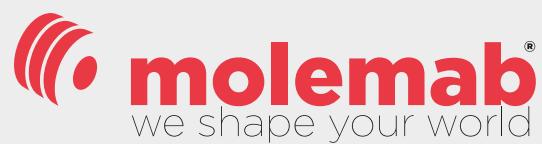


CONVENTIONAL
ABRASIVES
FOR PRECISION
GRINDING



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

CONVENTIONAL
ABRASIVES
FOR PRECISION
GRINDING



THE GROUP



molemab
we shape your world

CONTEC

Made
in Italy
(EU)

EN 12413

oSA

www.molemab.com





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 wheels are manufactured. Another facility, located in Maclo dio, in the province of Brescia, is where some types of vitrified and resinoid bonded wheels are produced using a highly automated technology. The factories in Ome and Maclo dio 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 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 wheels produced by latest generation plants. Having over 50 years of experience, the molemab Group is now able to produce 5,000 tons of wheels per year, with diameters up to 2100 mm.

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 Schleifmittel GmbH (Ottobrunn, Germany); molemab Abrasives Hungary (Budapest); whilst in North America molemab Canada (Sainte-Julie), molemab USA (Queensbury) and molemab de Mexico (Queretaro) operate. Supported by qualified distributors and agents worldwide, molemab can reach all of its customers, wherever they are.

molemab in the world



 Production facilities

 Technician-commercial branches

Chassieu
(France)



Ottobrunn
(Germany)



Pszczyna
(Poland)



Ome, Brescia
(Italy)



Maclo dio, Brescia
(Italy)



Lausdorf
(Austria)



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 wheels for the toughest applications and special superabrasive 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.

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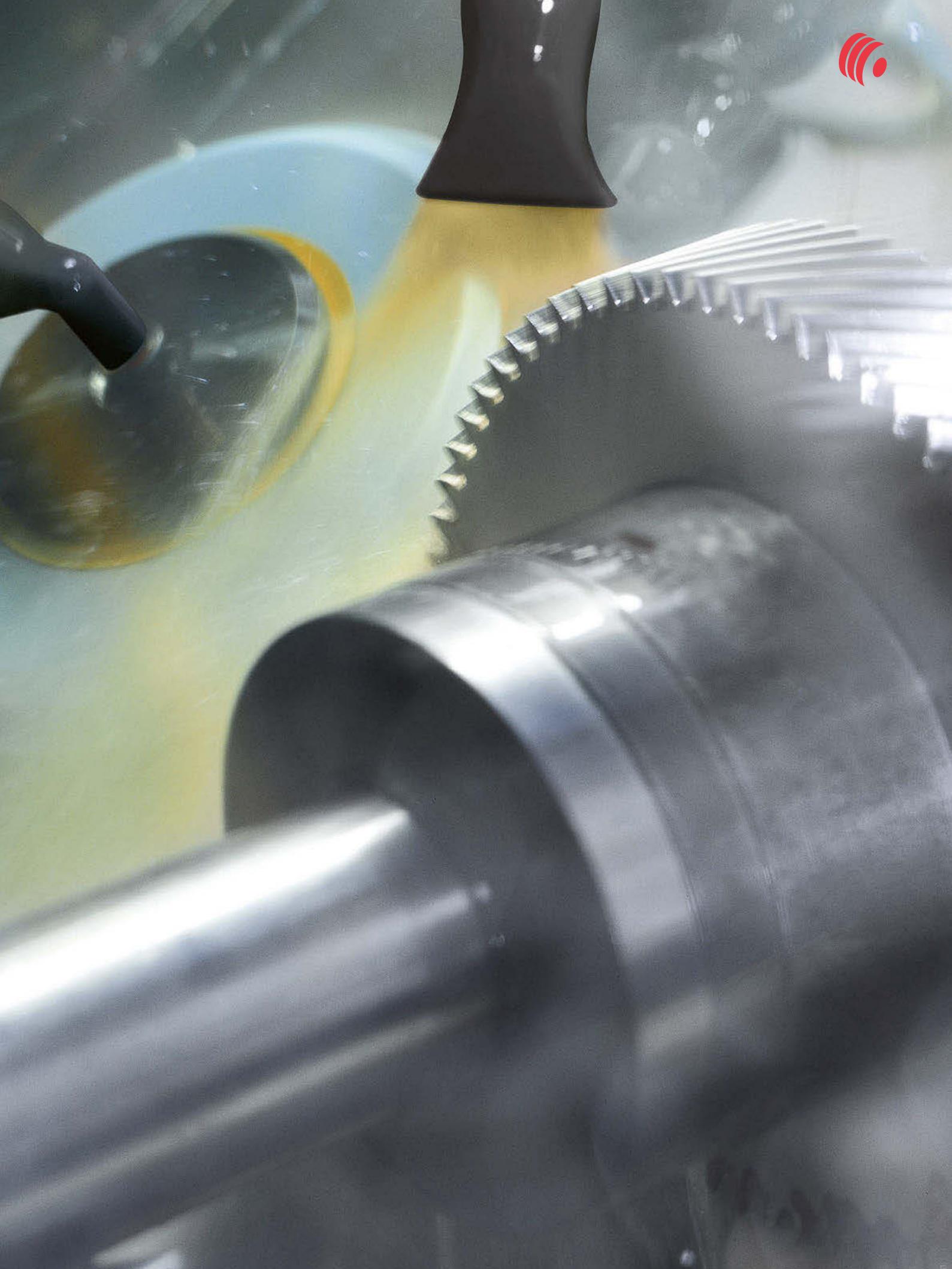
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GENERAL INFORMATION ABOUT WHEEL DRESSING, DIAMOND TOOLS

GENERAL
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E.G. LINE

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

- they offer a cold cutting
- they facilitate the introduction of the refrigerant into the area between wheel and 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 wheel
- they increase the 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 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 for the hot and cold rolling.

The Perfecta abrasive wheels are manufactured by using new abrasives, bond types of exclusive formulation and with special and innovative firing cycles.

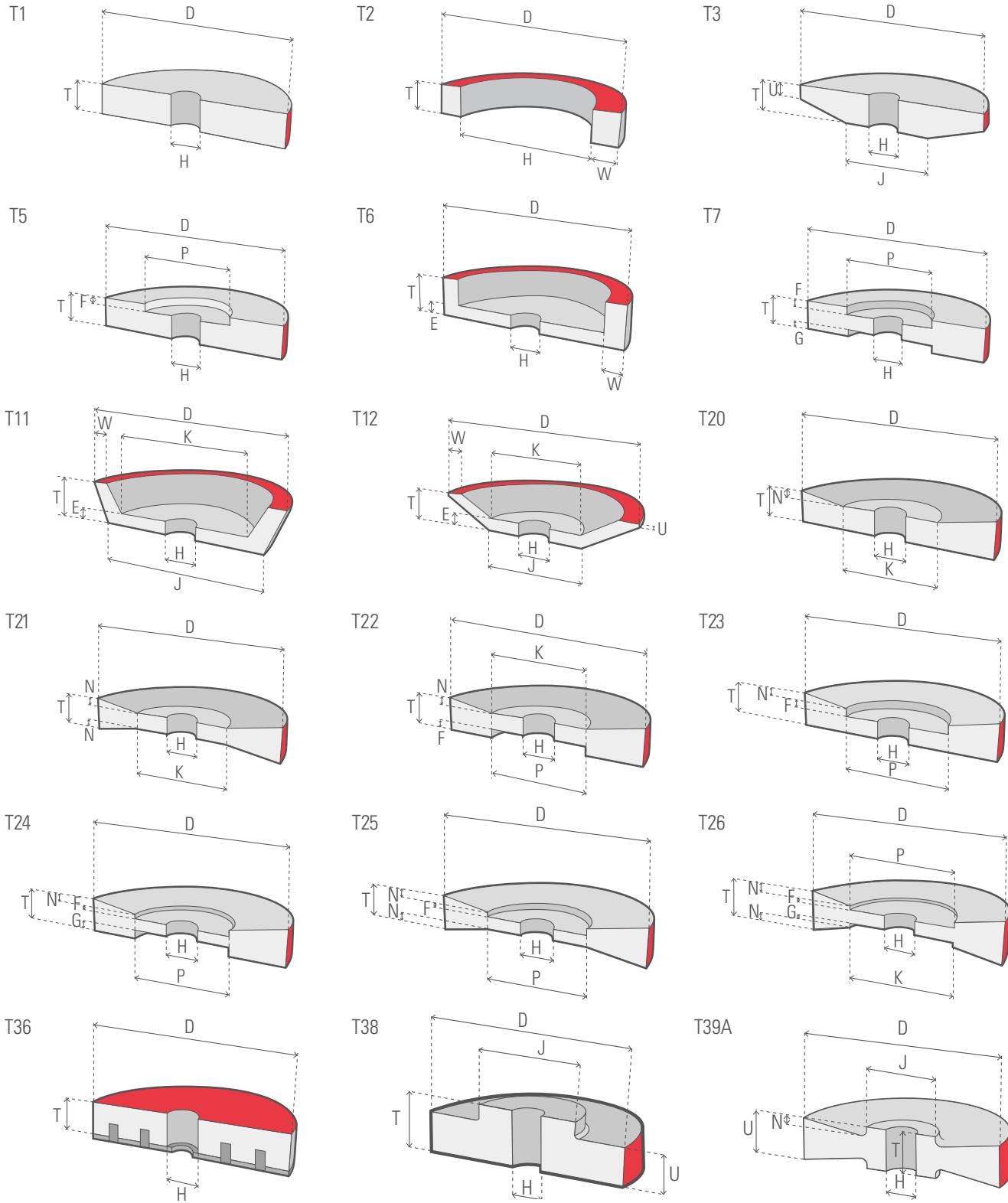
Each phase of the molemab production cycle is followed by highly specialized personnel constantly helped by the internal information network with programs dedicated to the total monitoring of the transformation process of the abrasive product; also the abrasive wheels of the new Perfecta series are manufactured 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 time.

COLD CUTTING

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

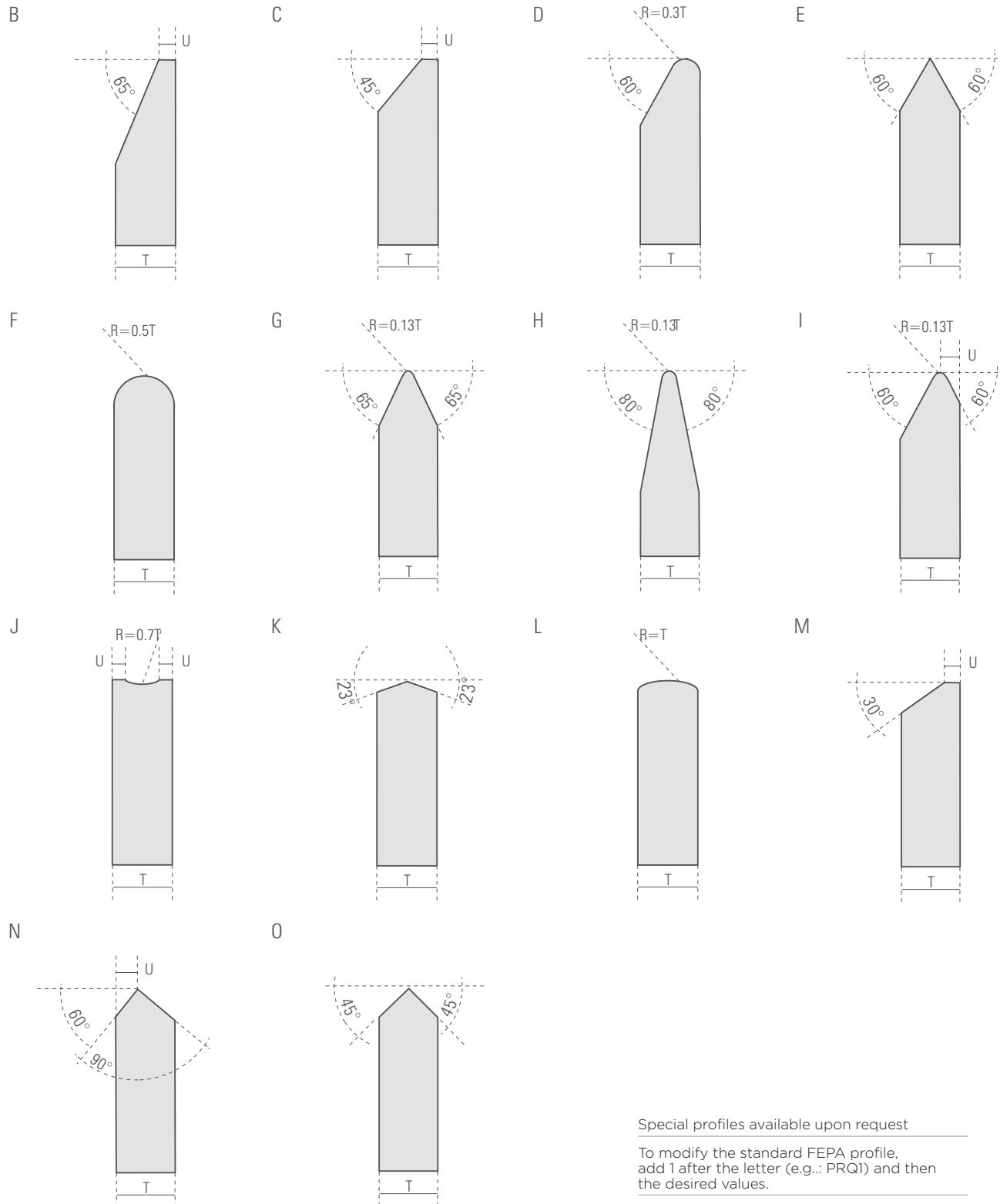
WHEEL SHAPES

ACCORDING TO FEPA STANDARDS



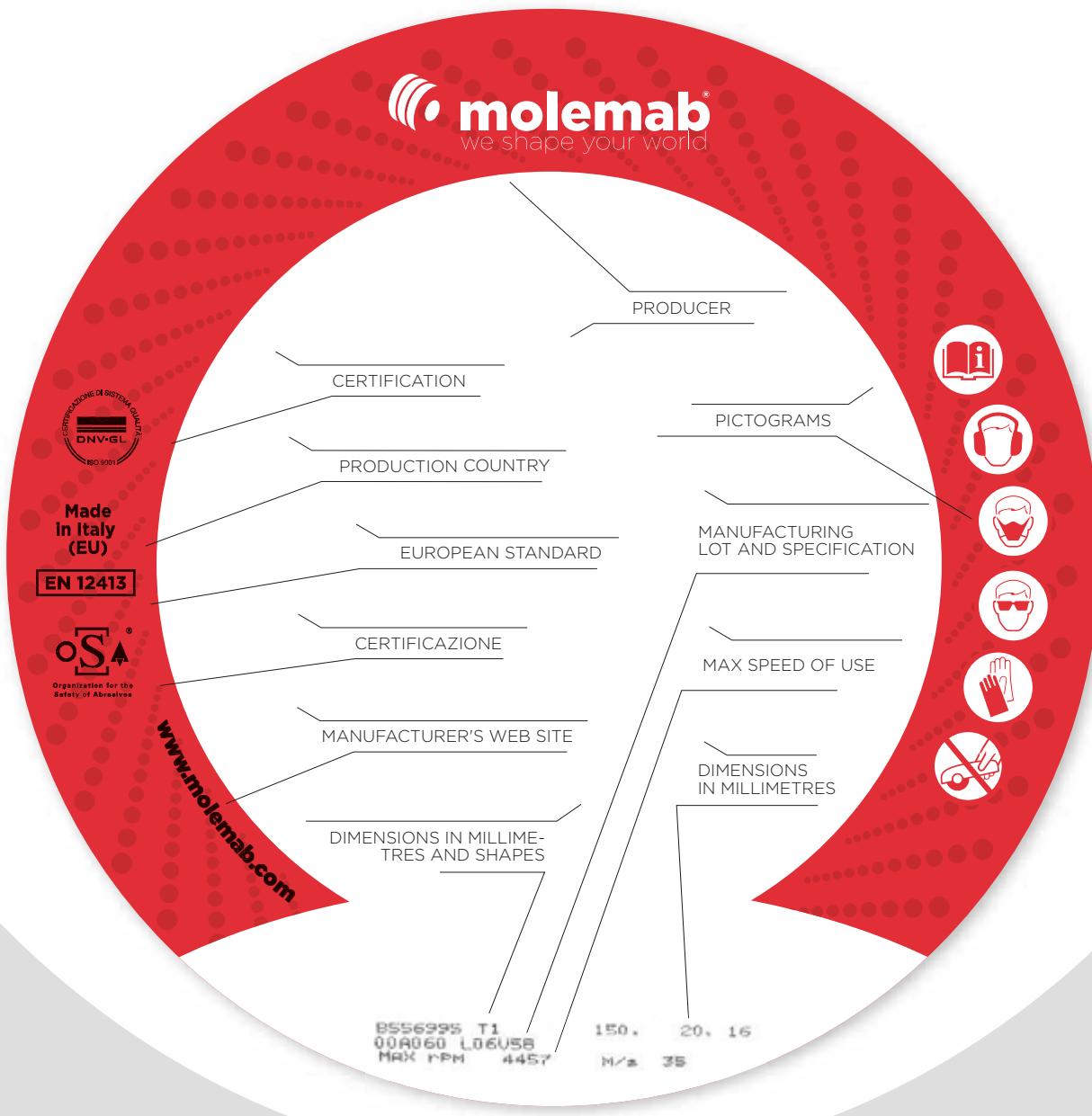
STANDARD PROFILES

ACCORDING TO FEPA STANDARDS



Special profiles available upon request

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



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 microcrystalline 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	Wheel 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	PF0
09A	White	16	D	4	V20	PF1
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	P2
31A	Ruby	30	G	7	V85	Super porous
43A	Monocrystalline	36	H	8	V86	P3
45A	Mix of Monocrystalline	46	I	Open	V92	P4
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	P12
	Silicon carbide	70	L	13	VG	P13
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	
		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



diameter	m/sec									
	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 $\frac{m/min}{3,14 \times D \text{ in m}} = \text{revolutions per min}$	Roughing or unhardened	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 unhardened	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
Depth of cut (measured on the radius for external and internal grinding)	Roughing or unhardened	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 described below 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 reception, 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 bond wheels have a "Use Before Date" and must be stored for use in chronological order. Vitrified bond wheels can be stored for an indefinite period of time.

2. BEFORE MOUNTING

Visual check: Never use broken or cracked grinding wheels.

Sound test: A sound test must be carried out on new or partially used 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 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

Carton labels: Always use carton labels 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 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 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 manufacturer

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

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 again the wheel balancing when it is disassembled and reassembled after working, and 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.

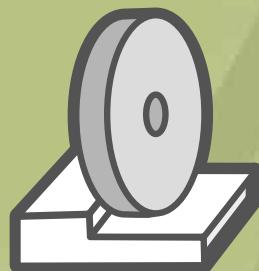
During this operation, all personnel must remain in safe areas.

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.



Surface grinding



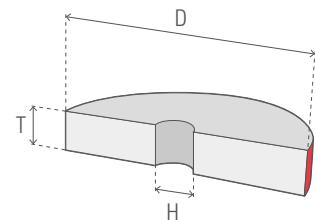
Horizontal spindle surface grinding wheels



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

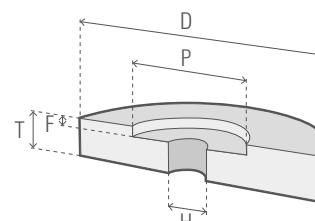
SHAPE T1



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

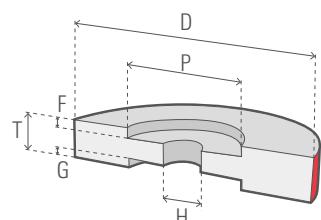
SHAPE T5



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	350	11A 036 I 10 V86	400	11A 036 H 10 V86	SURFACE
	11A 046 I 10 V86		11A 046 I 10 V86		11A 46 F12 VX P4	SURFACE
350	11A 036 I 10 V86	400	11A 036 I 10 V86	450	09A 046 FG12 V34 P3	SURFACE
	11A 046 I 10 V86		11A 046 I 10 V86		09A 054 FG12 VG P13	SURFACE
400	11A 036 I 10 V86	450	11A 036 I 10 V86	400	11A 46 FG12 VX P4	SURFACE
	11A 046 I 10 V86		11A 46 FG12 VX P4		09A 046 FG12 V34 P3	SURFACE
	11A 046 G12 VXP4		09A 046 FG12 V34 P3	450	09A 054 FG12 VG P13	SURFACE
			09A 054 FG12 VG P13		09A 054 FG12 VG P13	SURFACE
500	11A 036 I 10 V86	500	11A 036 I 10 V86	450	09A 046 FG12 V34 P3	SURFACE
	11A 46 FG12 VX P4		11A 46 FG12 VX P4		09A 054 FG12 VG P13	SURFACE
	09A 046 FG12 V34 P3		09A 046 FG12 V34 P3	500	09A 054 FG12 VG P13	SURFACE
	09A 054 FG12 VG P13		09A 054 FG12 VG P13		09A 054 FG12 VG P13	SURFACE
	610		11A 036 I 10 V86	500	11A 036 I 10 V86	SURFACE
	09A 046 FG12 V34 P3		09A 046 FG12 V34 P3		09A 054 FG12 VG P13	SURFACE
	09A 054 FG12 VG P13		09A 054 FG12 VG P13		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	350	09A 046 FG12 V34 P3	400	09A 046 FG12 V34 P3	SURFACE
	09A 054 FG12 VG P13		09A 054 FG12 VG P13		09A 054 FG12 VG P13	SURFACE
350	09A 046 FG12 V34 P3	400	09A 046 FG12 V34 P3	450	09A 046 FG12 V34 P3	SURFACE
	09A 054 FG12 VG P13		09A 054 FG12 VG P13		09A 054 FG12 VG P13	SURFACE
	45A 54/60 E14 VK P1		45A 54/60 DE14 VK P1	450	45A 54/60 DE14 VK P1	SURFACE
	OMA 54/60 FG11 VG5 P13		OMA 54/60 F11 VG5 P13		OMA 54/60 F11 VG5 P13	SURFACE
400	09A 046 FG12 V34 P3	450	09A 046 FG12 V34 P3	400	09A 046 FG12 V34 P3	SURFACE
	09A 054 FG12 VG P13		09A 054 FG12 VG P13		09A 054 FG12 VG P13	SURFACE
	45A 54/60 E14 VK P1		45A 54/60 DE14 VK P1	450	45A 54/60 DE14 VK P1	SURFACE
	OMA 54/60 FG11 VG5 P13		OMA 54/60 F11 VG5 P13		OMA 54/60 F11 VG5 P13	SURFACE
	450		09A 046 FG12 V34 P3	450	09A 046 FG12 V34 P3	SURFACE
	09A 054 FG12 VG P13		09A 054 FG12 VG P13		09A 054 FG12 VG P13	SURFACE
	45A 54/60 DE14 VK P1		45A 54/60 DE14 VK P1		45A 54/60 DE14 VK P1	SURFACE
	OMA 54/60 F11 VG5 P13		OMA 54/60 F11 VG5 P13		OMA 54/60 EF11 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	● SURFACE
		09A 054 FG12 VG P13	●		09A 054 F12 VG P13	● SURFACE
		45A 54/60 DE14 VK P1	●		45A 54/60 DE14 VK P1	● SURFACE
		0MA 54/60 F11 VG5 P13	●		0MA 54/60 EF11 VG5 P13	● SURFACE
	610	45A 54/60 DE14 VK P1	●	610	09A 046 FG12 V34 P3	● SURFACE
					09A 054 F12 VG P13	● SURFACE
					45A 54/60 DE14 VK P1	● SURFACE
					0MA 54/60 EF11 VG5 P13	● SURFACE

HARDENED AND CEMENTED STEEL < 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 F11 VG5 P13	●	400	0MA 54/60 F11 VG5 P13	●	0MA 54/60 EF11 VG5 P13 ● SURFACE
	43A 060 FG12 VG4 P13	●		43A 060 FG12 VG4 P13	●	43A 060 F12 VG4 P13 ● SURFACE
450	0MA 54/60 F11 VG5 P13	●	450	0MA 54/60 EF11 VG5 P13	●	0MA 54/60 EF11 VG5 P13 ● SURFACE
				43A 060 FG12 VG4 P13	●	43A 060 F12 VG4 P13 ● SURFACE
500	0MA 54/60 F11 VG5 P13	●	500	0MA 54/60 EF11 VG5 P13	●	0MA 54/60 EF11 VG5 P13 ● SURFACE
				43A 060 FG12 VG4 P13	●	43A 060 F12 VG4 P13 ● SURFACE
			610	0MA 54/60 EF11 VG5 P13	●	0MA 54/60 EF11 VG5 P13 ● SURFACE
					43A 060 F12 VG4 P13	● SURFACE

HARDENED AND CEMENTED STEEL < 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	●	1TA 046 F12 VG4 P3 ● SURFACE
	2SA 054 F12 VG4 P13	●		2SA 054 EF12 VG4 P13	●	2SA 054 EF12 VG4 P13 ● SURFACE
450	1TA 046 F12 VG4 P3	●	450	1TA 046 F12 VG4 P3	●	1TA 046 F12 VG4 P3 ● SURFACE
				2SA 054 EF12 VG4 P13	●	2SA 054 EF12 VG4 P13 ● SURFACE
500	1TA 046 F12 VG4 P3	●	500	1TA 046 F12 VG4 P3	●	1TA 046 F12 VG4 P3 ● SURFACE
				3SA 054 EF12 VG4 P13	●	3SA 054 EF12 VG4 P13 ● SURFACE
			610	1TA 046 F12 VG4 P3	●	1TA 046 F12 VG4 P3 ● SURFACE
					3SA 054 EF12 VG4 P13	● SURFACE

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 060 FG12 VG P13	●				SURFACE			
350	09A 060 FG12 VG P13	●				SURFACE			
400	09A 060 FG12 VG P13	●	400	09A 060 FG12 VG P13	●	SURFACE			
	9A 060 EF16 VK2 P13	●				CREEP-FEED			
	09A 070/2 H10 V86 P1	●		09A 070/2 H10 V86 P1	●	CREEP-FEED			
	09A 100 I14 VG PF1	●		09A 100 I14 VG PF1	●	CREEP-FEED			
		450		09A 060 FG12 VG P13	●	450	09A 060 F12 VG P13	●	SURFACE
		500		09A 060 FG12 VG P13	●	500	09A 060 F12 VG 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	●	610	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
	09A 054 FG12 VG P4		09A 054 FG12 VG P4		09A 054 F12 VG P4	SURFACE
			91A 70/1 G12 VG P2		91A 70/1 G12 VG P2	SURFACE
		500	09A 046 FG12 V34 P3	500	09A 046 FG12 V34 P3	SURFACE
			09A 054 FG12 VG P4		09A 054 F12 VG P4	SURFACE
			91A 70/1 G12 VG P2		91A 70/1 G12 VG P2	SURFACE
		610	91A 70/1 G12 VG P2	610	91A 70/1 G12 VG P2	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	The coloured dot shows the actual colour of the wheel
T5	500x80x203,2	P=280 F=15	35 m/sec	09A 046 FG12 V34 P3	●

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

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	
			09A 046 G08 V86	
250			09A 036 G08 V86	
			09A 046 G08 V86	

HARDENED AND CEMENTED STEEL ≥ 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	
			09A 046 F12 V34P3	
250			09A 036 F12 V34P3	
			09A 046 F12 V34P3	

SHAPES AND DIMENSIONS

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

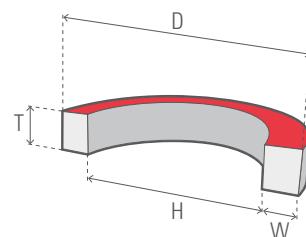
MILD, QUENCHED AND TEMPERED AND HARDENED STEEL ≤ 58 HRC

T6	T = 78	T6	T = 80	application
178	09A 30 H08 V86			SURFACE
	09A 36 H08 V86			SURFACE
200			09A 30 H08 V20	
			09A 36 H08 V20	

HARDENED AND CEMENTED STEEL ≥ 58 HRC

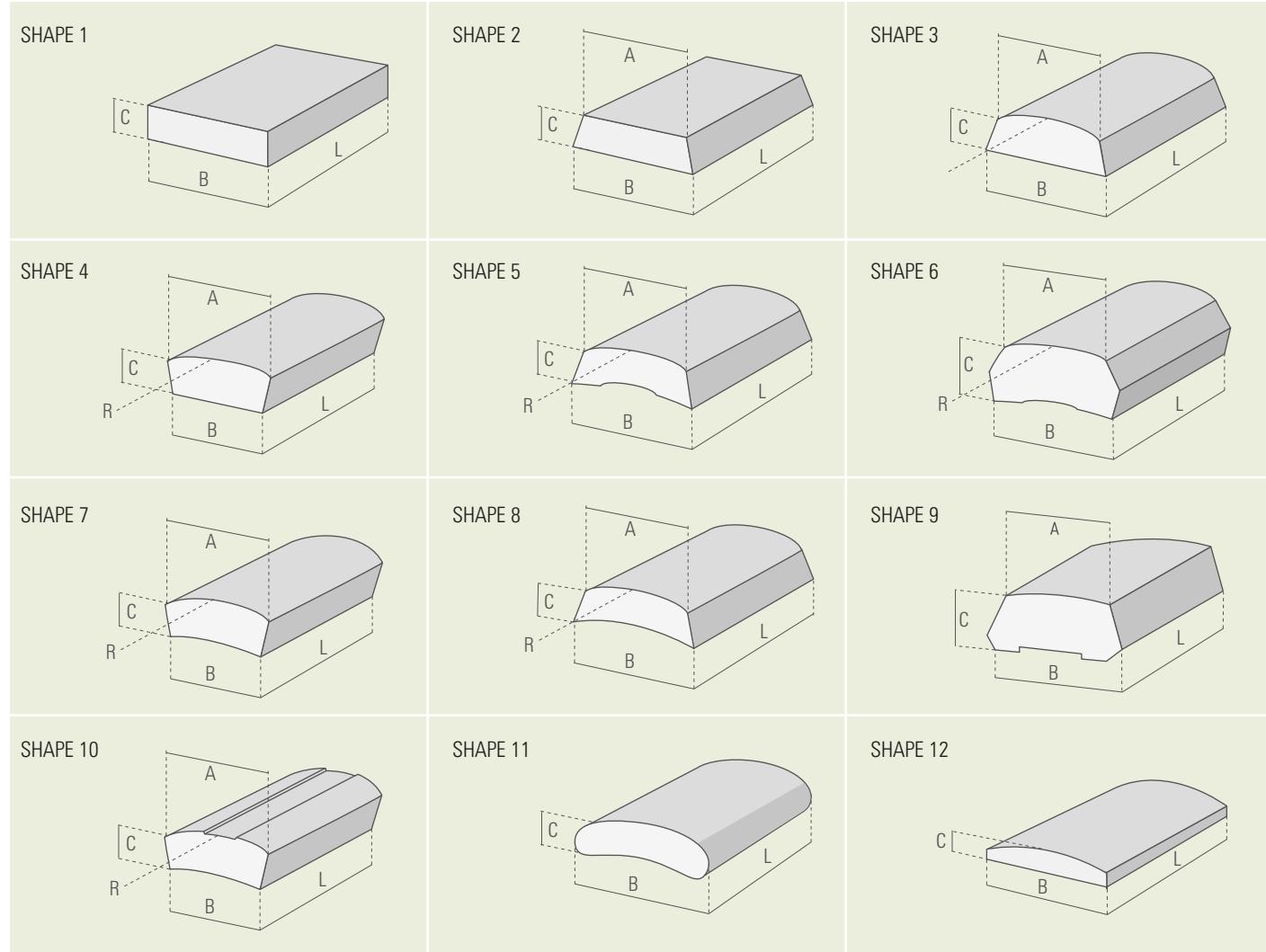
T6	T = 78	T6	T = 80	application
178	09A 36 G10 V34P			SURFACE
200			09A 36 G10 V34P	

SHAPE T2

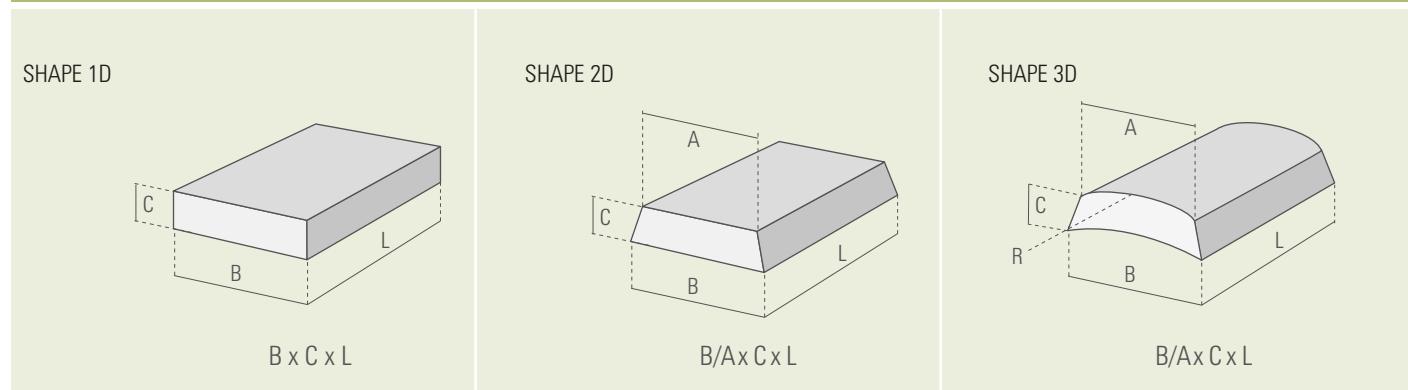


SHAPE T6

Abrasive segments



HOW TO IDENTIFY SIZES



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 09A030G10V92	11A036G08V86
	High alloy steels Tools steel HSS Hardness ≥ 58 HRC	09A036F12V34P	3SA046F12V114P 3AZ046F10VG4P13
	Unhardened stainless steel Hardened and alloyed steel	09A024H09V86 09A36G09V86	11A024I08V86 11A036G09V86
	Steel cast iron, Grey cast iron Engine head cast iron Annealed and ductile iron	09A024H09V86 06C036I07V11	11A024I08V86
Hard metal	Tungstene carbide	08C060G08V01	●
Non ferrous metals	Aluminium, bronze, copper, non-ferrous alloys	08C046G05V01 08C046H05V11	●



EXAMPLE OF ORDER

SHAPE	DIMENSIONS (mm)	SPECIFICATION	Notes
8	50/45 x 16 x 90	09A 36 G10 V34P	● The coloured dot shows the actual colour of the wheel

34

THROUGH-FEED EXTERNAL

GRINDING WHEELS SHAPES

T1 - T5 - T7 - T20 - T21 T23

T25 - T26

41

SHELLAC SUPERFINISHING

AND LAPPLNG WHEELS

42

PLUNGE GRINDING WHEELS

WITH STANDARD PROFILE

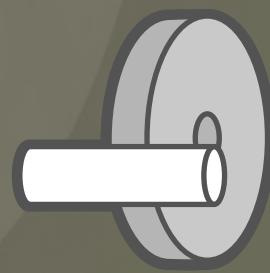
44

CAM AND CRANKSHAFT

GRINDING WHEELS

SHAPES T21 - T26 - T39A

External grinding





Cylindrical grinding wheels

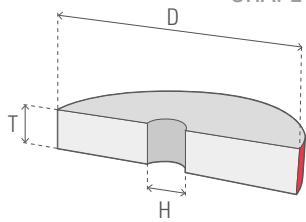
Cylindrical grinding wheels are available with diameters ranging from 300 to 1200 mm and bores from 76,2 to 508 mm

SHAPES AND DIMENSIONS			SHAPES AND DIMENSIONS					SHAPES AND DIMENSIONS							
Shape	D	H	Shape	D	H	P/K	F	N	Shape	D	H	P/K	F	G	N
T1	300	76,2 - 127	T1	300	127	210			T1	300	127	210			
	350	127		350	127	210				350	127	210			
	400	127 - 203,2		400	203,2	290				400	203,2	290			
	450	127 - 203,2		450	203,2	290				450	203,2	290			
	508	203,2 - 304,8		508	304,8	390				508	304,8	390			
	610	203,2 - 304,8		610	203,2	290				610	203,2	290			
	760	304,8		760	304,8	390				760	304,8	390			
	800	304,8		800	304,8	410				800	304,8	410			
	915	304,8 - 508		915	304,8	410				915	304,8	410			
	1060	304,8		1060						1060					
	1200			1200						1200					

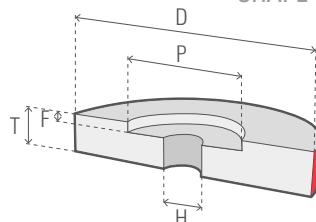
RECESS AND TAPER SIZE UPON REQUEST

RECESS AND TAPER SIZE UPON REQUEST

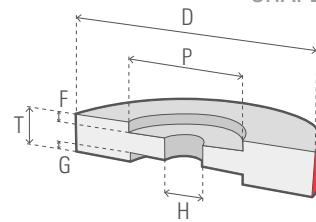
SHAPE T1



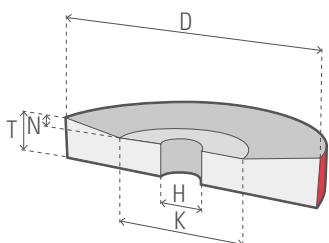
SHAPE T5



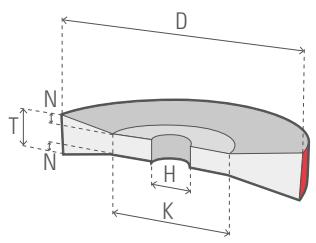
SHAPE T7



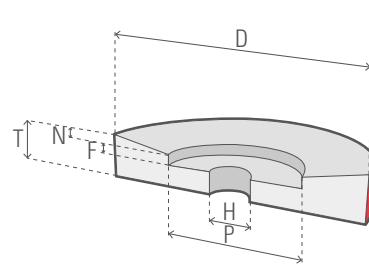
SHAPE T20



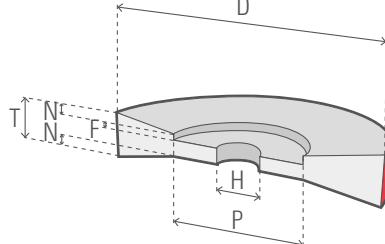
SHAPE T21



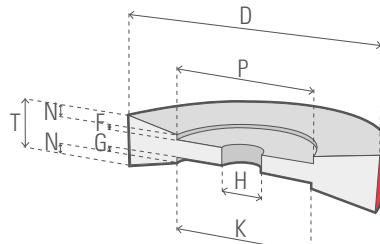
SHAPE T23



SHAPES T25



SHAPE T26



Cylindrical grinding wheels



MILD, ANNEALED AND 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	400	15A 060 K08 V92	500	15A 060 J08 V92	THROUGH-FEED		
	14A 060 K08 V85					THROUGH-FEED		
400	15A 060 K08 V92	450		500		THROUGH-FEED		
	14A 060 K08 V85					THROUGH-FEED		
	11A 060 K08 VK PF					THROUGH-FEED		
	11A 080 K08 VK PF					THROUGH-FEED		
450	15A 060 K08 V92	500		500		THROUGH-FEED		
	14A 060 K08 V85					THROUGH-FEED		
	11A 060 K08 VK PF					THROUGH-FEED		
	11A 080 K08 VK PF					THROUGH-FEED		
500	15A 060 K08 V92	610		610	500	THROUGH-FEED		
	14A 060 K08 V85					THROUGH-FEED		
	11A 060 K08 VK PF					THROUGH-FEED		
	11A 080 K08 VK PF					THROUGH-FEED		
610	14A 060 K08 V85	610		610	500	THROUGH-FEED		
	11A 060 K08 VK PF					THROUGH-FEED		
	11A 080 K08 VK PF					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	400	09A 060 J07 V86	500	500	THROUGH-FEED			
	09A 070 JK8 VK PF					THROUGH-FEED			
400	09A 060 K07 V86					THROUGH-FEED			
	09A 070 JK8 VK PF					THROUGH-FEED			
	09A 080 JK8 VK PF					THROUGH-FEED			
	09A 100 I14 VG PF					THROUGH-FEED			
	09A 120 I14 VG PF					THROUGH-FEED			
	09A 180 I14 VG PF					THROUGH-FEED			
	45A 070 JK8 VK4 PF					THROUGH-FEED			
	53A 100 JK8 VK4					THROUGH-FEED			
	09A 060 K07 V86	450				THROUGH-FEED			
450	09A 070 JK8 VK PF					THROUGH-FEED			
	09A 080 JK8 VK PF					THROUGH-FEED			
	09A 100 I14 VG PF					THROUGH-FEED			
	09A 120 I14 VG PF					THROUGH-FEED			
	09A 180 I14 VG PF					THROUGH-FEED			
	45A 070 JK8 VK4 PF					THROUGH-FEED			
	53A 100 JK8 VK4					THROUGH-FEED			

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

Cylindrical 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 070 JK8 VK PF		09A 070 JK8 VK PF		09A 070 J08 VK PF	THROUGH-FEED	
	09A 080 JK8 VK PF		09A 080 JK8 VK PF		09A 080 J08 VK PF	THROUGH-FEED	
	09A 100 I14 VG PF		09A 100 HI14 VG PF			THROUGH-FEED	
	09A 120 I14 VG PF		09A 120 HI14 VG PF			THROUGH-FEED	
	09A 180 I14 VG PF		09A 180 I14 VG PF			THROUGH-FEED	
	45A 070 JK8 VK4 PF		45A 070 JK8 VK4 PF		45A 070 J08 VK4 PF	THROUGH-FEED	
	53A 100 JK8 VK4		53A 100 JK8 VK4		53A 100 J08 VK4	THROUGH-FEED	
		610	09A 060 J07 V86	610	09A 060 J07 V86	THROUGH-FEED	
			09A 070 JK8 VK PF		09A 070 J08 VK PF	THROUGH-FEED	
			09A 080 JK8 VK PF		09A 080 J08 VK PF	THROUGH-FEED	
			45A 070 J08 VK4 PF		45A 070 J08 VK4 PF	THROUGH-FEED	
			53A 100 J08 VK4		53A 100 J08 VK4	THROUGH-FEED	

HARDENED AND CEMENTED STEEL < 60 HRC							
T1-T5	thickness 25 to 45	T1-T5	thickness 50 to 80	T1-T5-T7	thickness 85 to 120	application	
400	45A 070 JK8 VK4 PF	400	45A 070 JK8 VK4 PF			THROUGH-FEED	
	43A 080 J08 VK4 PF		43A 080 J08 VK4 PF			THROUGH-FEED	
	43A 100 J09 VK PF		43A 100 J09 VK PF			THROUGH-FEED	
	43A 120 J09 VK PF		43A 120 J09 VK PF			THROUGH-FEED	
500	45A 070 JK8 VK4 PF	500	45A 070 JK8 VK4 PF	500	45A 070 IJ8 VK4 PF	THROUGH-FEED	
	43A 080 J08 VK4 PF		43A 080 J08 VK4 PF		43A 080 IJ8 VK4 PF	THROUGH-FEED	
	43A 100 J09 VK PF		43A 100 J09 VK PF		43A 100 IJ9 VK PF	THROUGH-FEED	
	43A 120 J09 VK PF		43A 120 J09 VK PF		43A 120 IJ9 VK PF	THROUGH-FEED	
		610	45A 070 JK8 VK4 PF	610	45A 070 IJ8 VK4 PF	THROUGH-FEED	
			43A 080 J08 VK4 PF		43A 080 IJ8 VK4 PF	THROUGH-FEED	
			43A 100 J09 VK PF		43A 100 IJ9 VK PF	THROUGH-FEED	
			53A 100 J08 VK4		53A 100 J08 VK4	THROUGH-FEED	

Cylindrical grinding wheels



HARDENED AND CEMENTED STEEL < 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 PF	400	1SA 070/1 IJ8 VK4 PF				
	1SA 150/1 K09 VK4 PF		1SA 150/1 J09 VK4 PF				
	3SA 70/1 J08 VK4 PF		3SA 70/1 J08 VK4 PF				
	3SA 100 K09 VK4 PF		3SA 100 IJ9 VK4 PF				
450	1SA 070/1 IJ8 VK4 PF	450	1SA 070/1 IJ8 VK4 PF				
	1SA 150/1 K09 VK4 PF		1SA 150/1 J09 VK4 PF				
	3SA 70/1 J08 VK4 PF		3SA 70/1 J08 VK4 PF				
	3SA 100 K09 VK4 PF		3SA 100 IJ9 VK4 PF				
500	1SA 070/1 IJ8 VK4 PF	500	1SA 070/1 IJ8 VK4 PF	500	1SA 070/1 I08 VK4 PF	● THROUGH-FEED	
	1SA 150/1 K09 VK4 PF		1SA 150/1 J09 VK4 PF		1SA 150/1 J09 VK4 PF	● THROUGH-FEED	
	3SA 70/1 J08 VK4 PF		3SA 70/1 J08 VK4 PF		3SA 70/1 IJ08 VK4 PF	● THROUGH-FEED	
		610	1SA 070/1 IJ8 VK4 PF	610	1SA 070/1 IJ8 VK4 PF	● THROUGH-FEED	
			1SA 150/1 J09 VK4 PF		1SA 150/1 J09 VK4 PF	● THROUGH-FEED	
			3SA 70/1 J08 VK4 PF		3SA 70/1 IJ08 VK4 PF	● THROUGH-FEED	
			3SA 100 J09 VK4 PF		3SA 100 J09 VK4 PF	● THROUGH-FEED	

CHROME PLATED STEEL							
T1-T5	thickness 25 to 45	T1-T5	thickness 50 to 80	T1-T5-T7	thickness 85 to 120	application	
350	09A 080 J08 V86	350	09A 080 I08 V86				
	09A 080 HI8 VK2 PF		09A 080 HI8 VK2 PF				
400	09A 080 J08 V86	400	09A 080 I08 V86				
	09A 080 HI8 VK2 PF		09A 080 HI8 VK2 PF				
450	09A 080 J08 V86	450	09A 080 I08 V86	450	09A 080 H08 V86	● THROUGH-FEED	
	09A 080 HI8 VK2 PF		09A 080 HI8 VK2 PF		09A 080 H08 VK2 PF	● THROUGH-FEED	
500	09A 080 J08 V86	500	09A 080 I08 V86	500	09A 080 H08 V86	● THROUGH-FEED	
	09A 080 HI8 VK2 PF		09A 080 HI8 VK2 PF		09A 080 H08 VK2 PF	● THROUGH-FEED	
		610	09A 080 I08 V86	610	09A 080 H08 V86	● THROUGH-FEED	
			09A 080 HI8 VK2 PF		09A 080 H08 VK2 PF	● THROUGH-FEED	
			09A 080 HI8 VK2 PF		09A 080 H08 VK2 PF	● THROUGH-FEED	



Cylindrical 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			
	09A 070 JK8 VK PF		09A 070 JK8 VK PF			
400	09A 060 J08 V86	400	09A 060 J08 V86			
	09A 070 JK8 VK PF		09A 070 JK8 VK PF			
450	09A 060 J08 V86	450	09A 060 J08 V86	450	09A 060 I08 V86	THROUGH-FEED
	09A 070 JK8 VK PF		09A 070 JK8 VK PF		09A 070 J08 VK PF	
500	09A 060 J08 V86	500	09A 060 J08 V86	500	09A 060 I08 V86	THROUGH-FEED
	09A 070 JK8 VK PF		09A 070 JK8 VK PF		09A 070 J08 VK PF	
		610	09A 060 J08 V86	610	09A 060 I08 V86	THROUGH-FEED
			09A 070 JK8 VK PF		09A 070 J08 VK PF	

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	●	THROUGH-FEED
					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 PF					THROUGH-FEED			
400	43A 060 K08 V86	400	43A 060 J08 V86	450	43A 060 J08 V86	THROUGH-FEED			
	45A 070 JK8 VK PF		45A 070 J08 VK PF		45A 070 J08 VK PF				
450	43A 060 K08 V86	450	43A 060 J08 V86	500	43A 060 J08 V86	THROUGH-FEED			
	45A 070 JK8 VK PF		45A 070 J08 VK PF		45A 070 J08 VK PF				
500			500	43A 060 J08 V86	43A 060 J08 V86	THROUGH-FEED			
				45A 070 J08 VK PF	45A 070 J08 VK PF				
				610	43A 060 J08 V86	THROUGH-FEED			
					45A 070 J08 VK PF	THROUGH-FEED			

Cylindrical 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	●	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	●	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	
	43A 080 K08 V86		43A 080 J08 V86		●	43A 080 J08 V86	
				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	●	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	●	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	
	06C 060 J07 V11		06C 060 I07 V11		●	06C 060 I07 V11	
				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	●	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	●	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	
	08C 080 H10 V11 P1		08C 080 H10 V11 P1		●	08C 080 H10 V11 P1	
				610	08C 046 H10 V11 P1	● THROUGH-FEED	
					08C 080 H10 V11 P1	● THROUGH-FEED	

SHELLAC superfinishing wheels for cylindrical grinding



HARDENED AND CEMENTED < 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 STAINLESS STEEL

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 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 PF	●	400	09A 080 J08 VK7 PF	●	PLUNGE
	09A 100 I14 VG7 PF	●		09A 100 HI14 VG7 PF	●	PLUNGE
	09A 120 I14 VG7 PF	●		09A 120 I14 VG7 PF	●	PLUNGE
	45A 070 K08 VK7 PF	●		45A 070 K08 VK7 PF	●	PLUNGE
	45A 080 JK08 VK7 PF	●		45A 080 JK08 VK7 PF	●	PLUNGE
450	09A 080 J08 VK7 PF	●	450	09A 080 J08 VK7 PF	●	PLUNGE
	09A 100 I14 VG7 PF	●		09A 100 I14 VG7 PF	●	PLUNGE
	09A 120 I14 VG7 PF	●		09A 120 I14 VG7 PF	●	PLUNGE
	45A 070 K08 VK7 PF	●		45A 070 K08 VK7 PF	●	PLUNGE
	45A 080 JK08 VK7 PF	●		45A 080 JK08 VK7 PF	●	PLUNGE
500	09A 080 J08 VK7 PF	●	500	09A 080 J08 VK7 PF	●	PLUNGE
	09A 100 I14 VG7 PF	●		09A 100 I14 VG7 PF	●	PLUNGE
	09A 120 I14 VG7 PF	●		09A 120 I14 VG7 PF	●	PLUNGE
	45A 070 K08 VK7 PF	●		45A 070 K08 VK7 PF	●	PLUNGE
	45A 080 JK8 VK7 PF	●		45A 080 JK8 VK7 PF	●	PLUNGE

HARDENED AND CEMENTED 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 PF	●	400	43A 080 J08 VK7 PF	●	PLUNGE
	43A 120 JK09 VK7 PF	●		43A 120 J09 VK7 PF	●	PLUNGE
	43A 180 I12 VK7P1	●		43A 180 I12 VK7P1	●	PLUNGE
450	43A 080 JK08 VK7 PF	●	450	43A 080 J08 VK7 PF	●	PLUNGE
	43A 120 JK09 VK7 PF	●		43A 120 J09 VK7 PF	●	PLUNGE
	43A 180 I12 VK7P1	●		43A 180 I12 VK7P1	●	PLUNGE
500	43A 080 JK08 VK7 PF	●	500	43A 080 J08 VK7 PF	●	PLUNGE
	43A 120 JK09 VK7 PF	●		43A 120 J09 VK7 PF	●	PLUNGE
	43A 180 I12 VK7P1	●		43A 180 I12 VK7P1	●	PLUNGE

Cylindrical grinding wheels with standard profile



HARDENED AND CEMENTED STEEL < 68 HRC						
T1-PS	thickness 15 to 30	T1-PS	thickness 35 to 50	T1-PS	thickness 60 to 80	application
400	1SA 70/1 IJ8 VK4 PF	400	1SA 70/1 IJ8 VK4 PF			PLUNGE
	1SA 150/1 K09 VK4 PF		1SA 150/1 K09 VK4 PF			PLUNGE
	3SA 70/1 J08 VK4 PF		3SA 70/1 J08 VK4 PF			PLUNGE
	3SA 100 K09 VK4 PF		3SA 100 K09 VK4 PF			PLUNGE
450	1SA 70/1 IJ08 VK4 PF	450	1SA 70/1 IJ8 VK4 PF			PLUNGE
	1SA 150/1 K09 VK4 PF		1SA 150/1 K09 VK4 PF			PLUNGE
	3SA 70/1 J08 VK4 PF		3SA 70/1 J08 VK4 PF			PLUNGE
	3SA 100 K09 VK4 PF		3SA 100 K09 VK4 PF			PLUNGE
500	1SA 70/1 IJ08 VK4 PF	500	1SA 70/1 IJ8 VK4 PF	500	1SA 70/1 I08 VK4 PF	PLUNGE
	1SA 150/1 K09 VK4 PF		1SA 150/1 K09 VK4 PF		1SA 150/1 J09 VK4 PF	PLUNGE
	3SA 70/1 J08 VK4 PF		3SA 70/1 J08 VK4 PF		3SA 70/1 I08 VK4 PF	PLUNGE
	3SA 100 K09 VK4 PF		3SA 100 K09 VK4 PF		3SA 100 J09 VK4 PF	PLUNGE



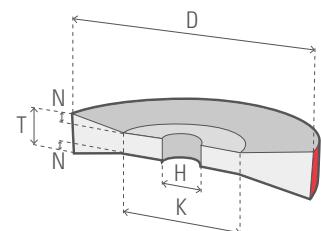
Crankshaft grinding wheels (reconditioning grinding)

Peripheral speed 35 m/sec

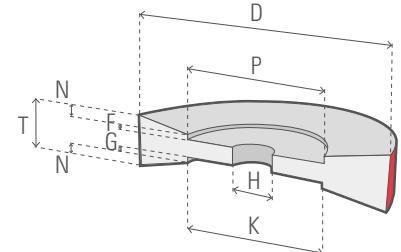


SHAPES AND DIMENSIONS								
Shape	D	T	U	H	J/K	F	G	N
T39A	660	25	19	203,2	320			1,5
T39A	660	25	22	203,2	320			2
T39A	660	25	25	203,2	320			2,5
T21	660	32	-	203,2	320			4
T39A	710	25	19	203,2	320			1,5
T39A	710	25	22	203,2	320			1,5
T39A	710	25	25	203,2	320			2,5
T39A	710	28	28	203,2	320			3
T21	710	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

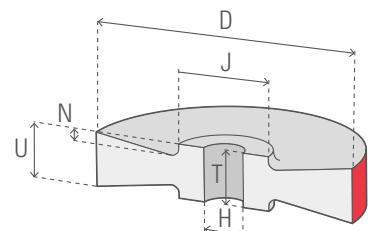
SHAPE T21



SHAPE T26



SHAPE T39A



EXAMPLE OF ORDER

SHAPE	DIMENSIONS (mm)	NOTE	SPEED	SPECIFICATION	The coloured dot shows the actual colour of the wheel
T39A	760 x 25 x 203,2	J/K = 320 N = 2,5	35 m/sec	00A054LM06V86	●

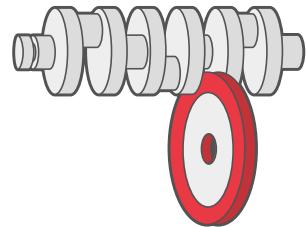
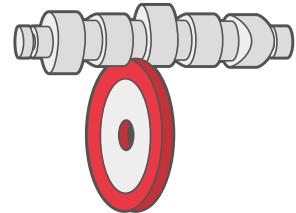
Crankshaft grinding wheels

Peripheral speed 35 m/sec

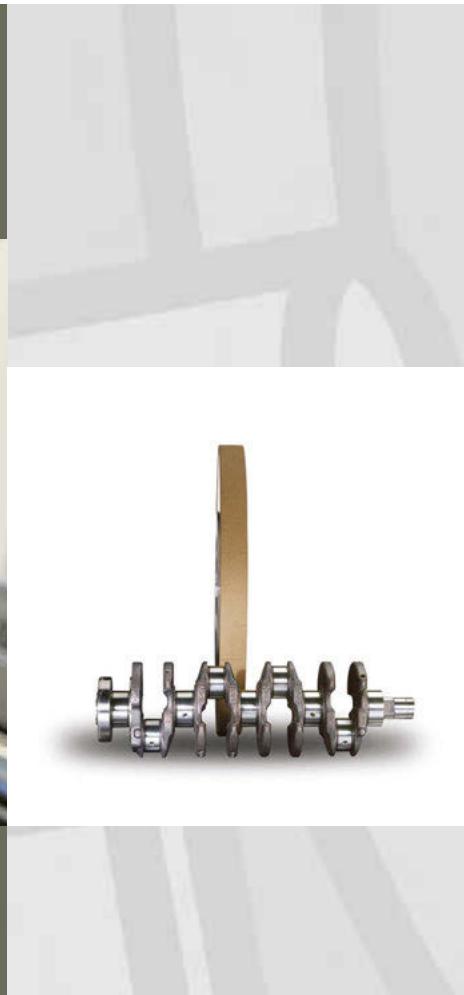


SPECIFICATIONS

materials	diameter ≤ 610 mm specification	diameter ≤ 610 mm specification	use
Hardened steel	15A054K07V86	● 00A054LM06V86	General use
Cast iron		9A46/2J07V86	● High removal
Hardened steel		9A70/2J09V86	● High removal
Chrome plated cast iron		09A080/1J08VK4P1	● High removal

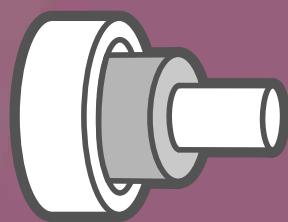


VIT CBN wheels for camshaft and crankshaft grinding



ON SPECIFIC REQUEST

Internal grinding



Wheels for internal grinding



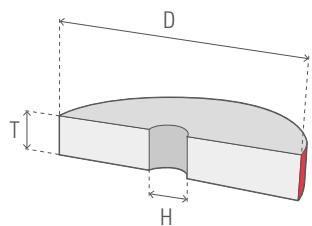
MILD, QUENCHED AND TEMPERED AND HARDENED STEEL ≤ 52 HRC

T1	Specification	T5	Inc.	Specification	Available
		16,0x16,0x6,00	10x6	31A 60 J08 V86	● STOCK
20,0x20,0x6,00	31A 60 J08 V86	● 20,0x20,0x6,00	13x10	31A 60 J08 V86	● STOCK
		20,0x20,0x8,00	13x10	31A 60 J08 V86	● STOCK
25,0x25,0x6,00	31A 60 J08 V86	●			STOCK
25,0x25,0x8,00	31A 60 J08 V86	● 25,0x25,0x8,00	13x10	31A 60 J08 V86	● STOCK
32,0x32,0x10,00	31A 60 J08 V86	● 32,0x32,0x10,00	16x16	31A 60 J08 V86	● STOCK
		40,0x25,0x10,00	20x16	31A 60 J08 V86	● STOCK
		40,0x40,0x10,00	20x16	31A 60 J08 V86	● STOCK
50,0x40,0x16,00	31A 60 J08 V86	● 50,0x40,0x16,00	25x16	31A 60 J08 V86	● STOCK
		60,0x40,0x20,00	32x20	31A 60 J08 V86	● STOCK

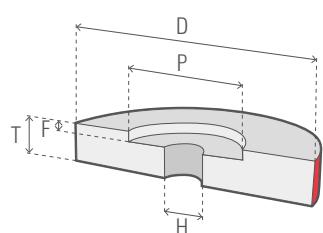
HARDENED AND CEMENTED STEEL ≤ 58 HRC AND STAINLESS

T1	Specification	T5	Inc.	Specification	Available
		16,0x16,0x6,00	10x6	43A 60 J14 VK2PF	● STOCK
20,0 x 20,0 x 6,00	43A 60 J14 VK2PF	● 20,0x20,0x6,00	13x10	43A 60 J14 VK2PF	● STOCK
		20,0x20,0x8,00	13x10	43A 60 J14 VK2PF	● STOCK
		25,0x25,0x8,00	13x10	43A 60 J14 VK2PF	● STOCK
		32,0x32,0x8,00	16x16	43A 60 J14 VK2PF	● STOCK
		32,0x32,0x10,00	16x16	43A 60 J14 VK2PF	● STOCK
		40,0x25,0x10,00	20x16	43A 60 J14 VK2PF	● STOCK
		40,0x40,0x10,00	20x16	43A 60 J14 VK2PF	● STOCK
		50,0x40,0x16,00	25x16	43A 60 J14 VK2PF	● STOCK
		60,0x32,0x20,00	32x16	43A 60 J14 VK2PF	● STOCK
		60,0x40,0x20,00	32x20	43A 60 J14 VK2PF	● STOCK
		80,0x40,0x20,00	40x20	43A 60 J14 VK2PF	● STOCK
		100,0x40,0x32,00	70x20	43A 60 J14 VK2PF	● STOCK

SHAPE T1



SHAPE T5



Wheels for internal grinding



HARDENED AND CEMENTED STEEL ≤ 62 HRC

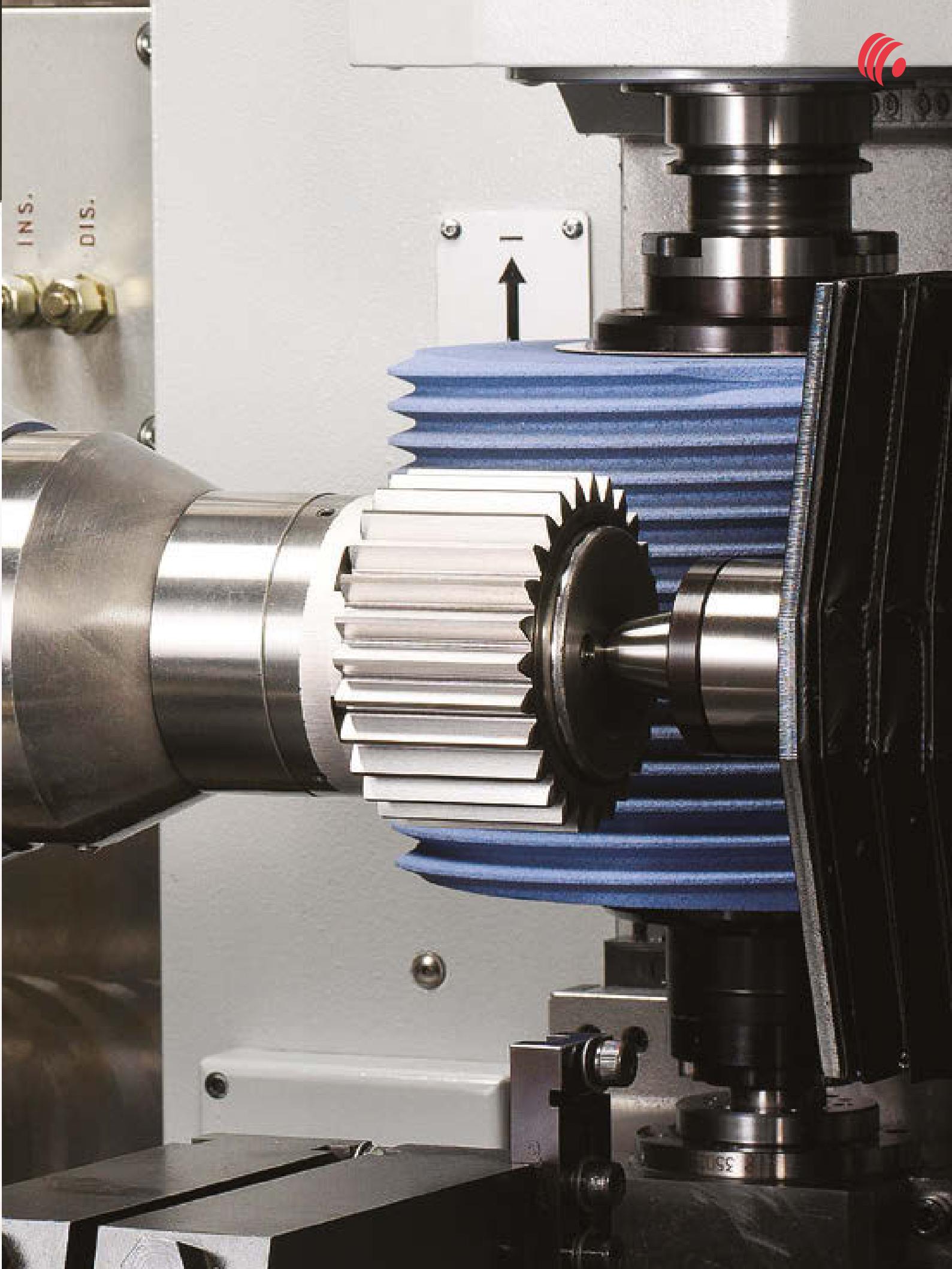
T1	Specification	T5	Inc.	Specification	Available
20,0x 20,0x 6,00	1SA 60 J8 VK4	16,0x16,0x6,00	10x6	1SA 60 J08 VK4	● STOCK
		20,0x20,0x6,00	13x10	1SA 60 J08 VK4	● STOCK
		20,0x20,0x8,00	13x10	1SA 60 J08 VK4	● STOCK
		25,0x25,0x8,00	13x10	1SA 60 J08 VK4	● STOCK
		32,0x32,0x8,00	16x16	1SA 60 J08 VK4	●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

CAST IRON AND NON FERROUS METALS

T1	Specification	T5	Inc.	Specification	Available	
20,0x20,0x6,00	06C 046 J06 V01	16,0x16,0x6,00	10x6	06C 046 J06 V01	● TO BE ORDERED	
		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	25x16	06C 046 J06 V01	● TO BE ORDERED
		●	60,0x40,0x20,00	32x20	06C 046 J06 V01	● TO BE ORDERED



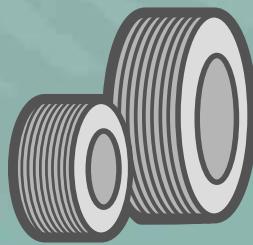




INS.

DIS.

Gear grinding

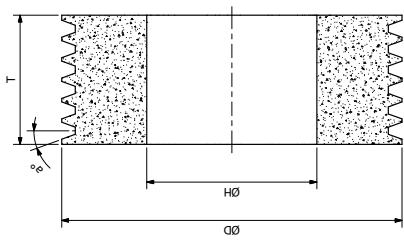


Worm wheel for gear grinding

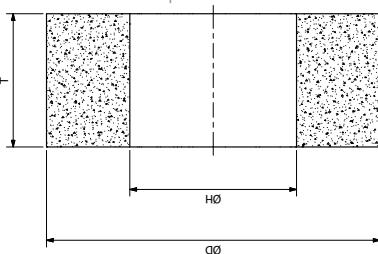


WORM WHEEL						
T1 - T7	Dimensions	Specification	Module Angle Principles	Machine	speed	
SPIR	220x180x90	11A 80 I V45 PF	● >1,5 V=> 20° 1:7	Gleason	63 m/sec	
T1	220x180x90	11A 80 I V45 PF	●	Gleason	63 m/sec	
SPIR	220x180x90	21A 120/1 I V40 PF	● <1,5 V=> 20° 1:7	Gleason	63 m/sec	
T1	220x180x90	21A 120/1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

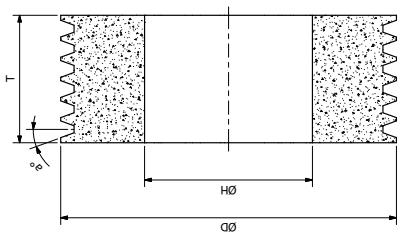


Worm wheel for gear grinding

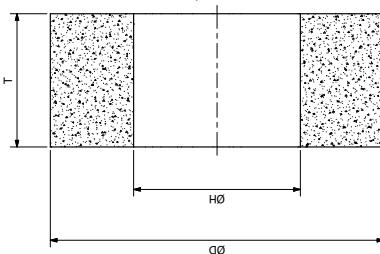


WORM WHEEL						
T1 - T7	Dimensions	Specification	Module Angle Principles	Machine	speed	
SPIR	195x200x90	11A 80 I V45 PF	● >1,5 V=> 20° 1:7	Liebherr	80 m/sec	
T1	195x200x90	11A 80 I V45 PF	●	Liebherr	80 m/sec	
SPIR	195x200x90	21A 120/1 I V40 PF	● <1,5 V=> 20° 1:7	Liebherr	80 m/sec	
T1	195x200x90	21A 120/1 I V40 PF	●	Liebherr	80 m/sec	
SPIR	240x230x110	11A 80 I V45 PF	● >1,5 V=> 20° 1:7	Liebherr	80 m/sec	
T1	240x230x110	11A 80 I V45 PF	●	Liebherr	80 m/sec	
SPIR	240x230x110	21A 120/1 I V40 PF	● <1,5 V=> 20° 1:7	Liebherr	80 m/sec	
T1	240x230x110	21A 120/1 I V40 PF	●	Liebherr	80 m/sec	
SPIR	280x160x115	11A 80 I V45 PF	● >1,5 V=> 20° 1:7	Kapp KX300P	80 m/sec	
T1	280x160x115	11A 80 I V45 PF	●	Kapp KX300P	80 m/sec	
SPIR	280x160x115	21A 120/1 I V40 PF	● <1,5 V=> 20° 1:7	Kapp KX300P	80 m/sec	
T1	280x160x115	21A 120/1 I V40 PF	●	Kapp KX300P	80 m/sec	
SPIR	320x125x115	11A 80 I V45 PF	● >1,5 V=> 20° 1:7	Kapp KX300P	80 m/sec	
T1	320x125x115	11A 80 I V45 PF	●	Kapp KX300P	80 m/sec	
SPIR	320x125x115	21A 120/1 I V40 PF	● <1,5 V=> 20° 1:7	Kapp KX300P	80 m/sec	
T1	320x125x115	21A 120/1 I V40 PF	●	Kapp KX300P	80 m/sec	
SPIR	220x104x76,2 - 2inc. 117x10,5	11A 80 I V45 PF	● >1,5 V=> 20° 1:7	Samp	63 m/sec	
T7	220x104x76,2 - 2inc. 117x10,5	11A 80 I V45 PF	●	Samp	63 m/sec	
SPIR	220x104x76,2 - 2inc. 117x10,5	21A 120/1 IJ V40 PF	● <1,5 V=> 20° 1:7	Samp	63 m/sec	
T7	220x104x76,2 - 2inc. 117x10,5	21A 120/1 IJ V40 PF	●	Samp	63 m/sec	
SPIR	240x104x76,2 - 2inc. 117x10,5	11A 80 I V45 PF	● >1,5 V=> 20° 1:7	Samp	63 m/sec	
T7	240x104x76,2 - 2inc. 117x10,5	11A 80 I V45 PF	●	Samp	63 m/sec	
SPIR	240x104x76,2 - 2inc. 117x10,5	21A 120/1 IJ V40 PF	● <1,5 V=> 20° 1:7	Samp	63 m/sec	
T7	240x104x76,2 - 2inc. 117x10,5	21A 120/1 IJ V40 PF	●	Samp	63 m/sec	
SPIR	240x140x76,2	11A 80 I V45 PF	● >1,5 V=> 20° 1:7	Samp	80 m/sec	
T1	240x140x76,2	11A 80 I V45 PF	●	Samp	80 m/sec	
SPIR	240x140x76,2	21A 120/1 IJ V40 PF	● <1,5 V=> 20° 1:7	Samp	80 m/sec	
T1	240x140x76,2	21A 120/1 IJ V40 PF	●	Samp	80 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 60 H11 VK4P1	U= V=	Samp	63 m/sec
T1	200x30x50,8	1SA 60 H11 VK4P1	U= V=	Samp	63 m/sec
PRQ	240x25x76,2	1SA 60 H11 VK4P1	U= V=	Samp	63 m/sec
T1	240x25x76,2	1SA 60 H11 VK4P1	U= V=	Samp	63 m/sec
PRQ	240x30x76,2	1SA 60 H11 VK4P1	U= V=	Samp	63 m/sec
T1	240x30x76,2	1SA 60 H11 VK4P1	U= V=	Samp	63 m/sec
PRQ	300x20x50,8	1SA 60 H11 VK4P1	U= V=	Samp	63 m/sec
PRQ	300x20x50,8	3AZ 060/1 H10 VK4 PF1	U= V=	Samp	63 m/sec
PRQ	300x20x50,8	3AZ 080 J08 VK4 PF1	U= V=	Samp	63 m/sec
T1	300x20x50,8	1SA 60 H11 VK4P1	U= V=	Samp	63 m/sec
T1	300x20x50,8	3AZ 060/1 H10 VK4 PF1	U= V=	Samp	63 m/sec
T1	300x20x50,8	3AZ 080 J08 VK4 PF1	U= V=	Samp	63 m/sec
PRQ	300x30x50,8	1SA 60 H11 VK4P1	U= V=	Samp	63 m/sec
PRQ	300x30x50,8	3AZ 060/1 H10 VK4 PF1	U= V=	Samp	63 m/sec
PRQ	300x30x50,8	3AZ 080 J08 VK4 PF1	U= V=	Samp	63 m/sec
T1	300x30x50,8	1SA 60 H11 VK4P1	U= V=	Samp	63 m/sec
T1	300x30x50,8	3AZ 060/1 H10 VK4 PF1	U= V=	Samp	63 m/sec
T1	300x30x50,8	3AZ 080 J08 VK4 PF1	U= V=	Samp	63 m/sec
PRQ	250x32x80	1SA 60 H11 VK4P1	U= V=	Gleason/Höfler/Niles	63 m/sec
T1	250x32x80	1SA 60 H11 VK4P1	U= V=	Gleason/Höfler/Niles	63 m/sec
PRQ	300x25x100	1SA 60 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 60 H11 VK4P1	U= V=	Gleason/Höfler/Niles	63 m/sec
T1	300x25x100	3AZ 060/1 H10 VK4 PF1	U= V=	Gleason/Höfler/Niles	63 m/sec
T1	300x25x100	3AZ 080 J08 VK4 PF1	U= V=	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 60 H11 VK4P1	U= V=	Gleason/Höfler/Niles	63 m/sec
T1	300x30x100	3AZ 060/1 H10 VK4 PF1	U= V=	Gleason/Höfler/Niles	63 m/sec
T1	300x30x100	3AZ 080 J08 VK4 PF1	U= V=	Gleason/Höfler/Niles	63 m/sec
PRQ	350x32x127	1SA 60 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 60 H11 VK4P1	U= V=	Gleason/Höfler/Niles	63 m/sec
T1	350x32x127	3AZ 060/1 H10 VK4 PF1	U= V=	Gleason/Höfler/Niles	63 m/sec
T1	350x32x127	3AZ 080 J08 VK4 PF1	U= V=	Gleason/Höfler/Niles	63 m/sec

Profiled PRQ

Single profile wheels for gear grinding



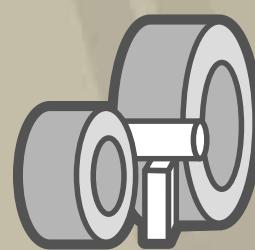
SINGLE PROFILE WHEELS

T1	Dimensions	Specification	Table Angle	Machine	speed
PRQ	350x40x127	1SA 60 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 60 H11 VK4P1	U= V=	Gleason/Höfler/Niles	63 m/sec
T1	350x40x127	3AZ 060/1 H10 VK4 PF1	U= V=	Gleason/Höfler/Niles	63 m/sec
T1	350x40x127	3AZ 080 I08 VK4 PF1	U= V=	Gleason/Höfler/Niles	63 m/sec
PRQ	400x32x127	1SA 60 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 60 H11 VK4P1	U= V=	Gleason/Höfler/Niles	63 m/sec
T1	400x32x127	3AZ 060/1 H10 VK4 PF1	U= V=	Gleason/Höfler/Niles	63 m/sec
T1	400x32x127	3AZ 080 J08 VK4 PF1	U= V=	Gleason/Höfler/Niles	63 m/sec
PRQ	400x40x127	1SA 60 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 60 H11 VK4P1	U= V=	Gleason/Höfler/Niles	63 m/sec
T1	400x40x127	3AZ 060/1 H10 VK4 PF1	U= V=	Gleason/Höfler/Niles	63 m/sec
T1	400x40x127	3AZ 080 I08 VK4 PF1	U= V=	Gleason/Höfler/Niles	63 m/sec
PRQ	450x32x127	1SA 60 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 60 H11 VK4P1	U= V=	Gleason/Höfler/Niles	63 m/sec
T1	450x32x127	3AZ 060/1 H10 VK4 PF1	U= V=	Gleason/Höfler/Niles	63 m/sec
T1	450x32x127	3AZ 080 J08 VK4 PF1	U= V=	Gleason/Höfler/Niles	63 m/sec
PRQ	450x40x127	1SA 60 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 60 H11 VK4P1	U= V=	Gleason/Höfler/Niles	63 m/sec
T1	450x40x127	3AZ 060/1 H10 VK4 PF1	U= V=	Gleason/Höfler/Niles	63 m/sec
T1	450x40x127	3AZ 080 I08 VK4 PF1	U= V=	Gleason/Höfler/Niles	63 m/sec
Variant with finer grit (better finishing)		3AZ 080 J08 VK4 PF1	U= V=		
Variant for modules with important dimensions		3AZ 060/1 H10 VK4 PF1	U= V=		

Cylindrical gear grinding for pumps and hydraulic engines

PROFILE N WHEELS					
T1 - PRN	thickness 20 to 30	thickness 35 to 60	thickness 65 to 100	Angle 1 / Angle2	
450	43A 080 JK8 VK7 PF	●	43A 080 J08 VK7 PF	●	V ¹ V ²
	43A 120 JK9 VK7 PF	●	43A 120 JK9 VK7 PF	●	V ¹ V ²
508	43A 080 JK8 VK7 PF	●	43A 080 J08 VK7 PF	●	43A 080 IJ08 VK7 PF
	43A 120 JK9 VK7 PF	●	43A 120 JK9 VK7 PF	●	43A 120 IJ09 VK7PF
610		43A 080 J08 VG7 PF	●	43A 080 IJ08 VK7 PF	●
		43A 120 JK9 VK7PF	●	43A 120 IJ09 VK7PF	●

Centreless grinding

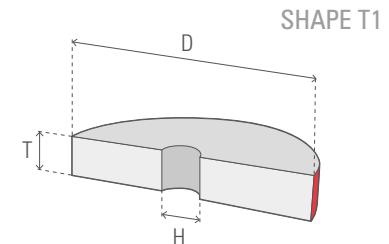


Operating wheels

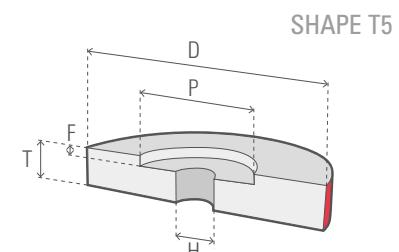


SHAPES AND DIMENSIONS

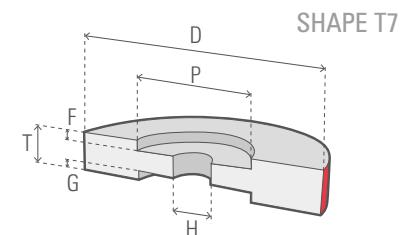
Shape	D	H
T1	300	127
	350	127
	400	203,2 - 152,4
	508	254 - 304,8
	610	304,8



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



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



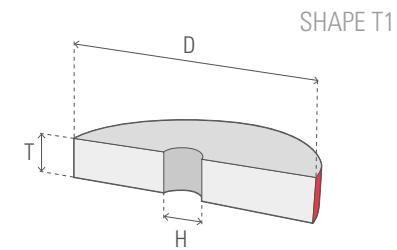
WHEEL THICKNESS UPON REQUEST
For thickness 400, 508 and 610, we supply wheels combined into 2 or 3 pieces, thickness 1/2T or 1/3T

Regulating wheels

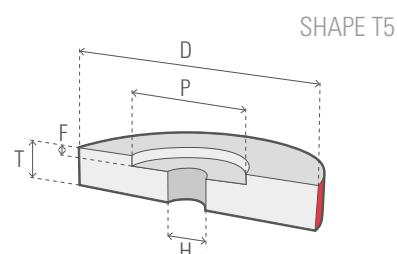


SHAPES AND DIMENSIONS

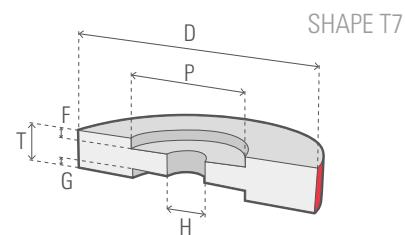
Shape	D	H
T1	200	76,2
	250	127
	300	127
	350	127 - 203,2



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



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



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

Through-feed centreless grinding



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
508	11A 060 K8 V86	●	508	11A 060 K8 V86	●	508
610	15A 060 K8 V86	●	610	15A 060 K8 V86	●	610
610	11A 060 K8 V86	●	610	11A 060 K8 V86	●	610

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 70/2 JK9 V85	●				THROUGH-FEED
350	09A 080 J08 V86	●	350	09A 080 J08 V86	●	THROUGH-FEED
350	45A 70/2 JK9 V85	●	350	45A 70/2 JK9 V85	●	THROUGH-FEED
400	09A 080 J08 V86	●	400	09A 080 J08 V86	●	THROUGH-FEED
400	45A 70/2 JK9 V85	●	400	45A 70/2 JK9 V85	●	THROUGH-FEED
508	09A 080 J08 V86	●	508	09A 080 J08 V86	●	508
508	45A 70/2 JK9 V85	●	508	45A 70/2 JK9 V85	●	508
610	09A 080 J08 V86	●	610	09A 080 J08 V86	●	610
610	45A 70/2 JK9 V85	●	610	45A 70/2 JK9 V85	●	610

HARDENED AND CEMENTED STEEL < 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
610	43A 080 J08 V86	●	610	43A 080 J08 V86	●	610

Through-feed centreless grinding



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
610	11A 060 J08 V30	●	610	11A 060 J08 V30	●	610
					11A 060 J08 V30	● THROUGH-FEED
					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 70/2 JK9 V85	●				THROUGH-FEED
350	45A 70/2 JK9 V85	●	350	45A 70/2 JK9 V85	●	THROUGH-FEED
400	45A 70/2 JK9 V85	●	400	45A 70/2 JK9 V85	●	THROUGH-FEED
508	45A 70/2 JK9 V85	●	508	45A 70/2 JK9 V85	●	508
610	45A 70/2 JK9 V85	●	610	45A 70/2 JK9 V85	●	610
					45A 70/2 JK9 V85	● THROUGH-FEED
					45A 70/2 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
610	43A 060 K08 V86	●	610	43A 060 K08 V86	●	610
					43A 060 K08 V86	● THROUGH-FEED
					43A 060 K08 V86	● THROUGH-FEED



Through-feed centreless grinding



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

HARD METAL 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

Plunge centreless grinding



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	●	PLUNGE
610	15A 080 L07 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	●	PLUNGE
508	45A 100 K8 V85	●	508	45A 100 K8 V85	●	PLUNGE
610	09A 100 L07 V86	●	610	09A 100 K07 V86	●	PLUNGE
610	45A 100 K8 V85	●	610	45A 100 K8 V85	●	PLUNGE

HARDENED AND CEMENTED STEEL < 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	●	PLUNGE
610	43A 080 K08 V86	●	610	43A 080 J08 V86	●	PLUNGE

CHROME PLATED 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	●	PLUNGE
610	11A 080 K08 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
610	45A 100 K8 V85	●	610	45A 100 J8 V85	● 610	45A 100 J8 V85

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
610	43A 080 K08 V86	●	610	43A 080 J08 V86	● 610	43A 080 J08 V86

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
610	15A 080 K07 V86	●	610	15A 080 J07 V86	● 610	15A 080 J07 V86

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
610	08C 080 K07 V11	●	610	08C 080 J07 V11	● 610	08C 080 J07 V11

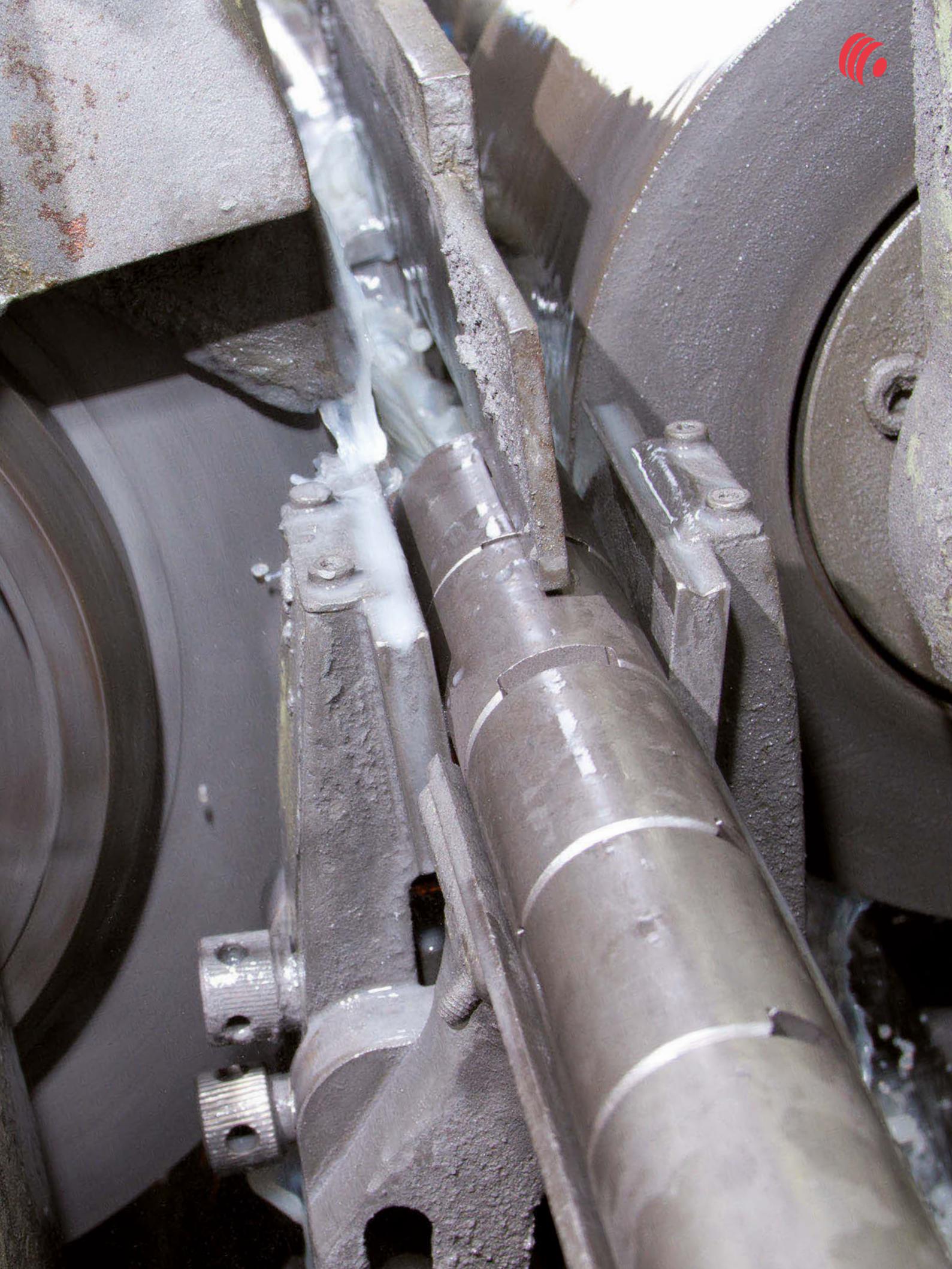
Plunge centreless grinding



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

HARD METAL 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



Centreless grinding of bars and tubes

Perfecta line

Resin-bonded



CARBON STEELS AND LOW ALLOY STEEL

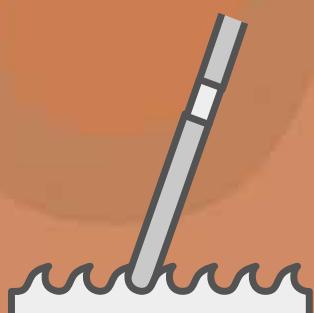
T1-T5	thickness 152 to 203		T1-T5	thickness 254 to 305		T1-T5-T7	thickness 355 to 508		application
406	BGL		S						THROUGH-FEED
406	BGT		M						THROUGH-FEED
406	BGW		H						THROUGH-FEED
508	BGL	S	508	BGL	S	508	BGL	S	THROUGH-FEED
508	BGT	M	508	BGT	M	508	BGT	M	THROUGH-FEED
508	BGW	H	508	BGW	H	508	BGW	H	THROUGH-FEED
		610	BGL	S	610	BGL	S	THROUGH-FEED	
		610	BGT	M	610	BGT	M	THROUGH-FEED	
		610	BGW	H	610	BGW	H	THROUGH-FEED	
		660	BGL	S	660	BGL	S	THROUGH-FEED	
		660	BGT	M	660	BGT	M	THROUGH-FEED	
		660	BGW	H	660	BGW	H	THROUGH-FEED	

STAINLESS STEEL AND **MVC** NICKEL-BASED SUPER-ALLOYS

T1-T5	thickness 152 to 203		T1-T5	thickness 254 to 305		T1-T5-T7	thickness 355 to 508		application
406	BGT								THROUGH-FEED
508	BGT		508	BGT		508	BGT		THROUGH-FEED
			610	BGT		610	BGT		THROUGH-FEED
			660	BGT		660	BGT		THROUGH-FEED



Tool sharpening



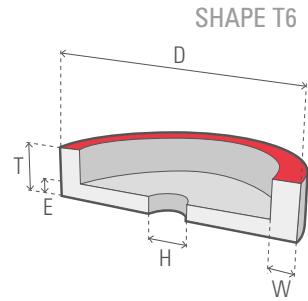
Flaring and cylindrical cup wheels

Peripheral speed 35 m/sec



SHAPES AND DIMENSIONS

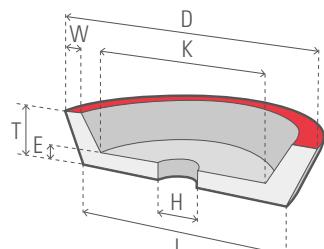
Shape	D	T	H	W	E
T6	80	40	20	10	10
	100	50	20 - 32	10	10
	125	50	32	10	10
	150	50	32	10	16
	150	63	32	16	16
	200	40	76,2	40	13



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
Hard metal	Tungsten carbide tools	08C060J08V01	Roughing	
		08C080J08V01	Finishing	

EXAMPLE OF ORDER

SHAPE	DIMENSIONS (mm)	NOTE	SPEED	SPECIFICATION	Color Dot	Notes
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 application

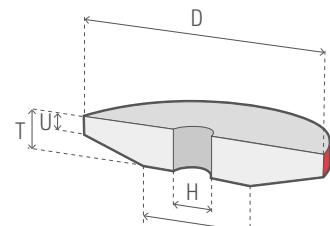
Peripheral speed 35 m/sec



SHAPES AND DIMENSIONS

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

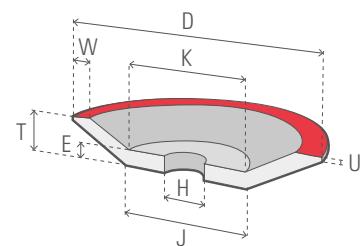
SHAPE T3



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
Hard metal	Carbide Tungsten carbide tools	08C060J08V01	● General use

Grinding wheels for circular saw sharpening

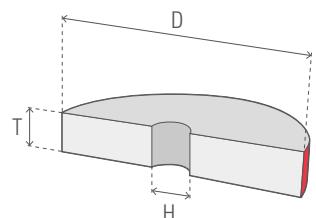
Speed 35 and 60 m/sec



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 \leq 3,5 mm
		11A080M06V86	For medium toothed saws wheel thickness 4 \div 5mm
		11A054M06V86	For wide narrow toothed saws wheel thickness \geq 6 mm
		09A080K08V20	General use high-speed grinding wheels

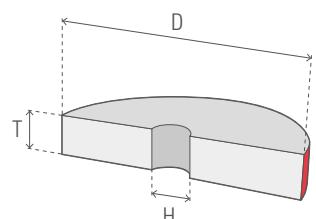
Grinding wheels for band saw sharpening

Peripheral speed 35 m/sec

SHAPE T1

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



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*

T1-BD = SHAPE T1 WITH RESIN HARD SIDE

* Best for stellite saws

Profiled wheels for conventional band saw sharpening

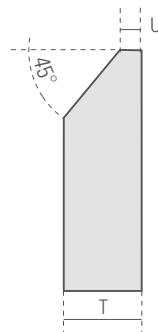
Peripheral speed 35 m/sec



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

SHAPE T1 PROFILE C - 45°



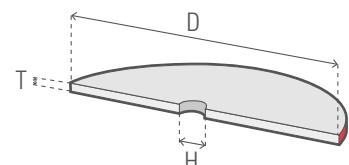
SPECIFICATIONS

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	5SA080007 BGW	● For automatic machines type Vollmer and Iseli

Thin wheels for circular saw sharpening

Speed 50 m/sec

SHAPE T1



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

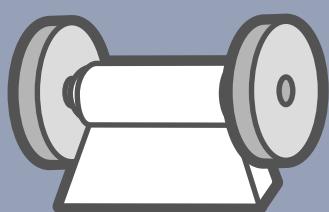
SPECIFICATIONS

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

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

Bench wheels



Wheels for bench and pedestal grinders

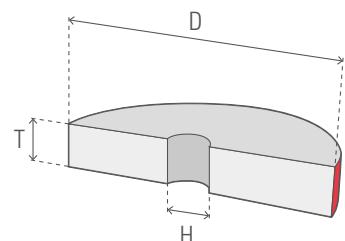
Peripheral speed 35 m/sec



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 for wheel bores

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 AND QUENCHED AND TEMPERED STEEL ≤ 35 HRC

T1	Bench	T1	Pedestal	application
	00A 024 005 V86	●	00A 024 005 V86	● Roughing
	00A 036 N05 V86	●	00A 036 N05 V86	● Roughing
	00A 046 L06 V58	●	00A 046 L06 V58	● Semifinitura
	00A 060 L06 V58	●	00A 060 L06 V58	● Finitura

HARDENED AND CEMENTED ≤ 60 HRC

T1	Bench	T1	Pedestal	application
	09A 046 K06 V86	●	09A 046 K06 V86	● Roughing
	09A 060 K06 V86	●	09A 060 K06 V86	● Finitura
	11A 046 K06 V86	●		Roughing
	11A 060 K06 V86	●		Finitura

HARD METAL

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
DRESSING,
DIAMOND
TOOLS



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 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 rollers

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.

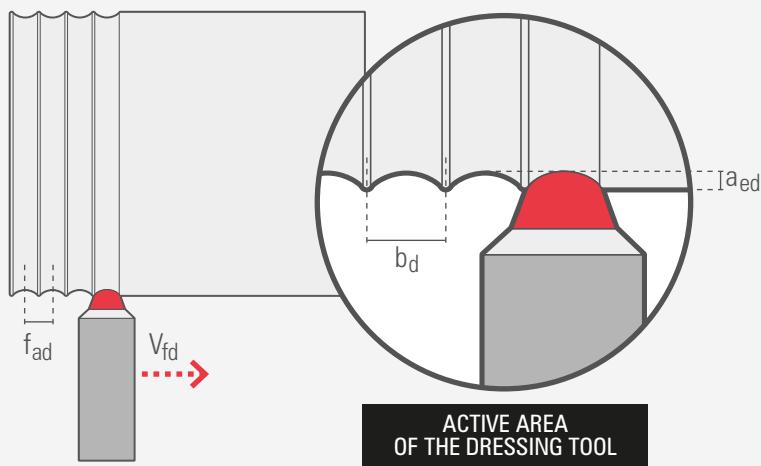
Choose the shape and size of the tool based on the size and specification of the grinding wheel and the type of grinding. The carat weight of the diamond must never be less than the recommended value.

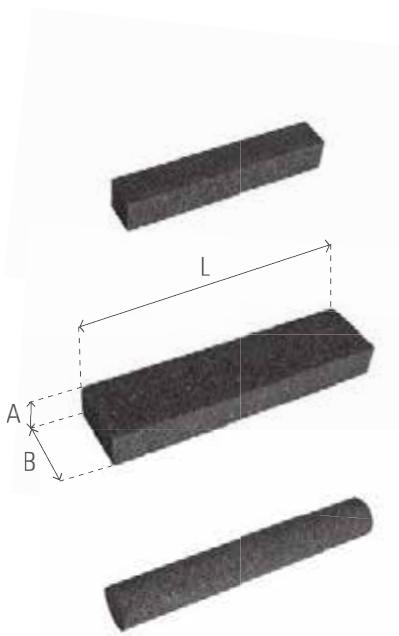
The diamond must always be well sharpened.

Single diamond tools have a more marked action on the abrasive

grain and are therefore more suitable for profiled and roughing wheels.

Multiple diamond tools are preferable to single diamond tools for dressing grinding wheels with linear peripheral banding, 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	
	20	20	200	
	25	25	150-200	
	50	50	200	04C020S05V55
Rectangular	13	25	150	
	25	50	200	
Round	15		100-150	
	20		150-200	
	25		150-200	04C020S05V55
	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	9A120G8V86	120
A1RTA13251005	13	25	100	9A240J8V86	240
A1RTA25502001	25	50	100	9A120J7V86	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





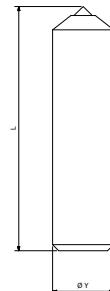
SINGLE POINT DRESSERS WITH CYLINDRICAL SHANK

STANDARD

Code	$\varnothing Y$	L	diamond
	mm	mm	ct
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

HIG QUALITY

Cylindrical Shank

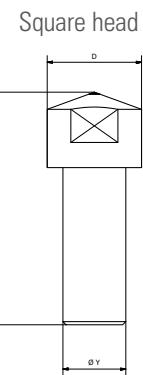


SINGLE POINT DRESSERS WITH MORSE TAPER 1 SHANK

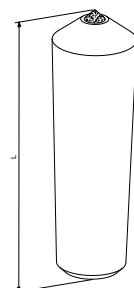
STANDARD

Code	$\varnothing Y$	L	diamond
	gambo		ct
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

HIG QUALITY



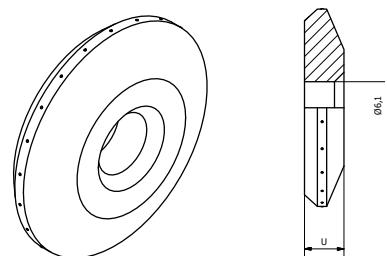
Morse Taper 1



Circular rotary dresser

CIRCULAR ROTARY DRESSER

Code	$\varnothing D$	u	Bore	diamond ct	
U1MRO4F20	20	9	6,1	2,0	STANDARD
U4MRO4FD18	21	7	6,1	2,0	HIG QUALITY



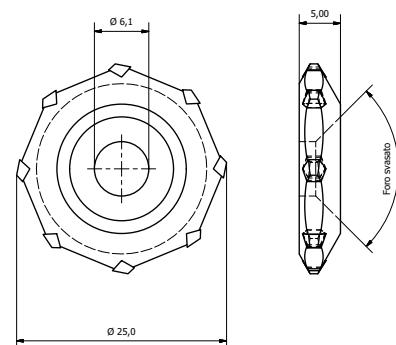
Diamond dressers



POINT ROTARY DRESSER V=25° (NATURAL STONES)

Code	Ø D	u	N° points	Bore	
U4MR08PPN2	25	5	8	6,1	HIG QUALITY

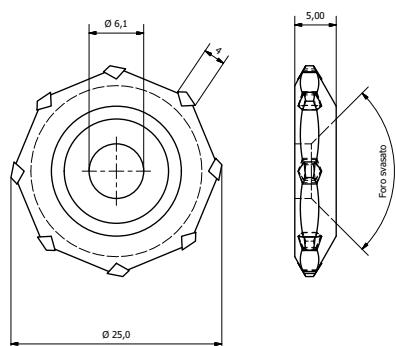
8 point rotary dresser v=25°
(natural stones)



POINT ROTARY DRESSER V=25° (CVD)

Code	Ø D	u	N° points	Bore	
U4MR08PCVD2	25	5	8	6,1	HIG 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

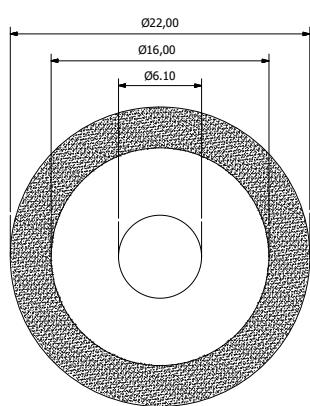
ROTARY DRESSER WITH CYLINDRICAL SHANK

Code	Ø D	u	x	Ø y	L	Diamond grit
U4-14-ROL1G10	22	7	3	10	48	600/800 20/30MESH

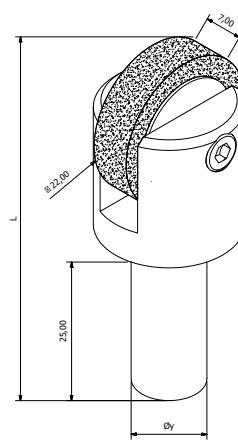
ROTARY DRESSER WITH MORSE TAPER 1 SHANK

Code	Ø D	u	x	CM1 x 48	Diamond grit
U4-14-ROL1CM1	22	7	3	CM1 x 48	600/800 20/30MESH

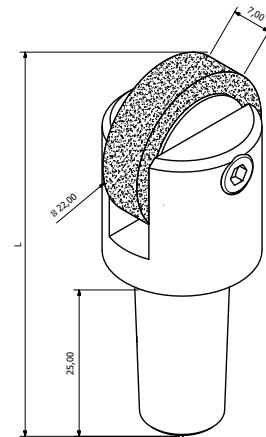
Impregnated circular rotary dresser



Rotary dresser with cylindrical shank



Rotary dresser with Morse taper 1 shank



Diamond dressers

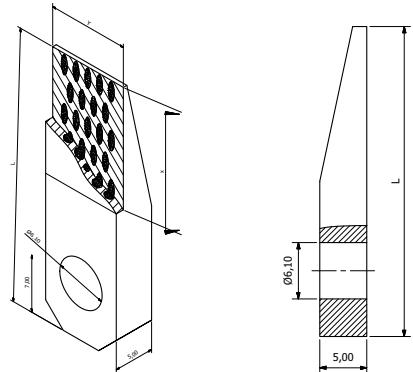


HANDSET BLADE DIAMOND DRESSERS

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

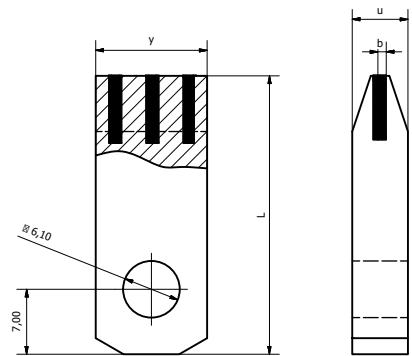


SA HANDSET BLADE NATURAL DIAMOND DRESSERS

HIG. 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

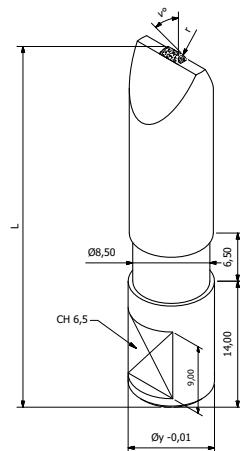
HIG. QUALITY

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



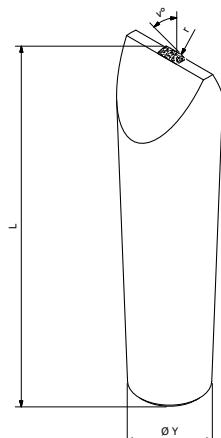
TOOLS FOR FORMING (DIAFORM)					
	CYLINDRICAL SHANK				
Code	V°	r	Ø y	L	Type
STANDARD	U1D40R125	40°	0,125	9.52	45 Diaform
	U1D40R250	40°	0,250	9.52	45 Diaform
	U1D60R250	60°	0,250	9.52	45 Diaform
	U1D60R500	60°	0,500	9.52	45 Diaform
HIGH QUALITY	U4D40R125	40°	0,125	9.52	45 Diaform
	U4D40R250	40°	0,250	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



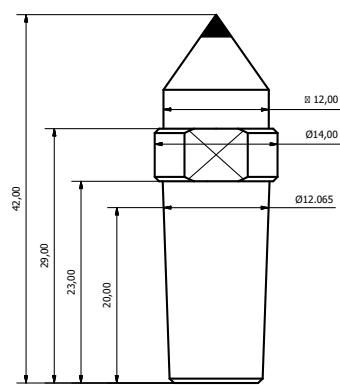
CHISEL TOOLS					
	CYLINDRICAL SHANK				
Code	V°	r	Ø y	L	Machine
HIGH QUALITY	U4D40R125G850	40°	0,125	8	50 MORARA
	U4D40R250G850	40°	0,250	8	50 MORARA
	U4D40R500G850	40°	0,500	8	50 MORARA
	U4D60R125G850	60°	0,125	8	50 MORARA
	U4D60R250G850	60°	0,250	8	50 MORARA
	U4D60R500G850	60°	0,500	8	50 MORARA
	U4D40R125G1050	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

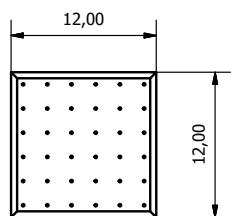
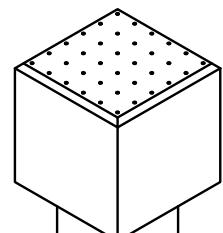




SQUARE HEAD DRESSERS (HANDSET)

	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
	U4MTQ12Y46G1250	12	12	46	12	50
	U4MTQ12Y60G1050	12	12	60	10	50
	U4MTQ12Y60G1250	12	12	60	12	50
	U4MTQ12Y80G1050	12	12	80	10	50
	U4MTQ12Y80G1250	12	12	80	12	50
	U4MTQ15Y4625G1050	15	15	46	10	50
	U4MTQ15Y4625G1250	15	15	46	12	50
	U4MTQ15Y6025G1050	15	15	60	10	50
	U4MTQ15Y6025G1250	15	15	60	12	50
	U4MTQ15Y8025G1050	15	15	80	10	50
	U4MTQ15Y8025G1250	15	15	80	12	50
	U4MTQ15Y4630G1050	15	15	46	10	50
	U4MTQ15Y4630G1250	15	15	46	12	50
	U4MTQ15Y6030G1050	15	15	60	10	50
	U4MTQ15Y6030G1250	15	15	60	12	50
	U4MTQ15Y8030G1050	15	15	80	10	50
	U4MTQ15Y8030G1250	15	15	80	12	50

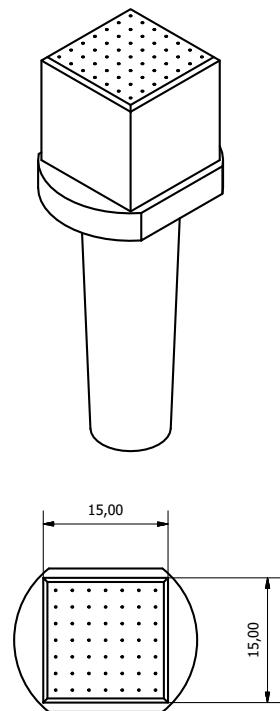
Cylindrical shank





SQUARE HEAD DRESSERS (HANDSET)						
				MORSE TAPER 1		
Code	Section	Grit wheel			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





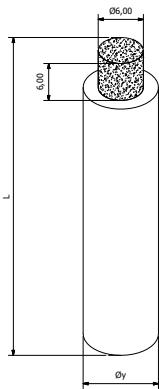
ROUND HEAD DRESSERS (CONCRETION)

CYLINDRICAL SHANK						
Code	ø d	x	ø y	L	Shape	Grit Diamond
U1820G10	10	10	10	40	PBP-8	600/800 20/30MESH
U4720G10	6	6	10	45	PBP7	600/800 20/30MESH
U4820G10	10	10	10	48	PBP8	600/800 20/30MESH
U48S20G10	10	10	10	48	PBP8S-15°	600/800 20/30MESH

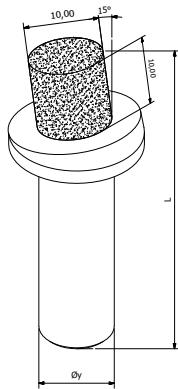
MORSE TAPER 1

Code	ø d	x		Shape	Grit Diamond
U1820CM1	10	10	CM1 x 40	PBP-8	600/800 20/30MESH
U4720CM1	6	6	CM1 x 48	PBP7	600/800 20/30MESH
U4820CM1	10	10	CM1 x 48	PBP8	600/800 20/30MESH
U48S20CM1	10	10	CM1 x 48	PBP8S-15°	600/800 20/30MESH

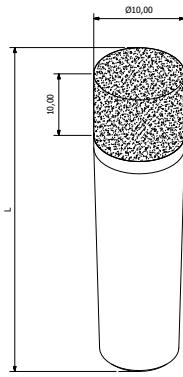
Cylindrical shank



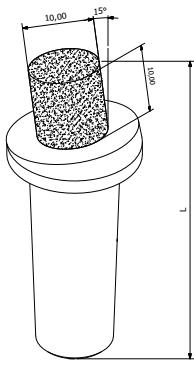
Cylindrical shank 15°



Morse taper 1



Morse taper 1 15°



PBP7 - PBP8

PBP8S-15°

PBP7 - PBP8

PBP8S-15°



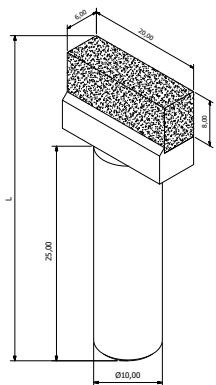
RECTANGULAR HEAD DRESSERS (CONCRETION)

			CYLINDRICAL SHANK			
Code	Section	x	Ø y	L	Shape	Grit Diamond
U4320G10	6 x 12	10	10	40	PBP3	600/800 20/30MESH
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

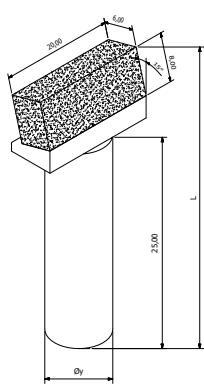
			MORSE TAPER 1			
Code	Section	x		V°	Grit Diamond	
U4320CM1	6 x 12	10	CM1 x 40	PBP3	600/800 20/30MESH	HIG QUALITY
U43S20CM1	6 x 12	10	CM1 x 40	PBP3S-15°	600/800 20/30MESH	
U4120CM1	6 x 20	10	CM1 x 40	PBP1	600/800 20/30MESH	
U41S20CM1	6 x 20	10	CM1 x 40	PBP1S-15°	600/800 20/30MESH	

Cylindrical shank



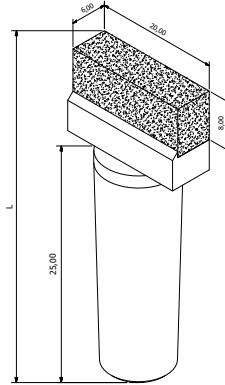
PBP1 - PBP3

Cylindrical shank 15°



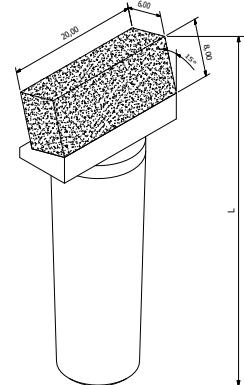
PBP1S-15° - PBP3S-15°

Morse taper 1



PBP1 - PBP3

Morse taper 1 15°



PBP1S-15° - PBP3S-15°

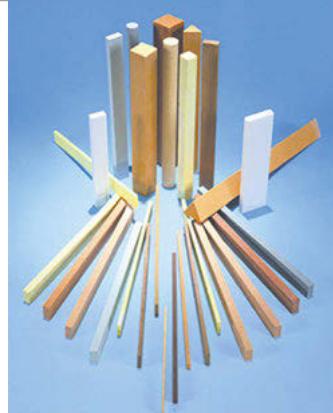
OUR PRODUCTS



VITRIFIED CBN
AND DIAMOND
WHEELS



ABRASIVE
FILES
AND STONESE



VITRIFIED CBN
AND DIAMOND
WHEELS



GDS
HALTER SPINDLES



DIAMOND
AND CBN
ELECTROPLATED
WHEELS



RESINOID
AND METAL
BONDED
DIAMOND
AND
CBN WHEELS



MOUNTED
WHEELS



FILTER
CLOTH



DIAMOND
TOOLS
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www.molemab.com

PRODUCTION UNITS

molemab Spa
via Provinciale 10
25050 Ome (Brescia)
ITALY
tel +39 030 6859888
fax +39 030 652010
molemab@molemab.com

Maclo dio facility
via XXV aprile 15
25030 Maclo dio (Brescia)

molemab Inotech
Schleifmittelindustrie GmbH
Hauptstrasse 17
9314 Lausdorf
AUSTRIA
tel +43 4213 4120
fax +43 4213 4120 - 20
office@molemab.at

molemab USA Corp.
150 Kendall Point Drive
Oswego Illinois 60543
USA
tel +1 800 962 2226
sales@molemab.com

COMMERCIAL BRANCHES

molemab super-abrasifs France Sas
2, rue A. Fresnel (Parc d'activité Le Fresnel I)
69680 Chassieu
FRANCE
tel +33 (0)4 72 21 82 39
fax +33 (0)4 72 50 58 11
superabrasifs@molemab.com

molemab Iberica SLU
Polígono Industrial Sur (CC/Les Forques 13-15)
08754 El Papiol (Barcelona)
SPAIN
tel +34 93 67 30 562
fax +34 93 67 30 563
molemab@molemab.es

molemab GmbH
Maria-Merian-Str. 10
85521 Ottobrunn
GERMANY
tel +49 (0)89 63286200
fax +49 (0)89 632862020
molemabgermany@molemab.com

molemab Abrasives Ungheria kft
Váci Utca 81. IV.em.
1056 Budapest
HUNGARY
tel +36 70-524-23-14
molemabhungary@molemab.com

molemab Canada
2141 rue Nobel, Suite 104
J3E1Z9 Sainte-Julie - QC
CANADA
tel +1 450 338 4241
fax +1 450 338 4291
sales@molemab.com

molemab USA Corp.
91 Carey Road
12804 Queensbury - NY
USA
tel +1 800 962 2226
fax +1 888 203 3876
sales@molemab.com

Primex Abrasives USA
91 Carey Road
12804 Queensbury - NY
USA
tel +1 800 333 0210 and +1 450 338 4353
fax +1 800 394 1732 and +1 450 338 4374
sales@primextools.com
www.primexabrasives.com

molemab México SA de CV
Acceso B 102-A numero 202
Zona Industrial Jurica
76100 Queretaro
MEXICO
tel +52 442 321 2799
molemab@molemab.mx

Office Poland
43-200 Pszczyna,
ul. Bogedaina 5
POLAND
tel +48 502 548 844
office.poland@molemab.com

Office China
Ledu building, Ledu road
Songjiang zone, Shanghai
CHINA
tel 013917879667
office.china@molemab.com



www.molemab.com

