CONVENTIONAL ABRASIVES FOR PRECISION GRINDING

molemab®
we shape your world

Special thanks to:
A.Z. Spa, Rosa Ermando Spa and Samputensili Machine Tools S.r.l.
for kindly allowing us to use their facilities
and equipment in the photographs of this catalogue.

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THE GROUP

THE HEADQUARTERS

molemab's head office is located in Ome, province of Brescia, in the Franciacorta winegrowing area of northern Italy. From here the molemab group is organised. This is the main factory where the conventional and superabrasive vitrified bonded grinding wheels are manufactured.
Another facility, located in Maclodio, in the province of Brescia, is where some types of vitrified and resinoid bonded grinding wheels are produced using highly automated technology.
The factories in Ome and Maclodio are amongst the best organised facilities in Europe, including a manufacturing line with presses up to 2,500 tons as well as a modern research and development department.

THE PRODUCTION FACILITIES

The presence of molemab worldwide has been spreading throughout the years thanks to the growing potential and market demand of hi-tech products.
molemab Inotech GmbH is located in Launsdorf, Austria. This is an advanced factory, focused on resinoid and metal bonded Diamond and CBN hi-tech grinding wheels produced by the most modern machinery.
In Oswego, Illinois (USA) molemab USA Corp. there is a productive unit of Diamond and CBN vitrified bonded grinding wheels.

THE COMMERCIAL BRANCHES

In addition to the production facilities molemab has various commercial branches.
They follow customers worldwide, providing technical and commercial support for every industrial sector.
The European market is serviced by molemab Iberica SLU (Barcelona, Spain), molemab Super-abrasifs France Sas (Chassieu, France), molemab GmbH (Siegburg, Germany), molemab Abrasives Hungary (Budapest), molemab Superabrasives s.r.o. (Praha) and by our office in Pszczyna (Poland); whilst in North America operate molemab Canada (Sainte-Julie), molemab USA (Queensbury) and molemab de Mexico (Queretaro); in China molemab abrasives (Shanghai) co. Ltd (Suzhou).
Supported by qualified distributors and agents worldwide, molemab can reach all of its customers, wherever they are.

molemab in the world


Ome, Brescia
(Italy)
Maclodio, Brescia
(Italy)
Pszczyna
(Poland)
Siegburg
(Germany)
Launsdorf
(Austria)
Prague
(Czech Republic)
Budapest
(Hungary)
Shanghai
(China)

OUR VISION

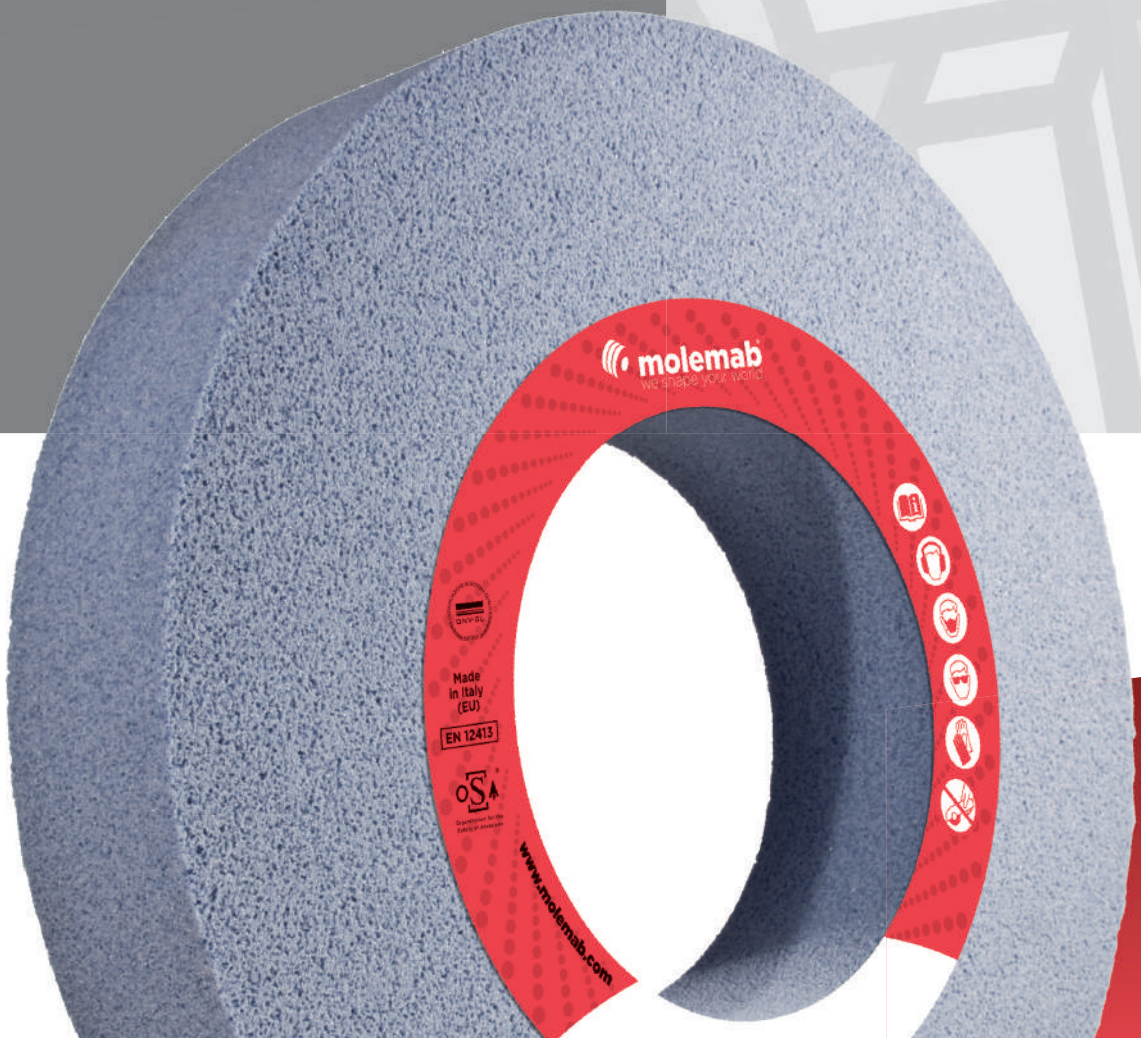
molemab aspires to a well-distributed and sustainable technological progress, respecting human dignity and environment.

OUR MISSION

molemab designs modern and efficient technological solutions in the abrasives' field. The company's goal is to offer its customers the confidence to work with the most reliable products.

HIGHLIGHTS

molemab finds its roots in the heritage of its territory: the passion for work, moral coherence and concreteness. Great successes over the years have been achieved thanks to the quality of work of all the employees. With its endless research for the best products, machinery and raw materials, molemab has been able to build a strong and solid business history.
A continuous, harmonious growth with its customers, partners and suppliers remains the main goal for molemab in Italy and worldwide.
molemab is proud of its work and its values and retains them with passion and integrity.



OUR VALUES

Since 1961, when molemab started its activity, the world has changed and so have the markets, the manufacturing processes materials and the technological challenges. molemab values still remain the same: innovation, safety, quality and strong collaboration with customers and suppliers.

INNOVATION Since its foundation molemab has strived for constant improvement. Original patents, unique and custom made equipment and the most modern solutions have always characterised molemab history. molemab takes on the most difficult challenges: conventional grinding wheels for the toughest applications and special superabrasive grinding wheels reaching almost the speed of sound.

SAFETY molemab aims to ensure its customers and partners the safest working conditions and environment. molemab applies the strictest safety rules in manufacturing while making accurate security tests in its laboratories.

QUALITY The certifications ISO 9001 and OSA accredited to molemab in all the production facilities are the result of constant research. molemab quality is granted by meticulous production controls together with the continuous improvement of its technicians' skills and a scrupulous analysis of the market requirements.

COLLABORATION Sharing experiences between the manufacturer and the end user leads to the best results. The feedback exchange and dialogue are the two pillars on which molemab's success is based. Sharing ideas, ambitions and problems with our partners while keeping an eye on market evolution and dynamics is the key to step by step growth.

molemab
we shape your world

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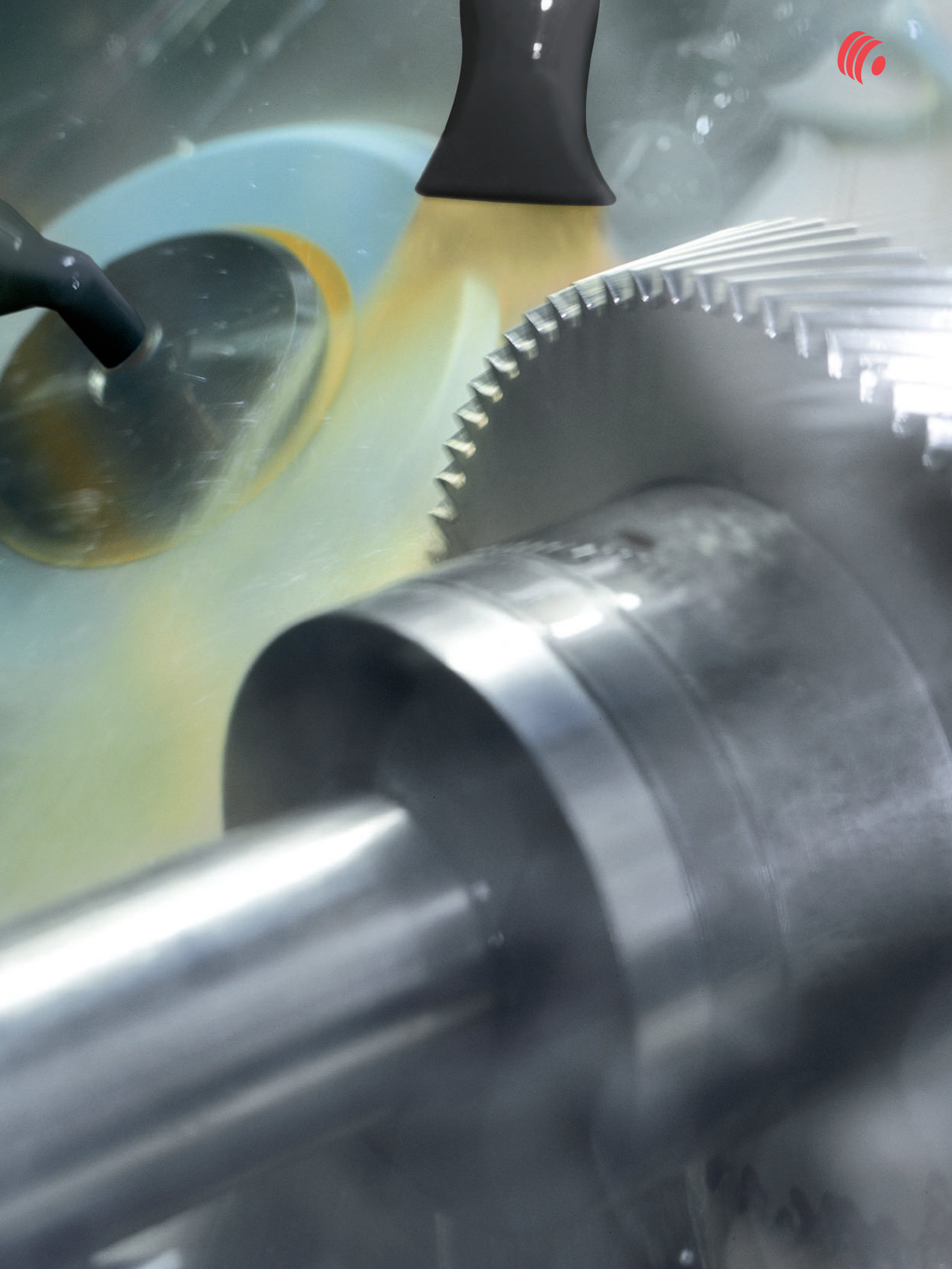
GENERAL INFORMATION ABOUT TRUEING AND DRESSING

GENERAL INFORMATION ABOUT ABRASIVES AND GRINDING WHEELS



E.G. LINE

Easy Grind is the latest generation of wheels born in the Research & Development department of molemab. New bonds and new grains types give unique characteristics to the vitrified wheels of THE E.G. line.

- they offer cool cutting
- they facilitate the introduction of the refrigerant into the area between grinding wheel and work-piece
- they allow a better chip removal
- they guarantee the respect of geometry
- they reduce the diamond dressing cycles
- they increase the life of the grinding wheel
- they increase productivity

APPLICATION	VITRIFIED FOR ALLUMINIUM OXIDE
General	VX
External grinding	VK
Surface grinding	VG
Gear grinding	V40

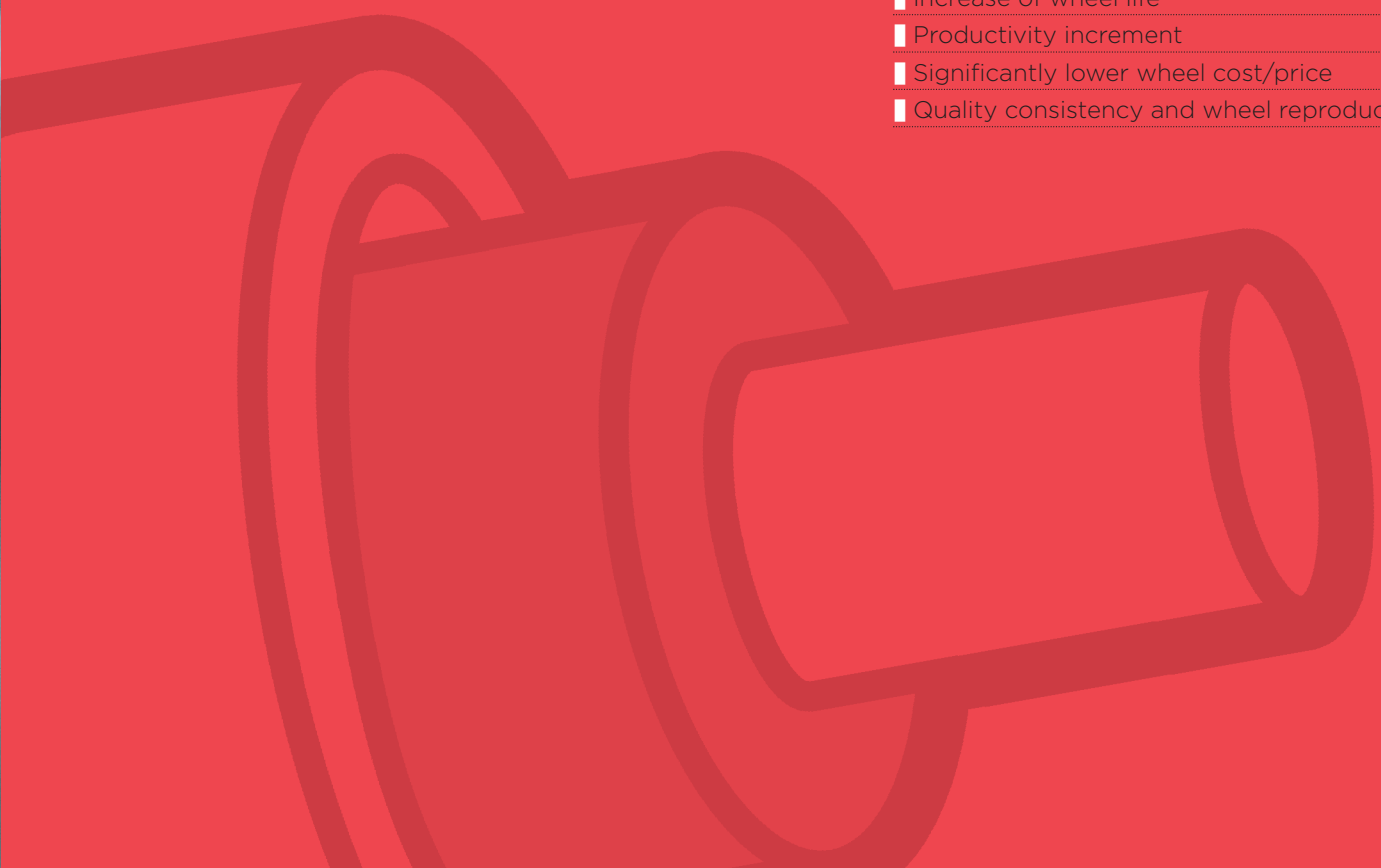
APPLICATION	VITRIFIED FOR SILICON CARBIDE
General	VJ

PERFECTA, PERFECTA MVC AND PERFECTA ROLL

The abrasive grinding wheels of the new Perfecta line, fruit of years of continuous research and technical experimentation are manufactured specifically for the centreless grinding of bars and tubes and for cylindrical grinding of hot and cold rolls.
The Perfecta abrasive grinding wheels are manufactured by using new abrasives, bond types of exclusive formulation and with special and innovative firing cycles.
Each phase of the molemab production cycle is followed by highly specialized personnel constantly helped by the internal information network with programs dedicated to total monitoring of the transformation process of the abrasive product; also the abrasive wheels of the new Perfecta series are manufactured by following this rigid methodology and this allows guaranteeing our customers a very high quality standard, the utmost safety and reliability for the use and the absolute reproducibility over always.

COLD CUTTING

- High respect of geometry
- Reduction of diamond dressing cycles
- Increase of wheel life
- Productivity increment
- Significantly lower wheel cost/price
- Quality consistency and wheel reproduction



WHEEL SHAPES

ACCORDING TO FEPA STANDARDS

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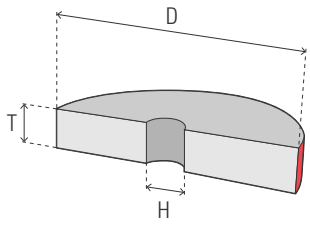

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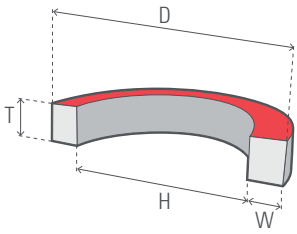

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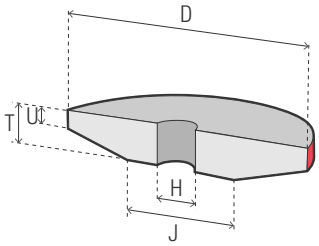

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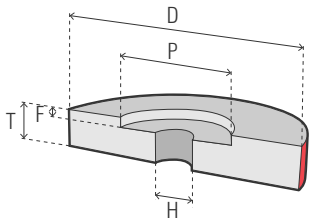

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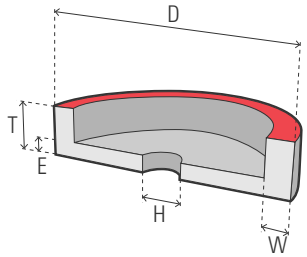

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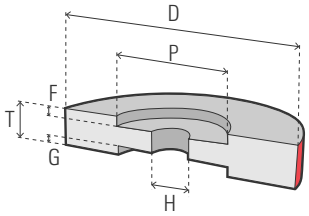

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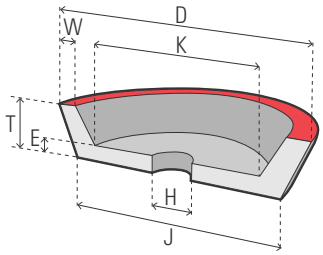

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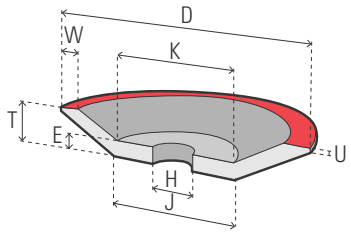

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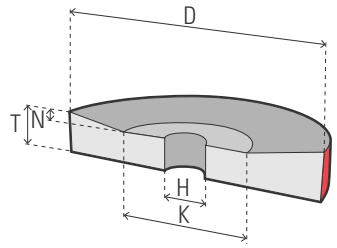

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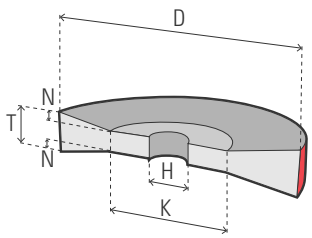

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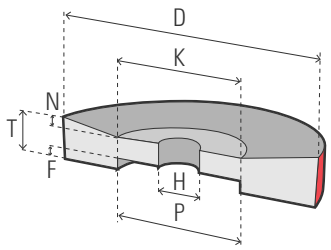

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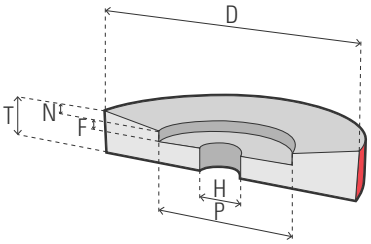

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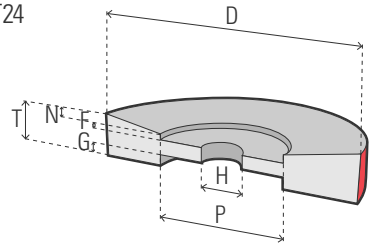

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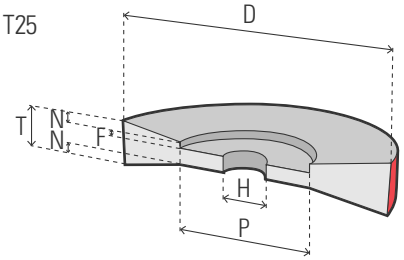

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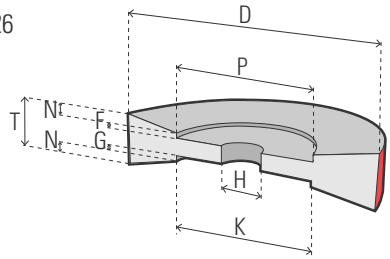

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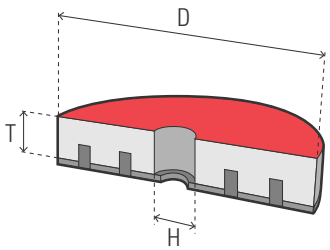

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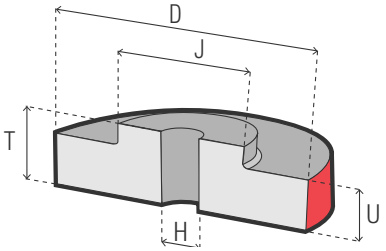

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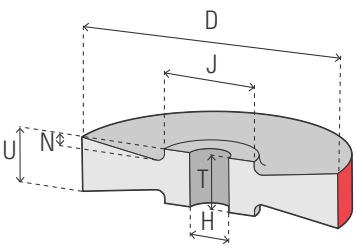

STANDARD PROFILES

ACCORDING TO FEPA STANDARDS

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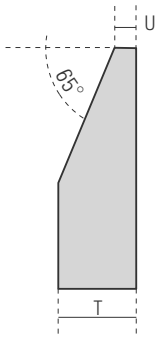

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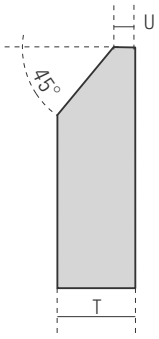

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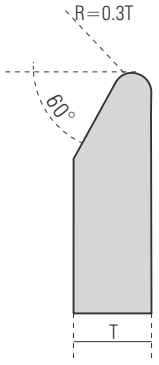

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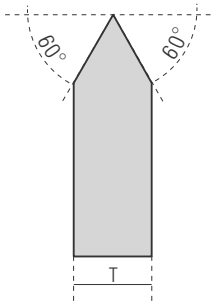

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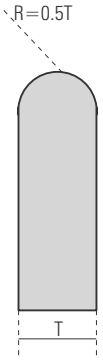

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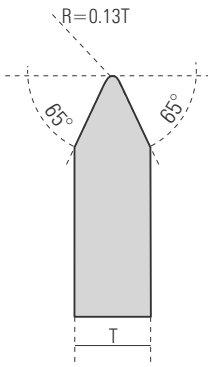

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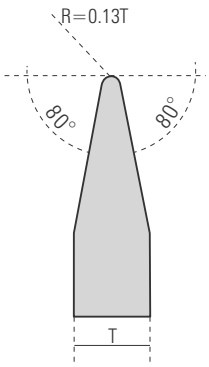

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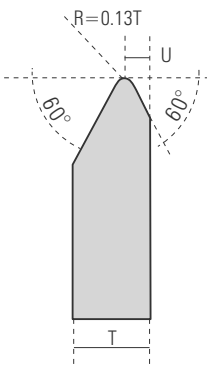

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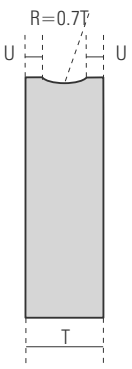

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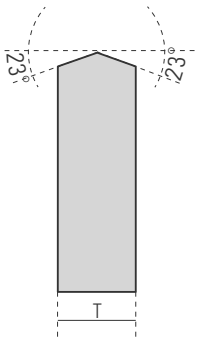

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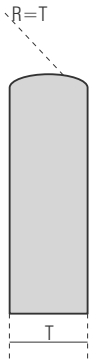

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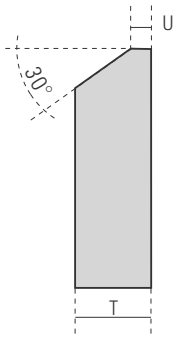

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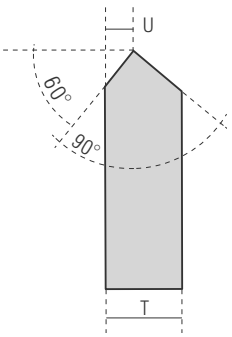

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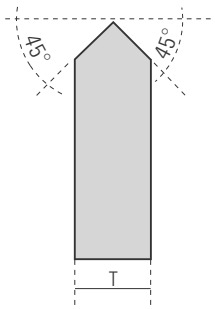

SPECIAL **molemab**

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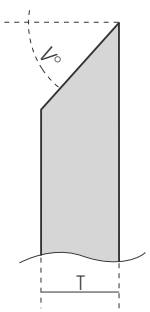

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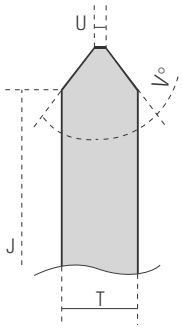

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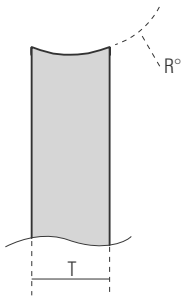
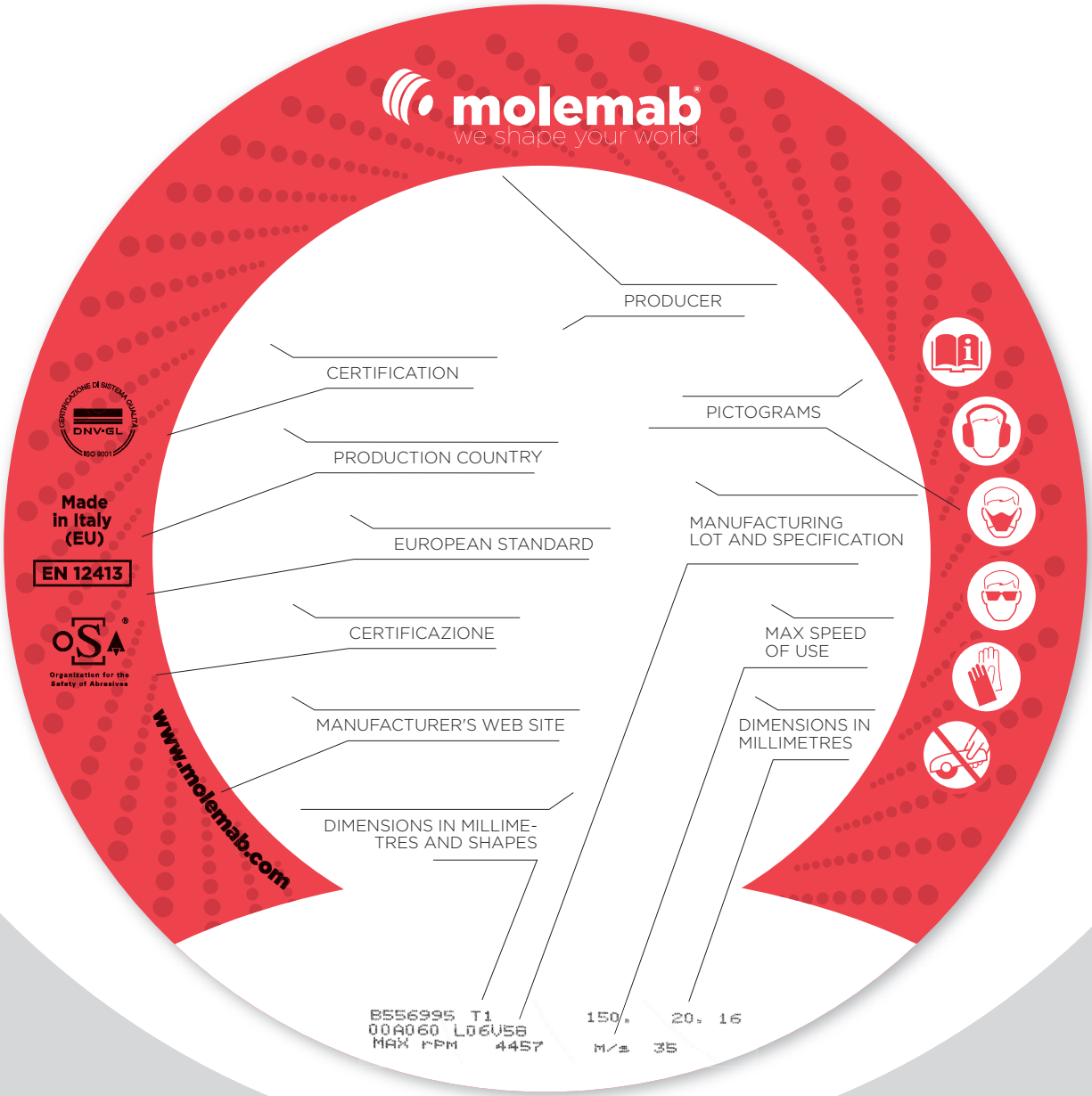


Special profiles available upon request

To modify the standard FEPA profile, add 1 after the letter (e.g.: PRQ1) and then the desired values.

molemab MARKING

IN COMPLIANCE WITH THE SAFETY RULES
THE WHEELS ARE MARKED AS FOLLOWS



Specifications

OOA 060 L 06 V58 PA

Abrasive type
- Conventional aluminium oxide
- Silicon carbide
- Microcrystalline aluminium oxide

Grit size
- Very coarse
- Coarse
- Medium
- Fine
- Very fine

Hardness
- Very soft /soft medium
- Hard
- Very Hard

Structure
- natural porosity closed/open
- Open induced porosity
- High induced porosity
- Very high induced porosity

Bond type
- Vitrified for regular Aluminium Oxide
- Vitrified for silicon carbide
- Vitrified for microcrystal-line Aluminium Oxide
- Resinoid for Aluminium Oxide and Silicon Carbide
- Rubber for regulating wheels

Porosity
- Porous fine
- Porous
- Super-porous
- Porous structured

Abrasive type	Typology	Grit size	Hardness	Structure	Bond type	Induced porosity
Classification molemab	Conventional aluminium oxide	Coarse	Very soft	Closed	Vitrified for aluminium oxide	Porous fine
00A	Semi-pure	14	C	3	V11	PF1
09A	White	16	D	4	V20	PP
11A	Pink	20	E	5	V27	Porous
14A	Mix of special aluminium	24	F	6	V30	P1
15A	Mix Grey and white	Medium	Soft	Medium	V34	P3
31A	Ruby	30	G	7	V85	Super porous
43A	Monocrystalline	36	H	8	V86	P4
45A	Mix of Monocrystalline	46	I	Open	V92	P5
51A	Mix of special aluminium	54	J	10	EG Line	Structured porous
75A	Semi-friable	60	K	11	VX	
91A	Mix of white and pink	Fine	Medium	12	VK	P13
	Silicon carbide	70	L	13	VG	P14
04C	Black	80	M	14	V40	
06C	Mixing	100	N	Very open	Vitrified for silicon carbide	
08C	Green	120	O	15		
	Sintered aluminium oxide	150	Hard	16	V01	
OMA	Mix special Arctic	180	P	17	V11	
SA	Ceramic Abrasive	Very fine	Q	18	V55	
AZ	Ceramic Abrasive NG	220	R		EG Line	
TA	Ceramic Abrasive	240	S		VJ	
AK	Ceramic Abrasive plus	280	T		For Perfecta aluminium oxide and silicon carbide	
		320	Very hard			
		400	U		BGL	
			V		BGT	
			W		BGW	
			X		Resinoid MVC	
			Y		BGT	
			Z			
					Rubber	
					R	

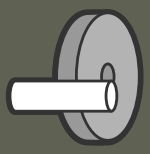
GRINDING WHEEL SPEED TABLE

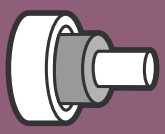
RPM AND M/SEC CORRESPONDING
PERIPHERAL SPEED FOR SOME WHEEL DIAMETERS

	m/sec									
diameter	20	25	32	35	40	45	50	63	80	100
6	64.000	80.000	102.000	112.000	128.000	143.500	160.000	201.000		
8	48.000	60.000	76.500	84.000	95.500	107.500	120.000	150.500	191.000	
10	38.200	48.000	61.200	67.000	76.500	86.000	95.500	120.500	153.000	153.000
13	29.500	36.800	47.100	51.500	58.800	66.200	73.500	92.600	118.000	147.000
16	23.900	29.850	38.200	41.800	47.800	53.750	59.700	75.200	95.500	120.000
20	19.500	23.900	30.600	33.500	38.200	43.000	47.800	60.200	76.500	95.500
25	15.300	19.100	24.500	26.800	30.600	34.500	38.200	48.200	61.200	76.500
32	11.950	14.950	19.100	20.900	23.900	27.000	30.000	37.600	48.000	60.000
40	9.550	11.950	15.300	16.750	19.100	21.500	23.900	30.100	38.200	47.800
50	7.650	9.550	12.550	13.400	15.300	17.200	19.100	24.100	30.600	38.200
63	6.100	7.600	9.750	10.650	12.150	13.650	15.200	19.100	24.300	30.350
80	4.800	6.000	7.650	8.400	9.550	10.750	12.000	15.100	19.100	23.900
100	3.850	4.800	6.150	6.700	7.650	8.600	9.550	12.100	15.300	19.100
125	3.100	3.850	4.900	5.350	6.150	6.900	7.650	9.650	12.250	15.300
150	2.550	3.200	4.100	4.500	5.100	5.750	6.400	8.050	10.200	12.750
180	2.150	2.700	3.400	3.750	4.250	4.780	5.350	6.700	8.500	10.650
200	1.950	2.400	3.100	3.350	3.850	4.300	4.800	6.050	7.650	9.550
230	1.700	2.100	2.700	2.950	3.350	3.750	4.200	5.250	6.650	8.350
250	1.550	1.950	2.450	2.700	3.100	3.450	3.850	4.850	6.150	7.650
300	1.300	1.600	2.050	2.250	2.550	2.870	3.200	4.050	5.100	6.400
350/356	1.100	1.400	1.750	1.950	2.200	2.460	2.750	3.450	4.400	5.500
400/406	960	1.200	1.550	1.700	1.950	2.150	2.400	3.050	3.850	4.800
450/457	850	1.100	1.400	1.500	1.700	1.910	1.700	2.700	3.400	4.250
500/508	765	960	1.250	1.350	1.550	1.720	1.950	2.450	3.100	3.850
600/610	640	800	1.050	1.150	1.300	1.450	1.600	2.050	2.550	3.200
660	580	725	930	1.050	1.200	1.300	1.450	1.850	2.350	2.900
750/762	510	640	820	895	1.050	1.150	1.300	1.650	2.050	2.550
800/813	480	600	765	840	960	1.075	1.200	1.550	1.950	2.400
900/914	425	535	680	750	850	955	1.100	1.350	1.700	2.150
1000/1016	385	480	615	670	765	860	960	1.250	1.550	1.950
1050/1067	365	455	585	640	730	820	910	1.150	1.500	1.850
1100/1120	350	435	560	610	695	785	870	1.100	1.400	1.750
1200/1220	320	400	510	560	640	720	800	1.050	1.300	1.600

STANDARD WORKING PARAMETERS FOR CONVENTIONAL GRINDING WHEELS

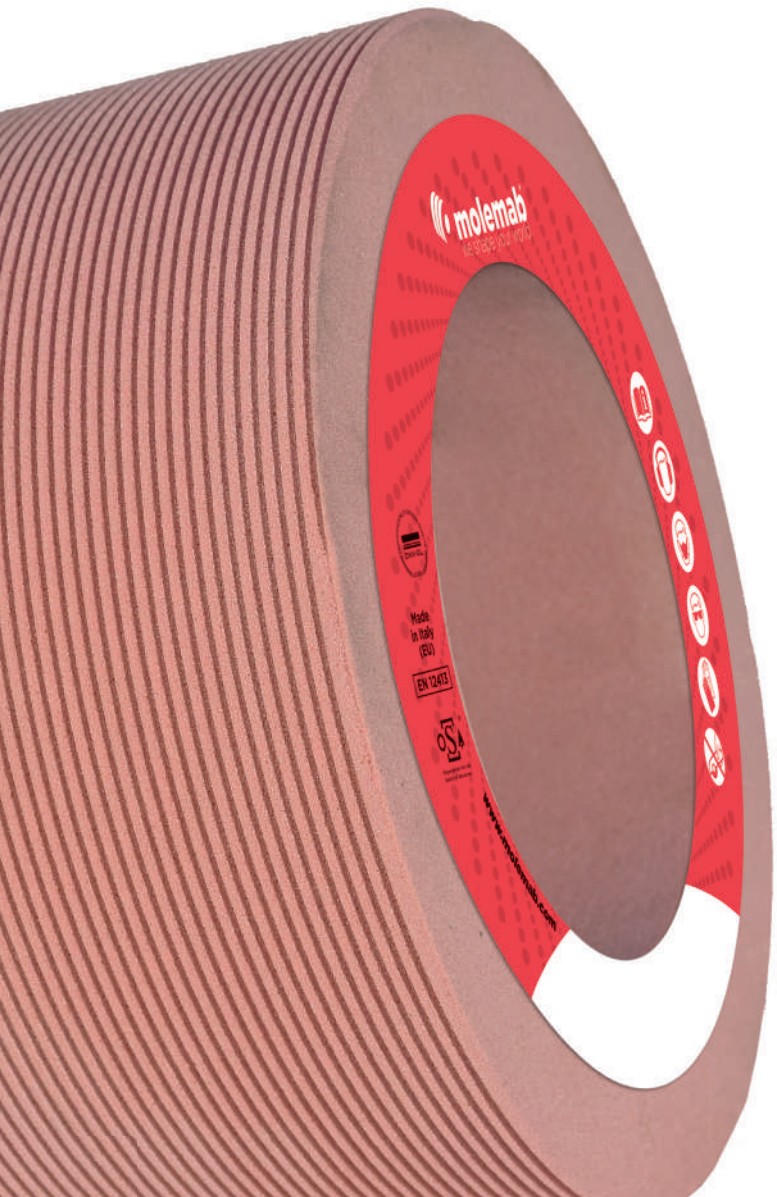
Parameters for aluminium oxide and silicon carbide grinding wheels	Operation / Material	Surface grinding	External grinding	Internal grinding
Peripheral speed of the grinding wheel (m/sec)		20 ÷ 35 m/sec	30 ÷ 50 m/sec	25 ÷ 35 m/sec
Workpiece speed m/min $\frac{\text{m/min}}{3{,}14 \times \text{D in m}}$ = revolutions per min	Roughing or soft	10 ÷ 20 m/minute	20 ÷ 50 m/minute	30 ÷ 60 m/minute
	Finishing or hardened	5 ÷ 10 m/minute	10 ÷ 15 m/minute	20 ÷ 40 m/minute
Ratio between peripheral wheel speed and peripheral working speed	Roughing	-	40 ÷ 60	60 ÷ 70
	Medium removal	-	60 ÷ 80	70 ÷ 80
	Finishing	-	80 ÷ 120	80 ÷ 90
Transverse movement t=grinding wheel thickness	Roughing or soft	1/4 ÷ 1/2 t	1/4 ÷ 1/2 t	1/4 ÷ 1/2 t
	Finishing or hardened	1/10 ÷ 1/5 t	1/10 ÷ 1/5 t	1/10 ÷ 1/5 t
Radial depth of cut for external and internal grinding	Roughing or soft	0,01 ÷ 0,05 mm	0,01 ÷ 0,05 mm	0,005 ÷ 0,02 mm
	Finishing or hardened	0,005 ÷ 0,02 mm	0,005 ÷ 0,02 mm	0,005 ÷ 0,01 mm





GRINDING WHEEL SAFETY

molemab products are manufactured in compliance with international safety standards. To guarantee compliance to European Standards, molemab is a member of FEPA, the European Abrasives Federation, and o.S.a. (Abrasive Safety Organization).
The United States apply the 1988 ANSI (American National Standard Institute) Safety Code Standard B7.1 and the 1970 OSHA (Occupational Health and Safety Act) Regulations. Other European and non-European countries have their own regulations regarding safety and the use of grinding wheels. The procedures now described must be carefully followed to minimize the risk of accidents.



1. RECEPTION AND STORAGE

Handling: Grinding wheels must be handled with care, avoiding impacts and falls.

Visual check: Upon receipt, the wheels must be checked visually.

Storage: Except for thin grinding wheels, all wheels must be stored vertically on suitable shelves. The storage location must be dry and not subject to significant or sudden temperature changes.

Expiry date: Resin bonded wheels have a "Use Before Date" and must be stored for use in chronological order. Vitrified bonded wheels can be stored for an indefinite period of time.

2. BEFORE MOUNTING

Visual check: Never use chipped or cracked grinding wheels.

Sound test: A sound test must be carried out on new or partially used grinding wheels. Smaller wheels can be held on a finger or mounted on the spindle vertically, heavier wheels must be placed standing vertically on the floor.

Using a small non-metal mallet, hit the wheel on the right and at the left side of the vertical centre line.
If the sound is ringing and clear, the grinding wheel is free of cracks or breakages. A dull, hollow sound indicates the presence of cracks.

Machine conditions: All machine parts subject to wear must be in good condition and regularly checked.

3. MOUNTING THE WHEEL

Paper washers: Always use paper washers that are slightly larger than the diameter of the flanges, to ensure that the clamping pressure of the flanges on the wheel is uniform.

Bore: The grinding wheel must fit the spindle correctly. Never force the grinding wheel onto the spindle and do not use grinding wheels with a bore that is too large for the spindle.

Flanges: Carefully follow the instructions regarding type of flange and installation of the grinding wheel.

Speed: Confirm the maximum working speed shown on the grinding wheel and check it against the speed of the machine. Never exceed the maximum speed specified by the grinding wheel manufacturer

Safety cover: Check that all safety covers and guards are in good condition to ensure containment of airborne fragments in case the wheel breaks.

4. OPERATION

Balancing: All wheels are systematically balanced by molemab.
The first on-machine balancing must be carried out after mounting the grinding wheel with the arrow located at the bottom (unless otherwise specified).
New generation grinding machines are often equipped with an automatic balancing system.
However, it is necessary to check the wheel balancing again when it is disassembled and reassembled after working, or when the flanges are replaced.

Starting the wheel: Before starting to remove material, the grinding wheel must be run at maximum speed for at least one minute.
During this operation, all personnel must remain in safe areas.

Dressing and sharpening the wheel: Dressing frequency depends on the type of operation.

All the operations described above must be carried out by qualified personnel.

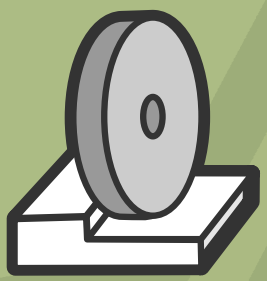
24
HORIZONTAL
SPINDLE SURFACE
GRINDING WHEELS
SHAPES T1 - T5 - T7

29
RING AND CYLINDRICAL
CUP WHEELS
FOR SURFACE GRINDING
SHAPE T6

30
ABRASIVE SEGMENTS

31
SURFACE GRINDING
SEGMENTS

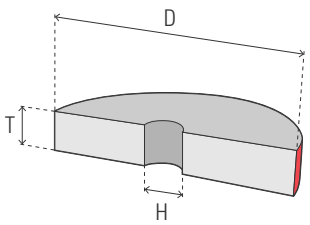
Surface grinding



Horizontal spindle surface grinding wheels

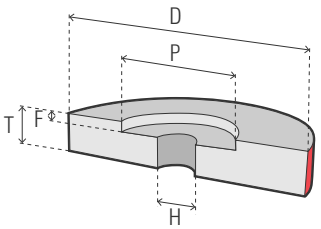
SHAPES AND DIMENSIONS			
Shape	D	T	H
T1	150	20	31,75 - 32
	180	6 - 8 - 10 - 13 - 16 - 20	31,75 - 32
	200	6 - 8 - 10 - 13 - 16 - 20	31,75 - 32
	225	20	50,8
	250	25	76,2
	300	25 - 32 - 40	76,2 - 127
	350	32 - 40 - 50	127
	400	40 - 50 - 60 - 76	127
	450	50 - 63 - 76	203,2
	508	50 - 63 - 80	203,2

SHAPE T1



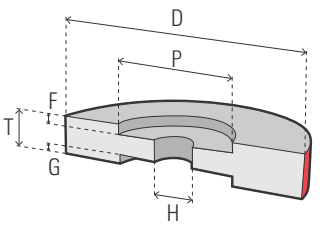
SHAPES AND DIMENSIONS					
Shape	D	T	H	P	F
T5	180	20	31,75	100	6
	200	25	31,75	110	10
	225	25	50,8	110	10
	250	32	76,2	125	12
	300	40	127	190	13
	300	50	127	190	13
	350	50	127	210	10
	400	50	127	210	10

SHAPE T5



SHAPES AND DIMENSIONS						
Shape	D	T	H	P	F	G
T7	300	50	76,2	155	10	10
	300	50	127	155	10	10
	350	50	127	210	10	10
	400	60	127	210	10	10
	400	76	127	210	20	10
	450	80	203,2	290	13	13
	508	100	203,2	300	15	15
	600	100	304,8	390	15	15

SHAPE T7



Other sizes available upon request

Horizontal spindle surface grinding wheels

MILD, ANNEALED QUENCHED AND TEMPERED STEEL < 35 HRC

T1-T5	thickness 25 to 40	T1-T5-T7	thickness 50 to 90	T1-T5-T7	thickness 100 to 150	application
300	11A 036 I 10 V86					SURFACE
	11A 046 I 10 V86					SURFACE
350	11A 036 I 10 V86	350	11A 036 I 10 V86			SURFACE
	11A 046 I 10 V86		11A 046 I 10 V86			SURFACE
400	11A 036 I 10 V86	400	11A 036 I 10 V86	400	11A 036 H 10 V86	SURFACE
	11A 046 I 10 V86		11A 046 FG12 VX P4		11A 046 F12 VX P4	SURFACE
	11A 046 G12 VXP4		09A 046 FG12 V34 P3		09A 046 FG12 V34 P3	SURFACE
			09A 054 FG12 VG P13		09A 054 FG12 VG P13	SURFACE
		450	11A 036 I 10 V86			SURFACE
			11A 046 FG12 VX P4			SURFACE
			09A 046 FG12 V34 P3	450	09A 046 FG12 V34 P3	SURFACE
			09A 054 FG12 VG P13		09A 054 FG12 VG P13	SURFACE
		500	11A 036 I 10 V86			SURFACE
			11A 046 FG12 VX P4			SURFACE
			09A 046 FG12 V34 P3	500	09A 046 FG12 V34 P3	SURFACE
			09A 054 FG12 VG P13		09A 054 FG12 VG P13	SURFACE
				610	11A 036 I 10 V86	SURFACE
					09A 046 FG12 V34 P3	SURFACE
					09A 054 FG12 VG P13	SURFACE

QUENCHED AND TEMPERED (HIGH RESISTANCE) AND HARDENED STEEL < 54 HRC

T1-T5	thickness 25 to 40	T1-T5-T7	thickness 50 to 90	T1-T5-T7	thickness 100 to 150	application
300	09A 046 FG12 V34 P3					SURFACE
	09A 054 FG12 VG P13					SURFACE
350	09A 046 FG12 V34 P3	350	09A 046 FG12 V34 P3			SURFACE
	09A 054 FG12 VG P13		09A 054 FG12 VG P13			SURFACE
	45A 054 FG12 VG P13		45A 054 FG12 VG P13			SURFACE
	0MA 054/60 FG11 VG5 P13		0MA 054/60 FG11 VG5 P13			SURFACE
400	09A 046 FG12 V34 P3	400	09A 046 FG12 V34 P3	400	09A 046 FG12 V34 P3	SURFACE
	09A 054 FG12 VG P13		09A 054 FG12 VG P13		09A 054 F12 VG P13	SURFACE
	45A 054 FG12 VG P13		45A 054 FG12 VG P13		45A 054 F12 VG P13	SURFACE
	0MA 054/60 FG11 VG5 P13		0MA 054/60 FG11 VG5 P13		0MA 054/60 F11 VG5 P13	SURFACE
		450	09A 046 FG12 V34 P3	450	09A 046 FG12 V34 P3	SURFACE
			09A 054 FG12 VG P13		09A 054 F12 VG P13	SURFACE
			45A 054 FG12 VG P13		45A 054 F12 VG P13	SURFACE
			0MA 054/60 FG11 VG5 P13		0MA 054/60 F11 VG5 P13	SURFACE

The coloured dot shows the actual colour of the wheel = (yellow wheel)

Horizontal spindle surface grinding wheels

QUENCHED AND TEMPERED (HIGH RESISTANCE) AND HARDENED STEEL < 54 HRC						
T1-T5	thickness 25 to 40	T1-T5-T7	thickness 50 to 90	T1-T5-T7	thickness 100 to 150	application
		500	09A 046 FG12 V34 P3	500	09A 046 FG12 V34 P3	IN PIANO
			09A 054 FG12 VG P13		09A 054 F12 VG P13	IN PIANO
			45A 054 F12 VG P13		45A 054 F12 VG P13	IN PIANO
			0MA 054/60 FG11 VG5 P13		0MA 054/60 F11 VG5 P13	IN PIANO
		610		610	09A 046 FG12 V34 P3	IN PIANO
					09A 054 F12 VG P13	IN PIANO
			45A 054 F12 VG P13		45A 054 F12 VG P13	IN PIANO
					0MA 054/60 F11 VG5 P13	IN PIANO

HARDENED STEELS AND SINTERED METAL PARTS < 58 HRC						
T1-T5	thickness 25 to 40	T1-T5-T7	thickness 50 to 90	T1-T5-T7	thickness 100 to 150	application
400	0MA 54/60 FG11 VG5 P13	400	0MA 54/60 FG11 VG5 P13	400	0MA 054/60 F11 VG5 P13	IN PIANO
	43A 054 FG12 VG4 P13		43A 054 F12 VG4 P13		43A 054 F12 VG4 P13	IN PIANO
	1GA 054 H12 V86 P1		1GA 054 H12 V86 P1		1GA 054 H12 V86 P1	IN PIANO
		450	0MA 054/60 FG11 VG5 P13	450	0MA 054/60 F11 VG5 P13	IN PIANO
			43A 054 F12 VG4 P13		43A 054 F12 VG4 P13	IN PIANO
			1GA 054 H12 V86 P1		1GA 054 H12 V86 P1	IN PIANO
		500	0MA 054/60 FG11 VG5 P13	500	0MA 054/60 F11 VG5 P13	IN PIANO
			43A 054 F12 VG4 P13		43A 054 F12 VG4 P13	IN PIANO
			1GA 054 H12 V86 P1		1GA 054 H12 V86 P1	IN PIANO
				610	0MA 054/60 F11 VG5 P13	IN PIANO
					43A 054 F12 VG4 P13	IN PIANO
					1GA 054 H12 V86 P1	IN PIANO

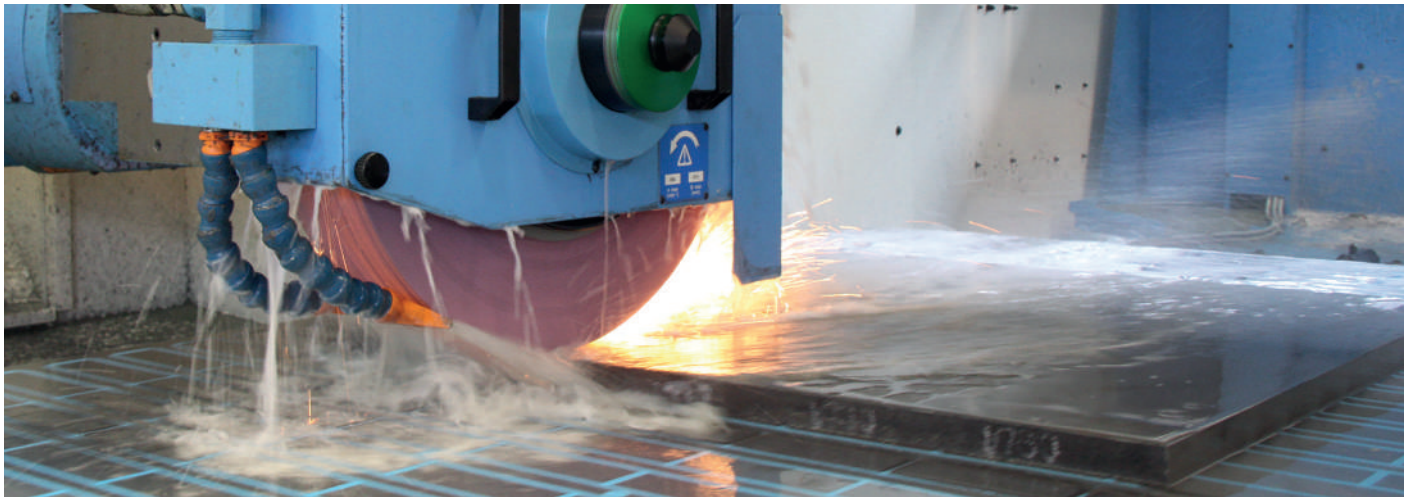
HARDENED STEELS AND SINTERED METAL PARTS < 62 HRC						
T1-T5	thickness 25 to 40	T1-T5-T7	thickness 50 to 90	T1-T5-T7	thickness 100 to 150	application
400	1TA 046 FG12 VG4 P3	400	1TA 046 F12 VG4 P3	400	1TA 046 F12 VG4 P3	IN PIANO
	2SA 054 F12 VG4 P13		2SA 054 EF12 VG4 P13		2SA 054 EF12 VG4 P13	IN PIANO
	2AK 054 F12 VK4 P13		2AK 054 F12 VK4 P13			IN PIANO
		450	1TA 046 F12 VG4 P3	450	1TA 046 F12 VG4 P3	IN PIANO
			2SA 054 EF12 VG4 P13		2SA 054 EF12 VG4 P13	IN PIANO
			2AK 054 F12 VK4 P13			IN PIANO
		500	1TA 046 F12 VG4 P3	500	1TA 046 F12 VG4 P3	IN PIANO
			3SA 054 EF12 VG4 P13		3SA 054 EF12 VG4 P13	IN PIANO
			2AK 054 F12 VK4 P13			IN PIANO
				610	1TA 046 F12 VG4 P3	IN PIANO
					3SA 054 EF12 VG4 P13	IN PIANO

Horizontal spindle surface grinding wheels

FERRITIC STAINLESS STEEL, SERIES 400 AND INCONEL						
T1-T5	thickness 25 to 40	T1-T5-T7	thickness 50 to 90	T1-T5-T7	thickness 100 to 150	application
300	09A 054 FG12 VK P13					SURFACE
350	09A 054 FG12 VK P13					SURFACE
400	09A 054 FG12 VK P13	400	09A 054 F12 VK P13	400		SURFACE
	9A 060 EF16 VK2 P13					CREEP-FEED
	09A 070/2 H10 V86 P1		09A 070/2 H10 V86 P1		09A 080/1G H12 V40 P1	CREEP-FEED
	09A 100 I14 VG PF1		09A 100 I14 VG PF1			CREEP-FEED
		450	09A 054 F12 VK P13	450	09A 054 F12 VK P13	SURFACE
		500	09A 054 F12 VK P13	500	09A 054 F12 VK P13	SURFACE

HARDENED STAINLESS STEEL						
T1-T5	thickness 30 to 50	T1-T5-T7	thickness 60 to 80	T1-T5-T7	thickness 100 to 150	application
350	08C 046 G12 VJ P3					SURFACE
400	08C 046 G12 VJ P3	400	08C 046 G12 VJ P3			SURFACE
450	08C 046 G12 VJ P3	450	08C 046 G12 VJ P3			SURFACE
500	08C 046 G12 VJ P3	500	08C 046 G12 VJ P3	500	08C 046 F12 VJ P3	SURFACE

AUSTENITIC STAINLESS STEEL SERIES 300 AND NIMONIC						
T1-T5	thickness 30 to 50	T1-T5-T7	thickness 60 to 80	T1-T5-T7	thickness 100 to 150	application
350	45A 060 E14 VK P13					SURFACE
400	45A 060 E14 VK P13	400	45A 060 DE14 VK P13			SURFACE
450	45A 060 E14 VK P13	450	45A 060 DE14 VK P13			SURFACE
500	45A 060 E14 VK P13	500	45A 060 DE14 VK P13	500	45A 060 DE14 VK P13	SURFACE
				610	45A 060 DE14 VK P13	SURFACE



Horizontal spindle surface grinding wheels

FERRITIC, NODULAR PEARLITIC AND HARDENED CAST IRON

T1-T5	thickness 30 to 50	T1-T5-T7	thickness 60 to 80	T1-T5-T7	thickness 100 to 150	application
400	09A 046 FG12 V34 P3	400	09A 046 FG12 V34 P3	400	09A 046 FG12 V34 P3	SURFACE
	45A 054 FG12 VG P4		45A 054 FG12 VG P4		45A 054 F12 VG P4	SURFACE
			91A 054 FG12 VG P3		91A 054 F12 VG P3	SURFACE
		500	09A 046 FG12 V34 P3	500	09A 046 FG12 V34 P3	SURFACE
			45A 054 FG12 VG P4		45A 054 F12 VG P4	SURFACE
			91A 054 FG12 VG P3		91A 054 F12 VG P3	SURFACE
		610	91A 054 FG12 VG P3	610	91A 054 F12 VG P3	SURFACE

GREY CAST IRON

T1-T5	thickness 30 to 50	T1-T5-T7	thickness 60 to 80	T1-T5-T7	thickness 100 to 150	application
400	08C 060 H10 V11 P1	400	08C 060 H10 V11 P1	400	08C 060 G10 V11 P1	SURFACE
	08C 060 G10 VJ P3		08C 060 G10 VJ P3		08C 060 FG10 VJ P3	SURFACE
		500	08C 060 H10 V11 P1	500	08C 060 G10 V11 P1	SURFACE
			08C 060 G10 VJ P3		08C 060 FG10 VJ P3	SURFACE

NON FERROUS METALS, ALUMINIUM, BRONZE, COPPER AND NON FERROUS ALLOYS

T1-T5	thickness 30 to 50	T1-T5-T7	thickness 60 to 80	T1-T5-T7	thickness 100 to 150	application
300	08C 060 H10 V11 P1					SURFACE
	08C 060 G10 VJ P3					SURFACE
350	08C 060 H10 V11 P					SURFACE
	08C 060 G10 VJ P3					SURFACE
400	08C 060 H10 V11 P1	400	08C 060 H10 V11 P1			SURFACE
	08C 060 G10 VJ P3		08C 060 G10 VJ P3			SURFACE
		450	08C 060 H10 V11 P1	450	08C 060 G10 V11 P1	SURFACE
			08C 060 G10 VJ P3		08C 060 FG10 VJ P3	SURFACE

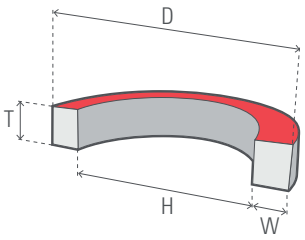
EXAMPLE OF ORDER

SHAPE	DIMENSIONS (mm)	NOTE	SPEED	SPECIFICATION	
T5	500x80x203,2	P=280 F=15	35 m/sec	09A 046 FG12 V34 P3	The coloured dot shows the actual colour of the wheel

Ring wheels and cylindrical cup for surface grinding

SHAPES AND DIMENSIONS			
Shape	D	T	H
T2	175	80	135
	200	100	160
	250	100	200

SHAPE T2

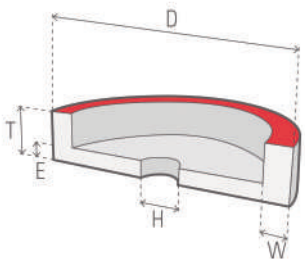


MILD, QUENCHED AND TEMPERED AND HARDENED STEEL ≤ 52 HRC				
T2	T= 80	T2	T= 100	application
175	09A 036 G08 V86 ○			SURFACE
	09A 046 G08 V86 ○			SURFACE
200			09A 036 G08 V86 ○	SURFACE
			09A 046 G08 V86 ○	SURFACE
250			09A 036 G08 V86 ○	SURFACE
			09A 046 G08 V86 ○	SURFACE

HARDENED STEELS AND SINTERED METAL PARTS ≥ 58 HRC				
T2	T= 80	T2	T= 100	application
175	09A 036 F12 V34P3 ●			SURFACE
	09A 046 F12 V34P3 ●			SURFACE
200			09A 036 F12 V34P3 ●	SURFACE
			09A 046 F12 V34P3 ●	SURFACE
250			09A 036 F12 V34P3 ●	SURFACE
			09A 046 F12 V34P3 ●	SURFACE

SHAPES AND DIMENSIONS					
Shape	D	T	H	W	E
T6	178	78	78	19	19
	200	80	78	22	22

SHAPE T6

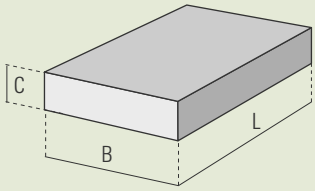


MILD, QUENCHED AND TEMPERED AND HARDENED STEEL ≤ 58 HRC				
T6	T= 78	T6	T= 80	application
178	09A 30 H08 V86 ○			SURFACE
	09A 36 H08 V86 ○			SURFACE
200			09A 30 H08 V20 ○	SURFACE
			09A 36 H08 V20 ○	SURFACE

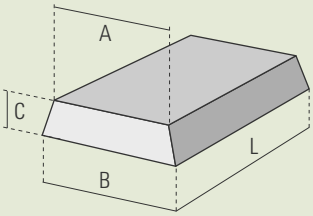
HARDENED STEELS AND SINTERED METAL PARTS ≥ 58 HRC				
T6	T= 78	T6	T= 80	application
178	09A 36 G10 V34P ●			SURFACE
200			09A 36 G10 V34P ●	SURFACE

Abrasive segments

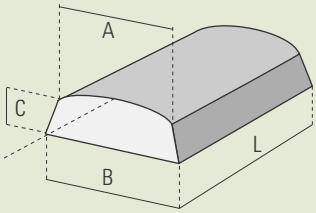
SHAPE 1



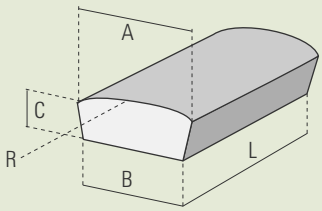
SHAPE 2



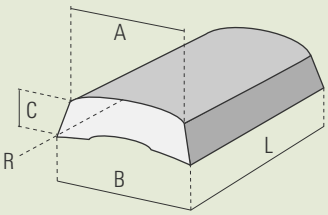
SHAPE 3



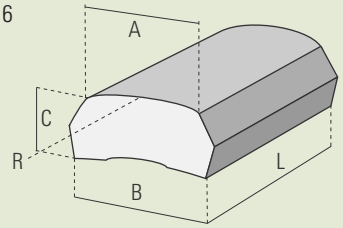
SHAPE 4



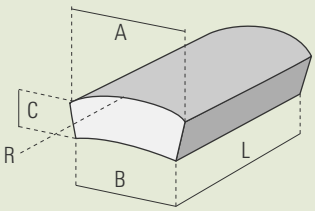
SHAPE 5



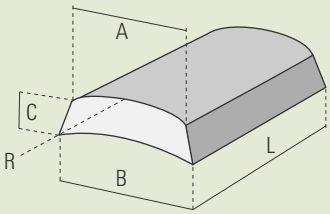
SHAPE 6



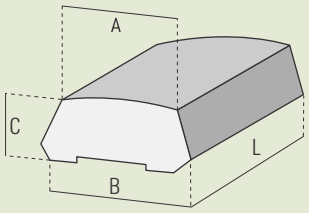
SHAPE 7



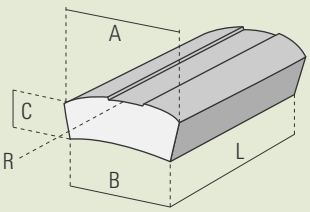
SHAPE 8



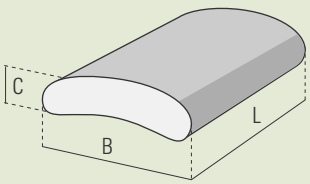
SHAPE 9



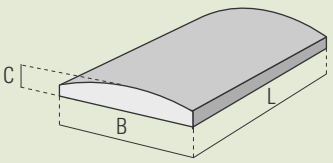
SHAPE 10



SHAPE 11

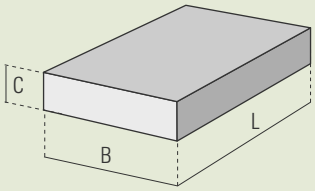


SHAPE 12



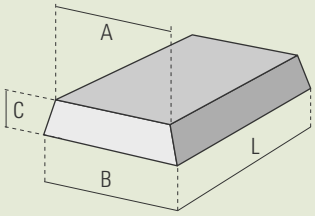
HOW TO IDENTIFY SIZES

SHAPE 1D



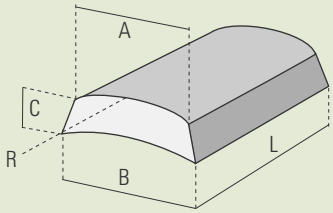
B x C x L

SHAPE 2D



B/A x C x L

SHAPE 3D



B/A x C x L

Surface grinding segments

The following tables list the most common abrasive segment shapes and sizes.
Other specifications and shapes are available upon request

SPECIFICATIONS					
MATERIAL	TYPE	CONTINUOUS CUTTING		DISCONTINUOUS CUTTING	
		SPECIFICATION		SPECIFICATION	
Steel	Mild steel Low/medium hardness steel	09A036H08V86	○	11A024I08V86	○
				11A030H09V86	○
	Hardened steel Alloy steel Hardness ≤ 58 HRC	09A036G10V20P	○	11A036G08V86	○
		09A030G10V92	○		
	High alloy steels Tools steel HSS Hardness ≥ 58 HRC	09A036F12V34P	○	3SA046F12V114P 3AZ046F10VG4P13	○ ○
Stainless steel	Unhardened stainless steel Hardened and alloyed steel	09A024H09V86	○	11A024I08V86	○
		09A036G09V86	○	11A036G09V86	○
Cast iron	Steel cast iron, Grey cast iron	09A024H09V86	○	11A024I08V86	○
	Engine head cast iron	06C036I07V11	○		
	Annealed and ductile iron				
Cemented carbide	Tungstene carbide	08C060G08V01	○		
Non ferrous metals	Aluminium, bronze, copper, non-ferrous alloys	08C046G05V01	○		
		08C046H05V11	○		

EXAMPLE OF ORDER

SHAPE	DIMENSIONS (mm)	SPECIFICATION	
8	50/45 x 16 x 90	09A 036 G10 V34P	○

The coloured dot shows the actual colour of the grinding wheel

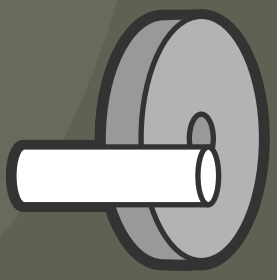
34
THROUGH-FEED EXTERNAL
GRINDING WHEELS SHAPES
T1 - T5 - T7 - T20 - T21 - T23
T25 - T26

41
SHELLAC SUPERFINISHING
AND LAPPING WHEELS

42
PLUNGE GRINDING WHEELS
WITH STANDARD PROFILE

44
CAM AND CRANKSHAFT
GRINDING WHEELS
SHAPES T21 - T26 - T39A

External grinding



Cylindrical round grinding wheels

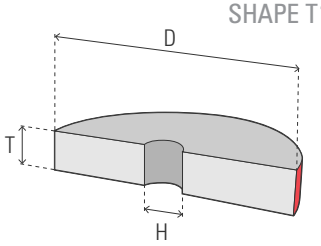
Cylindrical grinding wheels are available with diameters ranging from 300 to 1200 mm and bores from 76,2 to 508 mm

SHAPES AND DIMENSIONS		
Shape	D	H
T1	300	76,2 - 127
	350	127
	400	127 - 203,2
	450	127 - 203,2
	508	203,2 - 304,8
	610	203,2 - 304,8
	760	304,8
	800	304,8
	915	304,8 - 508
	1060	304,8
	1200	

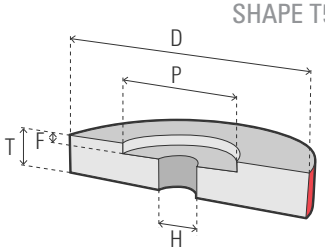
SHAPES AND DIMENSIONS					
Shape	D	H	P/K	F	N
T1	300	127	210	RECESS AND TAPER SIZE UPON REQUEST	
	350	127	210		
	400	203,2	290		
	450	203,2	290		
	508	304,8	390		
	610	203,2	290		
	760	304,8	390		
	800	304,8	410		
	915	304,8	410		
	1060				
	1200				

SHAPES AND DIMENSIONS						
Shape	D	H	P/K	F	G	N
T1	300	127	210	RECESS AND TAPER SIZE UPON REQUEST		
	350	127	210			
	400	203,2	290			
	450	203,2	290			
	508	304,8	390			
	610	203,2	290			
	760	304,8	390			
	800	304,8	410			
	915	304,8	410			
	1060					
	1200					

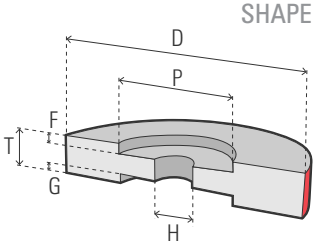
SHAPE T1



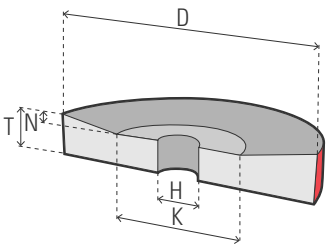
SHAPE T5



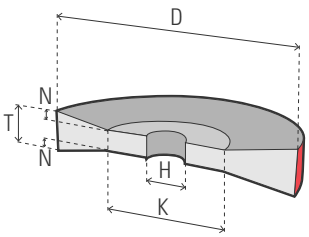
SHAPE T7



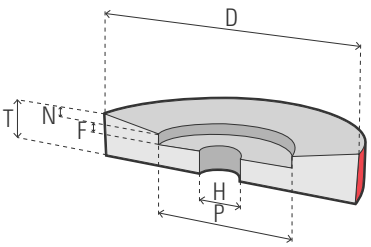
SHAPE T20



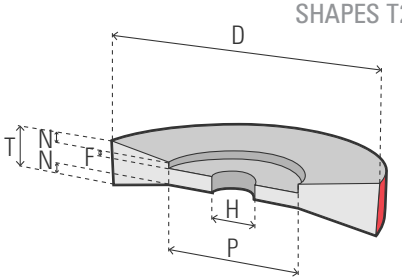
SHAPE T21



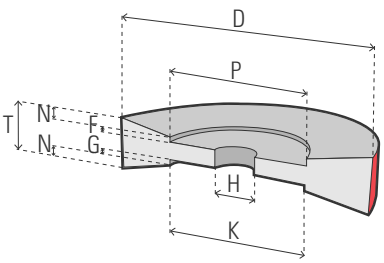
SHAPE T23



SHAPES T25



SHAPE T26



Cylindrical round grinding wheels

MILD, ANNEALED QUENCHED AND TEMPERED STEEL < 35 HRC

T1-T5	thickness 25 to 45	T1-T5	thickness 50 to 80	T1-T5-T7	thickness from 85 to 12	application
350	15A 060 K08 V92					THROUGH-FEED
	14A 060 K08 V85					THROUGH-FEED
400	15A 060 K08 V92	400	15A 060 K08 V92			THROUGH-FEED
	14A 060 K08 V85		14A 060 K08 V85			THROUGH-FEED
	11A 060 K08 VK		11A 060 K08 VK			THROUGH-FEED
	11A 070 J09 VK PP		11A 070 J09 VK PP			THROUGH-FEED
450	15A 060 K08 V92	450	15A 060 K08 V92			THROUGH-FEED
	14A 060 K08 V85		14A 060 K08 V85			THROUGH-FEED
	11A 060 K08 VK		11A 060 K08 VK			THROUGH-FEED
	11A 070 J09 VK PP		11A 070 J09 VK PP			THROUGH-FEED
500	15A 060 K08 V92	500	15A 060 K08 V92	500	15A 060 J08 V92	THROUGH-FEED
	14A 060 K08 V85		14A 060 K08 V85		14A 060 J08 V85	THROUGH-FEED
	11A 060 K08 VK		11A 060 K08 VK		11A 060 JK08 VK	THROUGH-FEED
	11A 070 J09 VK PP		11A 070 J09 VK PP		11A 070 IJ9 VK PP	THROUGH-FEED
610	14A 060 K08 V85	610	14A 060 K08 V85	610	14A 060 J08 V85	THROUGH-FEED
	11A 060 K08 VK		11A 060 K08 VK		11A 060 JK08 VK	THROUGH-FEED
	11A 070 J09 VK PP		11A 070 J09 VK PP		11A 070 IJ9 VK PP	THROUGH-FEED

QUENCHED AND TEMPERED (HIGH RESISTANCE) AND HARDENED STEEL < 56 HRC

T1-T5	thickness 25 to 45	T1-T5	thickness 50 to 80	T1-T5-T7	thickness 50 to 80	application
350	09A 060 K07 V86					THROUGH-FEED
	09A 080 JK8 VK					THROUGH-FEED
400	09A 060 K07 V86	400	09A 060 J07 V86			THROUGH-FEED
	09A 060 J08 VK		09A 060 J08 VK			THROUGH-FEED
	09A 080 J08 VK PF		09A 080 J08 VK PF			THROUGH-FEED
	09A 120 JK8 VK7 PF		09A 120 JK8 VK7 PF			THROUGH-FEED
	09A 120 I14 VG PF1		09A 120 HI14 VG PF1			THROUGH-FEED
	09A 180 I14 VG PF1		09A 180 I14 VG PF1			THROUGH-FEED
	45A 070 I10 VK PP		45A 070 I10 VK PP			THROUGH-FEED
	45A 080 J08 VK4 PF		45A 080 J08 VK4 PF			THROUGH-FEED
450	09A 060 K07 V86	450	09A 060 J07 V86			THROUGH-FEED
	09A 060 J08 VK		09A 060 J08 VK			THROUGH-FEED
	09A 080 J08 VK PF		09A 080 J08 VK PF			THROUGH-FEED
	09A 120 JK8 VK7 PF		09A 120 JK8 VK7 PF			THROUGH-FEED
	09A 120 I14 VG PF1		09A 120 HI14 VG PF1			THROUGH-FEED
	09A 180 I14 VG PF1		09A 180 I14 VG PF1			THROUGH-FEED
	45A 070 I10 VK PP		45A 070 I10 VK PP			THROUGH-FEED
	45A 080 J08 VK4 PF		45A 080 J08 VK4 PF			THROUGH-FEED

The coloured dot shows the actual colour of the wheel = (pink wheel)

Cylindrical round grinding wheels

QUENCHED AND TEMPERED (HIGH RESISTANCE) AND HARDENED STEEL < 56 HRC						
T1-T5	thickness 25 to 45	T1-T5	thickness 50 to 80	T1-T5-T7	thickness 85 to 120	application
500	09A 060 K07 V86	500	09A 060 J07 V86	500	09A 060 J07 V86	THROUGH-FEED
	09A 060 J08 VK		09A 060 J08 VK		09A 060 J08 VK	THROUGH-FEED
	09A 080 J08 VK PF		09A 080 J08 VK PF		09A 080 J08 VK PF	THROUGH-FEED
	09A 120 JK8 VK7 PF		09A 120 JK8 VK7 PF			THROUGH-FEED
	09A 120 I14 VG PF1		09A 120 HI14 VG PF1			THROUGH-FEED
	09A 180 I14 VG PF1		09A 180 I14 VG PF1			THROUGH-FEED
	45A 070 I10 VK PP		45A 070 I10 VK PP		45A 070 I10 VK PP	THROUGH-FEED
	45A 080 J08 VK4 PF		45A 080 J08 VK4 PF		45A 080 J08 VK4 PF	THROUGH-FEED
		610	09A 060 J07 V86	610	09A 060 J07 V86	THROUGH-FEED
			09A 060 J08 VK		09A 060 J08 VK	THROUGH-FEED
			09A 080 J08 VK PF		09A 080 J08 VK PF	THROUGH-FEED
			45A 070 I10 VK PP		45A 070 I10 VK PP	THROUGH-FEED
			45A 080 J08 VK4 PF		45A 080 J08 VK4 PF	THROUGH-FEED

HARDENED STEELS AND SINTERED METAL PARTS < 60 HRC						
T1-T5	thickness 25 to 45	T1-T5	thickness 50 to 80	T1-T5-T7	thickness 85 to 120	application
400	43A 070 J08 VK	400	43A 070 J08 VK			THROUGH-FEED
	43A 080 I08 VK PF		43A 080 I08 VK PF			THROUGH-FEED
	53A 100/2 J09 VK7		53A 100/2 J09 VK7			THROUGH-FEED
	53A 100 JK8 VK4		53A 100 J08 VK			THROUGH-FEED
500	43A 070 J08 VK	500	43A 070 J08 VK	500	43A 070 J08 VK	THROUGH-FEED
	43A 080 I08 VK PF		43A 080 I08 VK PF		43A 080 I08 VK PF	THROUGH-FEED
	53A 100/2 J09 VK7		53A 100/2 J09 VK7		53A 100/2 J09 VK7	THROUGH-FEED
	53A 100 JK8 VK4		53A 100 J08 VK4		53A 100 J08 VK4	THROUGH-FEED
		610	43A 070 J08 VK	610	43A 070 J08 VK	THROUGH-FEED
			43A 080 I08 VK PF		43A 080 I08 VK PF	THROUGH-FEED
			53A 100/2 J09 VK7		53A 100/2 J09 VK7	THROUGH-FEED

Cylindrical round grinding wheels

HARDENED STEELS AND SINTERED METAL PARTS < 68 HRC						
T1-T5	thickness 25 to 45	T1-T5	thickness 50 to 80	T1-T5-T7	thickness 85 to 120	application
400	1SA 070/1 IJ8 VK4	400	1SA 070/1 IJ8 VK4			THROUGH-FEED
	2AK 80 J08 VK4 PM0		2AK 80 J08 VK4 PM0			THROUGH-FEED
	3SA 070/1 J08 VK4		3SA 070/1 J08 VK4			THROUGH-FEED
	3SA 100 K09 VK4 PP		3SA 100 IJ9 VK4 PP			THROUGH-FEED
	3HA 080 H09 VX		3HA 080 H09 VX			THROUGH-FEED
450	1SA 070/1 IJ8 VK4	450	1SA 070/1 IJ8 VK4			THROUGH-FEED
	2AK 80 J08 VK4 PM0		2AK 80 J08 VK4 PM0			THROUGH-FEED
	3SA 070/1 J08 VK4		3SA 070/1 J08 VK4			THROUGH-FEED
	3SA 100 K09 VK4 PP		3SA 100 IJ9 VK4 PP			THROUGH-FEED
	3HA 080 H09 VX		3HA 080 H09 VX			THROUGH-FEED
500	1SA 070/1 IJ8 VK4	500	1SA 070/1 IJ8 VK4	500	1SA 070/1 I08 VK4	THROUGH-FEED
	2AK 80 J08 VK4 PM0		2AK 80 J08 VK4 PM0		2AK 80 J08 VK4 PM0	THROUGH-FEED
	3SA 070/1 J08 VK4		3SA 070/1 J08 VK4		3SA 070/1 IJ08 VK4	THROUGH-FEED
	3HA 080 H09 VX		3HA 080 H09 VX			THROUGH-FEED
		610	1SA 070/1 IJ8 VK4	610	1SA 070/1 IJ8 VK4	THROUGH-FEED
			2AK 80 J08 VK4 PM0		2AK 80 J08 VK4 PM0	THROUGH-FEED
			3SA 070/1 J08 VK4		3SA 070/1 IJ08 VK4	THROUGH-FEED
			3SA 100 J09 VK4 PP		3SA 100 J09 VK4 PP	THROUGH-FEED
			3HA 080 H09 VX			THROUGH-FEED

CHROME PLAITED STEEL						
T1-T5	thickness 25 to 45	T1-T5	thickness 50 to 80	T1-T5-T7	thickness 85 to 120	application
350	09A 070 JK7 V84	350	09A 070 J08 V84			THROUGH-FEED
	09A 070 J08 VK		09A 070 J08 VK			THROUGH-FEED
400	09A 070 JK7 V84	400	09A 070 J08 V84			THROUGH-FEED
	09A 070 J08 VK		09A 070 J08 VK			THROUGH-FEED
450	09A 070 JK7 V84	450	09A 070 J08 V84	450	09A 070 J08 V84	THROUGH-FEED
	09A 070 J08 VK		09A 070 J08 VK		09A 070 J08 VK	THROUGH-FEED
500	09A 070 JK7 V84	500	09A 070 J08 V84	500	09A 070 J08 V84	THROUGH-FEED
	09A 070 J08 VK		09A 070 J08 VK		09A 070 J08 VK	THROUGH-FEED
		610	09A 070 J08 V84	610	09A 070 J08 V84	THROUGH-FEED
			09A 070 J08 VK		09A 070 J08 VK	THROUGH-FEED

Cylindrical round grinding wheels

FERRITIC STAINLESS STEEL, SERIES 400 AND INCONEL

T1-T5	thickness 25 to 45	T1-T5	thickness 50 to 80	T1-T5-T7	thickness 85 to 120	application
350	09A 060 J08 V86	350	09A 060 J08 V86			THROUGH-FEED
	09A 070 JK8 VK		09A 070 JK8 VK			THROUGH-FEED
400	09A 060 J08 V86	400	09A 060 J08 V86			THROUGH-FEED
	09A 070 JK8 VK		09A 070 JK8 VK			THROUGH-FEED
450	09A 060 J08 V86	450	09A 060 J08 V86	450	09A 060 I08 V86	THROUGH-FEED
	09A 070 JK8 VK		09A 070 JK8 VK		09A 070 J08 VK	THROUGH-FEED
500	09A 060 J08 V86	500	09A 060 J08 V86	500	09A 060 I08 V86	THROUGH-FEED
	09A 070 JK8 VK		09A 070 JK8 VK		09A 070 J08 VK	THROUGH-FEED
		610	09A 060 J08 V86	610	09A 060 I08 V86	THROUGH-FEED
			09A 070 JK8 VK		09A 070 J08 VK	THROUGH-FEED

HARDENED STAINLESS STEEL

T1-T5	thickness 25 to 45	T1-T5	thickness 50 to 80	T1-T5-T7	thickness 100 to 150	application
350	08C 070 K08 V11					THROUGH-FEED
400	08C 070 K08 V11	400	08C 070 J08 V11			THROUGH-FEED
450	08C 070 K08 V11	450	08C 070 J08 V11			THROUGH-FEED
500	08C 070 K08 V11	500	08C 070 J08 V11	500	08C 070 I08 V11	THROUGH-FEED
					08C 070 I08 V11	THROUGH-FEED

AUSTENITIC STAINLESS STEEL SERIES 300 AND NIMONIC

T1-T5	thickness 25 to 45	T1-T5	thickness 50 to 80	T1-T5-T7	thickness 85 to 120	application
350	43A 060 K08 V86					THROUGH-FEED
	45A 070 JK8 VK					THROUGH-FEED
400	43A 060 K08 V86	400	43A 060 J08 V86			THROUGH-FEED
	45A 070 JK8 VK		45A 070 J08 VK			THROUGH-FEED
450	43A 060 K08 V86	450	43A 060 J08 V86	450	43A 060 J08 V86	THROUGH-FEED
	45A 070 JK8 VK		45A 070 J08 VK		45A 070 J08 VK	THROUGH-FEED
500		500	43A 060 J08 V86	500	43A 060 J08 V86	THROUGH-FEED
			45A 070 J08 VK		45A 070 J08 VK	THROUGH-FEED
				610	43A 060 J08 V86	THROUGH-FEED
					45A 070 J08 VK	THROUGH-FEED

Cylindrical round grinding wheels

FERRITIC, NODULAR PEARLITIC AND HARDENED CAST IRON							
T1-T5	thickness 25 to 45	T1-T5	thickness 50 to 80	T1-T5-T7	thickness 85 to 120		application
400	43A 060 K08 V86	400	43A 060 J08 V86				THROUGH-FEED
	43A 080 K08 V86		43A 080 J08 V86				THROUGH-FEED
450	43A 060 K08 V86	450	43A 060 J08 V86				THROUGH-FEED
	43A 080 K08 V86		43A 080 J08 V86				THROUGH-FEED
500	43A 060 K08 V86	500	43A 060 J08 V86	500	43A 060 J08 V86		THROUGH-FEED
	43A 080 K08 V86		43A 080 J08 V86		43A 080 J08 V86		THROUGH-FEED
				610	43A 060 J08 V86		THROUGH-FEED
					43A 080 J08 V86		THROUGH-FEED

GREY CAST IRON							
T1-T5	thickness 25 to 45	T1-T5	thickness 50 to 80	T1-T5-T7	thickness 85 to 120		application
400	06C 060J07 V11	400	06C 060 I07 V11				THROUGH-FEED
	06C 060 J07 V11		06C 060 I07 V11				THROUGH-FEED
450	06C 060J07 V11	450	06C 060 I07 V11				THROUGH-FEED
	06C 060 J07 V11		06C 060 I07 V11				THROUGH-FEED
500	06C 060J07 V11	500	06C 060 I07 V11	500	06C 060 I07 V11		THROUGH-FEED
	06C 060 J07 V11		06C 060 I07 V11		06C 060 I07 V11		THROUGH-FEED
				610	06C 060 I07 V11		THROUGH-FEED
					06C 060 I07 V11		THROUGH-FEED

NON FERROUS METALS: ALUMINIUM, BRONZE, COPPER AND NON FERROUS ALLOYS							
T1-T5	thickness 25 to 45	T1-T5	thickness 50 to 80	T1-T5-T7	thickness 85 to 120		application
400	08C 046 H10 V11 P1	400	08C 046 H10 V11 P1				THROUGH-FEED
	08C 080 H10 V11 P1		08C 080 H10 V11 P1				THROUGH-FEED
450	08C 046 H10 V11 P1	450	08C 046 H10 V11 P1				THROUGH-FEED
	08C 080 H10 V11 P1		08C 080 H10 V11 P1				THROUGH-FEED
500	08C 046 H10 V11 P1	500	08C 046 H10 V11 P1	500	08C 046 H10 V11 P1		THROUGH-FEED
	08C 080 H10 V11 P1		08C 080 H10 V11 P1		08C 080 H10 V11 P1		THROUGH-FEED
				610	08C 046 H10 V11 P1		THROUGH-FEED
					08C 080 H10 V11 P1		THROUGH-FEED

SHELLAC superfinishing wheels for cylindrical round grinding

HARDENED STEELS AND SINTERED METAL PARTS < 62 HRC						
T1	various diameters	T5	thickness 55 to 80	T7	thickness 85 to 120	application
	09A 120 E3E		09A 120 E3E		09A 120 E3E	THROUGH-FEED
	09A 220 E3E		09A 220 E3E		09A 220 E3E	THROUGH-FEED
	09A 320 E3E		09A 320 E3E		09A 320 E3E	THROUGH-FEED
	09A 400 E3E		09A 400 E3E		09A 400 E3E	THROUGH-FEED
	09A 500 E3E		09A 500 E3E		09A 500 E3E	THROUGH-FEED

HARDENED STEELS AND SINTERED METAL PARTS						
T1	various diameters	T5	thickness 55 to 80	T7	thickness 85 to 120	application
	08C 120 E3E		08C 120 E3E		08C 120 E3E	THROUGH-FEED
	08C 220 E3E		08C 220 E3E		08C 220 E3E	THROUGH-FEED
	08C 320 E3E		08C 320 E3E		08C 320 E3E	THROUGH-FEED
	08C 400 E3E		08C 400 E3E		08C 400 E3E	THROUGH-FEED
	08C 500 E3E		08C 500 E3E		08C 500 E3E	THROUGH-FEED

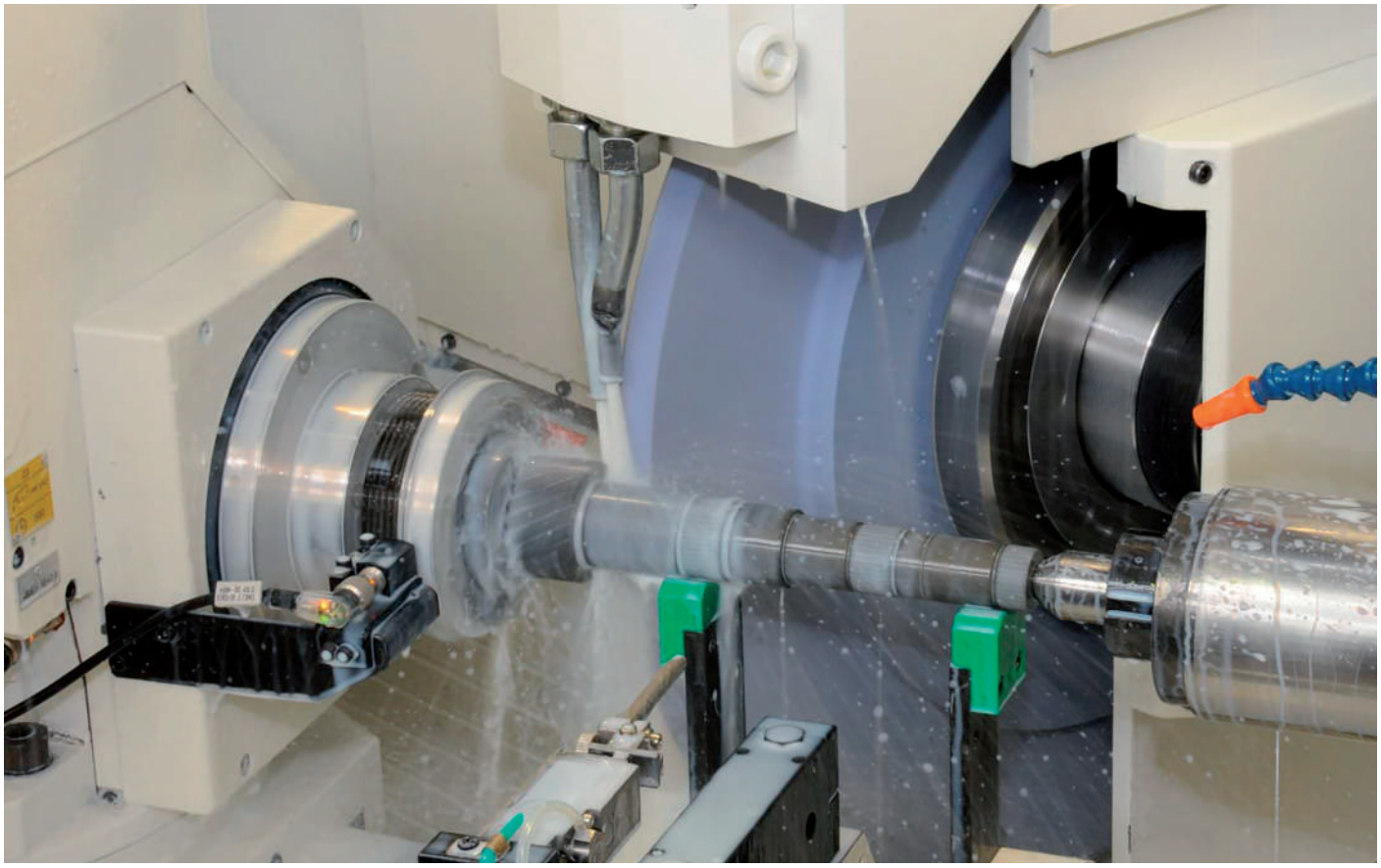
Cylindrical round grinding wheels with standard profile

QUENCHED AND TEMPERED (HIGH RESISTANCE) AND HARDENED STEEL < 56 HRC							
T1-PS	thickness 15 to 30		T1-PS	thickness 35 to 50		T1-PS	thickness 60 to 80		application
400	09A 080 J08 VK7	●	400	09A 080 J08 VK7	●				PLUNGE
	09A 100 I14 VG7 PF1	●		09A 100 HI14 VG7 PF1	●				PLUNGE
	09A 120 I14 VG7 PF1	●		09A 120 I14 VG7 PF1	●				PLUNGE
	45A 070 K08 VK7	●		45A 070 K08 VK7	●				PLUNGE
	45A 080 JK08 VK7	●		45A 080 JK08 VK7	●				PLUNGE
450	09A 080 J08 VK7	●	450	09A 080 J08 VK7	●				PLUNGE
	09A 100 I14 VG7 PF1	●		09A 100 I14 VG7 PF1	●				PLUNGE
	09A 120 I14 VG7 PF1	●		09A 120 I14 VG7 PF1	●				PLUNGE
	45A 070 K08 VK7	●		45A 070 K08 VK7	●				PLUNGE
	45A 080 JK08 VK7	●		45A 080 JK08 VK7	●				PLUNGE
500	09A 080 J08 VK7	●	500	09A 080 J08 VK7	●	500	09A 080 J08 VK7	●	PLUNGE
	09A 100 I14 VG7 PF1	●		09A 100 I14 VG7 PF1	●		09A 100 HI14 VG7 PF1	●	PLUNGE
	09A 120 I14 VG7 PF1	●		09A 120 I14 VG7 PF1	●		09A 120 I14 VG7 PF1	●	PLUNGE
	45A 070 K08 VK7	●		45A 070 K08 VK7	●		45A 070 J08 VK7	●	PLUNGE
	45A 080 JK8 VK7	●		45A 080 JK8 VK7	●		45A 080 J08 VK7	●	PLUNGE

HARDENED AND POWDERED METAL STEEL < 60 HRC							
T1-PS	thickness 15 to 30		T1-PS	thickness 35 to 50		T1-PS	thickness 60 to 80		application
400	43A 080 JK08 VK7	●	400	43A 080 J08 VK7	●				PLUNGE
	43A 120 JK09 VK7 PF1	●		43A 120 J09 VK7 PF1	●				PLUNGE
	43A 180 I12 VK7 PF1	●		43A 180 I12 VK7 PF1	●				PLUNGE
450	43A 080 JK08 VK7	●	450	43A 080 J08 VK7	●				PLUNGE
	43A 120 JK09 VK7 PF1	●		43A 120 J09 VK7 PF1	●				PLUNGE
	43A 180 I12 VK7 PF1	●		43A 180 I12 VK7 PF1	●				PLUNGE
500	43A 080 JK08 VK7	●	500	43A 080 J08 VK7	●	500	43A 080 J08 VK7	●	PLUNGE
	43A 120 JK09 VK7 PF1	●		43A 120 J09 VK7 PF1	●		43A 120 J09 VK7 PF1	●	PLUNGE
	43A 180 I12 VK7 PF1	●		43A 180 I12 VK7 PF1	●				PLUNGE

Cylindrical round grinding wheels with standard profile

HARDENED STEELS AND SINTERED METAL PARTS < 68 HRC						
T1-PS	thickness 15 to 30	T1-PS	thickness 35 to 50	T1-PS	thickness 60 to 80	application
400	1SA 070/1 IJ8 VK4	400	1SA 070/1 IJ8 VK4			PLUNGE
	1SA 150/1 K09 VK4 PP		1SA 150/1 K09 VK4 PP			PLUNGE
	3SA 070/1 J08 VK4		3SA 070/1 J08 VK4			PLUNGE
	3SA 100 K09 VK4 PP		3SA 100 K09 VK4 PP			PLUNGE
450	1SA 070/1 IJ08 VK4	450	1SA 070/1 IJ8 VK4			PLUNGE
	1SA 150/1 K09 VK4 PP		1SA 150/1 K09 VK4 PP			PLUNGE
	3SA 070/1 J08 VK4		3SA 070/1 J08 VK4			PLUNGE
	3SA 100 K09 VK4 PP		3SA 100 K09 VK4 PP			PLUNGE
500	1SA 070/1 IJ08 VK4	500	1SA 070/1 IJ8 VK4	500	1SA 070/1 I08 VK4	PLUNGE
	1SA 150/1 K09 VK4 PP		1SA 150/1 K09 VK4 PP		1SA 150/1 J09 VK4 PP	PLUNGE
	3SA 070/1 J08 VK4		3SA 070/1 J08 VK4		3SA 070/1 I08 VK4	PLUNGE
	3SA 100 K09 VK4 PP		3SA 100 K09 VK4 PP		3SA 100 J09 VK4 PP	PLUNGE

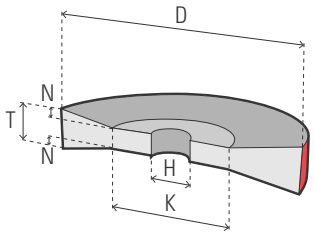


Crankshaft grinding wheels (reconditioning grinding)

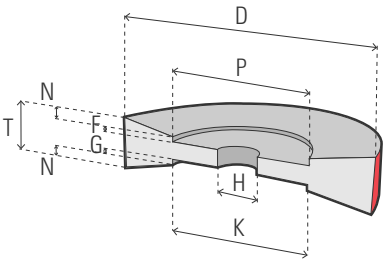
Peripheral speed 35 m/sec

SHAPES AND DIMENSIONS								
Shape	D	T	U	H	J/K	F	G	N
T39A	660	25	19	203,2	320			1,5
T39A	660	25	22	203,2	320			2
T39A	660	25	25	203,2	320			2,5
T21	660	32	-	203,2	320			4
T39A	710	25	19	203,2	320			1,5
T39A	710	25	22	203,2	320			1,5
T39A	710	25	25	203,2	320			2,5
T39A	710	28	28	203,2	320			3
T21	710	32	-	203,2	320			4
T26	710	38	-	203,2	320	4	4	1,5
T39A	760	25	19	203,2	320			1,5
T39A	760	25	22	203,2	320			1,5
T39A	760	25	25	203,2	320			2,5
T39A	760	28	28	203,2	320			3
T21	760	32	-	203,2	320			4
T26	760	38	-	203,2	320	4	4	1,5
T39A	812	25	19	203,2	320			1,5
T39A	812	25	22	203,2	320			1,5
T39A	812	25	25	203,2	320			2,5
T39A	812	28	28	203,2	320			3
T21	812	32	-	203,2	320			4
T26	812	38	-	203,2	320	4	4	1,5
T39A	915	25	22	304,8	400			1,5
T39A	915	25	25	304,8	400			2,5
T39A	915	28	28	304,8	400			3
T21	915	32	-	304,8	400			4
T26	915	38	-	304,8	400	4	4	1,5
T26	915	45	-	304,8	400	6	6	3
T26	915	50	-	304,8	400	7	7	3
T21	1016	32	-	304,8	400			4
T26	1016	38	-	304,8	400	4	4	1,5
T26	1016	45	-	304,8	400	6	6	3
T26	1016	50	-	304,8	400	7	7	3
T26	1016	63	-	304,8	400	13	13	3

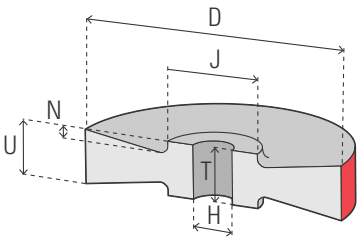
SHAPE T21



SHAPE T26



SHAPE T39A



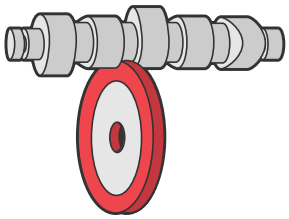
EXAMPLE OF ORDER

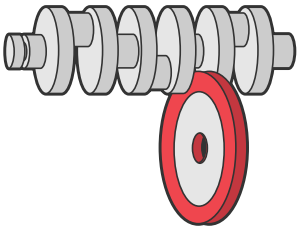
SHAPE	DIMENSIONS (mm)	NOTE	SPEED	SPECIFICATION	
T39A	760 x 25 x 203,2	J/K = 320 N = 2,5	35 m/sec	00A054LM06V86	●

The coloured dot shows the actual colour of the wheel

Crankshaft grinding wheels
Peripheral speed 35 m/sec

SPECIFICATIONS				
materials	diameter ≤ 610 mm specification		diameter ≤ 610 mm specification	use
Hardened steel	15A054K07V86		00A054LM06V86	General use
Cast iron			09A046/2J07V86	High stock removal
Hardened steel			09A070/2J09V86	High stock removal
Chrome plated cast iron			09A080/1J08VK4P1	High stock removal





VIT CBN wheels
for camshaft and crankshaft grinding

ON SPECIFIC REQUEST

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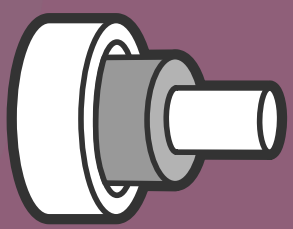
WHEELS FOR INTERNAL GRINDING
SHAPES T1 - T5

Internal grinding

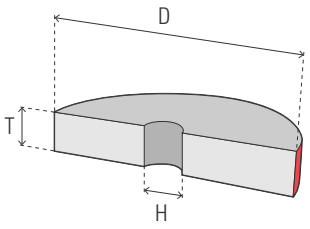


Wheels for internal grinding

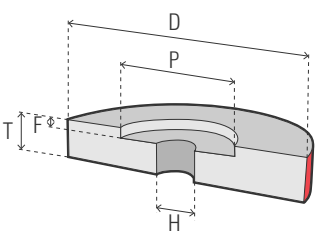
MILD, QUENCHED AND TEMPERED AND HARDENED STEEL ≤ 52 HRC						
T1	Specification		T5	Inc.	Specification	Available
			16,0x16,0x6,00	10x6	31A 060 J08 V86	STOCK
20,0x20,0x6,00	31A 060 J08 V86		20,0x20,0x6,00	13x10	31A 060 J08 V86	STOCK
			20,0x20,0x8,00	13x10	31A 060 J08 V86	STOCK
25,0x25,0x6,00	31A 060 J08 V86					STOCK
25,0x25,0x8,00	31A 060 J08 V86		25,0x25,0x8,00	13x10	31A 060 J08 V86	STOCK
32,0x32,0x10,00	31A 060 J08 V86		32,0x32,0x10,00	16x16	31A 060 J08 V86	STOCK
			40,0x25,0x10,00	20x16	31A 060 J08 V86	STOCK
			40,0x40,0x10,00	20x16	31A 060 J08 V86	STOCK
50,0x40,0x16,00	31A 060 J08 V86		50,0x40,0x16,00	25x16	31A 060 J08 V86	STOCK
			60,0x40,0x20,00	32x20	31A 060 J08 V86	STOCK

HARDENED STEELS AND SINTERED METAL PARTS ≤ 58 HRC AND STAINLESS						
T1	Specification		T5	Inc.	Specification	Available
			16,0x16,0x6,00	10x6	43A 060 J14 VK2PF	STOCK
20,0 x 20,0 x 6,00	43A 060 J14 VK2PF		20,0x20,0x6,00	13x10	43A 060 J14 VK2PF	STOCK
			20,0x20,0x8,00	13x10	43A 060 J14 VK2PF	STOCK
			25,0x25,0x8,00	13x10	43A 060 J14 VK2PF	STOCK
			32,0x32,0x8,00	16x16	43A 060 J14 VK2PF	STOCK
			32,0x32,0x10,00	16x16	43A 060 J14 VK2PF	STOCK
			40,0x25,0x10,00	20x16	43A 060 J14 VK2PF	STOCK
			40,0x40,0x10,00	20x16	43A 060 J14 VK2PF	STOCK
			50,0x40,0x16,00	25x16	43A 060 J14 VK2PF	STOCK
			60,0x32,0x20,00	32x16	43A 060 J14 VK2PF	STOCK
			60,0x40,0x20,00	32x20	43A 060 J14 VK2PF	STOCK
			80,0x40,0x20,00	40x20	43A 060 J14 VK2PF	STOCK
			100,0x40,0x32,00	70x20	43A 060 J14 VK2PF	STOCK

SHAPE T1



SHAPE T5



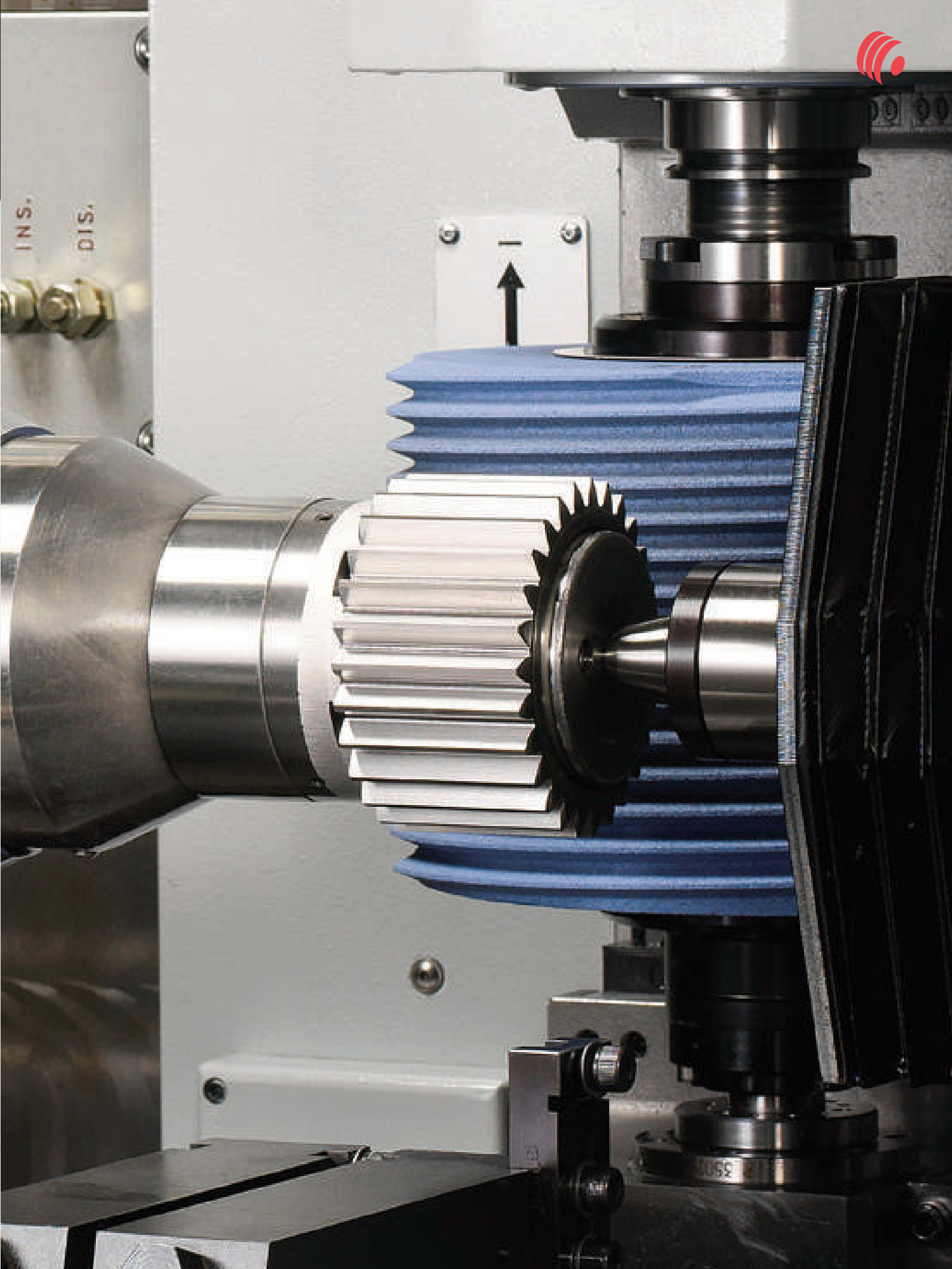
Wheels for internal grinding

HARDENED STEELS AND SINTERED METAL PARTS ≤ 62 HRC

T1	Specification	T5	Inc.	Specification	Available
		16,0x16,0x6,00	10x6	1SA 060 J08 VK4	STOCK
20,0x 20,0x 6,00	1SA 060 J8 VK4	20,0x20,0x6,00	13x10	1SA 060 J08 VK4	STOCK
		20,0x20,0x8,00	13x10	1SA 060 J08 VK4	STOCK
		25,0x25,0x8,00	13x10	1SA 060 J08 VK4	STOCK
		32,0x32,0x8,00	16x16	1SA 060 J08 VK4	STOCK
		32,0x32,0x10,00	16x16	1SA 060 J08 VK4	STOCK
		40,0x25,0x10,00	20x16	1SA 060 J08 VK4	STOCK
		40,0x40,0x10,00	20x16	1SA 060 J08 VK4	STOCK
		50,0x40,0x16,00	25x16	1SA 060 J08 VK4	STOCK
		60,0x32,0x20,00	32x16	1SA 060 J08 VK4	STOCK
		60,0x40,0x20,00	32x20	1SA 060 J08 VK4	STOCK
		80,0x40,0x20,00	40x20	1SA 060 I08 VK4	STOCK
		100,0x40,0x32,00	70x20	1SA 060 I08 VK4	STOCK

CAST IRON AND NON FERROUS METALS

T1	Specification	T5	Inc.	Specification	Available
		16,0x16,0x6,00	10x6	06C 046 J06 V01	TO BE ORDERED
20,0x20,0x6,00	06C 046 J06 V01	20,0x20,0x6,00	13x10	06C 046 J06 V01	TO BE ORDERED
		20,0x20,0x8,00	13x10	06C 046 J06 V01	TO BE ORDERED
25,0x25,0x6,00	06C 046 J06 V01				TO BE ORDERED
25,0x25,0x8,00	06C 046 J06 V01	25,0x25,0x8,00	13x10	06C 046 J06 V01	TO BE ORDERED
32,0x32,0x10,00	06C 046 J06 V01	32,0x32,0x10,00	16x16	06C 046 J06 V01	TO BE ORDERED
		40,0x25,0x10,00	20x16	06C 046 J06 V01	TO BE ORDERED
		40,0x40,0x10,00	20x16	06C 046 J06 V01	TO BE ORDERED
50,0x40,0x16,00	06C 046 J06 V01	50,0x40,0x16,00	25x16	06C 046 J06 V01	TO BE ORDERED
		60,0x40,0x20,00	32x20	06C 046 J06 V01	TO BE ORDERED

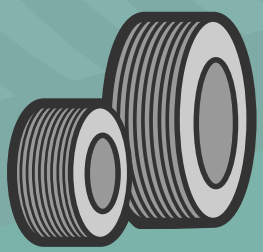

INS.
DIS.

54
SHAPES, DIMENSIONS
AND SPECIFICATIONS
WORM WHEEL
SHAPES T1 - T1 SPIR

56
SHAPES, DIMENSIONS
AND SPECIFICATIONS
OF WHEELS
WITH SINGLE PROFILE
SHAPES T1 - PRQ

57
CYLINDRICAL GEAR GRINDING
FOR PUMPS
AND HYDRAULIC MOTORS
SHAPES T1 - PRN

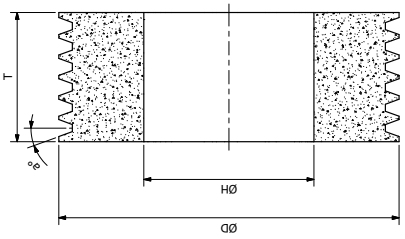
Gear grinding



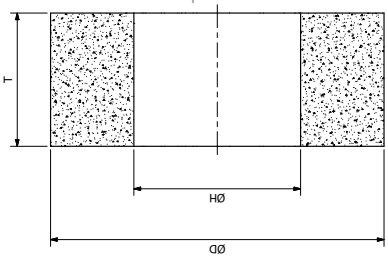
Worm wheel for gear grinding

WORM WHEEL					
T1 - T7	Dimensions	Specification	Module Angle Principles	Machine	speed
SPIR	220x180x90	11A 080 I V45 PF	>1,5 V=> 20° 1:7	Gleason	63 m/sec
T1	220x180x90	11A 080 I V45 PF		Gleason	63 m/sec
SPIR	220x180x90	21A 120/1 I V40 PF	<1,5 V=> 20° 1:7	Gleason	63 m/sec
T1	220x180x90	21A 120/1 I V40 PF		Gleason	63 m/sec
SPIR	240x125x120	11A 080 I V45 PF	>1,5 V=> 20° 1:7	Gleason	63 m/sec
T1	240x125x120	11A 080 I V45 PF		Gleason	63 m/sec
SPIR	240x125x120	21A 120/1 I V40 PF	<1,5 V=> 20° 1:7	Gleason	63 m/sec
T1	240x125x120	21A 120/1 I V40 PF		Gleason	63 m/sec
SPIR	275x125x160	11A 080 I V45 PF	>1,5 V=> 20° 1:7	Reishauer	80 m/sec
T1	275x125x160	11A 080 I V45 PF		Reishauer	80 m/sec
SPIR	275x125x160	21A 120/1 I V40 PF	<1,5 V=> 20° 1:7	Reishauer	80 m/sec
T1	275x125x160	21A 120/1 I V40 PF		Reishauer	80 m/sec
SPIR	275x160x160	11A 080 I V45 PF	>1,5 V=> 20° 1:7	Reishauer	80 m/sec
T1	275x160x160	11A 080 I V45 PF		Reishauer	80 m/sec
SPIR	275x160x160	21A 120/1 I V40 PF	<1,5 V=> 20° 1:7	Reishauer	80 m/sec
T1	275x160x160	21A 120/1 I V40 PF		Reishauer	80 m/sec
SPIR	300x125x160	11A 080 I V45 PF	>1,5 V=> 20° 1:7	Reishauer	80 m/sec
T1	300x125x160	11A 080 I V45 PF		Reishauer	80 m/sec
SPIR	300x125x160	21A 120/1 I V40 PF	<1,5 V=> 20° 1:7	Reishauer	80 m/sec
T1	300x125x160	21A 120/1 I V40 PF		Reishauer	80 m/sec
SPIR	300x145x160	11A 080 I V45 PF	>1,5 V=> 20° 1:7	Reishauer	80 m/sec
T1	300x145x160	11A 080 I V45 PF		Reishauer	80 m/sec
SPIR	300x145x160	21A 120/1 I V40 PF	<1,5 V=> 20° 1:7	Reishauer	80 m/sec
T1	300x145x160	21A 120/1 I V40 PF		Reishauer	80 m/sec
SPIR	350x104x160	11A 080 I V45 PF	>1,5 V=> 20° 1:7	Reishauer	80 m/sec
T1	350x104x160	11A 080 I V45 PF		Reishauer	80 m/sec
SPIR	350x104x160	21A 120/1 I V40 PF	<1,5 V=> 20° 1:7	Reishauer	80 m/sec
T1	350x104x160	21A 120/1 I V40 PF		Reishauer	80 m/sec

Profiled SPIR



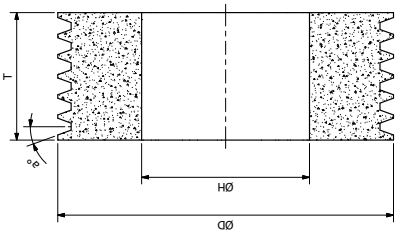
Non profiled T1



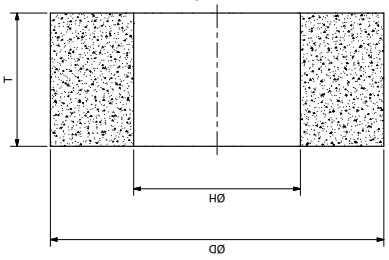
Worm wheel for gear grinding

WORM WHEEL					
T1 - T7	Dimensions	Specification	Module Angle Principles	Machine	speed
SPIR	195x200x90	11A 080 I V45 PF	>1,5 V=> 20° 1:7	Liebherr	63 m/sec
T1	195x200x90	11A 080 I V45 PF		Liebherr	63 m/sec
SPIR	195x200x90	21A 120/1 I V40 PF	<1,5 V=> 20° 1:7	Liebherr	63 m/sec
T1	195x200x90	21A 120/1 I V40 PF		Liebherr	63 m/sec
SPIR	240x230x110	11A 080 I V45 PF	>1,5 V=> 20° 1:7	Liebherr	63 m/sec
T1	240x230x110	11A 080 I V45 PF		Liebherr	63 m/sec
SPIR	240x230x110	21A 120/1 I V40 PF	<1,5 V=> 20° 1:7	Liebherr	63 m/sec
T1	240x230x110	21A 120/1 I V40 PF		Liebherr	63 m/sec
SPIR	280x160x115	11A 080 I V45 PF	>1,5 V=> 20° 1:7	Kapp KX300P	63 m/sec
T1	280x160x115	11A 080 I V45 PF		Kapp KX300P	63 m/sec
SPIR	280x160x115	21A 120/1 I V40 PF	<1,5 V=> 20° 1:7	Kapp KX300P	63 m/sec
T1	280x160x115	21A 120/1 I V40 PF		Kapp KX300P	63 m/sec
SPIR	320x125x115	11A 080 I V45 PF	>1,5 V=> 20° 1:7	Kapp KX300P	63 m/sec
T1	320x125x115	11A 080 I V45 PF		Kapp KX300P	63 m/sec
SPIR	320x125x115	21A 120/1 I V40 PF	<1,5 V=> 20° 1:7	Kapp KX300P	63 m/sec
T1	320x125x115	21A 120/1 I V40 PF		Kapp KX300P	63 m/sec
SPIR	220x104x76,2 - 2inc. 117x10,5	11A 080 I V45 PF	>1,5 V=> 20° 1:7	Samputensili	63 m/sec
T7	220x104x76,2 - 2inc. 117x10,5	11A 080 I V45 PF		Samputensili	63 m/sec
SPIR	220x104x76,2 - 2inc. 117x10,5	21A 120/1 IJ V40 PF	<1,5 V=> 20° 1:7	Samputensili	63 m/sec
T7	220x104x76,2 - 2inc. 117x10,5	21A 120/1 IJ V40 PF		Samputensili	63 m/sec
SPIR	240x104x76,2 - 2inc. 117x10,5	11A 080 I V45 PF	>1,5 V=> 20° 1:7	Samputensili	63 m/sec
T7	240x104x76,2 - 2inc. 117x10,5	11A 080 I V45 PF		Samputensili	63 m/sec
SPIR	240x104x76,2 - 2inc. 117x10,5	21A 120/1 IJ V40 PF	<1,5 V=> 20° 1:7	Samputensili	63 m/sec
T7	240x104x76,2 - 2inc. 117x10,5	21A 120/1 IJ V40 PF		Samputensili	63 m/sec
SPIR	240x140x76,2	11A 080 I V45 PF	>1,5 V=> 20° 1:7	Samputensili	63 m/sec
T1	240x140x76,2	11A 080 I V45 PF		Samputensili	63 m/sec
SPIR	240x140x76,2	21A 120/1 IJ V40 PF	<1,5 V=> 20° 1:7	Samputensili	63 m/sec
T1	240x140x76,2	21A 120/1 IJ V40 PF		Samputensili	63 m/sec

Profiled SPIR



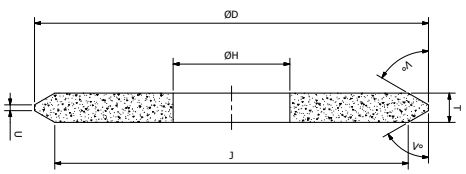
Non profiled T1



Single profile wheels for gear grinding

SINGLE PROFILE WHEELS						
T1	Dimensions	Specification	Table Angle		Machine	speed
PRQ	200x30x50,8	1SA 060 H11 VK4P1	U=	V=	Samputensili	63 m/sec
T1	200x30x50,8	1SA 060 H11 VK4P1			Samputensili	63 m/sec
PRQ	240x25x76,2	1SA 060 H11 VK4P1	U=	V=	Samputensili	63 m/sec
T1	240x25x76,2	1SA 060 H11 VK4P1			Samputensili	63 m/sec
PRQ	240x30x76,2	1SA 060 H11 VK4P1	U=	V=	Samputensili	63 m/sec
T1	240x30x76,2	1SA 060 H11 VK4P1			Samputensili	63 m/sec
PRQ	300x20x50,8	1SA 060 H11 VK4P1	U=	V=	Samputensili	63 m/sec
PRQ	300x20x50,8	3AZ 060/1 H10 VK4 PF1	U=	V=	Samputensili	63 m/sec
PRQ	300x20x50,8	3AZ 080 J08 VK4 PF1	U=	V=	Samputensili	63 m/sec
T1	300x20x50,8	1SA 060 H11 VK4P1			Samputensili	63 m/sec
T1	300x20x50,8	3AZ 060/1 H10 VK4 PF1			Samputensili	63 m/sec
T1	300x20x50,8	3AZ 080 J08 VK4 PF1			Samputensili	63 m/sec
PRQ	300x30x50,8	1SA 060 H11 VK4P1	U=	V=	Samputensili	63 m/sec
PRQ	300x30x50,8	3AZ 060/1 H10 VK4 PF1	U=	V=	Samputensili	63 m/sec
PRQ	300x30x50,8	3AZ 080 J08 VK4 PF1	U=	V=	Samputensili	63 m/sec
T1	300x30x50,8	1SA 60 H11 VK4P1			Samputensili	63 m/sec
T1	300x30x50,8	3AZ 060/1 H10 VK4 PF1			Samputensili	63 m/sec
T1	300x30x50,8	3AZ 080 J08 VK4 PF1			Samputensili	63 m/sec
PRQ	250x32x80	1SA 060 H11 VK4P1	U=	V=	Gleason/Höfler/Niles	63 m/sec
T1	250x32x80	1SA 060 H11 VK4P1			Gleason/Höfler/Niles	63 m/sec
PRQ	300x25x100	1SA 060 H11 VK4P1	U=	V=	Gleason/Höfler/Niles	63 m/sec
PRQ	300x25x100	3AZ 060/1 H10 VK4 PF1	U=	V=	Gleason/Höfler/Niles	63 m/sec
PRQ	300x25x100	3AZ 080 J08 VK4 PF1	U=	V=	Gleason/Höfler/Niles	63 m/sec
T1	300x25x100	1SA 060 H11 VK4P1			Gleason/Höfler/Niles	63 m/sec
T1	300x25x100	3AZ 060/1 H10 VK4 PF1			Gleason/Höfler/Niles	63 m/sec
T1	300x25x100	3AZ 080 J08 VK4 PF1			Gleason/Höfler/Niles	63 m/sec
PRQ	300x30x100	1SA 60 H11 VK4P1	U=	V=	Gleason/Höfler/Niles	63 m/sec
PRQ	300x30x100	3AZ 060/1 H10 VK4 PF1	U=	V=	Gleason/Höfler/Niles	63 m/sec
PRQ	300x30x100	3AZ 080 J08 VK4 PF1	U=	V=	Gleason/Höfler/Niles	63 m/sec
T1	300x30x100	1SA 060 H11 VK4P1			Gleason/Höfler/Niles	63 m/sec
T1	300x30x100	3AZ 060/1 H10 VK4 PF1			Gleason/Höfler/Niles	63 m/sec
T1	300x30x100	3AZ 080 J08 VK4 PF1			Gleason/Höfler/Niles	63 m/sec
PRQ	350x32x127	1SA 060 H11 VK4P1	U=	V=	Gleason/Höfler/Niles	63 m/sec
PRQ	350x32x127	3AZ 060/1 H10 VK4 PF1	U=	V=	Gleason/Höfler/Niles	63 m/sec
PRQ	350x32x127	3AZ 080 J08 VK4 PF1	U=	V=	Gleason/Höfler/Niles	63 m/sec
T1	350x32x127	1SA 060 H11 VK4P1			Gleason/Höfler/Niles	63 m/sec
T1	350x32x127	3AZ 060/1 H10 VK4 PF1			Gleason/Höfler/Niles	63 m/sec
T1	350x32x127	3AZ 080 J08 VK4 PF1			Gleason/Höfler/Niles	63 m/sec

Profiled PRQ



Single profile wheels for gear grinding

SINGLE PROFILE WHEELS						
T1	Dimensions	Specification	Table Angle		Machine	speed
PRQ	350x40x127	1SA 060 H11 VK4P1	U=	V=	Gleason/Höfler/Niles	63 m/sec
PRQ	350x40x127	3AZ 060/1 H10 VK4 PF1	U=	V=	Gleason/Höfler/Niles	63 m/sec
PRQ	350x40x127	3AZ 080 J08 VK4 PF1	U=	V=	Gleason/Höfler/Niles	63 m/sec
T1	350x40x127	1SA 060 H11 VK4P1			Gleason/Höfler/Niles	63 m/sec
T1	350x40x127	3AZ 060/1 H10 VK4 PF1			Gleason/Höfler/Niles	63 m/sec
T1	350x40x127	3AZ 080 I08 VK4 PF1			Gleason/Höfler/Niles	63 m/sec
PRQ	400x32x127	1SA 060 H11 VK4P1	U=	V=	Gleason/Höfler/Niles	63 m/sec
PRQ	400x32x127	3AZ 060/1 H10 VK4 PF1	U=	V=	Gleason/Höfler/Niles	63 m/sec
PRQ	400x32x127	3AZ 080 J08 VK4 PF1	U=	V=	Gleason/Höfler/Niles	63 m/sec
T1	400x32x127	1SA 060 H11 VK4P1			Gleason/Höfler/Niles	63 m/sec
T1	400x32x127	3AZ 060/1 H10 VK4 PF1			Gleason/Höfler/Niles	63 m/sec
T1	400x32x127	3AZ 080 J08 VK4 PF1			Gleason/Höfler/Niles	63 m/sec
PRQ	400x40x127	1SA 060 H11 VK4P1	U=	V=	Gleason/Höfler/Niles	63 m/sec
PRQ	400x40x127	3AZ 060/1 H10 VK4 PF1	U=	V=	Gleason/Höfler/Niles	63 m/sec
PRQ	400x40x127	3AZ 080 J08 VK4 PF1	U=	V=	Gleason/Höfler/Niles	63 m/sec
T1	400x40x127	1SA 060 H11 VK4P1			Gleason/Höfler/Niles	63 m/sec
T1	400x40x127	3AZ 060/1 H10 VK4 PF1			Gleason/Höfler/Niles	63 m/sec
T1	400x40x127	3AZ 080 I08 VK4 PF1			Gleason/Höfler/Niles	63 m/sec
PRQ	450x32x127	1SA 060 H11 VK4P1	U=	V=	Gleason/Höfler/Niles	63 m/sec
PRQ	450x32x127	3AZ 060/1 H10 VK4 PF1	U=	V=	Gleason/Höfler/Niles	63 m/sec
PRQ	450x32x127	3AZ 080 J08 VK4 PF1	U=	V=	Gleason/Höfler/Niles	63 m/sec
T1	450x32x127	1SA 060 H11 VK4P1			Gleason/Höfler/Niles	63 m/sec
T1	450x32x127	3AZ 060/1 H10 VK4 PF1			Gleason/Höfler/Niles	63 m/sec
T1	450x32x127	3AZ 080 J08 VK4 PF1			Gleason/Höfler/Niles	63 m/sec
PRQ	450x40x127	1SA 060 H11 VK4P1	U=	V=	Gleason/Höfler/Niles	63 m/sec
PRQ	450x40x127	3AZ 060/1 H10 VK4 PF1	U=	V=	Gleason/Höfler/Niles	63 m/sec
PRQ	450x40x127	3AZ 080 J08 VK4 PF1	U=	V=	Gleason/Höfler/Niles	63 m/sec
T1	450x40x127	1SA 060 H11 VK4P1			Gleason/Höfler/Niles	63 m/sec
T1	450x40x127	3AZ 060/1 H10 VK4 PF1			Gleason/Höfler/Niles	63 m/sec
T1	450x40x127	3AZ 080 I08 VK4 PF1			Gleason/Höfler/Niles	63 m/sec
Variant with finer grit (better finishing)		3AZ 080 J08 VK4 PF1				
Variant for modules with important dimensions		3AZ 060/1 H10 VK4 PF1				

Cylindrical gear grinding for pumps and hydraulic motors

PROFILE N WHEELS								
T1 - PRN	thickness 20 to 30		thickness 35 to 60		thickness 65 to 100		Angle 1	/ Angle 2
450	43A 080 JK8 VK7		43A 080 J08 VK7				V^1	V^2
	43A 120 K06 VK7		43A 120 K06 VK7				V^1	V^2
508	43A 080 JK8 VK7		43A 080 J08 VK7		43A 080 IJ08 VK7		V^1	V^2
	43A 120 K06 VK7		43A 120 JK9 VK7		43A 120 J10 VK7		V^1	V^2
610			43A 080 J08 VK7		43A 080 IJ08 VK7		V^1	V^2
			43A 120 K06 VK7		43A 120 J10 VK7		V^1	V^2

60
OPERATING WHEELS
SHAPES T1 - T5 - T7

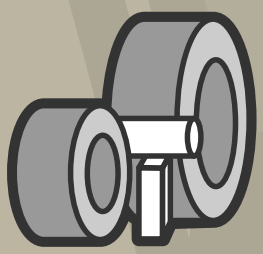
61
REGULATING WHEELS

62
THROUGH-FEED CENTRELESS
GRINDING

65
PLUNGE CENTRELESS
GRINDING

69
CENTRELESS GRINDING
FOR BARS AND TUBES

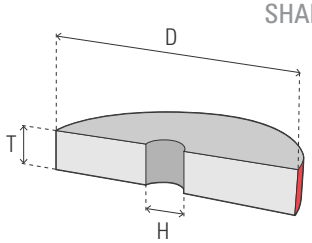
Centreless grinding



Operating wheels

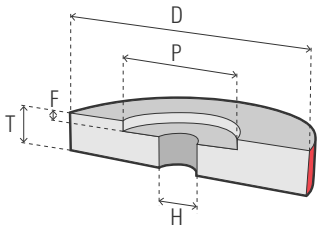
SHAPES AND DIMENSIONS				
Shape	D	H		
T1	300	127		
	350	127		
	400	203,2 - 152,4		
	508	254 - 304,8		
	610	304,8		

SHAPE T1



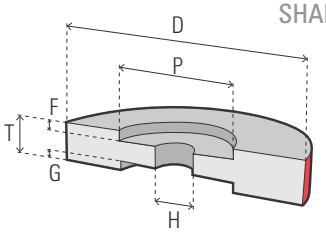
Shape	D	H	P	F
T5	300	127	190	To be specified F max = 1/2T
	350	127	215	
	400	203,2	270	
	508	304,8	390	
	610	304,8	390	

SHAPE T5



Shape	D	H	P	F
T7	300	127	190	To be specified F+G max = 1/2T
	350	127	215	
	400	203,2	270	
	508	304,8	390	
	610	304,8	390	

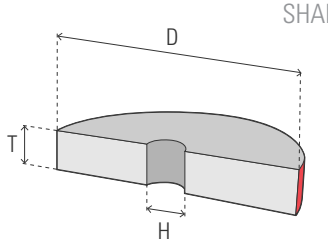
SHAPE T7



WHEEL THICKNESS UPON REQUEST
For thickness 400, 508 and 610, we supply wheels combined into 2 or 3 pieces, thickness 1/2T or 1/3T

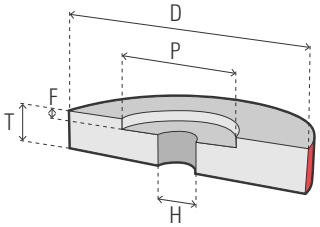
SHAPES AND DIMENSIONS		
Shape	D	H
T1	200	76,2
	250	127
	300	127
	350	127 - 203,2

SHAPE T1



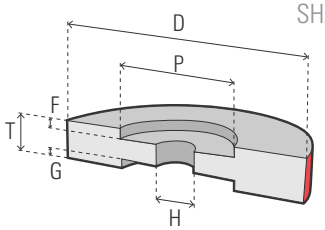
Shape	D	H	P	F
T5	200	76,2	115	To specify
	250	127	190	
	300	127	190	
	350	127	215	
	350	203,2	270	

SHAPE T5



Shape	D	H	P	F
T7	200	76,2	115	To specify
	250	127	190	
	300	127	190	
	350	127	215	
	350	203,2	270	

SHAPE T7



SPECIFICATIONS		
Grinding type	Specification	Use
Through-feed Centerless Plunge Centerless	00A080 RR Rubber bond	General
	00A120 RR	Finishing
	00A180 SR	Superfinishing
	00A080 SV Vitrified bond	Only for specific production of pieces with diameter ≤ 16 mm

WHEEL THICKNESS UPON REQUEST

MILD, ANNEALED AND QUENCHED AND TEMPERED STEEL < 35 HRC							
T1-T5	thickness 100 to 150		T1-T5	thickness 200 to 250	T1-T5-T7	thickness 300 to 500	application
300	15A 060 K8 V86						THROUGH-FEED
300	11A 060 K8 V86						THROUGH-FEED
350	15A 060 K8 V86		350	15A 060 K8 V86			THROUGH-FEED
350	11A 060 K8 V86		350	11A 060 K8 V86			THROUGH-FEED
400	15A 060 K8 V86		400	15A 060 K8 V86			THROUGH-FEED
400	11A 060 K8 V86		400	11A 060 K8 V86			THROUGH-FEED
508	15A 060 K8 V86		508	15A 060 K8 V86	508	15A 060 K8 V86	THROUGH-FEED
508	11A 060 K8 V86		508	11A 060 K8 V86	508	11A 060 K8 V86	THROUGH-FEED
610	15A 060 K8 V86		610	15A 060 K8 V86	610	15A 060 K8 V86	THROUGH-FEED
610	11A 060 K8 V86		610	11A 060 K8 V86	610	11A 060 K8 V86	THROUGH-FEED

QUENCHED AND TEMPERED (HIGH RESISTANCE) AND HARDENED STEEL < 56 HRC							
T1-T5	thickness 100 to 150		T1-T5	thickness 200 to 250	T1-T5-T7	thickness 300 to 500	application
300	09A 080 J08 V86						THROUGH-FEED
300	45A 070/2 JK9 V85						THROUGH-FEED
350	09A 080 J08 V86		350	09A 080 J08 V86			THROUGH-FEED
350	45A 070/2 JK9 V85		350	45A 070/2 JK9 V85			THROUGH-FEED
400	09A 080 J08 V86		400	09A 080 J08 V86			THROUGH-FEED
400	45A 070/2 JK9 V85		400	45A 070/2 JK9 V85			THROUGH-FEED
508	09A 080 J08 V86		508	09A 080 J08 V86	508	09A 080 J08 V86	THROUGH-FEED
508	45A 070/2 JK9 V85		508	45A 070/2 JK9 V85	508	45A 070/2 JK9 V85	THROUGH-FEED
610	09A 080 J08 V86		610	09A 080 J08 V86	610	09A 080 J08 V86	THROUGH-FEED
610	45A 070/2 JK9 V85		610	45A 070/2 JK9 V85	610	45A 070/2 JK9 V85	THROUGH-FEED

HARDENED STEELS AND SINTERED METAL PARTS < 60 HRC							
T1-T5	thickness 100 to 150		T1-T5	thickness 200 to 250	T1-T5-T7	thickness 300 to 500	application
300	43A 080 J08 V86						THROUGH-FEED
350	43A 080 J08 V86		350	43A 080 J08 V86			THROUGH-FEED
400	43A 080 J08 V86		400	43A 080 J08 V86			THROUGH-FEED
508	43A 080 J08 V86		508	43A 080 J08 V86	508	43A 080 J08 V86	THROUGH-FEED
610	43A 080 J08 V86		610	43A 080 J08 V86	610	43A 080 J08 V86	THROUGH-FEED

CHROME PLAITED STEEL							
T1-T5	thickness 100 to 150		T1-T5	thickness 200 to 250		T1-T5-T7	thickness 300 to 500		application
300	11A 060 J08 V30								THROUGH-FEED
350	11A 060 J08 V30		350	11A 060 J08 V30					THROUGH-FEED
400	11A 060 J08 V30		400	11A 060 J08 V30					THROUGH-FEED
508	11A 060 J08 V30		508	11A 060 J08 V30		508	11A 060 J08 V30		THROUGH-FEED
610	11A 060 J08 V30		610	11A 060 J08 V30		610	11A 060 J08 V30		THROUGH-FEED

FERRITIC STAINLESS STEEL, SERIES 400 AND INCONEL							
T1-T5	thickness 100 to 150		T1-T5	thickness 200 to 250		T1-T5-T7	thickness 300 to 500		application
300	45A 070/2 JK9 V85								THROUGH-FEED
350	45A 070/2 JK9 V85		350	45A 070/2 JK9 V85					THROUGH-FEED
400	45A 070/2 JK9 V85		400	45A 070/2 JK9 V85					THROUGH-FEED
508	45A 070/2 JK9 V85		508	45A 070/2 JK9 V85		508	45A 070/2 JK9 V85		THROUGH-FEED
610	45A 070/2 JK9 V85		610	45A 070/2 JK9 V85		610	45A 070/2 JK9 V85		THROUGH-FEED

AUSTENITIC STAINLESS STEEL SERIES 300 AND NIMONIC							
T1-T5	thickness 100 to 150		T1-T5	thickness 200 to 250		T1-T5-T7	thickness 300 to 500		application
300	43A 080 K08 V86								THROUGH-FEED
350	43A 060 K08 V86		350	43A 060 K08 V86					THROUGH-FEED
400	43A 060 K08 V86		400	43A 060 K08 V86					THROUGH-FEED
508	43A 060 K08 V86		508	43A 060 K08 V86		508	43A 060 K08 V86		THROUGH-FEED
610	43A 060 K08 V86		610	43A 060 K08 V86		610	43A 060 K08 V86		THROUGH-FEED

FERRITIC, NODULAR PEARLITIC AND HARDENED CAST IRON

T1-T5	thickness 100 to 150	T1-T5	thickness 200 to 250	T1-T5-T7	thickness 300 to 500	application
300	15A 060 K07 V86					THROUGH-FEED
350	15A 060 K07 V86	350	15A 060 K07 V86			THROUGH-FEED
400	15A 060 K07 V86	400	15A 060 K07 V86			THROUGH-FEED
508	15A 060 K07 V86	508	15A 060 K07 V86	508	15A 060 K07 V86	THROUGH-FEED
610	15A 060 K07 V86	610	15A 060 K07 V86	610	15A 060 K07 V86	THROUGH-FEED

GREY CAST IRON

T1-T5	thickness 100 to 150	T1-T5	thickness 200 to 250	T1-T5-T7	thickness 300 to 500	application
300	08C 080 K07 V11					THROUGH-FEED
350	08C 060 K07 V11	350	08C 060 K07 V11			THROUGH-FEED
400	08C 060 K07 V11	400	08C 060 K07 V11			THROUGH-FEED
508	08C 060 K07 V11	508	08C 060 K07 V11	508	08C 060 K07 V11	THROUGH-FEED
610	08C 060 K07 V11	610	08C 060 K07 V11	610	08C 060 K07 V11	THROUGH-FEED

TITANIUM

T1-T5	thickness 100 to 150	T1-T5	thickness 200 to 250	T1-T5-T7	thickness 300 to 500	application
300	08C 080 K07 V11					THROUGH-FEED
350	08C 080 K07 V11	350	08C 080 K07 V11			THROUGH-FEED
400	08C 080 K07 V11	400	08C 080 K07 V11			THROUGH-FEED
508	08C 080 K07 V11	508	08C 080 K07 V11	508	08C 080 K07 V11	THROUGH-FEED
610	08C 080 K07 V11	610	08C 080 K07 V11	610	08C 080 K07 V11	THROUGH-FEED

NON FERROUS METALS: ALUMINIUM, BRONZE, COPPER, RUBBER AND NON FERROUS ALLOYS

T1-T5	thickness 100 to 150	T1-T5	thickness 200 to 250	T1-T5-T7	thickness 300 to 500	application
300	08C 080 H10 V11P					THROUGH-FEED
350	08C 080 H10 V11P	350	08C 080 H10 V11P			THROUGH-FEED
400	08C 080 H10 V11P	400	08C 080 H10 V11P			THROUGH-FEED
508	08C 080 H10 V11P	508	08C 080 H10 V11P	508	08C 080 H10 V11P	THROUGH-FEED
610	08C 080 H10 V11P	610	08C 080 H10 V11P	610	08C 080 H10 V11P	THROUGH-FEED

CEMENTED CARBIDE AND INDUSTRIAL CERAMICS

T1-T5	thickness 100 to 150	T1-T5	thickness 200 to 250	T1-T5-T7	thickness 300 to 500	application
300	08C 060 H08 V11					THROUGH-FEED
350	08C 060 H08 V11	350	08C 060 H08 V11			THROUGH-FEED
400	08C 060 H08 V11	400	08C 060 H08 V11			THROUGH-FEED
508	08C 060 H08 V11	508	08C 060 H08 V11	508	08C 060 H08 V11	THROUGH-FEED
610	08C 060 H08 V11	610	08C 060 H08 V11	610	08C 060 H08 V11	THROUGH-FEED

MILD, ANNEALED AND QUENCHED AND TEMPERED STEEL < 35 HRC

T1-T5	thickness 100 to 150	T1-T5	thickness 200 to 250	T1-T5-T7	thickness 300 to 500	application
300	15A 120 L07 V86					PLUNGE
350	15A 120 L07 V86	350	15A 120 k07 V86			PLUNGE
400	15A 120 L07 V86	400	15A 120 k07 V86			PLUNGE
508	15A 080 L07 V86	508	15A 080 K07 V86	508	15A 080 K07 V86	PLUNGE
610	15A 080 L07 V86	610	15A 080 K07 V86	610	15A 080 K07 V86	PLUNGE

QUENCHED AND TEMPERED (HIGH RESISTANCE) AND HARDENED STEEL < 56 HRC

T1-T5	thickness 100 to 150	T1-T5	thickness 200 to 250	T1-T5-T7	thickness 300 to 500	application
300	09A 120 L07 V86					PLUNGE
300	45A 120 K8 V85					PLUNGE
350	09A 100 L07 V86	350	09A 100 K07 V86			PLUNGE
350	45A 120 K8 V85	350	45A 120 K8 V85			PLUNGE
400	09A 100 L07 V86	400	09A 100 K07 V86			PLUNGE
400	45A 120 K8 V85	400	45A 120 K8 V85			PLUNGE
508	09A 100 L07 V86	508	09A 100 K07 V86	508	09A 100 K07 V86	PLUNGE
508	45A 100 K8 V85	508	45A 100 K8 V85	508	45A 100 K8 V85	PLUNGE
610	09A 100 L07 V86	610	09A 100 K07 V86	610	09A 100 K07 V86	PLUNGE
610	45A 100 K8 V85	610	45A 100 K8 V85	610	45A 100 K8 V85	PLUNGE

HARDENED STEELS AND SINTERED METAL PARTS < 60 HRC

T1-T5	thickness 100 to 150	T1-T5	thickness 200 to 250	T1-T5-T7	thickness 300 to 500	application
300	43A 120 K08 V86					PLUNGE
350	43A 120 K08 V86	350	43A 120 J08 V86			PLUNGE
400	43A 120 K08 V86	400	43A 120 J08 V86			PLUNGE
508	43A 080 K08 V86	508	43A 080 J08 V86	508	43A 080 J08 V86	PLUNGE
610	43A 080 K08 V86	610	43A 080 J08 V86	610	43A 080 J08 V86	PLUNGE

CHROME PLAITED STEEL

T1-T5	thickness 100 to 150	T1-T5	thickness 200 to 250	T1-T5-T7	thickness 300 to 500	application
300	11A 120 K08 V11					PLUNGE
350	11A 120 K08 V11	350	11A 120 J08 V11			PLUNGE
400	11A 080 K08 V11	400	11A 080 J08 V11			PLUNGE
508	11A 080 K08 V11	508	11A 080 J08 V11	508	11A 080 J08 V11	PLUNGE
610	11A 080 K08 V11	610	11A 080 J08 V11	610	11A 080 J08 V11	PLUNGE

Plunge centreless grinding

FERRITIC STAINLESS STEEL, SERIES 400 AND INCONEL							
T1-T5	thickness 100 to 150	T1-T5	thickness 200 to 250		T1-T5-T7	thickness 300 to 500	application
300	45A 120 JK8 V85						PLUNGE
350	45A 120 JK8 V85	350	45A 100 J8 V85				PLUNGE
400	45A 100 K8 V85	400	45A 100 J8 V85				PLUNGE
508	45A 100 K8 V85	508	45A 100 J8 V85		508	45A 100 J8 V85	PLUNGE
610	45A 100 K8 V85	610	45A 100 J8 V85		610	45A 100 J8 V85	PLUNGE

AUSTENITIC STAINLESS STEEL SERIES 300 AND NIMONIC							
T1-T5	thickness 100 to 150	T1-T5	thickness 200 to 250		T1-T5-T7	thickness 300 to 500	application
300	43A 120 K08 V86						PLUNGE
350	43A 120 K08 V86	350	43A 120 JK08 V86				PLUNGE
400	43A 080 K08 V86	400	43A 080 J08 V86				PLUNGE
508	43A 080 K08 V86	508	43A 080 J08 V86		508	43A 080 J08 V86	PLUNGE
610	43A 080 K08 V86	610	43A 080 J08 V86		610	43A 080 J08 V86	PLUNGE

FERRITIC, NODULAR PEARLITIC AND HARDENED CAST IRON							
T1-T5	thickness 100 to 150	T1-T5	thickness 200 to 250		T1-T5-T7	thickness 300 to 500	application
300	15A 120 JK07 V86						PLUNGE
350	15A 120 JK07 V86	350	15A 120 J07 V86				PLUNGE
400	15A 080 K07 V86	400	15A 080 J07 V86				PLUNGE
508	15A 080 K07 V86	508	15A 080 J07 V86		508	15A 080 J07 V86	PLUNGE
610	15A 080 K07 V86	610	15A 080 J07 V86		610	15A 080 J07 V86	PLUNGE

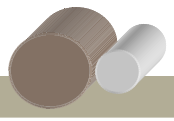
GREY CAST IRON							
T1-T5	thickness 100 to 150	T1-T5	thickness 200 to 250		T1-T5-T7	thickness 300 to 500	application
300	08C 120 J07 V11						PLUNGE
350	08C 120 J07 V11	350	08C 120 J07 V11				PLUNGE
400	08C 080 K07 V11	400	08C 080 J07 V11				PLUNGE
508	08C 080 K07 V11	508	08C 080 J07 V11		508	08C 080 J07 V11	PLUNGE
610	08C 080 K07 V11	610	08C 080 J07 V11		610	08C 080 J07 V11	PLUNGE

TITANIUM BOLTS AND RIVETS							
T1-T5	thickness 100 to 150	T1-T5	thickness 200 to 250		T1-T5-T7	thickness 300 to 500	application
300	08C 120 N07 V11						PLUNGE
350	08C 120 N07 V11	350	08C 120 N07 V11				PLUNGE
400	08C 120 N07 V11	400	08C 120 N07 V11				PLUNGE
508	08C 120 N07 V11	508	08C 120 N07 V11		508	08C 120 N07 V11	PLUNGE
610	08C 120 N07 V11	610	08C 120 N07 V11		610	08C 120 N07 V11	PLUNGE

NON FERROUS METALS: ALUMINIUM, BRONZE, COPPER, RUBBER AND NON FERROUS ALLOYS							
T1-T5	thickness 100 to 150	T1-T5	thickness 200 to 250		T1-T5-T7	thickness 300 to 500	application
300	08C 120 H10 V11P						PLUNGE
350	08C 120 H10 V11P	350	08C 120 H10 V11P				PLUNGE
400	08C 080 H10 V11P	400	08C 080 H10 V11P				PLUNGE
508	08C 080 H10 V11P	508	08C 080 H10 V11P		508	08C 080 H10 V11P	PLUNGE
610	08C 080 H10 V11P	610	08C 080 H10 V11P		610	08C 080 H10 V11P	PLUNGE

CEMENTED CARBIDE AND INDUSTRIAL CERAMICS							
T1-T5	thickness 100 to 150	T1-T5	thickness 200 to 250		T1-T5-T7	thickness 300 to 500	application
300	08C 080 H08 V11						PLUNGE
350	08C 080 H08 V11	350	08C 080 H08 V11				PLUNGE
400	08C 060 H08 V11	400	08C 060 H08 V11				PLUNGE
508	08C 060 H08 V11	508	08C 060 H08 V11		508	08C 060 H08 V11	PLUNGE
610	08C 060 H08 V11	610	08C 060 H08 V11		610	08C 060 H08 V11	PLUNGE

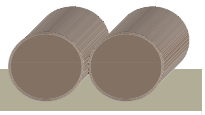
Grinding wheels resinoid bonded for centerless grinding of pipes
Perfecta line



FOR CENTERLESS GRINDING MACHINES WITH WORKING WHEEL AND REGULATING WHEEL

Tipo: Bocca & Malandrone, Cincinnati, Giustina, Ghiringhelli, Lidkoping, Mikrosa, Monzesi, Schumag ecc.

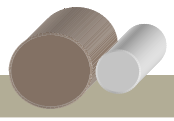
Low alloyed carbon steels	Roughing and finishing	08C 80/2 O8 BGT 08C 80/2 P8 BGT	Ø 406, 508, 610, 660 T= 204, 254, 305, 355, 508
Hardened carbon steels	Roughing and finishing	08C 80/2 O8 BGT 08C 80/2 P8 BGT	Ø 406, 508, 610, 660 T= 204, 254, 305, 355, 508
Stainless steels and special alloys	Roughing and finishing	MVC 080 OP6 BGT	Ø 406, 508, 610, 660 T= 204, 254, 305, 355, 508
Austenitic and martensitic stainless steels for automotive valves	Roughing and finishing	07C 060 Q8 BGT MVC 080 OP6 BGT	Ø 406, 508, 610, 660 T= 204, 254, 305, 355, 508



FOR CENTERLESS GRINDING MACHINES WITH 2 WORKING WHEELS (OPPOSED WHEELS)

Tipo: Landgraf, Mair, Schumag

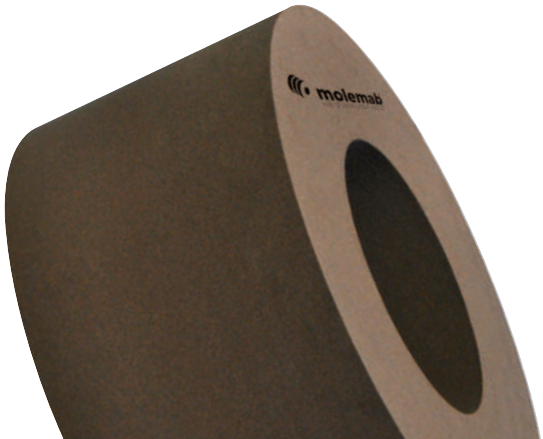
Low alloyed carbon steels	Roughing and finishing	1SC 080 P6 B4S	Ø 350, 508, 600, 660 T= 150, 305, 355
Hardened carbon steels	Roughing and finishing	1SC 080 P6 B4S	Ø 350, 508, 600, 660 T= 150, 305, 355
Stainless steels and special alloys	Roughing and finishing	MVC 080 P6 BGT	Ø 350, 508, 600, 660 T= 150, 305, 355
Austenitic and martensitic stainless steels for automotive valves	Finishing	MVC 080 P6 BGT MVC 100 P6 BGT	Ø 350, 508, 600, 660 T= 150, 305, 355



FOR CENTERLESS GRINDING MACHINES WITH WORKING WHEEL AND REGULATING WHEEL

Tipo: Bocca & Malandrone, Cincinnati, Giustina, Ghiringhelli, Lidkoping, Mikrosa, Monzesi, Schumag ecc.

Din steels 2391-2 (St52)	Roughing	79A 054 OP8 BW	Ø 406, 508, 610, 660 T= 204, 254, 305, 355, 508



72
FLARING AND CYLINDRICAL
CUP WHEELS

73
TAPERED AND DISH WHEELS
FOR DRY APPLICATION

74
GRINDING WHEELS
FOR CIRCULAR
SAW SHARPENING

74
GRINDING WHEELS
FOR BAND
SAW SHARPENING

75
GRINDING WHEELS
FOR CONVENTIONAL BAND
SAWS SHARPENING

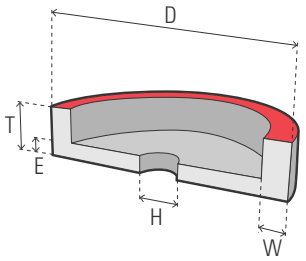
75
THIN WHEELS
FOR CIRCULAR
SAW SHARPENING

Tool and cutter grinding

Flaring and cylindrical cup wheels
Peripheral speed 35 m/sec

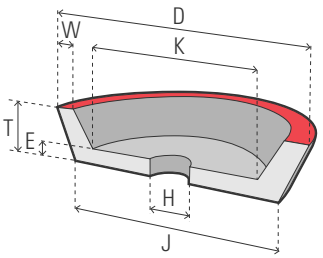
SHAPES AND DIMENSIONS					
Shape	D	T	H	W	E
T6	80	40	20	10	10
	100	50	20 - 32	10	10
	125	50	32	10	10
	150	50	32	10	16
	150	63	32	16	16
	200	40	76,2	40	13

SHAPE T6



SHAPES AND DIMENSIONS							
Shape	D	T	H	W	E	J	K
T11	80	32	20	8	10	57	46
	100	40	20 - 32	8	10	75	65
	125	45	32	8	10	96	78
	150	50	32	10	13	114	95

SHAPE T11



SPECIFICATIONS				
Material	Type	Specification	Use	Remarks
Steel	HSS Alloy steels	09A046K06V86	Roughing General use	
		09A060K06V86	Finishing General use	
		3HA060K07V114	General use Cool grinding without deformation	
		11A080K06V92	General use	Only for wheels T6 - D100
		31A070J07V86	General use	Only for wheels T6 - D100
Cemented carbide	Tungsten carbide tools	08C060J08V01	Roughing	
		08C080J08V01	Finishing	

EXAMPLE OF ORDER

SHAPE	DIMENSIONS (mm)	NOTE	SPEED	SPECIFICATION
T6	100 x 50 x20	W=10 E=10	35 m/sec	31A070J07V86

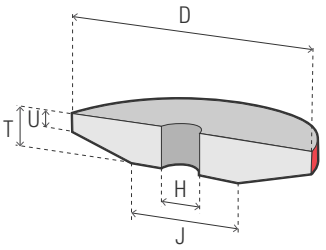
The coloured dot shows the actual colour of the wheel

Tapered and dish wheels for dry applications

Peripheral speed 35 m/sec

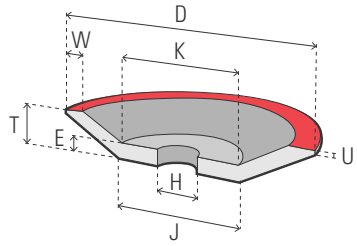
SHAPES AND DIMENSIONS					
Shape	D	T	H	U	J
T3	125	8	20 - 32	2	63
	150	8	20 - 32	2	75

SHAPE T3



SHAPES AND DIMENSIONS							
Shape	D	T	H	W	U	E	J=K
T12	80	10	13	4	2	6	31
	100	13	20	5	3	7	36
	125	14	20 - 32	6	3	7	61
	150	16	20 - 32	8	3	9	66
	200	19	32	10	3	12	90
	200	32	32	10	3	12	90

SHAPE T12

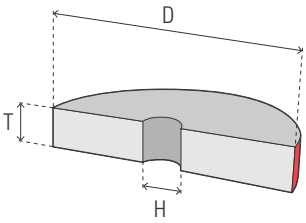


SPECIFICATIONS				
Material	Type	Specification		application
Steel	HSS and alloy steels	09A046K06V86		General use
		3HA060K07V114		General use
Cemented carbide	Carbide Tungsten carbide tools	08C060J08V01		General use

Grinding wheels for circular saw sharpening
Speed 35 and 60 m/sec

SHAPES AND DIMENSIONS			
Shape	D	T	H
T1	150	1,0 - 1,5 - 2 - 2,5 - 3 - 3,5 - 4 - 4,5 - 5 - 6	32
	175	2 - 3 - 4 - 6 - 8	51
	200	1,0 - 1,5 - 2 - 2,5 - 3 - 3,5 - 4 - 4,5 - 5 - 6 - 8 - 10	32
	250	6 - 8 - 10 - 13	32

SHAPE T1

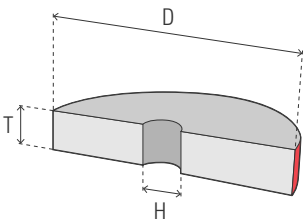


SPECIFICATIONS				
Material	Type	Specification		application
Circular saws	HSS and Stellite	11A080N05V86	●	For very narrow toothed saws wheel thickness ≤ 3,5 mm
		11A080M06V86	●	For medium toothed saws wheel thickness 4 ÷ 5mm
		11A054M06V86	●	For wide narrow toothed saws wheel thickness ≥ 6 mm
		09A080K08V20	○	General use high-speed grinding wheels

Grinding wheels for band saw sharpening
Peripheral speed 35 m/sec

SHAPES AND DIMENSIONS			
Shape	D	T	H
T1	150	6 - 8 - 10	20 - 32
	200	6 - 8 - 10 - 13	32
	225	8 - 10 - 13	32
	250	8 - 10 - 13	32
	300	16 - 20	32

SHAPE T1



T1-BD = SHAPE T1 WITH RESIN HARD SIDE

SPECIFICATIONS				
Material	Type	Specification		application
Band saws	High alloy steels HSS and Stellite	09A054M06V86	○	General use
		09A054L06V86 1 resin hardened edge	○	General use improved profile*
		11A054M06V86	●	General use good profile retention
		11A054L06V86 1 resin hardened edge	●	General use improved profile retention*

* Best for stellite saws

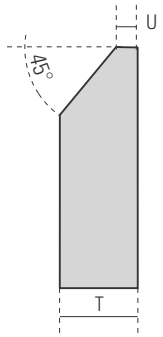
Profiled wheels for conventional band saw sharpening

Peripheral speed 35 m/sec

SHAPES AND DIMENSIONS			
Shape	D	T	H
T1-PR Profile C - 45°	150	6 - 8	20 - 32
	200	6 - 8- 10	20 - 32
	250	10 - 13	32

SPECIFICATIONS				
Material	Type	Specification		application
Conventional band saws	Medium-low hardness steel	15A060N05V12	●	General use
		09A054M06V86	○	General use Best removal
	High alloy steels HSS and Stellite	5SA080O07 BGW	●	For automatic machines type Vollmer and Iseli

SHAPE T1 PROFILE C - 45°



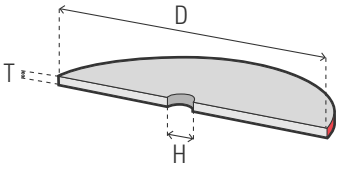
Thin wheels for circular saw sharpening

Speed 50 m/sec

SHAPES AND DIMENSIONS			
Shape	D	T	H
T1-PR	120	2	51
	150	1,5 - 2 - 3	20 - 32
	175	2 - 3	51
	200	1,5 - 2 - 3 - 4	32

SPECIFICATIONS				
Material	Type	Abrasive		application
Circular saws with narrow teeth	Hardened steel - HSS	17A060P05BA	●	General use
		09A054M06V86	○	General use quick removal

SHAPE T1



EXAMPLE OF ORDER

SHAPE	DIMENSIONS (mm)	NOTE	SPEED	SPECIFICATION	
T1 - PR	150 x 6 x 20	profile C-45°	35 m/sec	15A060N05V12	●

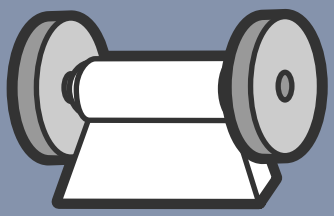
The coloured dot shows the actual colour of the wheel

78
WHEELS FOR GRINDERS

78
PLASTIC BUSHING
FOR WHEEL BORES

79
WHEELS FOR GRINDING
ON BENCH
AND PEDESTAL GRINDERS

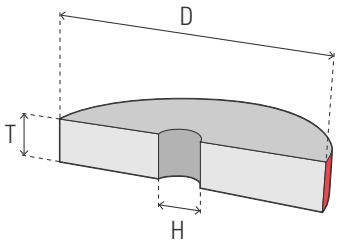
Bench grinding wheels



Wheels for bench and pedestal grinders
Peripheral speed 35 m/sec

BENCH GRINDERS - SHAPES AND DIMENSIONS			
Shape	D	T	H
T1	125	16 - 20	13 - 20 - 32
	150	16 - 20 - 25	16 - 20 - 32
	178	20 - 25	20 - 32
	200	20 - 25 - 30	20 - 32 - 76,2
	250	25 - 30	25 - 32

SHAPE T1



PEDESTAL GRINDERS - SHAPES AND DIMENSIONS			
Shape	D	T	H
T1	300	32 - 40	32 - 127
	300	50	127 - 150
	350	40	32 - 127
	350	50	127 - 150
	400	40 - 50 - 63	40 - 127
	500	50 - 63	50 - 203,2

Plastic bushing

SHAPES AND DIMENSIONS		
Bore	Bushing	Thickness
16	13	6
20	13 - 16	6
25	13 - 16 - 20	6
30	20 - 25	6
31.75	12,7 - 13 - 15,87 - 16 - 20 - 25	6
32	10,05 - 12,75 - 13 -16 - 19 - 20 - 23 - 25	6
35	31.75	6
38	20- 32	6

EXAMPLE OF ORDER

SHAPE	DIMENSIONS (mm)	SPEED	SPECIFICATION	
T1	300 x 32 x 32	35 m/sec	00A036N05V86	●

The coloured dot shows the actual colour of the wheel

Wheels for bench and pedestal grinders

MILD, ANNEALED QUENCHED AND TEMPERED STEEL ≤ 35 HRC					
T1	Bench		T1	Pedestal	application
	00A 024 O05 V86	●		00A 024 O05 V86 ●	Roughing
	00A 036 N05 V86	●		00A 036 N05 V86 ●	Roughing
	00A 046 L06 V58	●		00A 046 L06 V58 ●	Semi-finishing
	00A 060 L06 V58	●		00A 060 L06 V58 ●	Finishing

HARDENED STEELS AND SINTERED METAL PARTS ≤ 60 HRC					
T1	Bench		T1	Pedestal	application
	09A 046 K06 V86	○		09A 046 K06 V86 ○	Roughing
	09A 060 K06 V86	○		09A 060 K06 V86 ○	Finishing
	11A 046 K06 V86	●			Roughing
	11A 060 K06 V86	●			Finishing

CEMENTED CARBIDE					
T1	Bench		T1	Pedestal	application
	08C 060 J08 V01	●		08C 046 J08 V01 ●	Roughing
	08C 080 J08 V01	●		08C 060 K07 V01 ●	Sharpening
	08C 120 I08 V01	●			Chip breaker

GENERAL INFORMATION ABOUT TRUEING AND DRESSING

DRESSING A GRINDING WHEEL

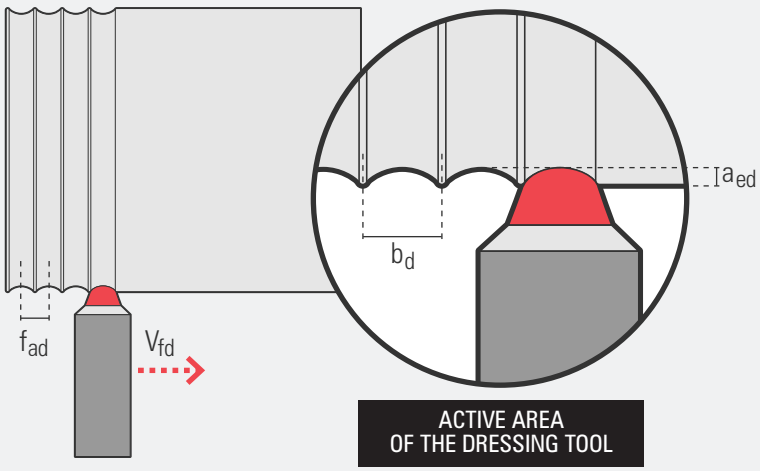
GENERAL CONSIDERATIONS

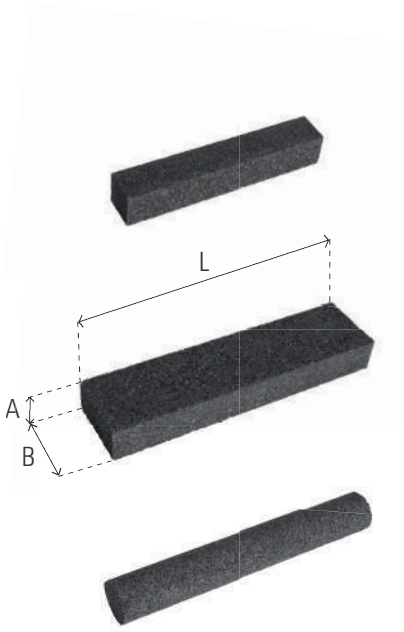
In all grinding operations a correct dressing is essential to obtain the maximum performance of the grinding wheel.
Dressing of conventional abrasive and microcrystalline Aluminium Oxide grinding wheels is carried out using:

- single point diamond dressers
- manually mounted multi point blade type diamond dressers
- PBP type multi point impregnated diamond dressers
- chisel type MCD monocrystalline diamond dressers
- diamond rotary truers

GENERAL TIPS FOR DRESSING

The dressing operation must always be carried out in the presence of an abundant flow of coolant. To avoid thermal shocks on the diamond, direct the coolant to the dressing area before starting the operation.
The tool carrier must be free from vibrations. Limit the protrusion of the dresser to less than twice the diameter of the shank. Ensure the correct positioning and the correct 10-15° angle of single point diamonds.
Choose the shape and size of the tool based on the size and specification of the grinding wheel and the type of grinding. The carat weight of the diamond must never be less than the recommended value.
The diamond must always be well sharpened.
Single diamond tools have a more marked action on the abrasive grain and are therefore more suitable for profile and roughing wheels.
Multiple diamond tools are preferable to single diamond tools for dressing straight grinding wheels since they are less susceptible to the risk of breakage and cheaper (at the same carat weight).





DRESSING STICKS - SHAPES AND DIMENSIONS

Shape	A	B	L	Specification
Square	15	15	150	04C020S05V55
	20	20	200	
	25	25	150-200	
	50	50	200	
Rectangular	13	25	150	
	25	50	200	
Round	15		100-150	04C020S05V55
	20		150-200	
	25		150-200	
	30		200	

TREBEL DRESSERS - SHAPES AND DIMENSIONS

Shape	D	T	H	Specification
T1	90	40	22,2	04C020S05V55

ALUMINIUM OXIDE DRESSING STICKS FOR DIAMOND WHEELS - SHAPES AND DIMENSIONS

Code	A	B	L	Specification	Grit
A1RTA13251001	13	25	100	09A120G8V86	120
A1RTA13251005	13	25	100	09A240J8V86	240
A1RTA25502001	25	50	100	09A120J7V86	120

RESIN-BONDED SILICON CARBIDE DRESSING STONES FOR DIAMOND WHEELS SHAPES AND DIMENSIONS

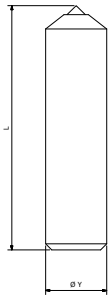
Code	A	B	L	Specification	Grit
A1RTA50252001	50	25	200	08C150G07B	150

Diamond dressers

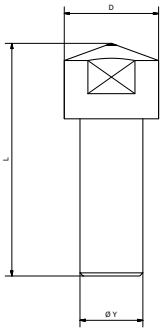
SINGLE POINT DRESSERS WITH CYLINDRICAL SHANK

	Code	Ø Y	L	Diamond
		mm	mm	ct
STANDARD	U1SST050G10	10	40	0.5
	U1SST100G10	10	40	1,0
	U1SST150G10	10	40	1.5
	U1SST200G10	10	40	2,0
	U1SST250G10	10	40	2,5
	U1SST300G10	10	40	3,0
HIGH QUALITY	U4SST025G10	10	40	0.25
	U4SST050G10	10	40	0.5
	U4SST100G10	10	40 square head	1,0
	U4SST150G10	10	40 square head	1,5
	U4SST200G10	10	40 square head	2,0

Cylindrical Shank



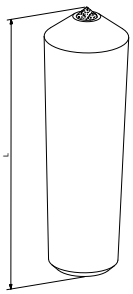
Square head



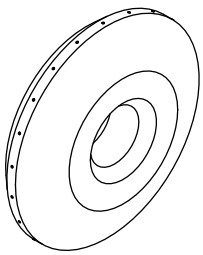
SINGLE POINT DRESSERS WITH MORSE TAPER 1 SHANK

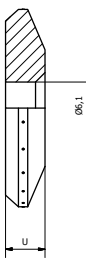
	Code	Ø Y	L	Diamond
		gambo		ct
STANDARD	U1SST050CM1	CM1 x 40		0,5
	U1SST100CM1	CM1 x 40		1,0
	U1SST150CM1	CM1 x 40		1,5
	U1SST200CM1	CM1 x 40		2,0
	U1SST250CM1	CM1 x 40		2,5
HIGH QUALITY	U4SST025CM1	CM1 x 40		0,25
	U4SST050CM1	CM1 x 40		0,5
	U4SST100CM1	CM1 x 40		1,0
	U4SST150CM1	CM1 x 40		1,5
	U4SST200CM1	CM1 x 40		2,0

Morse Taper 1



Circular rotary dresser





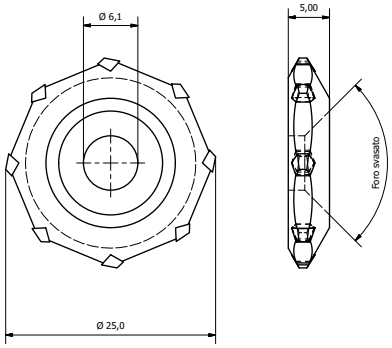
CIRCULAR ROTARY DRESSER

Code	Ø D	u	Bore	Diamond ct	
U1MR04F20	20	9	6,1	2,0	STANDARD
U4MR04FD18	21	7	6,1	2,0	HIGH QUALITY

Diamond dressers

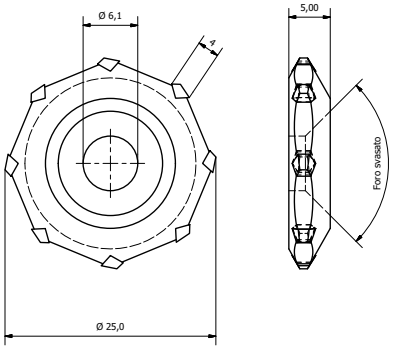
POINT ROTARY DRESSER V=25° (NATURAL STONES)					
Code	Ø D	u	N° points	Bore	
U4MR08PPN2	25	5	8	6,1	HIGH QUALITY

8 point rotary dresser v=25°
(natural stones)



POINT ROTARY DRESSER V=25° (CVD)					
Code	Ø D	u	N° points	Bore	
U4MR08PCVD2	25	5	8	6,1	HIGH QUALITY

8 point rotary dresser v=25°
(synthetic diamond)

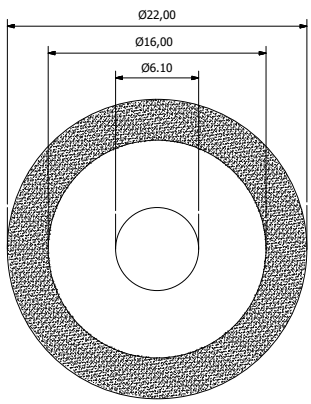


IMPREGNATED CIRCULAR ROTARY DRESSER						
Code	Ø D	u	X	H		Diamond grit
U4-14-ROL1	22	7	x	6,1		600/800 20/30MESH

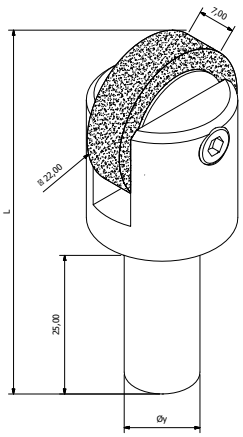
ROTARY DRESSER WITH CYLINDRICAL SHANK						
Code	Ø D	u	X	Ø Y	L	Diamond grit
U4-14-ROL1G10	22	7	3	10	48	600/800 20/30MESH

ROTARY DRESSER WITH MORSE TAPER 1 SHANK					
Code	Ø D	u	X		Diamond grit
U4-14-ROL1CM1	22	7	3	CM1 x 48	600/800 20/30MESH

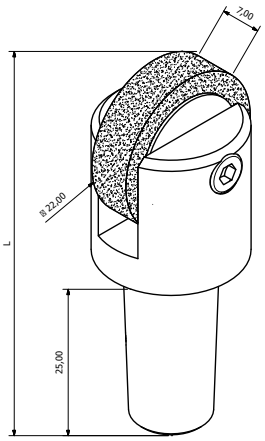
Impregnated circular rotary dresser



Rotary dresser with cylindrical shank



Rotary dresser with Morse taper 1 shank



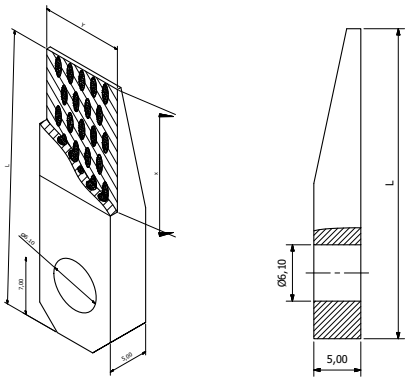
Diamond dressers

HANDSET BLADE DIAMOND DRESSERS

STANDARD

Code	Y	X	L			Diamond Ct
U1MSC1015	10	15	33			1.5
U1MSC1020	10	15	33			2,0
U1MSC1025	10	15	33			2.5
U1MSC1030	10	15	33			3,0
U1MSC1515	15	15	33			1.5
U1MSC1520	15	15	33			2,0
U1MSC1525	15	15	33			2.5
U1MSC1530	15	15	33			3,0
U1MSC2015	20	15	33			1.5
U1MSC2020	20	15	33			2,0
U1MSC2025	20	15	33			2.5
U1MSC2030	20	15	33			3,0

Handset blade natural diamond dressers



SA HANDSET BLADE NATURAL DIAMOND DRESSERS

HIGH QUALITY

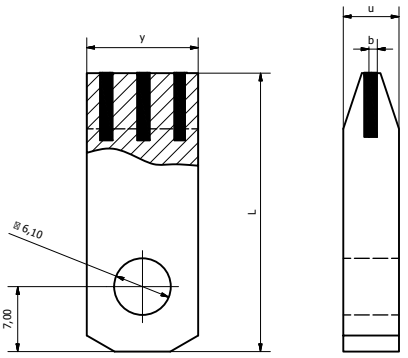
Code	Y	X	u	L	TIPO	Grit of conventional wheel
U4MSC1020F	10	10	5	30	F	80 and higher
U4MSC1020M	10	10	5	30	M	60 - 80
U4MSC1020G	10	10	5	30	G	54 and lower
U4MSC1520F	15	15	5	30	F	80 and higher
U4MSC1520M	15	15	5	30	M	60 - 80
U4MSC1520G	15	15	5	30	G	54 and lower
U4MSC2020F	20	15	5	30	F	80 and higher
U4MSC2020M	20	15	5	30	M	60 - 80
U4MSC2020G	20	15	5	30	G	54 and lower

Blade dressers with CVD bar synthetic diamond

BLADE DRESSERS WITH CVD BAR SYNTHETIC DIAMOND

HIGH QUALITY

Code	Y	X	u	L	B	Grit of conventional wheel
U4MSC1006MDL	10	4	5	30	0,6	80 and higher
U4MSC1008MDL	10	4	5	30	0,8	60 and lower

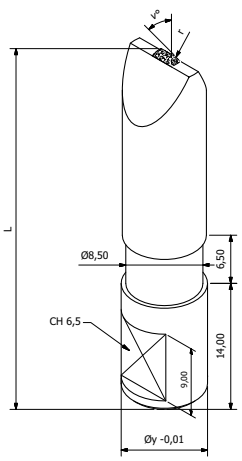


Diamond dressers

TOOLS FOR FORMING (DIAFORM)

				CYLINDRICAL SHANK		
	Code	V°	r	Ø Y	L	Type
STANDARD	U1D40R125	40°	0,125	9.52	45	Diaform
	U1D40R250	40°	0,250	9.52	45	Diaform
	U1D60R250	60°	0,250	9.52	45	Diaform
	U1D60R500	60°	0,500	9.52	45	Diaform
HIGH QUALITY	U4D40R125	40°	0,125	9.52	45	Diaform
	U4D40R250	40°	0,250	9.52	45	Diaform
	U4D40R500	40°	0,500	9.52	45	Diaform
	U4D60R125	60°	0,125	9.52	45	Diaform
	U4D60R250	60°	0,250	9.52	45	Diaform
	U4D60R500	60°	0,500	9.52	45	Diaform

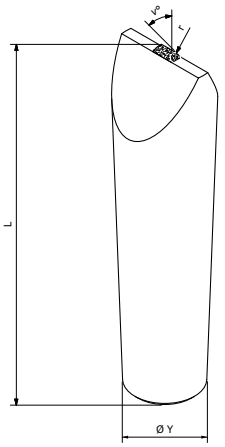
Diaform



CHISEL TOOLS

				CYLINDRICAL SHANK		
	Code	V°	r	Ø Y	L	Machine
HIGH QUALITY	U4D40R125G850	40°	0,125	8	50	MORARA
	U4D40R250G850	40°	0,250	8	50	MORARA
	U4D40R500G850	40°	0,500	8	50	MORARA
	U4D60R125G850	60°	0,125	8	50	MORARA
	U4D60R250G850	60°	0,250	8	50	MORARA
	U4D60R500G850	60°	0,500	8	50	MORARA
	U4D40R125G1050	40°	0,125	10	50	TACCHELLA
	U4D40R250G1050	40°	0,250	10	50	TACCHELLA
	U4D40R500G1050	40°	0,500	10	50	TACCHELLA
	U4D60R125G1050	60°	0,125	10	50	TACCHELLA
	U4D60R250G1050	60°	0,250	10	50	TACCHELLA
	U4D60R500G1050	60°	0,500	10	50	TACCHELLA

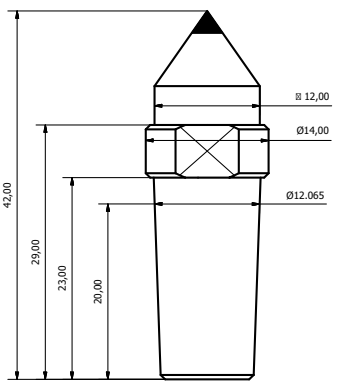
Chisel Cylindrical Shank



CHISEL TOOLS

	Code	V°	r	MORSE TAPER 1	Machine
HIGH QUALITY	U4D40R125CM1	40°	0,125	CM1 x 23	STUDER
	U4D40R250CM1	40°	0,250	CM1 x 23	STUDER
	U4D40R500CM1	40°	0,500	CM1 x 23	STUDER
	U4D60R125CM1	60°	0,125	CM1 x 23	STUDER
	U4D60R250CM1	60°	0,250	CM1 x 23	STUDER
	U4D60R500CM1	60°	0,500	CM1 x 23	STUDER

Chisel Morse taper 1

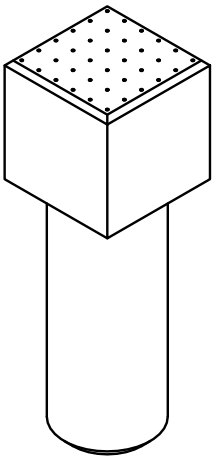


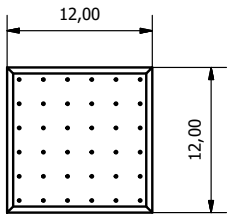
Diamond dressers

SQUARE HEAD DRESSERS (HANDSET)

				CYLINDRICAL SHANK		
	Code	Section	Grit wheel	Ø Y	L	Diamond Ct
STANDARD	U1MTQ4S20G10	15 15		10	50	2,0
	U1MTQ4S25G10	15 15		10	50	2,5
	U1MTQ4S30G10	15 15		10	50	3,0
	U1MTQ4S50G10	15 15		10	50	5,0
HIGH QUALITY	U4MTQ12Y46G1050	12 12	46	10	50	2,0
	U4MTQ12Y46G1250	12 12	46	12	50	2,0
	U4MTQ12Y60G1050	12 12	60	10	50	2,0
	U4MTQ12Y60G1250	12 12	60	12	50	2,0
	U4MTQ12Y80G1050	12 12	80	10	50	2,0
	U4MTQ12Y80G1250	12 12	80	12	50	2,0
	U4MTQ15Y4625G1050	15 15	46	10	50	2,5
	U4MTQ15Y4625G1250	15 15	46	12	50	2,5
	U4MTQ15Y6025G1050	15 15	60	10	50	2,5
	U4MTQ15Y6025G1250	15 15	60	12	50	2,5
	U4MTQ15Y8025G1050	15 15	80	10	50	2,5
	U4MTQ15Y8025G1250	15 15	80	12	50	2,5
	U4MTQ15Y4630G1050	15 15	46	10	50	3,0
	U4MTQ15Y4630G1250	15 15	46	12	50	3,0
	U4MTQ15Y6030G1050	15 15	60	10	50	3,0
	U4MTQ15Y6030G1250	15 15	60	12	50	3,0
	U4MTQ15Y8030G1050	15 15	80	10	50	3,0
	U4MTQ15Y8030G1250	15 15	80	12	50	3,0

Cylindrical shank



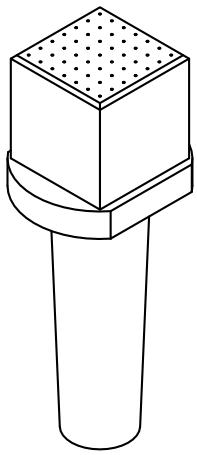


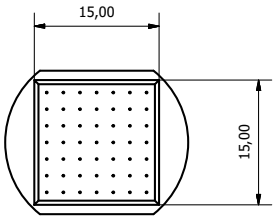
Diamond dressers

SQUARE HEAD DRESSERS (HANDSET)

	Code	Section		Grit wheel	MORSE TAPER 1	Diamond Ct
STANDARD	U1MTQ4S20CM1	15	15		CM1 x 50mm	2,0
	U1MTQ4S25CM1	15	15		CM1 x 50mm	2,5
	U1MTQ4S30CM1	15	15		CM1 x 50mm	3,0
	U1MTQ4S50CM1	15	15		CM1 x 50mm	5,0
HIGH QUALITY	U4MTQ12Y46CM125	12	12	46	CM1 x 25mm	2,0
	U4MTQ12Y60CM125	12	12	60	CM1 x 25mm	2,0
	U4MTQ12Y80CM125	12	12	80	CM1 x 25mm	2,0
	U4MTQ12Y46CM1	12	12	46	CM1 x 50mm	2,0
	U4MTQ12Y60CM1	12	12	60	CM1 x 50mm	2,0
	U4MTQ12Y80CM1	12	12	80	CM1 x 50mm	2,0
	U4MTQ12Y46CM180	12	12	46	CM1 x 80mm	2,0
	U4MTQ12Y60CM180	12	12	60	CM1 x 80mm	2,0
	U4MTQ12Y80CM180	12	12	80	CM1 x 80mm	2,0
	U4MTQ1525Y46CM125	15	15	46	CM1 x 25mm	2,5
	U4MTQ1525Y60CM125	15	15	60	CM1 x 25mm	2,5
	U4MTQ1525Y80CM125	15	15	80	CM1 x 25mm	2,5
	U4MTQ1525Y46CM1	15	15	46	CM1 x 50mm	2,5
	U4MTQ1525Y60CM1	15	15	60	CM1 x 50mm	2,5
	U4MTQ1525Y80CM1	15	15	80	CM1 x 50mm	2,5
	U4MTQ1525Y46CM180	15	15	46	CM1 x 80mm	2,5
	U4MTQ1525Y60CM180	15	15	60	CM1 x 80mm	2,5
	U4MTQ1525Y80CM180	15	15	80	CM1 x 80mm	2,5
	U4MTQ1530Y46CM125	15	15	46	CM1 x 25mm	3,0
	U4MTQ1530Y60CM125	15	15	60	CM1 x 25mm	3,0
	U4MTQ1530Y80CM125	15	15	80	CM1 x 25mm	3,0
	U4MTQ1530Y46CM1	15	15	46	CM1 x 50mm	3,0
	U4MTQ1530Y60CM1	15	15	60	CM1 x 50mm	3,0
	U4MTQ1530Y80CM1	15	15	80	CM1 x 50mm	3,0
	U4MTQ1530Y46CM180	15	15	46	CM1 x 80mm	3,0
	U4MTQ1530Y60CM180	15	15	60	CM1 x 80mm	3,0
	U4MTQ1530Y80CM180	15	15	80	CM1 x 80mm	3,0

Morse taper 1





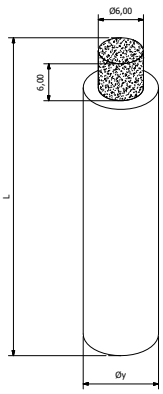
Diamond dressers

ROUND HEAD DRESSERS (CONCRETION)

			CYLINDRICAL SHANK				
Code	Ø D	X	Ø Y	L	Shape	Grit Diamond	
U1820G10	10	10	10	40	PBP-8	600/800 20/30MESH	STANDARD
U4720G10	6	6	10	45	PBP7	600/800 20/30MESH	HIGH QUALITY
U4820G10	10	10	10	48	PBP8	600/800 20/30MESH	
U48S20G10	10	10	10	48	PBP8S-15°	600/800 20/30MESH	

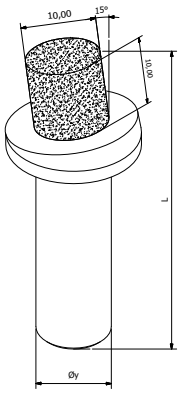
			MORSE TAPER 1			
Code	Ø D	X		Shape	Grit Diamond	
U1820CM1	10	10	CM1 x 40	PBP-8	600/800 20/30MESH	STANDARD
U4720CM1	6	6	CM1 x 48	PBP7	600/800 20/30MESH	HIGH QUALITY
U4820CM1	10	10	CM1 x 48	PBP8	600/800 20/30MESH	
U48S20CM1	10	10	CM1 x 48	PBP8S-15°	600/800 20/30MESH	

Cylindrical shank



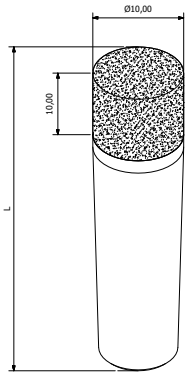
PBP7 - PBP8

Cylindrical shank 15°



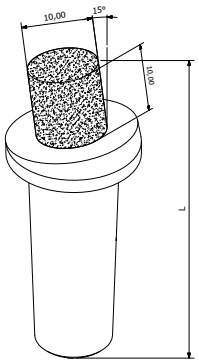
PBP8S-15°

Morse taper 1



PBP7 - PBP8

Morse taper 1 15°



PBP8S-15°

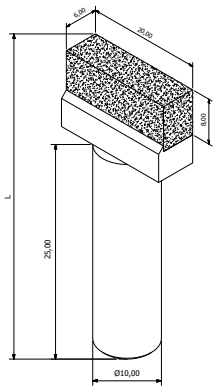
Diamond dressers

RECTANGULAR HEAD DRESSERS (CONCRETION)

			CYLINDRICAL SHANK				
Code	Section	X	Ø Y	L	Shape	Grit Diamond	
U4320G10	6 x 12	10	10	40	PBP3	600/800 20/30MESH	HIGH QUALITY
U43S20G10	6 x 12	10	10	40	PBP3S-15°	600/800 20/30MESH	
U4120G10	6 x 20	10	10	40	PBP1	600/800 20/30MESH	
U41S20G10	6 x 20	10	10	40	PBP1S-15°	600/800 20/30MESH	

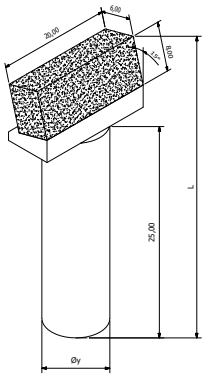
			MORSE TAPER 1			
Code	Section	X			V°	Grit Diamond	
U4320CM1	6 x 12	10	CM1 x 40		PBP3	600/800 20/30MESH	HIGH QUALITY
U43S20CM1	6 x 12	10	CM1 x 40		PBP3S-15°	600/800 20/30MESH	
U4120CM1	6 x 20	10	CM1 x 40		PBP1	600/800 20/30MESH	
U41S20CM1	6 x 20	10	CM1 x 40		PBP1S-15°	600/800 20/30MESH	

Cylindrical shank



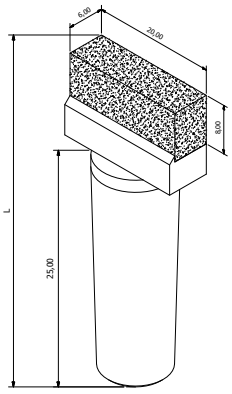
PBP1 - PBP3

Cylindrical shank 15°



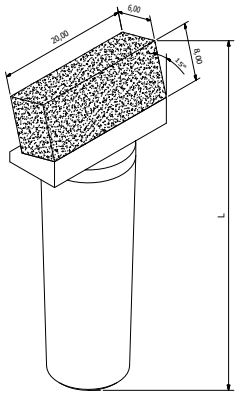
PBP1S-15° - PBP3S-15°

Morse taper 1



PBP1 - PBP3

Morse taper 1 15°



PBP1S-15° - PBP3S-15°

OUR PRODUCTS

VITRIFIED CBN
AND DIAMOND TOOLS

ABRASIVE
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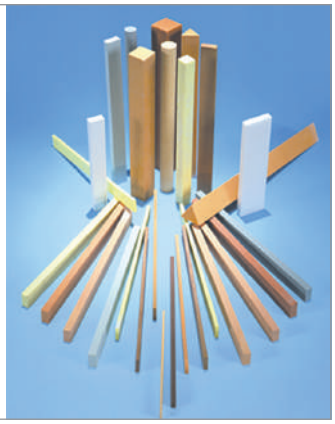
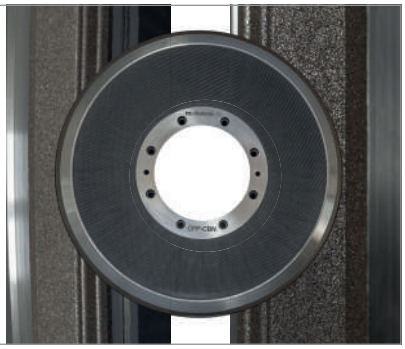
AND STONES



VITRIFIED CBN AND DIAMOND
GRINDING WHEELS

DIAMOND
AND CBN
ELECTROPLATED
GRINDING
WHEELS



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