys.

TiN coated step drills provide a cost effective solution with long tool life. Hard, with good temperature stability and a low friction coefficient. For general purpose use on most materials including steel, stainless steel <1100 N/mm², cast iron, brass, bronze and plastic.

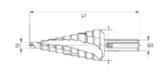
RECOMMENDED CUTTING SPEEDS

Material	Carbon steel <700 N/ mm²	Carbon steel >700 N/ mm²	Alloy steel <1000 N/ mm²	Stainless Steel <1400 N/ mm²	Casl iron <250 N/ mm²	Casl iron >250 N/ mm²	CuZn (Brittle)	CuZn (Tough)	AI-alloy <11% Si	Thermo plastics	Duro plastics
Vc=m/min	30	20	20	10	15	10	60	35	30	20	15
Coolant	Cutting oil	Cutting oil	Cutting oil	Cutting oil	Com- pressed air	Com- pressed air	Com- pressed air	Com- pressed air	Cutting oil	Water	Com- pressed air
Ø mm						R.P.M					
3-8	3185-1194	2123-796	2123-796	1062-398	1592-597	1062-398	6369-2389	3715-1393	3185-1194	2123-796	1592-597
9-15	1062-637	708-425	708-425	354-212	531-318	354-212	2123-1274	1238-743	1062-637	708-425	531-318
16-22	597-434	398-290	398-290	199-145	299-217	199-145	1194-869	697-507	597-434	398-290	299-217
23-29	415-329	277-220	277-220	138-110	208-165	138-110	831-659	485-384	415-329	277-220	208-165
30-36	318-265	212-177	212-177	106-88	159-133	106-88	637-531	372-310	318-265	212-177	159-133



NEW STEP DRILLS HSSM2-TiN

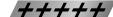
- Ideal for drilling repetitive holes in metal sheets or tubes
- Fast penetration, centre and drill in one operation
- Works optimally on steel, cast iron, brass and plastics
- Also can be use on stainless steel and bronze



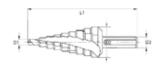
_ L ₁ xD ₁ xD ₂ xD ₃ (mm	n) STEPS	HOLE DIAMETERS (mm)	MAX HOLE DEPTH (mm)	PK QTY	ART NO.
65x4x12x6	5	4-6-8-10-12	5	1	66261140028
65x4x12x6	9	4-5-6-7-8-9-10-11-12	3	1	78072765476
75x4x20x8	9	4-6-8-10-12-14-16-18-20	4	1	5539553840
100x4x30x10	14	4-6-8-10-12-14-16-18-20-22-24-26-28-30) 4	1	5539553845



NEW STEP DRILL HSSM2-TIAIN #+++



- Ideal for drilling repetitive holes in metal sheets or tubes
- Fast penetration, centre and drill in one operation
- Highly recommended for heat resisting alloys, high-alloy steel, stainless steel, Titanium alloys and NiCo alloys

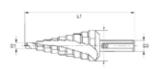


L ₁ xD ₁ xD ₂ xD ₃ (mm)	STEPS	HOLE DIAMETERS (mm)	MAX HOLE DEPTH (mm)	PK QTY	ART NO.	
82x5x35x12.7	13	5-13-15-17-19-21-23-25-27-29-31-33-35	3	1	5539553846	



NEW STEP DRILLS HSSM2-TiN

- Ideal for drilling repetitive holes in metal sheets or tubes
- Fast penetration, centre and drill in one operation
- Works optimally on steel, cast iron, brass and plastics
- Also can be use on stainless steel and bronze
- TiN Step drill kit cover most commont materials and hole dimensions





$L_1 x D_1 x D_2 x D_3$ (mm)	STEPS	HOLE DIAMETERS (mm)	MAX HOLE DEPTH (mm)	PK QTY	ITEM ART NO.	ART NO.
65x4x12x6	9	4-5-6-7-8-9-10-11-12	3	1	78072765476	
75x4x20x8	9	4-6-8-10-12-14-16-18-20	4	1	5539553840	5539553847
100x4x30x10	14	4-6-8-10-12-14-16-18-20-22-24-26-28-30	4	1	5539553845	

NOTES			
NUIES			



CORE DRILLS

Introduction Core Drills 354

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NEW! HIGH PERFORMANCE CORE DRILLS (ANNULAR CUTTERS)



Norton core drills are best used with either magnetic drills or drill press machines. A core drill works differently than conventional twist drills, as it cuts only a groove at the periphery of the hole, leaving a solid core in the centre that is ejected by the centre pin. This results in faster and easier drilling of larger holes and a much longer tool life.

Norton high performance core drills enable easy drilling of a wide range of materials, and we make it even easier for you to choose the best solution from our range of core drills, whether it be TCT (Tungsten Carbide Tipped), HSS-E (High Speed Steel Cobalt alloy) or HSSM2 (High Speed Steel M2). All our core drills are supplied as standard with a Weldon Shank. Alternative shanks (Universal, Fein, Thread) and other core dimensions are available on request.



ENERGY SAVING

Since core drills do not have to drill/cut through the entire diameter of the required hole, they require less energy to drill through the material.





SAVE MONEY

Core drills stay sharp longer and can produce 5 to 10 times more holes than a twist drill.



HSSM2 and HSS-E can be easily re-sharpened and re-used for drilling.

Core drills can **NOT** drill blind holes. They can only make through holes.

Materials like cast iron produce a lot of powder, compressed air is recommended instead of cutting oil or coolant.

TIP!

To keep your core drill at its optimum efficiency always use it with suitable cutting oil.



PRODUCT RECOMMENDATION GUIDE

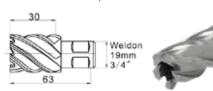
	HSSM2	HSS-E (Co alloy)*	тст
MATERIAL (Tensile strength in N/mm²)	+++	++++	++++
ALU < 10% Si < 600 N/mm²	**	***	***
ALU > 10% Si < 600 N/mm ²	*	**	***
CARBON STEEL < 500 N/mm ²	***	***	***
CARBON STEEL < 750 N/mm ²	**	***	***
ALLOY STEEL < 900 N/mm ²	*	***	***
ALLOY STEEL < 1100 N/mm ²		***	***
ALLOY STEEL < 1400 N/mm ²		**	***
Stainless steel < 700 N/mm²	*	***	***
Stainless steel < 900 N/mm²		**	***
Stainless steel > 900 N/mm²		*	***
Brass, Nickel, Titanium		**	**
Nickel based alloy			***
Cast iron		*	***
Plastic	***	***	
Graphite			***
Rail		*	***

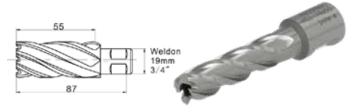
^{*} HSS-E (Co alloy); Available on demand, MTO product. Product list available in core drill brochure.



HSSM2 CORE DRILLS WELDON SHANK

- Made of solid high performance HSS
- Can be re-sharpened





CUT DIAM	CUTTING DEPTH 25mm ART NO.	CUTTING DEPTH 50mm ART NO.
12	78072726995 MTS	78072726996 MTS
13	78072745567 MTS	78072745617 MTS
14	78072745568 MTS	78072745618 MTS
15	78072745569 MTS	78072745619 MTS
16	78072745570 MTS	78072745620 MTS
17	78072745571 MTS	78072745625 MTS
18	78072745581 MTS	78072745798 MTS
19	78072745583 MTS	78072745799 MTS
20	78072745585 MTS	78072745800 MTS
21	78072745586 MTS	78072745801 MTS
22	78072741647 MTS	78072741659 MTS
23	78072745588 MTS	78072745804 MTS
24	78072745590 MTS	78072745805 MTS
25	78072745591 MTS	78072745806 MTS
26	78072745592 MTS	78072745807 MTS
27	78072745593 MTS	78072745808 MTS
28	78072745594 MTS	78072745810 MTS
29	78072745595 MTS	78072745811 MTS
30	78072741651 MTS	78072741667 MTS
31	78072745596 MTS	78072745812 MTS
32	78072745597 MTS	78072745813 MTS
33	78072745598 MTS	78072745814 MTS
34	78072745600 MTS	78072745815 MTS
35	78072745601 MTS	78072745816 MTS
36	78072745602 MTS	78072745817 MTS
37	78072745607 MTS	78072745818 MTS
38	78072745608 MTS	78072745819 MTS
39	78072745609 MTS	78072745820 MTS
40	78072745610 MTS	78072745821 MTS
41	78072745611 MTS	78072745822 MTS
42	78072745612 MTS	78072745823 MTS
OFNITDE DIN		
CENTRE PIN	6.35 / 5.3 x 77mm	6.34 / 5.3 x 102mm

MTS; Made to Stock



STEEL CENTRE PIN (EJECT PIN)

CENTRE PIN/EJECTOR PIN HAS THREE FUNCTIONS:

- Centring enables more accurate core positioning
- Oiling directs automatic lubrication straight into the cutting area
- Ejecting assists in ejecting the waste core from the core drill after each cut

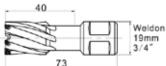
DESCRIPTION	ART NO.
STEEL PIN 6.35 / 5.3 x 102mm	78072741722 MTS
STEEL PIN 6.35 / 5.3 x 77mm	78072741675 MTS
STEEL PIN 7,98 x 90mm	78072748026 MTS





TCT CORE DRILLS WELDON SHANK***

- Tungsten Carbide Tipped cutting edges welded to a tough alloy steel body
- Ultimate wear resistance and longer tool life
- Can run faster than HSS drills for more productivity
- Very good performance on rail



. 73		
CUT DIAM	CUTTING DEPTH 35mm ART NO.	
12	78072751462	
13	78072751891	
14	78072751899	
15	78072751904	
16	78072751906	
17	78072751905	
CENTRE PIN		
522	6,35 x 77 mm	
18	78072751909	
19	78072751911	
20	78072751912	
21	78072751913	
22	78072751914	
23	78072751915 MTS	
24	78072751944	
25	78072751945	
26	78072751999	
27	78072752007	
28	78072752043	
29	78072752195	
30	78072752196	
31	78072752197	
32	78072752203	
33	78072748025 MTS	
34	78072752214	
CENTRE PIN		
SERVINE I IIV	7,98 x 90 mm	

MTS; Made to Stock

TCT CORE DRILLS WELDON SHANK***

CUT DIAM	CUTTING DEPTH 35mm ART NO.	
35	78072752218	
36	78072752221	
37	78072752217	
38	78072752229	
39	78072752366	
40	78072752371	
41	78072752373	
42	78072752374	
43	78072752376	
44	78072752377	
45	78072752379	
46	78072752381	
47	78072752594	
48	78072752596	
49	78072752599	
50	78072752600	
51	78072752601	
52	78072752648	
CENTRE PIN	7,98 x 90 mm	

T.C.T cutting depth 50 mm available on demand full range information in core drill brochure

*** made to order



^{* 6,35} x 77 mm and 6,35 x 102 mm not included

^{** 7,98} x 90 mm and 7,98 x 105 mm not included



RECOMMENDED CUTTING SPEEDS

FOR HSSM2 AND HSS-E

Material	High Carbon steel up to<750 N	Alloyed steel up to <1200 N	Stainless Steel	Aluminium	Grey Cast iron	Brass	Copper
Vc=m/min	20	10	12	37	18	25	40
Ø mm	R.P.M						
12-18	530-350	265-175	320-210	980-655	480-320	660-440	1060-700
19-25	340-250	165-130	200-150	620-470	300-230	420-320	670-510
26-32	245-200	125-100	145-120	455-370	200-180	305-250	490-400
33-39	195-165	95-80	115-95	360-305	175-147	240-200	390-330
40-46	160-140	79-70	90-85	295-255	143-125	195-170	320-280
47-53	135-120	67-60	80-72	250-225	122-108	165-150	270-240
54-60	115-105	58-53	70-63	220-195	106-95	145-130	235-210

It is recommended to use HSSM2 and HSS-E tools with cutting oil, except for grey cast iron, where compressed air should be used to keep it clean and cool.

FOR T.C.T. CORE DRILL

Material	High Carbon steel up to<750 N	Alloyed steel up to <1200 N	Stainless Steel	Aluminium	Grey Cast iron	Brass	Copper			
Vc=m/min	45	30	20	90	35	50	35			
Ø mm	R.P.M									
12-18	1327-796	795-530	530-350	2390-1590	930-620	1325-885	930-620			
19-25	754-537	500-380	340-250	1510-1150	590-450	840-635	590-450			
26-32	550-448	370-300	245-200	1100-895	430-340	615-500	430-340			
33-39	434-367	290-245	195-165	870-735	335-285	490-410	335-285			
40-46	358-311	240-265	160-140	715-625	280-240	400-345	280-240			
47-53	304-270	200-180	135-120	610-540	239-210	340-300	239-210			

It is recommended to use T.C.T tools with coolant, except for grey cast iron, where compressed air should be used to keep it clean and cool.

NOTES				



WIRE BRUSHES & CARBIDE BURRS

Wire brushes	36
Carbide burrs	37
Bevelling tools	38
Steel wool	39

INTRODUCTION

Norton offers a range of wire brushes suitable for a wide variety of surface processing applications. The range encompasses crimped & knotted wire power wheel brushes, bevelled brushes, cup brushes, end brushes & 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

1	TEMPERED QUA	ERED QUALITY STEEL WIRE STAINLESS STEEL WIRE		STAINLESS STEEL WIRE		BRASS WIRE		
С	RIMPED	S	TRAIGHT	CRIMPED)	S	TRAIGHT	CRIMPED
Ren	Removing dust and smoothing low-grade and non alloy steels		Brushing and smooting chrome-nickel sincluding stainless steel			Brushing, cleaning and smoothing brass, copper and bronze		
NOS NOrmal Crimpe	Steel N0rm	SKW al Steel ed Wire	NOSSW NOrmal Steel Straight Wire	STSCW STainless Steel Crimped Wire		KW ss Steel d 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 & primers. Removal of rust, corrosion, paint and primers.
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	Thomas and the second	With wooden core. Available in different widths. For use on narrow work pieces. Ideal for light deburring & cleaning profiled surfaces.
TUB	Pipe Brushes		With handle or thread. For deburring and cleaning tubes.



paint, corrosion and weld splatter from metal surfaces. They're almost spark free and with lower thermal impact, reduce the risk of workpiece burn. Norton offers a number of brush types and sizes for large flat areas to small, tight spaces. All provide a uniform finish and excellent price/performance ratio.

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	75, 80, 100	115,125, 150	150, 178	178	
Wheel brush, crimped	100,115	75, 80, 100, 125	115, 125, 150	115, 125, 150	178	
Cup brush, knotted	65	75, 80, 100	80, 100	100, 125, 150	125, 150	
Cup brush, crimped	60	75, 80, 100	80,100	100, 125, 150	125,150	

^{*} Please, check always MOS (Maximum operation Speed) marked on the wire brush and machine operation speed.

BY APPLICATION

Highly recommended

WIRE DIAMETER (mm)

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 re

Highly recommended PRODUCT AVAILABILITY ON:	STEEL	CARBON STEEL	STAINLESS STEEL	NON-FERROL METAL	ALUMINIUM
Normal steel	•	•			
Stainless steel			•	•	•

S



PIPELINE HIGH PERFORMANCE TWIST KNOTTED WHEEL BRUSHES #++++

- Long life, high material removal, able to high speed work
- Aggressive removal of welding scale and weld removal of tube joins in pipelines

DxBxA L (mm)	NO. KNOTS	RECOMMENDED RPM	PK QTY	STEEL	STAINLESS STEEL
0,50 mm					
115x6x22,2 T22	36	6300 - 12500	10	63642581151	63642581639
125x6x22,2 T23	42	5500 - 11000	1	63642581157	
	42	5500 - 11000	15		63642581640
178x6x22 T35	76	4000 - 8000	15	63642581169*MTO	

*MTO; Made to order



NEW! CRIMPED WHEEL BRUSHES



- For cleaning light surface oxidation, paint and primers without removing the base material
- Wheel shape makes it easier to access hard to reach areas

DxBxA L (mm)	RECOMMENDED RPM	PK QTY	STEEL	STAINLESS STEEL	
0,30 mm					
115x15xM14 T25	6300 - 12500	1	78072749618	-	-
115x15 x M14 T25	6300 - 12500	1	-	- 78072749622	-



TWIST KNOTTED WHEEL BRUSHES #+++



• Aggressive brush for de-burring, edge honing, removing rust, paint and weld spatter

DxBxA L (mm)	RECOMMENDED RPM	PK QTY	STEEL	STAINLESS STEEL
0,35 mm				
125x13x22,2 T28	5500 - 11000	1	66254406178	
0,50 mm				
115x11x22,2 T23	6300 - 12500	15	-	78072704146
115x11x22,2 T23	6300 - 12500	1	66254406167	66254406153
115x11xM14 T23	6300 - 12500	1	66254406160	
125x13x22,2 T28	5500 - 11000	1	66254406166	-
178x15x22,2 T35	4500 - 8500	1	66254406163	
DIMENSION KEY: D = Diameter	B = Width	A = Bore min L	= Wire Length	





TWIST KNOTTED CUP BRUSHES WITH GUARD +++++

- Aggressive brush for removing rust, paint Includes a guard for added protection and weld spatter on large surfaces
 - from dust and particles when in use

DxA L (mm)	GRINDER SIZE (mm)	PK QTY	STEEL	STAINLESS STEEL
0,50 mm				
65xM14 T20	115 & 125	1	66261103046	66261103171







TWIST KNOTTED CUP BRUSHES #+++



• Aggressive brush for removing rust, paint, weld spatter from large surfaces

DxA L (mm)	GRINDER SIZE (mm)	PK QTY	STEEL	STAINLESS STEEL
0,35 mm				
65xM14 T20	115	1	66254406104	
0,50 mm				
65xM14 T20	115	1	66254406095	66254406068
80xM14 T25	125	1	66254406094	
100xM14 T25	150	1	66254406088	



CRIMPED CUP BRUSHES +++++ WITH GUARD

- Multi-Purpose brush for the most common cleaning jobs
- Includes a protection guard to shield the user from dust and particles when in use

DxA L (mm)	GRINDER SIZE (mm)	PK QTY	STEEL	STAINLESS STEEL
0,30 mm				
75xM14 T22	115 & 125	1	66261103049	66261103176



CRIMPED WIRE CUP BRUSHES



• For cleaning light oxidation, paint and primers of large areas

GRINDER SIZE (mm)	PK QTY	STEEL	STAINLESS STEEL
115	1	66254406058	66254406037
125	1	66254406055	
125	1	66254406054	66254404868
150	1	66254406053	
230	1	66254406050	
230	1	66254406049	
	SIZE (mm) 115 125 125 150 230	SIZE (mm) QTY 115 1 125 1 125 1 150 1 230 1	SIZE (mm) QTY STEEL 115 1 66254406058 125 1 66254406055 125 1 66254406054 150 1 66254406053 230 1 66254406050



TWIST KNOTTED BEVEL BRUSH WITH GUARD #++++

• Aggressive brush for hard to reach areas

• Integrated guard offers protection against flying chips of material whilst maintaining surface visibility

DxA L (mm)	GRINDER SIZE (mm)	PK QTY	STEEL	STAINLESS STEEL
0,50 mm				
100xM14 T22	115	1	66261103055	66261103179



TWIST KNOTTED BEVEL BRUSHES #+++



• Twisted knotted wires for aggressive applications including preparing joints for welding and removing welds and heavy scale.

DxBxA L (mm)	GRINDER SIZE (mm)	PK QTY	STEEL	STAINLESS STEEL
0,50 mm				
100x13xM14 T20	115	1	66254406149	66254406146
115x15xM14 T27,5	125	1	66254406147	66254406144

DIMENSION KEY: D = Diameter

B = Width

A = Bore min

L = Wire Length





CRIMPED WIRE BEVEL BRUSH WITH GUARD #++++

- For removal of light rust, corrosion, paint and primer
- Guard offers extra protection against chips

DxA L (mm)	GRINDER SIZE (mm)	PK QTY	STEEL	STAINLESS STEEL
0,30 mm				
100xM14 T24	115	1	66261103056	66261103180



CRIMPED WIRE BEVEL BRUSHES

- Crimped wire is thinner and more flexible than knotted wire
- Bevel shape is designed for hard to reach areas including edges and corners

DxBxA L (mm)	GRINDER SIZE (mm)	PK QTY	STEEL
0,50 mm			
100x13xM14 T20	115	1	66254406142
115x15xM14 T27,5	125	1	66254406109









PRODUCT SELECTION GUIDE

brush types are available for different application needs.

BY APPLICATION

Highly recommended

Highly recommended	WIRE DIAMETER (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 BRUSHES #+++ WITH SHANK

• For aggressive removal of rust, corrosion, paint and primer

DxB L (mm)	SHANK (mm)	PK QTY	STEEL
0,35 mm			
70x15 T15	6	12	66254405406
0,50 mm			
70x15 T15	6	12	66254405407

TWIST KNOTTED END BRUSHES #+++





• Perfect for heavy-duty cleaning and deburring in hard reach areas on pipes, tubes and internal diameters.

DxBxL (mm)	SHANK (mm)	PK QTY	STEEL	STAINLESS STEEL
0,20 mm				
25x69 T26	6	50	-	- 77696091115
0,35 mm				
19x68 T26	6	12	66254405421	-
22x68 T26	6	12	66254405422	-
0,50 mm				
28x68 T26	6	12	66254405423	-









CRIMPED WIRE BRUSHES WITH SHANK

• For removal of light rust corrosion, paint and primer from hard to reach areas, edges and corners

DxB L (mm)	SHANK (mm)	PK QTY	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	-	-	66254405405
0,30 mm					
50x10 T12,5	6	10	66254404891	-	
70x10 T19	6	10	66254404899	66254405395*	
70x15 T19	6	10		66254405396*	
80x20 T19	6	10	66254404907	66254405398*	

* 12PK QTY



CRIMPED WIRE END BRUSHES #### WITH SHANK (ENB)

• Small diameter and flexible wire is perfect for light cleaning of small and hard to reach areas including pipes and internal diameters

DxBxL (mm)	SHANK (mm)	PK QTY	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 T26	6	12	66254405411	66254405415
24x68 T26	6	12	66254405412	66254405418
30x68 T26	6	12	66254405413	66254405419
DIMENSION KEY: D = Diameter	B = Width	A = Bore min	L = Wire Length	



PRODUCT SELECTION GUIDE

BY APPLICATION

Highly recommended

WIRE DIAMETER (mm)
-----------------	-----

APPLICATIONS		0,2		0,3		0,5	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	STA	NΣ	AL	20	H
Normal steel	•	•				•	•
Stainless steel			•	•	•		



CRIMPED WHEEL BRUSHES (WHB)

• Ideal for removing corrosion, rust, hardened paints and hard adhesive residues

DxBxAxR L (mm)	PK QTY	STEEL	STAINLESS STEEL
0,20 mm			
200x26x32x80 T40	1	66254406401	
0,30 mm			
125x24x20x30 T36	1	66254406282	
200x36x32x80 T40	1	66254406243	

CRIMPED WHEEL BRUSHES (WHB) #+++

• Ideal for removing corrosion, rust, hardened paints and hard adhesive residues

DxBxAxR L (mm)	PK QTY	STEEL	STAINLESS STEEL
0,30 mm			
100x11x12x20 T22	1	66254406455	
150x18x32x50,8 T27	1	66254406265	66254406206
180x22x32x50,8 T42	1	66254406263	
200x26x32x80 T40	1	66254406255	66254406187
250x32x50,8x100 T50	1	66254406241	

FOR MORE INFORMATION VISIT www.nortonabrasives.com





PRODUCT SELECTION GUIDE

BY APPLICATION

Highly recommended

TYPE	ΛF	W	RF
111 -	Οı	V V I	111

APPLICATIONS		BRASS	CRIMPED		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 WOODEN HANDLE

• Easy manual cleaning of paint, rust, primers, hardened adhesives and silicones.



L1xL2xL (mm)	NUMBER OF ROWS	PK QTY	ART NO.			
WOOD HANDLE NORMAL STEEL STRAIGHT WIRE 0,30 mm						
290x140x25	2R	12	66254405432			
WOOD HANDLE STAINLESS STEEL CRIMPED	WOOD HANDLE STAINLESS STEEL CRIMPED WIRE 0,30 mm					
290x140x25	4R	12	66254405461			
WOOD HANDLE BRASS CRIMPED WIRE 0,30 mm						
290x140x25	4R	12	66254405466			



WOOD HANDLE NORMAL STEEL STRAIGHT WIRE 0,30 mm					
290x140x25	3R	30	66254405434		
290x140x25	4R	24	66254405435		
290x140x25	5R	20	66254405437		
PLASTIC HAND STAINLESS STEEL STRAIGHT WIRE	0,30 mm				
290x140x25	3R	30	78072755571		
290x140x25	4R	24	66254405447		



BRUSHES WITH PLASTIC HANDLE



• Easy cleaning with an ergonomic plastic grip

L1xL2xL (mm)	NUMBER OF ROWS	PK QTY	ART NO.			
PLASTIC HAND NORMAL STEEL STRAIGHT WIRE 0,30 mm						
265x140x25	1R	12	66254405470			
PLASTIC HAND STAINLESS STEEL STRAIGHT W	PLASTIC HAND STAINLESS STEEL STRAIGHT WIRE 0,30 mm					
265x140x25	1R	12	66254405471			
PLASTIC HAND BRASS CRIMPED WIRE 0,30 mm						
265x140x25	1R	12	66254405473			



NON SPARK HAND BRUSH

For use in potentially explosive environments, where 'traditional' wire brushes may create sparks.

L1xL2xL (mm)	WIRE	ROWS	PK QTY	ART NO.	
SPB					
200x18x45	0,20	3x6R	12	66254405474	





PIPE BRUSHES WITH THREAD

• For cleaning internal diameters of pipes

L1xL2xL (mm)	WIRE	THREAD	PK QTY	ART NO.	
STEEL					
10x90x140	0,25	W 1/4	20	78072753590	
18x90x140	0,25	W 1/4	20	78072753605	
25x120x190	0,4	W 1/2	20	78072753616	
30x120x190	0,4	W 1/2	20	78072753620	
40x120x190	0,4	W 1/2	20	78072753626	
50x120x190	0,4	W 1/2	20	78072753634	
75x120x190	0,4	W 1/2	10	78072753635	







OPERATING SPEED

Peripheral speed is a decisive factor in achieving optimum performance from a brush, the table opposite enables you to determine the relevant peripheral speed by simply reading down and across the appropriate diameter and drive shaft operating speed columns.

DDM -	BRUSH DIAMETER (mm)											
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 till 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 371 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 DI/OSUES	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:

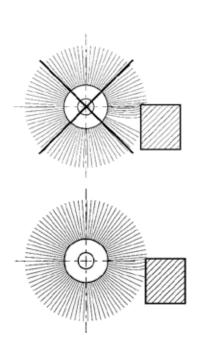
APPLICATION	CRIMPED WIRE	TWIST KNOTTED
STEEL	30m/s	35-40m/s
NON FERROUS	18-20m/s	-
PLASTIC	15m/s	-

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				
A.E. (1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1	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				

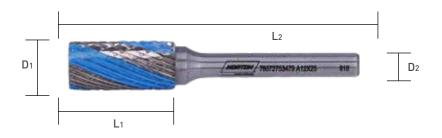
SAFETY & STORAGE

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.

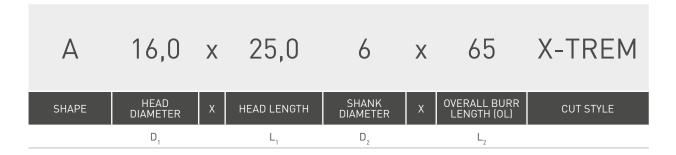
- Keep all machine guards in place
- Observe all speed restrictions indicated on brushes
- Appropriate protective clothing and equipment must be used
- Brushes should be carefully checked when removed from the original carton. Do not use if rusted or damaged
- Store brushes in the original carton. Wire 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



UNDERSTANDING THE PRODUCT



BURR DIMENSIONS & DESCRIPTION



CUT STYLES



^{*} than double cut (DC)

Glossy & smooth finish

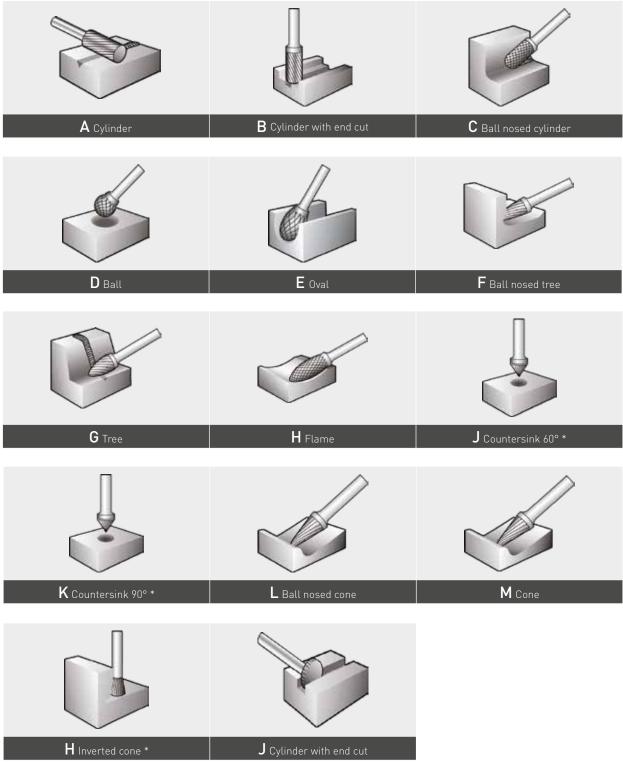
PRODUCT RECOMMENDATION GUIDE

	X-TREM CUT	DC X-TIAIN	DC	ALU X-TIAIN	ALU
MATERIALS	++++	++++	++++	++++	++++
Steel<40HRc, carbon steel, non-alloy steel	****	****	****		
Steel (40-60HRc), alloyed steel	****	****	****		
Stainless steel	****	****	****		
Cast iron	****	****	****		
Nickel alloys, cobalt alloys	****	****	****		
Soft aluminium, aluminium alloys, brass, copper, zinc				****	****
Bronze, titanium, titanium alloys, very hard aluminium alloys	***	***	***	****	***
Plastic/wood				****	****





APPLICATION BY SHAPE

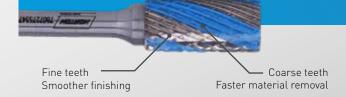


NEW X-TREM CUT +++++

A LEAP IN PERFORMANCE



- 40% faster stock removal*
- 40% longer life*
- Glossy and smooth finish





TIP

All Norton X-TREM burrs are identified with blue stripes so you can be sure you picked up the right product.
X-TREM CUT still works long after the blue paint is gone.

FOR ALUMINIUM AND NON-FERROUS METALS

ALU X-TIAIN

- 'ALU' cut style, coated with TiAIN (titanium aluminium nitride) for a smoother cut
- Reduced heat generation on the workpiece
- Excellent chip removal and reduced tooth wear
- Reduces cutting pressure due to improved lubrication

ALU **++++**

- 'ALU' cut style, for deburring aluminium, alloys and plastic
- Wide tooth formation for easy chip flow
- Large chip formation to avoid aluminium dust generation
- Controlled consistent cut

PRODUCT SHAPE	$D_1xL_1xD_2xL_2$ (mm)	PK QTY	ALU X-TIAIN +++++	ALU ++++
A CYLINDER				
	10x19x6x65	1	-	60157638195
	12x25x6x70	1	-	63642586517

B CYLINDER WITH END CUT				
	10x19x6x65	1	-	07660739845

C BALL NOSED CYLINDER				
	10x19x6x65	1	-	60157638182
	12x25x6x70	1	-	07660707846

^{*} than double cut (DC)



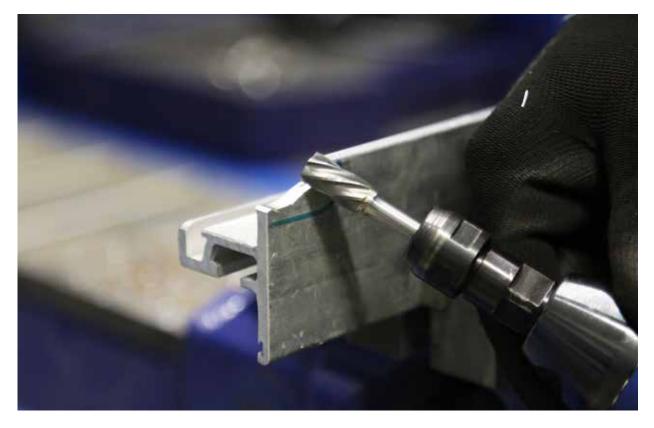
FOR ALUMINIUM AND NON-FERROUS METALS

PRODUCT SHAPE	$D_1xL_1xD_2xL_2$ (mm)	PK QTY	ALU X-TiAIN +++++	ALU ++++
F BALL NOSED TREE				
	10x19x6x65	1	-	63642586951
	12x25x6x70	1	69957383303	60157638181
L BALL NOSED CONE				
	12x30x6x75	1	69957383325	-



ALU BURR KIT #### FOR ALUMINIUM AND NON-FERROUS METALS

SHAPE	$D_1xL_1xD_2xL_2$ (mm)	ART NO.	PK QTY	ART NO.
С	12x25 6x70	07660707846	1	
D	10x9 6x53	63642586824	1	- 66254428260
F	12x25 6x70	60157638181	1	00234428200
L	12x30 6x75	63642587101	1	-



FOR STEEL, STAINLESS STEEL, CAST STEEL, COPPER, CAST IRON, NICKEL ALLOYS, ALLOYED STEEL, FERROUS METALS

NEW! X-TREM CUT

+++++

- New cutting geometry for faster stock removal and better finish
- Easy to use (works in both directions)
- Longer life than double cut carbide burrs
- The blue stripes for easy identification of the product

DOUBLE CUT DC X-TIAIN

+++++

- Double cut style, coated with TiAIN (titanium aluminium nitride) for better sliding characteristics
- Universal cutting style for fast material removal, smooth finish & granular chip break
- Excellent chip removal and reduced tooth wear
- Reduces cutting pressure due to improved lubrication

DOUBLE CUT DC

++++

- Universal cutting style for fast material removal
- Unique geometry improves operator control and reduces the size of chips
- Increased cut rate and longer life on tough applications
- Double cut style

PRODUCT SHAPE	D ₁ xL ₁ xD ₂ xL ₂ (mm)	PK QTY	<i>NEW!</i> X-TREM CUT	DOUBLE CUT DC X-TIAIN	DOUBLE CUT DC
A CYLINDER					
	3x13x3x38	1	-	-	63642586518
	4x12,7 3x38	1	-	-	78072756859
	5x16x6x50	1	-	-	78072756912
	6x19x6x50	1	-	-	66261146394
1 8505000	8x19x6x65	1	-	-	66261146396
	10x19x6x65	1	-	-	66261146496
	10x25x6x162	1	-	-	63642535764
	12x25x6x70	1	78072753479	-	66261146497
	12x25x8x70	1	78072756634	-	-
	16x25x6x70	1	-	-	60157638148
B CYLINDER WITH END CUT					
	4x16x6x50	1	-	-	78072756915
	5x16x6x50	1	-	-	78072756935
	6x19x6x50	1	-	-	63642586641
STATE OF THE PARTY	8x19x6x65	1	-	-	7660707804
-3686888	8x19x6x175	1	-	-	63642535757
	9,5x19 6x65	1	-	-	66261146498
	12x25x6x70	1	78072756677	-	66261146499
	16x25x6x70	1	-	-	66261146500



FOR STEEL, STAINLESS STEEL, CAST STEEL, COPPER, CAST IRON, NICKEL ALLOYS, ALLOYED STEEL, FERROUS METALS

PRODUCT SHAPE	D ₁ xL ₁ xD ₂ xL ₂ (mm)	PK QTY	<i>NEW!</i> X-TREM CUT	DOUBLE CUT DC X-TIAIN	DOUBLE CUT DC
C BALL NOSED CYLINDER					
	3x13 3x38	1	78072756678	-	-
D BALL E OVAL F BALL NOSED TREE	6x13x6x162	1	-	-	63642535773
	6x19 6x80	1	-	-	66261197806
A BROOKERSON	6x19x6x50	1	78072756707	-	66261146521
	8x19x6x64	1	78072756708	-	66261146524
	9,5x19 6x64	1	78072756709	-	66261146526
	12x19x6x65	1	-	-	60157638153
	12x25x6x70	1	78072753481	69957383241	66261146531
	16x25x6x70	1	-	-	66261146532
D BALL					
	6x5 6x50	1	-	-	66261146533
	8x6,3 6x52	1	-	-	66261146534
	9,5x8 6x54	1	-	-	66261146535
	10x9 6x53	1	78072756722	-	07660707832
	12x11 6x56	1	78072756783	-	-
	16x4x6x59	1	-	-	78072756936
E OVAL					
	5x7,1 3x38	1	-	-	78072756954
	6x10x6x50	1	-	-	63642586892
	10x16x6x60	1	-	-	60157638159
	12x22x6x67	1	-	-	60157638162
	16x25 6x70	1	-	-	78072756958
F BALL NOSED TREE					
	3x12,7 3x38	1	-	-	78072757016
	6x16x6x50	1	78072756792	-	-
	6x18 6x50	1	-	-	66261146537
4	6x18x6x150	1	-	-	66623391628
	8x20x6x150	1	-	-	66623382151
A STATE OF THE PARTY OF THE PAR	9,5x19 6x65	1	-	-	66261146539
	12x25x6x70	1	78072753486	-	66261146540
	12x25x8x70	1	78072756793	-	-
	16x25x6x70	1	-	-	66261146541
G TREE					
	3x14 3x38	1	-	-	60157638163
	6x16x6x50	1	-	69957383305	-
	6x18 6x50	1	-	-	66261146542
	8x19x6x64	1	-	-	66261146544
	9,5x19 6x64	1	-	-	66261146545
	12,7x19 6x64	1	78072756839	-	-
	12x25x8x70	1	78072756840	-	-
	12,7x25 6x70	1	-	-	66261146547
	16x25x6x70	1	-	-	66261146548
	19x25x6x70	1	-	_	78072757018

FOR STEEL, STAINLESS STEEL, CAST STEEL, COPPER, CAST IRON, NICKEL ALLOYS, ALLOYED STEEL, FERROUS METALS

PRODUCT SHAPE	$D_1xL_1xD_2xL_2$ (mm)	PK QTY	NEW! X-TREM CUT	DOUBLE CUT DC X-TIAIN	DOUBLE CUT DC
H FLAME					
	5x9,5x4x38	1	-	-	78072757019
The state of the s	8x19 6x64	1	78072756845	-	-
Application of the Party	12x32x6x77	1	78072756850	-	63642587971
	16x36x6x81	1	-	-	78072757007
J CYLINDER WITH END CUT					
	12,7x11 6x61	1	-	-	78072757020
	16x14 6x64	1	-		78072757021
K COUNTERSINK 90°					
	12,7x6x6x58	1	-	-	78072757063
	16x8 6x58	1	-	-	78072757064
L BALL NOSED CONE					
	6x16x6x50	1	-	-	60157638156
The second	8x22 6x70	1	-	-	66261146549
	9,5x27 6x75	1	-	-	66261146550
	12x30x6x75	1	78072756853	-	-
	12,7x28 6x77	1	-	-	66261146552
M CONE					
	3x11x3x38	1	-	-	78072757066
	6x19x6x50	1	-	-	63642587137
No Colombia	10x16x6x65	1	-	-	63642587133
	12x22x6x70	1	-	-	60157638149



NEW X-TREM CUT 5 ##### CARBIDE BURR KIT

SHAPE	$D_1xL_1xD_2xL_2$ (mm)	ART NO.	PK QTY	ART NO.	
А	12x25x6x70	78072753479	1	,	
С	12x25x6x70	78072753481	1		
D	12,7x10,8x6x,56	78072756783	1	78072756854	
F	12x25x6x70	78072753486	1		
L	12x30 6x75	78072756853	1		



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 fibers	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

New cutting heads are made with carbide and a high performance coating for easy bevelling and long life on steel, alloy steel and stainless steel. The new heads can be recognised by their bronze colour coating.

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 contact 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

MAX DEPTH (mm)	RADIUS / ANGLE	PK QTY	NEW HIGH PERFORMANCE HEAD; STEEL, LASER-CUT STEEL & STAINLESS STEEL	ALUMINIUM, PLASTIC, BRASS & SOFT METALS
8mm	R2	1	78072742984	66261113318
STATE	R3	1	78072742983	66261113319
	R4	1	78072743003	66261113320
	R8	1		66261152484
8mm	30°	1	78072743015	66261113321
	37°	1	78072743013	
	45°	1	78072743010	66261113323
10 mm	R6	1	78072743008	
12mm	R8	1	78072743009	
	30°	1	78072743020	66261146169
	37°	1	78072743019	
	45°	1	78072743017	66261146171
	60°	1	78072743021	





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	NEW HIGH PERFORMANCE HEAD; STEEL, LASER-CUT STEEL & STAINLESS STEEL	ALUMINIUM, PLASTIC, BRASS & SOFT METALS
6mm	R2	1	78072742976	66261113306
	R3	1	78072742973	66261113309
	R4	1	78072742978	66261113310
6mm	30°	1	78072742982	66261113311
	45°	1	78072742979	66261113312



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. Synthetic Steel Wool is one of top NORTON quality items.

STANDARD



- Made from strands of ultra-fine steel filaments
- For use on wood, paint, metal, stone, marble & glass
- Can be used with a chemical stripper

PAINT/VARN.

• Ideal for cleaning & fine finishing

			& 501 1 W00D
WEIGHT	GRADE	PK QTY	ART NO.
1kg	0000	12	63642593149
1kg	000	12	63642593151
1kg	00	12	63642593153
1ka	0	12	63642593154



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