

The Norton logo is displayed in white, italicized, sans-serif capital letters within a blue parallelogram. A small registered trademark symbol (®) is located to the right of the logo.

NORTON®

SAINT-GOBAIN

BONDED
ABRASIVES

PRECISION GRINDING

Straight wheels	255
Straight & tapered cups	271
Dishes	274
Cylinders	275
Segments	276

PRECISION GRINDING APPLICATIONS

Thanks to Norton's technical expertise, bond and abrasive grain formulations are optimised to best suit the technical request of all precision operations. Our vitrified wheels are available in a variety of shapes, diameters and arbor

sizes available from stock or on request. They are intended to maximise your productivity by improving your grinding efficiency and part quality in surface, tool and cutter, ID and cylindrical grinding as well as sharpening applications.



TOOL GRINDING

Tool grinding refers to the maintenance and repair of the cutting tools used in manufacturing operations. Wheels of all sizes and shapes are used in tool and cutter applications. Most wheels used are vitrified, in grit sizes 36 to 220, and in grades H through to N.



SAW SHARPENING

Saw sharpening refers to the maintenance and repair of saw blades. Vitrified flat wheels and cups are used in grit sizes 54 to 60. Resin treatment reinforces the wheel and helps reduce wheel face deformation.



SURFACE GRINDING

The term surface grinding is used to describe the grinding of flat surfaces in which the wheel moves past the workpiece in a flat plane, or vice versa. Surface grinding applications range can vary from heavy rapid stock removal, to precision contour grinding.



EXTERNAL CYLINDRICAL GRINDING

Norton's leading technology, provides you with the best precision, form holding vitrified wheels to maximise productivity, increase grinding efficiency and improve part quality in all your external cylindrical grinding operations.



INTERNAL CYLINDRICAL GRINDING

Internal grinding refers to the grinding of bores or holes and is probably one of the most difficult types of grinding. Internal grinding applications range from very rapid stock removal to more controlled processes capable of generating sizes and concentricity measured in microns.



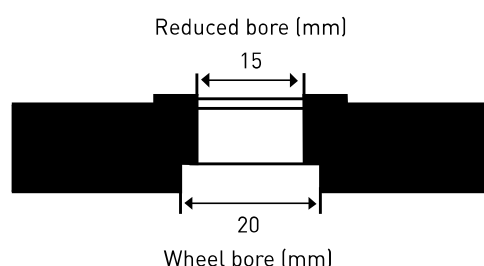
BENCH AND PEDESTAL GRINDING

Bench and pedestal grinding application refers to off-hand deburring and sharpening of parts and tools. The wheels are mounted on bench grinders or pedestal grinders and covers three types of abrasives to answer all deburring, shaping and sharpening needs: aluminium oxide for high speed tool steels and other metals, and silicon carbide for non-ferrous metals.

REDUCTION RINGS

Plastic reduction rings may be used to adapt grinding wheels to fit on various spindle sizes. These rings reduce the bore hole size, allowing the wheel to be safely mounted on a spindle with a smaller diameter.

- Reduction rings should never come in contact with the flange
- Reduction rings should not be used on wheels of thicknesses less than 6mm, nor greater than 50mm
- Always use one reduction ring on each side of the wheel when the wheel is thick enough to allow correct seating
- Never use reduction rings to reduce the hole below the minimum specified in the FEPA safety code



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

HOW TO READ THE GRINDING WHEEL SECTION

1.

SELECT YOUR DIMENSION

20 x 20 x 6,35mm

SHAPE 01 SHAPE 05 SHAPE 07 SHAPE 20 SHAPE 01C

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

Tools
Saw Sharpening
Bench Wheels
Internal Diameter
External Diameter
Surface

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

Abrasive Type
Grt size
Grade
Bond

GRAIN COLOUR CODE

5NQ	GF	25A
3NQ	38A Vit [®]	19A
2NQ	38A	A
NQ Vit [®]	86A	39C
SG	32A	37C

DIM Dia/H mm	SHAPE	P	FA	FB	Deburring & Sharpening	Grinding	Materials	SPECIFICATION	MDS m/s	ART NO.	PRICE	PK QTY	QUALITY TIER
20x20x6,35	5	10	10	-				5NQ 60 K VQN 45	66253244884	###,##	10	++++	
	5	10	10	-				5GB 60 J VS3 63	66253355181	###,##	10	++++	
	1	-	-	-				5GB 60 JB VS3 63	66253358179	###,##	10	++++	
	5	10	10	-				38A 60 L VS 35	69936621542	###,##	10	+++	
25x25x6,35	5	13	12	-				5NQ 80 I VQN 45	66253244885	###,##	10	++++	
	5	13	12	-				5GB 60 J VS3 63	66253355182	###,##	10	++++	
	5	13	12	-				38A 60 K VS3 45	66253348349	###,##	10	++++	
25x25x8	5	13	12	-				5NQ 68 K VS3 35	66253348317	###,##	10	++++	
	5	13	10	-				5NQ 88 J VQN 45	66253244887	###,##	10	++++	
	5	13	12	-				35G 88 L VS 35	69936639547	###,##	10	++++	
	5	13	10	-				5GB 68 K VK 45	69936681795	###,##	10	++++	
32x25x8	5	13	10	-				5NQ 60 J VQN 45	66253244888	###,##	10	++++	
	5	16	16	-				55G 60 K VS 35	69936639439	###,##	10	++++	
32x32x9,53	5	16	16	-				5NQ 80 I VQN 45	66253244898	###,##	10	++++	
	5	16	16	-				5GB 60 JB VS3 63	66253355183	###,##	10	++++	
32x32x10	5	16	16	-				55G 60 K VS 35	69936639605	###,##	10	++++	
	5	16	16	-				5GB 68 J VK 45	69936676291	###,##	10	++++	
	5	16	16	-				38A 60 L VS 45	69936675118	###,##	10	+++	
40x25x9,53	5	20	32	-				5NQ 60 K VQN 45	66253244889	###,##	10	++++	

BONDED
ABRASIVES

APPLICATION/GRIT RECOMMENDATION GUIDE

COARSER (GRINDING)

FINER (FINISHING)

24	36	46	60	80	100	150
Heavy Stock Removal						
	Medium Stock Removal					
		Light Stock Removal				
			Deburring/Shaping			
				Sharpening		
					Final Finishing	



- Unsecured machines can move, causing grinding breakage and injury. Fixed-based bench and pedestal grinders **MUST** be secured.
- Do not grind wood, plastic, or any other non-metallic material on a bench or pedestal grinder.
- All bench and pedestal wheels must be dressed to prevent loading. Loading can cause excessive heat, damage to the workpiece, and wheel breakage. Dressing exposes new cutting edges and provides chip clearance.
- Recommended starting dressing stick: 1" x 1" x 6" 37C24-SVK Part # 61463610462



WHEEL DRESSING

Single Point Diamond Tools

- Rigidly mount Single Point tools at a 10°-15° angle to the wheel centerline with a line drawn through the centre of the wheel, pointing in the direction of wheel travel
- Point of contact should be slightly below centreline of wheel
- Use coolant whenever possible
- Normal infeed is .001" per pass
- Lead selections range from .002" - .010" per wheel revolution
- Rotate the tool 1/4 turn periodically to maintain a sharp point
- Use VBE, V, VS, VK bonds for general purpose applications or medium contact areas
- Use VBEP, VSP, VS3P, VCP, VP2 bonds on wide contact areas where heat is an issue



It is the user's responsibility to refer to and comply with ANSI B7.1

Multi-Point Diamond Tools

- Most multi-point tools are used for straight face dressing
- Tool should have full face contact with the wheel
- With new tool, 3 to 5 passes at .005" per pass should be taken to expose diamonds
- Infeed per pass .001" - .002"
- Use coolant whenever possible
- Use appropriate lead (and traverse rate)
- Contact your Norton representative for proper tool selection for Targa (TG) wheels

Dressing Ceramic Wheels

- Use our specially designed Norton SG diamond tools when dressing ceramic wheels
- When first using a Norton SG tool, make 3 to 5 passes at .005" infeed to ensure full face contact between the dressing tool and wheel face
- Reduce normal dressing infeed by half. Do not exceed infeed of .002" per pass
- The lead selection should be between .006" - .030" per wheel revolution. Faster traverse with Norton SG tools generally provides an open wheel face that can maximise productivity of the ceramic abrasive
- To optimise applications using ceramic abrasives and/or tools, normal dressing parameters must change. Reduce infeed by 25%. Significant reductions in the amount of infeed and frequency of dress will result in substantially lower cost per part ground
- See the Fliesen Tool section for Furioso tools, engineered specifically for Quantum vitrified wheel dressing

TROUBLESHOOTING GUIDE

Check the obvious first. Before changing the grinding wheel specification, investigate the following most common causes for most grinding problems:

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

PROBLEM	POSSIBLE CAUSE	CORRECTION
Workpiece burn	Poor coolant direction	Redirect coolant into grinding zone
	Restricted or low coolant volume	Increase coolant volume
	Wheel too hard	Use one grade softer wheel
	Wheel structure too closed	Use porous bond wheel
	Wheel dressed too fine	Dress wheel coarser, more "open"
	Worn dressing tool	Inspect, rotate or replace dressing tool
	Work speed too slow	Increase work speed
	Infeed too fast	Reduce stock removed per pass or upgrade to 5SG or 5NQ
Wheel loading and glazing	Wheel too fine	Use coarser grit or softer grade wheel
	Wheel too hard	Use one grade softer wheel
	Too durable abrasive	Use a sharper, more friable abrasive
	Poor coolant quality	Change coolant or use high detergent type
	Wheel structure too closed	Use a porous bond wheel
	Wheel too finely dressed	Dress wheel very open
	Diamond dressing tool worn	Replace diamond and dress coarse (open)
	Depth of cut too small	Increase feed and traverse speed
Chatter	Unsupported work	Increase work support
	Machine vibration	Check for worn bearings
	Too heavy cut rate	Reduce cut rate
	Wheel too hard	Use one grade softer wheel
	Wheel structure too closed	Use a porous bond wheel
	Wheel out of balance	Check wheel balance or try new wheel
Chatter marks on workpiece	Worn spindle bearings	Check and correct for truth and end play
	Wheel out of truth	Redress wheel and check mounting
	Poorly clamped wheel	Check tightness of mounting nuts
	Glazed face of wheel	Redress wheel with sharp dressing tool
Poor surface finish	Incorrect wheel dress	Dress wheel finer (slow down dressing tool traverse)
	Worn dressing tool	Inspect, rotate, or replace dressing tool
	Too coarse grit size	Use a finer grit size
	Wheel too hard	Use softer grade
Not holding form	Wheel too soft	Use one grade harder wheel
	Wheel structure too open	Use a more closed wheel structure
Not holding corner	Incorrect wheel dress	Dress wheel finer. Face and side true wheel.
	Too large grit size	Use smaller grit size (maximum grit diameter less than 1,5 times corner radius)
	Wheel too soft	Use harder grade wheel
	Wheel structure too open	Use more closed structure wheel



NQ VS3

Engineered microcrystalline ceramic grain combined with our latest innovative bond

- A perfect blend of sharp grains for the ultimate free cutting action
- Enhanced bond adhesion and chemistry for a cooler cut and high speed material removal
- Unique, microcrystalline structure is self-sharpening for long product life
- High profile accuracy and reduced dressing frequency



NQ



Engineered microcrystalline ceramic grain

- A perfect blend of sharp grains for the ultimate free cutting action
- Unique, microcrystalline structure is self-sharpening for long product life
- Can be used in all low, medium and high force applications
- Reduces the need for dressing

SG VS3



An excellent ceramic grain with the latest bond innovation

- High concentration of SG ceramic aluminium oxide abrasive combined with our Vitrium³ enhanced bond adhesion and chemistry
- Unique, microcrystalline structure is self-sharpening for long product life
- Ultimate cutting capability
- High material removal rate whilst maintaining a high profile accuracy for reduced dressing

3SG / 5SG



Traditional ceramic microstructure grain

- Very high concentration of SG ceramic aluminium oxide abrasive for high removal rate and extended wheel life
- Unique, microcrystalline structure is self-sharpening for long product life
- Very good cutting capabilities on very hard steels
- Perfect for technical applications where grinding parameters can be adjusted to optimise performance



SGA / SGB



A blend with a low concentration of ceramic grain for good performance in a number of applications

- Harder and sharper than conventional abrasive grains for good cutting capabilities
- Very versatile for use on a number of steels
- Suitable for low to medium power machines



38A VS3



The latest bond innovation with conventional alumina grain

- High purity aluminium oxide abrasive for cool and burn free cutting
- Highly friable abrasive, versatile on hard metals (HRC >50)
- Ideal for heat sensitive applications with light to moderate feed rates
- Improved profile accuracy and wheel life



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

BONDED ABRASIVES FOR PRECISION GRINDING



A



Brown aluminium oxide

- For soft steel removal, shaping and deburring
- Very tough, suitable for grinding most types of soft steels
- Good wheel life and hard wearing for general purpose cylindrical off-hand bench and pedestal grinding applications
- Good price vs. performance ratio



39C



Highest purity green silicon carbide abrasive

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



37C



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





STRAIGHT WHEELS FOR PRECISION GRINDING

SHAPE 01 SHAPE 05 SHAPE 07 SHAPE 20 SHAPE 01C

PRODUCT RECOMMENDATION

Highly recommended ●
Recommended ○

DIM DxDxH (mm)	SHAPE	P	FA	FB	Recess/Inner Concave Diameter Recess/Concave Depth A Recess/Concave Depth B	Tools Saw Sharpening Bench Wheels	Internal Diameter External Diameter Surface	Grinding	Materials High Alloyed Steels & HSS Soft Steels Inox Non-Ferrous & Carbide Cast Iron	Abrasive Type	Grit Size	Grade	Bond	MOS (m/s)	ART NO.	PK QTY	QUALITY TIER
10x10x3,18	01	-	-	-				●	● ○	SGB	60	J	VS3	63	66253355175	10	+++++
13x13x4	01	-	-	-				●	● ○	5NQ	80	K	VS3	35	66253348357	10	+++++
13x13x4,76	01	-	-	-				●	● ○	SGB	60	J	VS3	63	66253355176	10	+++++
	05	6	6	-				●	● ○	SGB	60	J	VS3	63	66253355177	10	+++++
16x16x6	05	10	8	-				●	● ○	5NQ	60	K8	VS3	35	66253348333	10	+++++
	01	-	-	-				●	● ○	5NQ	80	J	VQN	45	66253244881	10	+++++
	01	-	-	-				●	● ○	3NQ	60	K	VS3	35	66253348360	10	+++++
	01	-	-	-				●	● ○	3NQ	60	L	VQN	45	66253261880	10	+++++
20x20x6	05	13	10	-				●	● ○	5NQ	80	J	VQN	45	66253244883	10	+++++
	05	13	10	-				●	● ○	5NQ	60	K	VS3	35	66253348335	10	+++++
	01	-	-	-				●	● ○	3NQ	60	L	VQN	45	66253261903	10	+++++
	05	13	10	-				●	● ○	SGB	60	K	VX	45	69936681793	10	+++++
	01	13	10	-				●	● ○	38A	60	K	VS3	45	66253348355	10	+++++

HSS = High Speed Steel

Steel hardened = Over 50Rc

Steel soft = Up to 50Rc

BONDED ABRASIVES FOR PRECISION GRINDING

SHAPE 01  SHAPE 05  SHAPE 07  SHAPE 20  SHAPE 01C 

GRAIN COLOUR CODE

5NQ	GF	25A
3NQ	38A Vit ³	19A
2NQ	38A	A
NQ Vit ³	86A	39C
SG	32A	37C

DIM DxDxH (mm)	SHAPE	P	FA	FB	Tools	Deburring & Sharpening	Grinding	Materials	SPECIFICATION	MOS (m/s)	ART NO.	PK QTY	QUALITY TIER
20x20x6,35	5	10	10	-			●	●	5NQ 60 K VQN	45	66253244884	10	+++++
	5	10	10	-			●	●	SGB 60 J VS3	63	66253355181	10	+++++
	1	-	-	-			●	●	SGB 60 J8 VS3	63	66253355179	10	+++++
	5	10	10	-			●	●	38A 60 L VS	35	69936621542	10	+++
25x25x6,35	5	13	12	-			●	●	5NQ 80 I VQN	45	66253244885	10	+++++
	5	13	12	-			●	●	SGB 60 J VS3	63	66253355182	10	+++++
	5	13	12	-			●	●	38A 60 K VS3	45	66253348349	10	+++++
25x25x8	5	13	12	-			●	●	5NQ 60 K VS3	35	66253348317	10	+++++
	5	13	10	-			●	●	5NQ 80 J VQN	45	66253244887	10	+++++
	5	13	12	-			●	●	3SG 80 L VS	35	69936639647	10	+++++
	5	13	10	-			●	●	SGB 60 K VX	45	69936681795	10	+++++
32x25x8	5	13	10	-			●	●	5NQ 60 J VQN	45	66253244888	10	+++++
	5	16	16	-			●	●	5SG 60 K VS	35	69936639439	10	+++++
32x32x9,53	5	16	16	-			●	●	5NQ 80 I VQN	45	66253244898	10	+++++
	5	16	16	-			●	●	SGB 60 J8 VS3	63	66253355183	10	+++++
32x32x10	5	16	16	-			●	●	5SG 60 K VS	35	69936639605	10	+++++
	5	16	16	-			●	●	SGB 60 J VX	45	69936676291	10	+++++
	5	16	16	-			●	●	38A 60 L VS	45	69936675118	10	+++
40x25x9,53	5	20	12	-			●	●	5NQ 60 K VQN	45	66253244889	10	+++++
	5	20	12	-			●	●	SGB 60 J VS3	63	66253355184	10	+++++
40x25x10	5	16	12	-			●	●	5NQ 80 K VQN	45	66253244890	10	+++++
	5	16	12	-			●	●	5SG 60 K VS	35	69936639834	15	+++++
40x32x10	5	20	16	-			●	●	5NQ 60 L VQN	45	66253244891	10	+++++
40x40x10	5	16	20	-			●	●	5NQ 60 J VS3	35	66253348334	10	+++++
	5	16	20	-			●	●	5NQ 60 K VQN	45	66253244897	10	+++++
40x40x12,7	5	20	20	-			●	●	SGB 60 J VS3	63	66253355185	10	+++++
50x40x12,7	5	25	20	-			●	●	5NQ 60 K VQN	45	66253244892	10	+++++
	5	25	25	-			●	●	SGB 60 J VS3	63	66253355186	10	+++++
50x40x16	5	25	20	-			●	●	5NQ 60 K VQN	45	66253244894	10	+++++
	5	25	20	-			●	●	5NQ 60 J VS3	35	66253348348	10	+++++
63x10x20	1	-	-	-			●	●	38A 60 N VS	45	66253050376	10	+++
63x40x12,7	5	32	20	-			●	●	5NQ 80 I VQN	45	66253244895	10	+++++
	5	32	20	-			●	●	SGB 60 J VS3	63	66253355187	10	+++++
	5	32	20	-			●	●	38A 60 L VS	45	69936621565	10	+++
70x7,1x17	1	-	-	-			●	●	3NQ 60 L VS3	35	66253348329	10	+++++
76x25x12,7	1	-	-	-			●	●	39C 80 I V	45	66253052726	10	+++
76x32x20	5	42	16	-			●	●	5NQ 60 J VQN	45	66253244896	10	+++++
80x25x12,7	1	-	-	-			●	●	39C 60 M V	45	66253051624	10	+++
	1	-	-	-			●	●	39C 60 M V	45	66253051623	10	+++
	1	-	-	-			●	●	37C 60 N V	35	69936668764	10	+++

HSS = High Speed Steel

Steel hardened = Over 50Rc

Steel soft = Up to 50Rc

PRODUCT RECOMMENDATION

Highly recommended ●
Recommended ○

																							PRODUCT RECOMMENDATION			
																							Highly recommended	●		
																							Recommended	◐		

HSS = High Speed Steel

Steel hardened = Over 50Rc

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BONDED ABRASIVES FOR PRECISION GRINDING

SHAPE 01



SHAPE 05



SHAPE 07



SHAPE 20



SHAPE 01C



GRAIN COLOUR CODE

5NQ	GF	25A
3NQ	38A Vit ³	19A
2NQ	38A	A
NQ Vit ³	86A	39C
SG	32A	37C

DIM DxDxH (mm)	SHAPE	P	FA	FB	Recess/Inner Concave Diameter	Recess/Concave Depth A	Recess/Concave Depth B	Tools	Saw Sharpening	Bench Wheels	Internal Diameter	External Diameter	Surface	High Alloyed Steels & HSS	Soft Steels	Inox	Non-Ferrous & Carbide	Cast Iron	Abrasive Type	Grit Size	Grade	Bond	MOS (m/s)	ART NO.	PK QTY	QUALITY TIER
150x13x31,75	1	-	-	-	●									●	●				38A	60	M	VS	45	66243541072	5	+++++
	1	-	-	-	●									●	●				38A	46	M	VS	45	66253050261	1	+++
	1	-	-	-	●									●	●				38A	60	M	VS	45	69936641112	1	+++
	1	-	-	-	●									●	●				38A	60	L	VS	45	69936675744	1	+++
	1	-	-	-	●									●	●				38A	60	K	VS	45	66253051070	1	+++
	1	-	-	-	●									●	●				38A	80	M	VS	45	66253050373	1	+++
	1	-	-	-	●									●	●				38A	100	M	VS	45	66253050371	1	+++
	1	-	-	-	●									●	●				38A	120	J	VS	45	69936675749	1	+++
	1	-	-	-	●										●	●			39C	80	K	VS	45	66253050357	2	+++
	1	-	-	-	●										●	●			39C	120	K	VS	45	69936675629	2	+++
150x13x32	1	-	-	-	●				●					●	●				3SG	60	K	VS	50	69936622862	1	+++++
	1	-	-	-	●									●	●				38A	60	K	VS3	63	66253353664	1	+++++
	1	-	-	-	●					●					●	●			39C	60	K	VS	35	69936621564	1	+++
150x16x32	1	-	-	-	●									●	●				3SG	46	H	VX	45	66253054863	2	+++++
	1	-	-	-	●									●	●				3SG	60	L	VX	45	66253050142	2	+++++
	1	-	-	-	●									●	●				38A	46	L	VS	45	69936675754	1	+++
	1	-	-	-	●									●	●				38A	60	L	VS	35	69936675757	1	+++
	1	-	-	-	●									●	●				38A	60	N	VS	45	69936675758	1	+++
	1	-	-	-	●									●	●				38A	60	L	VS	35	69936639340	1	+++
	1	-	-	-	●									●	●				38A	80	L	VS	45	69936675759	1	+++
	1	-	-	-	●									●	●				38A	120	J	VS	45	69936675760	1	+++
	1	-	-	-	●									●	●				3SG	60	L	VX	45	66253050367	2	+++++
150x20x31,75	1	-	-	-	●									●	●				3SG	60	H12	VXP	45	69936677177	2	+++++
	1	-	-	-	●									●	●				38A	46	L	VS	45	69936675763	1	+++
	1	-	-	-	●									●	●				38A	60	L	VS	45	69936675764	1	+++
	1	-	-	-	●									●	●				38A	80	L	VS	45	69936675767	1	+++
	1	-	-	-	●				●						●				A	46	N	VS	45	69936675560	1	+++
	1	-	-	-	●										●	●			39C	80	L	VS	45	69936675657	2	+++
	1	-	-	-	●										●	●			39C	120	K	VS	45	69936675659	2	+++
	1	-	-	-	●									●	●				38A	60	K	VS3	63	66253353966	1	+++++
150x20x32	1	-	-	-	●				●					●					A	46	N	VS	35	69936623469	1	+++
	1	-	-	-	●					●				●					A	60	N	VS	35	69936623470	1	+++
	1	-	-	-	●					●				●					A	60	N	VS	35	69936623302	1	+++
	1	-	-	-	●					●					●	●			39C	60	K	VS	35	69936623474	1	+++
	1	-	-	-	●					●					●	●			39C	100	K	VS	35	69936623221	1	+++
	1	-	-	-	●									●	●				3SG	60	K	VX	45	66253050155	2	+++++
150x20x32	1	-	-	-	●									●	●				SG	100	J	VX	45	66253049895	2	+++++
	1	-	-	-	●									●	●				38A	46	M	VS	45	66253050372	1	+++

HSS = High Speed Steel

Steel hardened = Over 50Rc

Steel soft = Up to 50Rc

PRODUCT RECOMMENDATION

Highly recommended ●
Recommended ○

																				PRODUCT RECOMMENDATION				
																				Highly recommended		●		
																				Recommended		◐		

HSS = High Speed Steel

Steel hardened = Over 50Rc

Steel soft = Up to 50Rc

BONDED ABRASIVES FOR PRECISION GRINDING

SHAPE 01



SHAPE 05



SHAPE 07



SHAPE 20



SHAPE 01C



GRAIN COLOUR CODE

5NQ	GF	25A
3NQ	38A Vit ³	19A
2NQ	38A	A
NQ Vit ³	86A	39C
SG	32A	37C

DIM DxDxH (mm)	SHAPE	P	FA	FB	Deburring & Sharpening		Grinding			Materials				SPECIFICATION				MOS (m/s)	ART NO.		PK QTY	QUALITY TIER
	1	-	-	-		●				●	●		●	38A	46	J	VS	35	69936623274	1	+++	
	1	-	-	-		●				●	●		●	38A	60	J	VS	35	69936623266	1	+++	
	1	-	-	-		●				●	●		●	38A	80	L	VS	35	69936623239	1	+++	
	1	-	-	-		●				●	●		●	38A	100	L	VS	35	69936623220	1	+++	
	1	-	-	-		●					●	●		39C	100	J	VS	35	69936623248	1	+++	
180x13x32	1	-	-	-		●				●	●			3NQ	60	I	VS3	35	66253348361	2	+++++	
	1	-	-	-	●					●	●	●		2NQ	46	I	VS3	45	66253348363	2	+++++	
	1	-	-	-	●					●	●			3SG	80	J	VX	45	66253054892	2	+++++	
	1	-	-	-	●					●	●			3SG	120	J	VX	45	66253054874	2	+++++	
	1	-	-	-	●					●	●			SGB	60	J	VX	45	69936639148	2	++++	
	1	-	-	-	●					●	●			38A	60	L	VS	45	69936675797	1	+++	
	1	-	-	-	●					●	●			38A	80	L	VS	45	69936675801	1	+++	
	1	-	-	-	●					●	●			38A	120	J	VS	45	69936675802	1	+++	
180x16x32	1	-	-	-		●				●	●	●		3SG	60	H12	VXP	35	69936677179	1	+++++	
	1	-	-	-	●					●	●			SGB	70	G12	VXP	45	69936639169	2	++++	
	1	-	-	-		●				●	●		●	38A	46	J	VS	35	69936675806	1	+++	
	1	-	-	-	●					●	●			38A	60	K	VS	45	66253050453	1	+++	
180x20x31,75	1	-	-	-		●				●	●	●		3SG	46	K	VS	50	69936623242	1	+++++	
	5	100	6	-		●				●	●	●		3SG	60	J	VS	35	69936639808	1	+++++	
	1	-	-	-		●				●	●			SGB	60	K	VX	50	69936623480	1	++++	
	1	-	-	-		●				●	●		●	38A	46	L	VS	35	69936623312	1	+++	
	1	-	-	-		●				●	●		●	38A	60	L	VS	35	69936623472	1	+++	
	5	100	6	-		●				●	●		●	38A	60	J	VS	35	69936640226	1	+++	
	1	-	-	-		●						●	●	39C	60	K	VS	35	69936623477	1	+++	
180x20x32	1	-	-	-		●				●	●	●		3SG	60	H12	VXP	35	66243593654	1	+++++	
	1	-	-	-	●					●	●			SGB	46	H10	VXP	45	69936638723	2	++++	
	1	-	-	-	●					●	●			SGB	60	K	VX	45	66253049878	2	++++	
	1	-	-	-	●					●	●			SGB	60	H10	VXP	45	69936639170	2	++++	
	1	-	-	-		●					●			A	46	N	VS	45	69936641372	1	+++	
	1	-	-	-		●					●			A	60	N	VS	45	66253352810	2	+++	
	1	-	-	-	●							●	●	39C	60	K	VS	45	69936641415	2	+++	
	1	-	-	-	●							●	●	39C	80	L	VS	45	69936676582	2	+++	
	1	-	-	-	●							●	●	39C	120	K	VS	45	69936675666	2	+++	
180x25x31,75	5	105	13	-		●				●	●	●		3SG	46	K	VS	50	69936621519	1	+++++	
	5	105	13	-		●				●	●	●		3SG	60	K	VS	50	69936621570	1	+++++	
	5	105	13	-		●				●	●			SGB	46	K	VX	50	69936621605	1	++++	
	5	105	12	-	●					●	●			38A	46	K6	VS3	63	66253354036	1	++++	
	5	105	12	-	●					●	●			38A	60	K6	VS3	63	66253354035	1	++++	
	5	105	12	-		●				●	●		●	38A	46	J	VS	35	69936621529	2	+++	

HSS = High Speed Steel

Steel hardened = Over 50Rc

Steel soft = Up to 50Rc

PRODUCT RECOMMENDATION

Highly recommended ●
Recommended ○

																							PRODUCT RECOMMENDATION			
																							Highly recommended	●		
																							Recommended	○		
																							</			

HSS = High Speed Steel

Steel hardened = Over 50Rc

Steel soft = Up to 50Rc

BONDED ABRASIVES FOR PRECISION GRINDING

SHAPE 01  SHAPE 05  SHAPE 07  SHAPE 20  SHAPE 01C 

GRAIN COLOUR CODE

5NQ	GF	25A
3NQ	38A Vit ³	19A
2NQ	38A	A
NQ Vit ³	86A	39C
SG	32A	37C

DIM DxDxH (mm)	SHAPE	P	FA	FB	Deburring & Sharpening	Grinding			Materials				SPECIFICATION				MOS (m/s)	ART NO.		PK QTY	QUALITY TIER
200x13x32	1	-	-	-	●				●	●				38A	120	I	VS	35	69936641286	4	+++
	1	-	-	-	●				●	●				SGB	60	J	VX	45	69936639160	2	++++
	1	-	-	-	●				●	●				SGB	120	J	VX	45	69936676608	2	++++
	1	-	-	-	●				●	●				38A	60	L	VS3	63	66253348352	1	++++
	1	-	-	-	●				●	●				38A	60	L	VS	45	69936675823	1	+++
	1	-	-	-	●				●	●				38A	60	J	VS	45	69936675821	1	+++
	1	-	-	-	●					●				19A	60	M	VS	63	69936675994	6	+++
	1	-	-	-	●						●	●		39C	80	J	VS	45	69936676152	2	+++
200x16x76,2	1	-	-	-	●				●	●				38A	60	L	VS	45	69936675827	1	+++
200x20x20	1	-	-	-	●						●	●		39C	80	K	VS	45	69936641417	2	+++
	1	-	-	-	●						●	●		39C	80	M	VS	45	69936640220	2	+++
200x20x31,75	1	-	-	-		●			●	●	●			3SG	46	K	VX	50	69936623774	1	+++++
	1	-	-	-		●			●	●				SGB	70	H12	VXP	50	69936623902	1	++++
	1	-	-	-	●				●	●				38A	46	K	VS3	63	66253354039	1	++++
	1	-	-	-	●				●	●				38A	60	K	VS3	63	66253354038	1	++++
	1	-	-	-		●				●				A	46	N	VS	35	69936623592	1	+++
	1	-	-	-		●				●				A	60	N	VS	35	69936623591	1	+++
200x20x32	1	-	-	-	●				●	●	●			3NQ	46	J	VQN	45	66253261995	2	+++++
	1	-	-	-	●				●	●	●			2NQ	60	I8	VS3	45	66253357059	2	+++++
	1	-	-	-	●				●	●				3SG	60	H12	VXP	45	69936677181	2	+++++
	1	-	-	-	●				●	●				SGB	60	H10	VXP	45	69936639172	2	++++
	1	-	-	-	●				●	●				SGB	46	H	VX	45	69936639171	2	++++
	1	-	-	-	●				●	●				SGB	60	K	VX	45	66253049887	5	++++
	1	-	-	-	●				●	●				38A	46	N	VS	45	69936641400	1	+++
	1	-	-	-	●				●	●				38A	46	K	VS	45	66253051075	1	+++
	1	-	-	-	●				●	●				38A	46	H	VS	45	69936675551	1	+++
	1	-	-	-	●				●	●				38A	60	N	VS	45	6993667154	1	+++
	1	-	-	-		●			●	●		●		38A	60	L	VS	35	69936641402	1	+++
	1	-	-	-	●				●	●				38A	60	K	VS	45	66253051077	1	+++
	1	-	-	-	●				●	●				38A	80	K	VS	45	66253051080	1	+++
	1	-	-	-		●				●				A	30	P	VS	45	69936675566	1	+++
	1	-	-	-		●				●				A	46	N	VS	45	69936641375	1	+++
	1	-	-	-		●				●				A	60	N	VS	45	69936666929	1	+++
	1	-	-	-		●					●	●		39C	60	K	VS	45	66253349667	2	+++
	1	-	-	-	●						●	●		39C	60	K	VS	45	69936641418	2	+++
	1	-	-	-	●						●	●		39C	80	K	VS	45	69936676351	2	+++
	1	-	-	-		●					●	●		39C	80	K	VS	45	66253349681	2	+++
	1	-	-	-	●						●	●		39C	120	K	VS	45	69936641421	2	+++
200x20x50	1	-	-	-	●				●	●				3SG	60	J	VX	45	66253050362	2	+++++

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

PRODUCT RECOMMENDATION

Highly recommended ●
Recommended ○

																							PRODUCT RECOMMENDATION			
																							Highly recommended	Recommended		

HSS = High Speed Steel

Steel hardened = Over 50Rc

Steel soft = Up to 50Rc

BONDED ABRASIVES FOR PRECISION GRINDING

SHAPE 01  SHAPE 05  SHAPE 07  SHAPE 20  SHAPE 01C 

GRAIN COLOUR CODE

5NQ	GF	25A
3NQ	38A Vit ³	19A
2NQ	38A	A
NQ Vit ³	86A	39C
SG	32A	37C

DIM DxDxH (mm)	SHAPE	P	FA	FB	Tools	Saw Sharpening	Bench Wheels	Internal Diameter	External Diameter	Surface	High Alloyed Steels & HSS	Soft Steels	Inox	Non-Ferrous & Carbide	Cast Iron	Abrasive Type	Grit Size	Grade	Bond	MOS (m/s)	ART NO.	PK QTY	QUALITY TIER
	1	-	-	-	●							●	●			39C	80	K	VS	45	66253050276	2	+++
	1	-	-	-	●						●	●				38A	100	J	VS	45	66243570496	1	+++
	1	-	-	-	●							●	●			39C	100	J	VS	45	66253050375	2	+++
	1	-	-	-	●							●	●			39C	120	K	VS	45	69936641428	2	+++
200x25x50	5	110	10	-						●	●	●				3SG	60	I	VS	35	69936639454	2	+++++
200x25x50,8	1	-	-	-	●						●	●				SGB	46	K	VX	45	66253050183	2	+++++
200x25x51	1	-	-	-	●						●	●				38A	46	K	VS	45	66253051086	1	+++
	1	-	-	-	●						●	●				38A	60	L	VS	45	69936640125	1	+++
200x25x76,2	1	-	-	-	●						●	●				38A	46	N	VS	45	69936675841	1	+++
	1	-	-	-	●						●	●				38A	46	L	VS	35	69936675842	1	+++
	1	-	-	-	●						●	●				38A	60	L	VS	35	69936675845	1	+++
	1	-	-	-		●						●				A	46	N	VS	45	69936675568	1	+++
	1	-	-	-	●						●	●				38A	60	N	VS	45	69936675846	1	+++
	1	-	-	-	●							●	●			39C	60	K	VS	45	69936675672	2	+++
	1	-	-	-	●							●	●			39C	80	L	VS	45	69936675673	2	+++
	1	-	-	-	●							●	●			39C	80	K	VS	35	69936675641	2	+++
	1	-	-	-	●							●	●			39C	120	K	VS	45	69936675674	2	+++
200x32x32	1	-	-	-	●						●	●				SGB	60	K	VX	45	66253049892	2	+++++
	1	-	-	-	●						●	●				38A	46	M	VS	45	66253052712	1	+++
	1	-	-	-	●						●	●				38A	60	L	VS	45	69936675855	1	+++
	1	-	-	-		●						●				A	36	P	VS	45	69936666932	1	+++
200x32x32	1	-	-	-		●						●				A	46	N	VS	45	69936640814	1	+++
	1	-	-	-		●						●				A	60	N	VS	45	69936690246	1	+++
	1	-	-	-	●							●	●			39C	60	K	VS	45	69936640293	2	+++
	1	-	-	-	●							●	●			39C	80	K	VS	45	69936667106	2	+++
	1	-	-	-	●							●	●			39C	120	K	VS	45	69936675677	2	+++
200x32x51	1	-	-	-	●						●	●				38A	60	L	VS	45	69936640245	1	+++
200x32x76,2	1	-	-	-	●						●	●				38A	46	N	VS	45	69936675849	1	+++
	1	-	-	-	●						●	●				38A	60	N	VS	45	69936675854	1	+++
	1	-	-	-		●						●				A	46	N6	VS	45	66243593707	1	+++
	1	-	-	-	●							●	●			39C	60	K	VS	45	69936675643	2	+++
	1	-	-	-	●							●	●			39C	80	K	VS	45	69936675644	2	+++
200x40x20	5	110	25	-		●						●	●			39C	80	J	VS	35	69936640285	1	+++
200x40x50,8	1	-	-	-	●						●	●				38A	46	I	VS	45	69936681707	1	+++
225x5x60	1	-	-	-	●						●	●				38A	54	J	VS	45	69936675859	1	+++
225x20x51	1	-	-	-	●						●	●				3SG	60	H12	VXP	45	69936676452	2	+++++
	1	-	-	-	●						●	●				SGB	60	H	VX	45	69936640943	2	+++++
	1	-	-	-	●						●	●				38A	46	I	VS	45	69936640871	1	+++
225x25x76,2	1	-	-	-	●						●	●				3SG	46	H	VX	45	66243570377	2	+++++
	1	-	-	-	●						●	●				3SG	46	H	VX	45	66253055043	2	+++++
	1	-	-	-	●						●	●				3SG	60	H12	VXP	45	66243593705	2	+++++

PRODUCT RECOMMENDATION

Highly recommended ●
Recommended ○

DIM DxDxH (mm)	SHAPE	P	FA	FB	Recess/Inner Concave Diameter Recess/Concave Depth A Recess/Concave Depth B			Tools Saw Sharpening Bench Wheels			Internal Diameter External Diameter Surface			High Alloyed Steels & HSS Soft Steels Inox			Non-Ferrous & Carbide Cast Iron			Abrasive Type	Grit Size	Grade	Bond	MOS (m/s)	ART NO.	PK QTY	QUALITY TIER
230x5x31,75	1	-	-	-	●									●						19A	54	J	VS	40	69936623905	2	+++
230x10x32	1	-	-	-	●									○	●					38A	60	M	VS	63	69936675929	1	+++
230x25x32	1	-	-	-				●								●	●			39C	80	K	VS	35	69936639374	1	+++
230x25x50,8	1	-	-	-	●									○	●					38A	60	H	VS	45	69936639829	1	+++
250x3x32	1	-	-	-				●						●	○					SGB	80	K	VS3	50	66243541097	5	++++
250x10x20	1	-	-	-				●						○	●					38A	60	L	VS3	63	66243541093	5	++++
250x10x32	1	-	-	-	●									○	●					38A	60	M	VS	63	69936675931	1	+++
	01C	-	-	-				●						○	●					38A	60	L6	VS3	35	69210431945	5	++++
250x13x32	1	-	-	-	●									○	●					38A	60	L	VS3	63	66253348353	1	++++
250x20x76,2	1	-	-	-	●									○	●					38A	60	L	VS	45	69936675862	1	+++
250x25x31,75	1	-	-	-				●						●						A	36	O	VS	35	69936623907	1	+++
	1	-	-	-				●						●						A	46	N	VS	35	69936623914	1	+++
	1	-	-	-				●						●						A	60	N	VS	35	69936623918	1	+++
	1	-	-	-				●								●	●			39C	60	K	VS	35	69936623664	1	+++
250x25x32	1	-	-	-	●									○	●					38A	60	L5	VS	45	66253049927	1	+++
	1	-	-	-				●						●						A	36	P	VS	45	69936666940	1	+++
	1	-	-	-				●						●						A	46	N	VS	45	69936641386	1	+++
	1	-	-	-	●											●	●			39C	80	L	VS	45	69936675679	1	+++
250x25x76	1	-	-	-							○	●	●	○	○					2NQ	60	G	VS3	35	66253348365	1	+++++
	1	-	-	-							○	●		●						32A	60	I	VS	35	69936639898	2	+++
250x25x76,2	1	-	-	-							○	●	●	○	○					2NQ	46	G	VS3	35	66253348371	1	+++++
	1	-	-	-	●									●	○					3SG	46	K	VS	45	69936623668	1	+++++
	1	-	-	-	●									●	○					3SG	54	F11	VXP	45	69936676054	1	+++++
	1	-	-	-	●									●	○					3SG	60	K	VX	45	66253055045	1	+++++
	1	-	-	-							○	●	○	●						SGA	46	K	VX	50	61463693965	1	++++
	1	-	-	-	●									●	○					SGB	46	K	VX	45	66253050124	1	++++
	1	-	-	-	●									●	○					SGB	60	K	VX	45	66253050126	1	++++
	1	-	-	-	●									●	○					SGB	70	H12	VXP	45	69936623901	1	++++
	1	-	-	-	●									○	●					38A	46	L	VS	45	69936623691	1	+++
	1	-	-	-	●									○	●					38A	46	K	VS3	63	66253354041	1	++++
	1	-	-	-	●									○	●					38A	60	K	VS3	63	66253354040	1	++++
	1	-	-	-	●									○	●					38A	60	L	VS	45	69936623733	1	+++
	1	-	-	-	●									○	●					38A	60	I	VS	45	66253050101	1	+++
	1	-	-	-	●									○	●					38A	80	L	VS	45	69936623651	1	+++
250x32x32	1	-	-	-	●									●	○					SGB	60	K	VX	45	66253050162	1	++++
	1	-	-	-	●									○	●					38A	60	N	VS	45	69936667158	1	+++
	1	-	-	-				●						●						A	24	Q	VS	45	69936666942	1	+++
	1	-	-	-				●						●						A	36	P	VS	45	69936666943	1	+++
	1	-	-	-				●						●						A	60	M	VS	45	69936642130	1	+++
	1	-	-	-	●											●	●			39C	60	K	VS	45	69936639837	1	+++
	1	-	-	-	●											●	●			39C	80	K	VS	45	69936640845	1	+++

BONDED ABRASIVES FOR PRECISION GRINDING

SHAPE 01  SHAPE 05  SHAPE 07  SHAPE 20  SHAPE 01C 

GRAIN COLOUR CODE

5NQ	GF	25A
3NQ	38A Vit ³	19A
2NQ	38A	A
NQ Vit ³	86A	39C
SG	32A	37C

DIM DxDxH (mm)	SHAPE	P	FA	FB	Tools	Saw Sharpening	Bench Wheels	Internal Diameter	External Diameter	Surface	High Alloyed Steels & HSS	Soft Steels	Inox	Non-Ferrous & Carbide	Cast Iron	Abrasive Type	Grit Size	Grade	Bond	MOS (m/s)	ART NO.	PK QTY	QUALITY TIER
250x32x76,2	1	-	-	-	●						●	●				3SG	46	H	VX	45	66253055046	1	+++++
250x40x32	1	-	-	-		●					●					A	36	Q	VS	45	69936666945	1	+++
	1	-	-	-		●					●					A	60	N	VS	45	69936666946	1	+++
250x40x51	1	-	-	-				●	●						●	37C	60	K6	VK	35	69210431004	3	+++
250x40x76	1	-	-	-				●	●	●	●					38A	46	L6	VS3	35	69210432025	3	+++++
	1	-	-	-				●	●	●	●					38A	60	L6	VS3	35	69210431657	3	+++++
250x40x76,2	1	-	-	-	●					●	●					3SG	46	I	VX	45	66253050259	1	+++++
	1	-	-	-	●					●	●					3SG	46	G12	VXPC	45	69936676056	1	+++++
300x25x127	1	-	-	-						●	●	●	●			3NQ	60	K	VQN	45	66253262040	1	+++++
	1	-	-	-						●	●	●	●			2NQ	60	J	VS3	45	66253348372	1	+++++
	1	-	-	-						●	●	●				3SG	46	K	VX	45	66253055050	1	+++++
	1	-	-	-						●	●	●				3SG	60	H12	VXP	45	69936677184	1	+++++
	1	-	-	-						●	●	●				SGA	46	K	VS	50	61463699584	1	+++++
	1	-	-	-						●	●	●				SGA	60	K	VX	50	61463693967	1	+++++
	1	-	-	-						●	●	●				SGB	60	K	VX	45	66253050132	1	+++++
	1	-	-	-						●	●	●				SGA	80	L	VX	50	61463693973	1	+++++
	1	-	-	-						●	●	●				SGB	80	K	VX	35	69936678987	1	+++++
	1	-	-	-						●	●	●				SGB	80	I10	VXP	45	66253050121	1	+++++
	1	-	-	-						●	●	●				38A	46	J	VS	35	69936623662	1	+++
	1	-	-	-						●	●	●				38A	60	K	VS3	63	66253354042	2	+++++
	1	-	-	-						●	●	●				38A	60	K	VS	45	66253050105	1	+++
	1	-	-	-						●	●	●				38A	80	L	VS	45	69936623648	1	+++
	1	-	-	-						●		●				19A	60	M	VS	35	69936623719	1	+++
	1	-	-	-						●			●	●		39C	60	K	VS	45	69936623687	1	+++
	1	-	-	-						●			●	●		39C	80	J	VS	45	69936640343	1	+++
	1	-	-	-						●			●	●		39C	120	K	VS	35	69936675646	1	+++
300x32x127	1	-	-	-						●	●	●				3SG	60	K	VX	45	66253055872	1	+++++
	1	-	-	-						●	●	●				SGB	46	F12	VXP	45	69936676705	1	+++++
	1	-	-	-						●	●	●				SGB	60	K	VX	45	69936676386	1	+++++
	1	-	-	-						●	●	●				38A	46	H	VS	45	69936675883	1	+++
	1	-	-	-						●	●	●				38A	60	L	VS	45	69936675884	1	+++
	1	-	-	-		●					●					A	24	Q	VS	45	69936675579	1	+++
	1	-	-	-		●					●					A	36	O	VS	45	69936675580	1	+++
	1	-	-	-		●					●					A	46	N	VS	45	69936675581	1	+++
300x32x32	1	-	-	-		●				●	●			●		38A	60	N	VS	45	69936639618	1	+++
	1	-	-	-	●					●	●					38A	60	K	VS	45	66253051100	1	+++
	1	-	-	-		●					●					A	36	O	VS	45	69936675575	1	+++
300x32x50,8	1	-	-	-		●					●					A	46	N	VS	45	69936675578	1	+++
300x32x76,2	1	-	-	-				●	●	●	●					38A	46	H	VS	45	69936675880	1	+++
300x40x30	1	-	-	-		●					●					A	36	P	VS	45	69936681734	1	+++

HSS = High Speed Steel

Steel hardened = Over 50Rc

Steel soft = Up to 50Rc

PRODUCT RECOMMENDATION

Highly recommended ●
Recommended ○

																							PRODUCT RECOMMENDATION			
																							Highly recommended	●		
																							Recommended	●		

HSS = High Speed Steel

Steel hardened = Over 50Rc

Steel soft = Up to 50Rc

BONDED ABRASIVES FOR PRECISION GRINDING

SHAPE 01  SHAPE 05  SHAPE 07  SHAPE 20  SHAPE 01C 

GRAIN COLOUR CODE

5NQ	GF	25A
3NQ	38A Vit ³	19A
2NQ	38A	A
NQ Vit ³	86A	39C
SG	32A	37C

																				GRAIN COLOUR CODE															
																				5NQ	GF	25A													
																				3NQ	38A Vit³	19A													
																				2NQ	38A	A													
																				NQ Vit³	86A	39C													
																				SG	32A	37C													

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

PRODUCT RECOMMENDATION

Highly recommended ●
Recommended ○

																							PRODUCT RECOMMENDATION			
																							Highly recommended		●	
																							Recommended		◐	

HSS = High Speed Steel

Steel hardened = Over 50Rc

Steel soft = Up to 50Rc

BONDED ABRASIVES FOR PRECISION GRINDING

SHAPE 01



SHAPE 05



SHAPE 07



SHAPE 20



SHAPE 01C



Recess/Inner Concave Diameter

Recess/Concave Depth A

Recess/Concave Depth B

Tools

Saw Sharpening

Bench Wheels

Internal Diameter

External Diameter

Surface

High Alloyed Steels & HSS

Soft Steels

Inox

Non-Ferrous & Carbide

Cast Iron

Abrasive Type

Grit Size

Grade

Bond

GRAIN COLOUR CODE

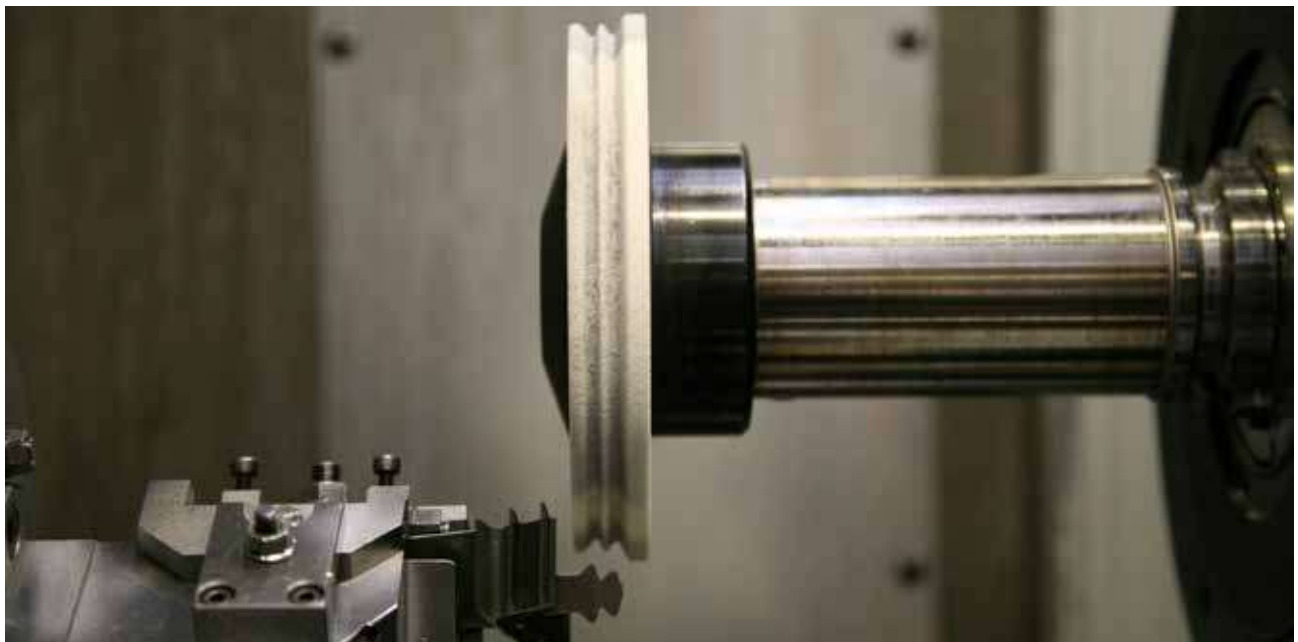
5NQ	GF	25A
3NQ	38A Vit ³	19A
2NQ	38A	A
NQ Vit ³	86A	39C
SG	32A	37C

DIM DxDxH (mm)	SHAPE	P	FA	FB	Deburring & Sharpening	Grinding	Materials	SPECIFICATION	MOS (m/s)	ART NO.	PK QTY	QUALITY TIER			
406x63x127	1	-	-	-		●		●			●		●	A 36 O VS 45 66243467497 1 +++	
	7	215	12	12			●	●			●		●	GF 46 F12 VXP 35 66243449251 1 ++++	
	20	215	13	-		●	●	●			●		●	GF 60 L VX 50 66243468993 1 ++++	
406x76x127	7	215	12	25			●	●	●					3SG 54 E12 VXP 35 66243448665 1 +++++	
	7	215	12	25			●	●	●					SGB 46 F1 VXP 35 66243448691 1 ++++	
	7	215	13	25		●	●	●			●		●	GF 46 I VX 35 66243469001 1 ++++	
	7	215	13	25			●	●			●		●	GF 46 F1 VXP 35 66243469016 1 ++++	
	7	215	12	25			●	●			●		●	38A 46 F1 VBEP 35 66243448206 1 +++	
	7	215	12	25		●	●				●		●	32A 46 I VS 35 66243448354 1 +++	
	406x100x152,4	7	220	15	15			●	●	●					3SG 54 E12 VXP 35 66243449287 1 +++++
		7	220	15	15			●	●			●		●	GF 46 I VX 35 66243449285 1 ++++
457x50x127	20	215	8	-			●	●	●					GF 60 L VX 50 66243468995 1 ++++	
	1	-	-	-			●	●	●					38A 60 L VS 45 66243466558 1 +++	
	20	215	13	-			●	●	●					38A 60 M VS 50 66243448676 1 +++	
457x50x203,2	1	-	-	-			●		●	●				SGA 60 K VX 50 61463694560 1 ++++	
	1	-	-	-			●		●	●				38A 46 J VS 35 66243466557 1 +++	
457x63x127	20	215	13	-			●	●	●					GF 60 L VX 50 66243468996 1 ++++	
457x80x203,2	7	290	13	13			●	●	●					SGB 46 F12 VXP 35 66243468578 1 ++++	
	7	280	13	13			●	●	●					GF 46 F12 VXP 35 66243469018 1 ++++	
508x50x203,2	1	-	-	-			●		●	●				3SG 60 K VX 45 66253055088 1 +++++	
	1	-	-	-			●		●	●				SGA 80 I10 VXP 50 61463699663 1 ++++	
	1	-	-	-			●		●	●				38A 60 L VS 35 66243466565 1 +++	
500x60x203	20	290	10	-			●		●	●				SGB 60 K VX 50 66243468575 1 ++++	

HSS = High Speed Steel

Steel hardened = Over 50Rc

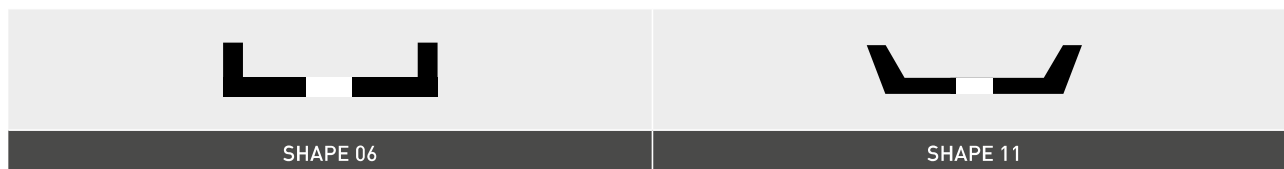
Steel soft = Up to 50Rc





STRAIGHT & TAPERED CUPS FOR PRECISION GRINDING

SHAPE KEY



														PRODUCT RECOMMENDATION				
														Highly recommended ●				
														Recommended ○				
		Rim Width	Back Thickness	Tools	Saw Sharpening	Bench Wheels	Internal Diameter	External Diameter	Surface	High Alloyed Steels & HSS	Soft Steels	Inox	Non-Ferrous & Carbide	Abrasive Type	Grit Size	Grade	Bond	
DIM DxDxH (mm)	SHAPE	W	E	Deburring & Sharpening			Grinding		Materials					SPECIFICATION	MOS (m/s)	ART NO.	PK QTY	QUALITY TIER
63x40x20	6	10	10	●				○	●	●				38A 60 J VS3	45	66253348322	10	★★★★
80x32x20	11	6	8	●					●	○				SGB 60 L VX	45	66253050137	6	★★★★
80x40x20	6	10	10	●				○	●	○				SGB 60 L VX	45	66253050098	10	★★★★
	6	6	10	●				○	●	○				SGB 60 J VX	45	66243570391	10	★★★★
	6	6	8	●				○	○	●				38A 60 L VS3	63	66253348323	6	★★★★
	6	8	8	●				○	○	●				38A 60 J VS3	63	66253348289	6	★★★★
80x40x32	6	10	10	●				○	○	●				38A 46 J VS3	45	66253348326	10	★★★★
100x40x20	11	8	10	●					●	○				3SG 60 K VX	45	66253050110	2	★★★★★
	11	8	10	●					○	●				38A 60 K VS	45	69936686170	2	★★★
	11	8	10	●					○	●				38A 60 L VS	45	69936688495	2	★★★
100x40x31,75	11	6	13	●					●	○				3SG 54 K VS	32	69936624036	2	★★★★★
	11	6	13	●					●	○				3SG 60 K VS	32	69936624043	2	★★★★★
	11	6	13	●					○	●				38A 46 J6 VS3	35	66253358217	2	★★★★
	11	6	13	●					○	●				38A 54 K VS	32	69936624609	2	★★★
	11	6	13	●					○	●				38A 60 J6 VS3	35	66253358216	2	★★★★
	11	6	13	●					○	●				38A 60 J VS3	32	66253348630	2	★★★★
	11	6	13	●					○	●	○			2NQ 46 J VS3	45	66253348633	2	★★★★★
100x40x32	11	8	10	●					●	○				3SG 60 K VX	45	66253050114	2	★★★★★
	6	8	10	●				○	○	●				38A 60 K VS	45	69936674854	2	★★★
	11	8	10	●					○	●				38A 60 K VS	45	69936686169	2	★★★

BONDED ABRASIVES FOR PRECISION GRINDING

GRAIN COLOUR CODE

5NQ	GF	25A
3NQ	38A Vit ³	19A
2NQ	38A	A
NQ Vit ³	86A	39C
SG	32A	37C

DIM DxDxH (mm)	SHAPE	W	E	Rim Width	Back Thickness	Tools	Saw Sharpening	Bench Wheels	Internal Diameter	External Diameter	Surface	High Alloyed Steels & HSS	Soft Steels	Inox	Non-Ferrous & Carbide	Cast Iron	Abrasive Type	Grit Size	Grade	Bond	MOS (m/s)	ART NO.	PK QTY	QUALITY TIER
100x50x20	6	10	10	●							○	●	○				3SG	60	K	VX	45	66253049965	2	+++++
	6	10	13	●							○	●	○				3SG	60	L	VX	45	66253049960	2	+++++
	6	10	13	●							○	●	○				3SG	80	L	VX	45	66253049966	2	+++++
	6	10	10	●							○	●	○				3SG	60	J	VX	45	66253050069	2	+++++
	6	8	10	●							○	●	○				SGB	60	K	VX	45	69936641284	2	++++
	6	10	10	●							○	○	●				38A	60	J	VS3	45	66253348327	2	++++
	6	10	10	●							○	○	●				38A	60	I	VS3	45	66253348629	2	++++
	6	10	13	●							○	○	●				38A	80	J	VS3	45	66253348324	2	++++
	6	10	10	●							○	○	●				38A	120	I8	VS3	45	66253358793	2	++++
	6	10	10	●							○	○	●				38A	46	K	VS	45	69936644193	2	+++
	6	10	13	●							○	○	●				38A	60	L	VS	45	69936639450	2	+++
	6	10	13	●							○	○	●				38A	60	M	VS	45	69936639460	2	+++
	6	10	10	●							○	○	●				38A	80	J	VS	45	69936639600	2	+++
	6	10	13	●							○			●	●		39C	80	J	VS	45	69936640131	2	+++
100x50x32	6	10	10	●							○	●	○				3SG	60	K	VX	45	66253050073	2	+++++
	6	10	10	●							○	○	●				38A	60	K	VS	45	69936674859	2	+++
125x40x31,75	6	13	13	●							○	○	●				38A	46	J8	VS3	45	66253358794	2	++++
	6	13	13	●							○	○	●				38A	60	J8	VS3	45	66253358795	2	++++
	11	8	10	●							○	○	●				38A	60	J6	VS3	35	66253358219	2	++++
	11	10	10	●							○	○	●				38A	54	K	VS	35	69936625578	2	+++
	6	8	10	●							○	○	●				38A	60	K	VS	32	69936623645	2	+++
	11	8	10	●							○	○	●				SGB	46	J	VX	45	69936682429	2	++++
125x40x32	11	8	10	●							○	○	●				38A	46	K	VS	45	69936686175	2	+++
	11	8	10	●							○	○	●				38A	60	K	VS	45	69936686176	2	+++
	11	8	10	●							○	○	●				38A	60	K	VS	45	69936686177	2	+++
125x45x20	11	6	13	●							○	○	●				3SG	46	K	VX	45	66253055954	2	+++++
	11	6	13	●							○	○	●				SGB	60	K	VX	45	69936686736	2	++++
125x50x32	6	13	13	●							○	○	●				SGB	60	J	VX	45	66253050075	2	++++
	6	13	13	●							○	○	●				38A	46	K	VS	45	69936674867	2	+++
	6	10	13	●							○	○	●				38A	60	L	VS	45	69936639992	2	+++
125x63x32	6	10	13	●							○	○	●				SGB	60	K	VX	45	69936640579	2	++++
	6	25	16	●							○			●	●		39C	60	J	V	45	6993668305	2	+++
150x40x32	6	16	13	●							○	○	●				38A	46	H	VS	45	69936674872	2	+++
	6	16	13	●							○	○	●				38A	60	K	VS	45	69936674875	2	+++
150x50x32	6	16	16	●							○	○	●				3SG	46	K	VX	45	66253050068	2	+++++
	11	10	13	●							○	○	●				SGB	46	J	VX	45	66253050133	2	++++
	6	16	16	●							○	○	●				SGB	60	K	VX	45	66253050076	2	++++
	11	10	13	●							○	○	●				SGB	60	K	VX	45	66253050134	2	++++
	11	10	13	●							○	○	●				38A	46	K	VS	45	69936686177	2	+++
	6	16	16	●							○	○	●				38A	60	K	VS	45	69936674879	2	+++
	11	10	13	●							○	○	●				38A	60	K	VS	45	69936682576	2	+++
	11	10	13	●							○	○	●				38A	60	K	VS	45	69936682576	2	+++
150x50x65	6	20	16	●							○	○	●				38A	60	L	VS	45	69936639480	2	+++
	6	20	16	●							○			●	●		39C	80	J	VS	32	69936639798	2	+++

PRODUCT RECOMMENDATION

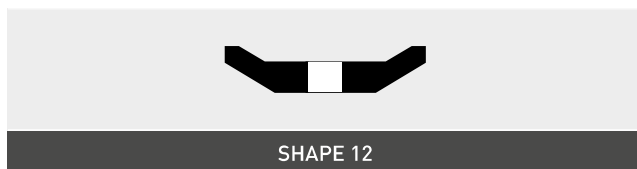
Highly recommended ●
Recommended ○

																				PRODUCT RECOMMENDATION			
																				Highly recommended		●	
																				Recommended		●	



DISHES FOR PRECISION GRINDING

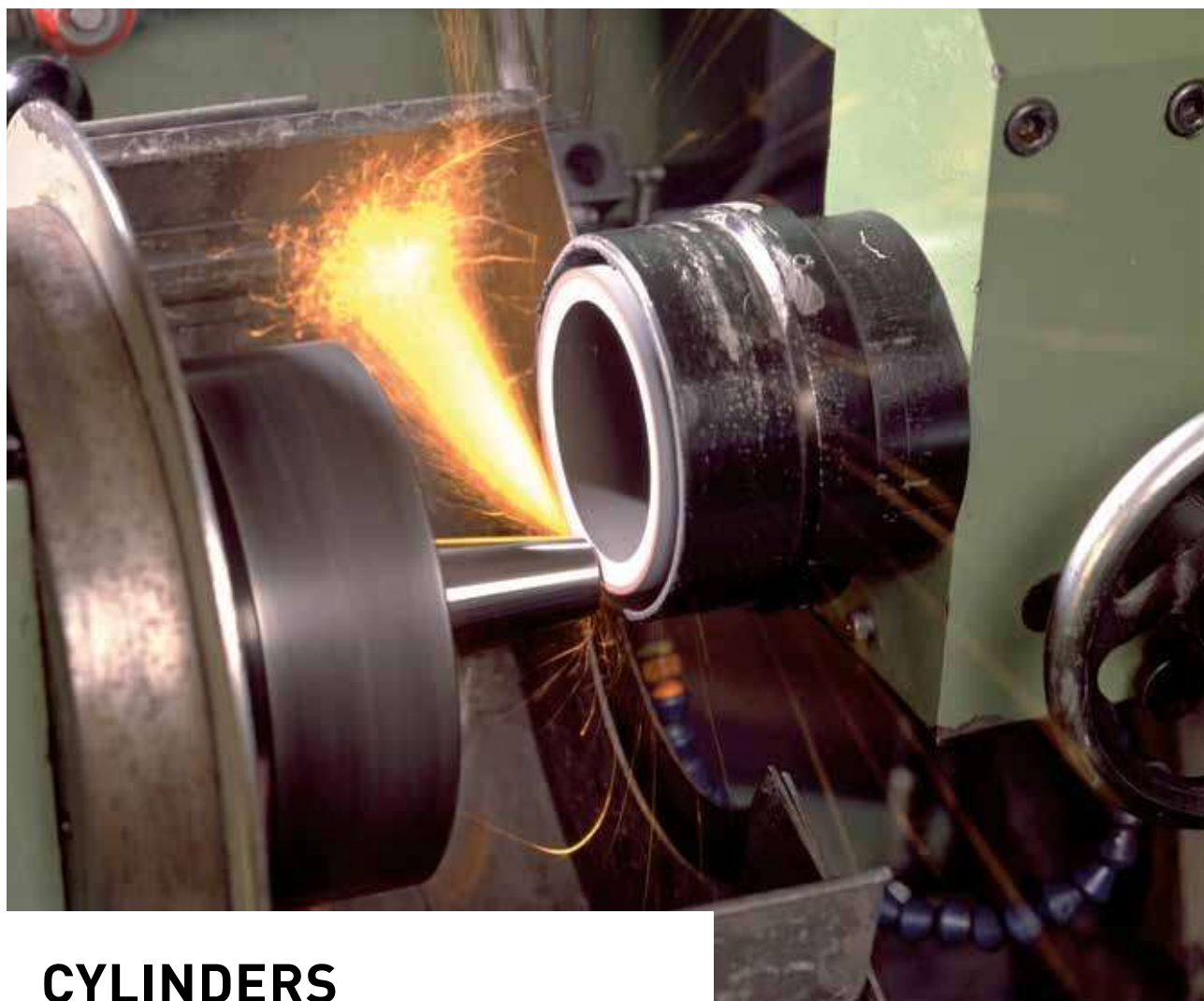
SHAPE KEY



GRAIN COLOUR CODE

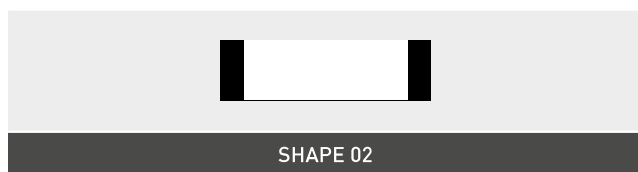
5NQ	GF	25A
3NQ	38A Vit ³	19A
2NQ	38A	A
NQ Vit ³	86A	39C
SG	32A	37C

DIM DxDxH (mm)	W	E	J	K	U	Deburring & Sharpening	Grinding	Materials	SPECIFICATION	MOS (m/s)	ART NO.	PK QTY	QUALITY TIER
100x13x12,7	5	7	45	50	2,5	●		●	38A 60 K VS 45	69936624605	2	+++	
100x13x20	5	7	41	41	3,2	●		●	3SG 60 K VX 45	66253050236	2	+++++	
	5	7	41	41	3,2	●		●	38A 60 J VS3 45	66253348382	2	+++++	
125x13x20	6	7	61	61	3,2	●		●	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	●		●	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	+++++	
	7	9	86	86	3,2	●		●	38A 60 K VS 45	69936686199	2	+++	
150x13x31,75	9,5	8	76	76	3,2	●		●	3SG 60 K VS 35	69936624608	2	+++++	
150x13x32	7	9	86	86	3,2	●		●	3SG 60 K VX 45	66253050239	2	+++++	
	7	9	86	86	3,2	●		●	38A 46 K VS 45	69936686194	2	+++	
	7	9	86	86	3,2	●		●	38A 60 J VS3 45	66253348380	2	+++++	
150x20x32	8	9	87	87	3,2	●		●	SGB60 K VX 45	66253050245	2	+++++	
180x20x32	9	11	70	70	3,2	●		●	SGB54 K VX 45	66253050260	2	+++++	
200x20x32	10	12	90	90	3,2	●		●	38A 60 K VS 45	69936686215	2	+++	
200x32x32	10	12	92	92	3,2	●		●	SGB46 I VX 45	66253050253	2	+++++	



CYLINDERS FOR PRECISION GRINDING

SHAPE KEY



PRODUCT RECOMMENDATION

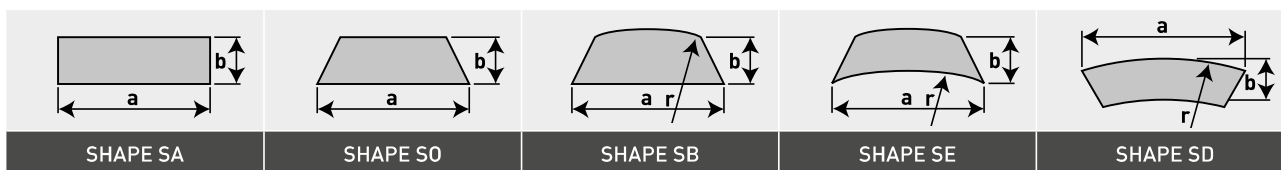
Highly recommended ●
Recommended ○

DIM DxDxH (mm)	Tools			Grinding	Materials				SPECIFICATION				ART NO.	PK QTY	QUALITY TIER
	Deburring & Sharpening	Saw Sharpening	Bench Wheels		Internal Diameter	External Diameter	Surface	High Alloyed Steels & HSS	Abrasive Type	Grit Size	Grade	Bond			
200x100x160							●	●	SGB46	H	VX	45	69936686693	1	★★★★
							●	○							
254x100x204							●	○	38A 46	G	VS3	45	66253348386	1	★★★★
							●	○							
							●	○	38A 46	G	VS3	45	66253348387	1	★★★★



SEGMENTS FOR PRECISION GRINDING

SHAPE KEY



GRAIN COLOUR CODE

5NQ	GF	25A
3NQ	38A Vit ³	19A
2NQ	38A	A
NQ Vit ³	86A	39C
SG	32A	37C

Tools	Saw Sharpening	Bench Wheels	Internal Diameter	External Diameter	Surface	High Alloyed Steels & HSS	Soft Steels	Inox	Non-Ferrous & Carbide	Cast Iron
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Abrasive Type	Grit Size	Grade	Bond
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PRODUCT RECOMMENDATION

Highly recommended ●
Recommended ○

DIM AxBxR	TYPE	Deburring & Sharpening	Grinding	Materials	SPECIFICATION	ART NO.	PK QTY	QUALITY TIER
16x50x90	SE			● ● ○ ○	3NQ 46 H VQN	69083141440	4	+++++
	SE			● ● ○ ○	2NQ 36 H VS3	66253348492	4	+++++
	SE			● ○ ●	38A 36 H VS3	66253348785	4	+++++
	SE			● ○ ●	38A 46 G VS3	66253348493	4	+++++
16x53,5x110	SE			● ○ ●	38A 36 I VS	69936688485	4	+++
	SE			● ○ ●	38A 46 H VS	69936688614	4	+++
20x42x90	SO			● ○ ●	38A 60 G VS	69936686264	4	+++
21x59,5x121	SO			● ○ ●	38A 30 H VS	69936624796	4	+++
	SO			● ○ ●	38A 36 H VS3	66253348638	4	+++++
22x60x110	SO			● ● ○ ○	2NQ 36 G VS3	66253348778	4	+++++
	SO			● ○ ●	38A 36 G VS3	66253348665	4	+++++
25x50x110	SO			● ● ○	3SG 60 G VX	66253050282	4	+++++
	SO			● ○ ●	38A 46 G VS3	66253348779	4	+++++
	SO			● ○ ●	38A 60 G VS3	66253348786	4	+++++
	SO			●	19A 54 I VS	69936686249	4	+++
25x65x100	SB			●	37C 30 H8 V	69936688426	4	+++
25x70x110	SO			● ● ○	3SG 36 E12 VXP	69936688295	4	+++++
	SO			● ○ ●	38A 30 I VS	69936682296	4	+++
	SO			● ○ ●	38A 36 I VS	69936682640	4	+++
	SO			● ○ ●	38A 36 H VS3	66253348783	4	+++++
25x80x150	SA			● ● ○	3SG 36 E12 VXP	69936688321	4	+++++
	SA			● ○ ●	38A 30 I VS	69936686253	4	+++
38x103x180	SO			● ● ○ ○	3NQ 36 H VQN	69083141453	4	+++++
	SO			● ● ○	3SG 36 H VX	66253050287	4	+++++
	SO			● ○ ●	38A 30 H VS3	66253348780	4	+++++

HSS = High Speed Steel

Steel hardened = Over 50Rc

Steel soft = Up to 50Rc