
ZAPORIZHZHIA
ABRASIVE PLANT
ABRASIVE
TOOLS
MANUFACTURING

ABRASIVE TOOLS

Zaporizhzhia Abrasive Plant PJSC produces more than 1,500 types of abrasive tools. These tools can be categorized into two groups: fixed geometric form tools (such as wheels, rings, segments and stones on ceramic and bakelite bonds) and flexible grinding tools (including coated abrasives, grinding belts, flap wheels, and fiber wheels).

TO ENSURE EFFICIENT GRINDING AND THE DESIRED QUALITY OF THE PROCESSED MATERIAL, SEVERAL PARAMETERS NEED TO BE CONSIDERED WHEN CHOOSING AN ABRASIVE TOOL.

These parameters include the characteristics of the processed material (its chemical composition, its physical and mechanical properties), the geometric parameters and form of the grinding surface (continuous or discontinuous), the machining allowance, the initial state of the grinding surface (including roughness), the required processing quality, type and parameters of the working machine, the processing conditions (speed, feed, cooling), and the processing efficiency (productivity, tool durability, adjustments, energy consumption).

The selection of the abrasive tool depends on various characteristics, such as the type, size, brand, and grit of the grinding material, as well as the hardness and structure of the tool's bonding material and the operating speed. It is crucial to choose the appropriate wheel hardness and structure based on the material being processed and the type of grinding operation.

The choice of abrasive tool form and size is determined by factors such as machine design and purpose, machine dimensions, fixture design, and the shape and dimensions of the parts being processed. The efficiency of the wheel's operation relies on the proper selection of characteristics, including its cutting ability, resistance, and the quality of the grinding surface it produces.

The vitrified bond tool has no expiration date. It is unlimited.

ABRASIVE MATERIAL CHOOSING

CHARACTERISTIC OF THE PROCESSED MATERIAL AND PERFORMING OPERATION	ABRASIVE MATERIAL MARK						
	13A	14A	25A	53C	54C	63C	64C
Materials processing with high breaking strength: stripping of steel castings, forgings, rolled products, steel-like high-strength and chilled cast irons, malleable cast iron; semifinish operation of various machine parts, made of carbon and alloy steels in non-hardened and hardened form, manganese bronze, nickel and aluminum alloys.	X	X					
Parts of carbon steel, high speed steel and stainless steel, chrome and nitrated surfaces hard-part machining. Processing of thin parts and tools in non scar mode (stamps, teeth, gearwheels, threading tool, thin knives, blades, steel cutters, drills, knives, woodworking knives, etc.). in-process part Parts processing: surface inner and profile grinding with a contact between the wheel and the in-process part large area, accompanied by abundant heat generation; fine grinding (honing operation and superfinishing, etc.).			X				
Hard materials processing with low breaking strength: cast iron, bronze and brass castings, hard alloys, precious stones, glass, marble, granite, porcelain, hard rubber, etc.very viscous materials: heat-resistant steel, copper and aluminum alloys, rubber.				X	X	X	X

GRINDING MATERIALS GRIT OF ABRASIVE TOOL CHOOSING DEPENDING ON THE PROCESSING TYPE

GRINDING MATERIALS GRIT OF TOOL	TYPE OF PROCESSING
F22-F10	Stripping operations: deseaming, fettling, flogging, die fogging stripping
F36-F22	Surface grinding by the wheel end, sharpening middle and large cutters, adjustment of abrasive tool, cutting off
F46-F36	Preliminary and combined grinding (preliminary and final grinding is performed without removing the product from the machine), cutter sharpening
F90-F46	Clean grinding. Profile surface processing, small tool sharpening, grinding of brittle materials
F180-F100	Fine grinding, hard alloys lapping, cutting tool lapping, pre-honing, thin blades sharpening
F220-F180	Fine grinding of metals, glass, marble, etc., thread grinding, clean grinding
F230	Superfinishing, final honing, lapping of thin blade and calibre measuring surfaces, products with fine pitch thread grinding

HARDNESS AND STRUCTURE OF WHEEL IS SELECTED DEPENDING ON THE MATERIAL, THE TYPE AND PURPOSE OF THE GRINDING OPERATION.

RECOMMENDATIONS FOR HARDNESS OF WHEEL CHOOSING

GRINDING OPERATION	HARDNESS OF WHEEL
Round outer by plunge cutting with longitudinal motion	 L-N L-K
Centreless by plunge cutting with longitudinal motion	 N-O M-N
Inner	M-N
Even with wheel periphery by wheel end	 J-L I-K
Gear grinding module < 3 module > 3	 K-L J-K
Thread grinding, spacing, mm 0,5... 1 >0,5...1 >1...1,5 >1,5...2 >2...3 >3	 O-Q N-O M-N L K-L
Spline grinding	K-N
Carbide material tool sharpening: – rough – finishing – finishing high-speed steel: – rough – finishing	 H-K K-M J-L L-M
Striping grinding	P-S

The selected abrasive tools form and size is determined depending on the design and purpose of the machine, its dimensions, the fixture design, in-process parts form and dimensions, the tool contact area with the processed parts surfaces.

FIELD OF APPLICATION OF ABRASIVE TOOLS ON DIFFERENT BONDS

BOND TYPE	DESIGNATION	TYPE OF PROCESSING
Ceramic	V	All grinding operations of precision products, made of steel, alloys, based on nickel, titanium; Grinding of hardwearing coating coatings (plasma, detonation, etc.).
Bakelite	B	Stock material striping grinding (mill products, casting, forging); Sharpening of cutting tools; Grinding of brittle materials; Grinding by hand-held small machines; Cutting of metals and non-metallic materials, grooving.

ABRASIVE TOOLS ON CERAMIC BOND

AREAS OF APPLICATION

- foundry production
- locksmith works
- shipbuilding
- construction industry
- aircraft construction
- automotive industry
- mechanical engineering
- metallurgical industry
- railway industry
- metalworking
- metal construction production
- welding industry
- domestic use

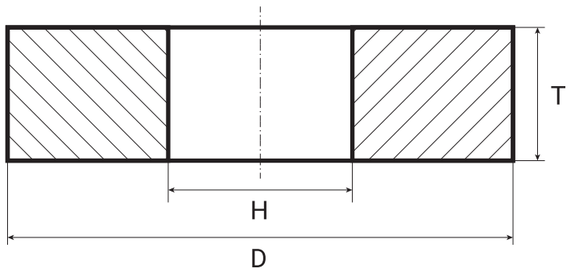
The ceramic bond provides high strength, heat resistance, and wear resistance.

This type of tool is used for sharpening, smoothing, grinding, polishing various surfaces, providing high speed of material knowledge, excellent surface finish, efficient and accurate grinding results.

Abrasive tools on ceramic bond is manufactured from grinding materials of marks 14A, 25A, 54C and 64C, with grit F46-F180, hardness F-Z, of different types: 1, 3, 4, 5, 6, 7, 11, 12, 23, AS (angle section), OP (profiled outline), with operating speed up to 63 m/s under the current regulatory documentation, acting at the plant, with outer diameter of 63-900 mm tool bore diameter 20, 32, 51, 76, 127, 203, 305 and a standard range of heights 6, 8, 10, 13, 16, 20, 25, 32, 40, 50, 63, 80, 100, 125, 150, 200, 250 mm.

Type 1

They are used for round external, centerless, internal, and flat grinding. They are also used for precision grinding of various materials and sharpening cutting tools. The main tasks include grinding planes, shafts in centres, centerless grinding, processing of holes, shaped and profile grinding, and rough processing.

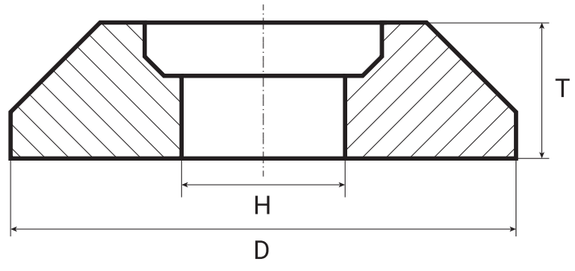


TYPE	OUTER DIAMETER D, MM	HEIGHT T, MM	DIAMETER OF TOOL BORE H, MM	MARK OF GRINDING MATERIAL/GRIT, HARDNESS
1	63	8, 10, 13, 16, 20, 25, 32	20	14A, 25A, 54C, 64C / F46-F80 K-Q
1	80, 100	8, 10, 13, 16, 20, 25, 32	20, 32	
1	125	8, 10, 13, 16, 20, 25, 32, 40	20, 32	
		16, 20, 25, 32	32	14A, 54C, 64C / F100-F180 K-Q
1	150	8, 10, 13, 16, 20, 25, 32, 40, 50	20, 32, 51	14A, 25A, 54C, 64C / F46-F80 K-Q
		16, 20, 25, 32	32	14A, 54C, 64C / F100-F180 K-Q
1	175	16, 20, 25, 32	32	14A, 54C, 64C / F100-F180 K-Q
1	175	8, 10, 13, 16, 20, 25, 32	32	14A, 25A, 54C, 64C / F46-F80 K-Q
		20, 25	20	
1	200	8, 10, 13, 16, 20, 25, 32, 40	32	
		10, 13, 16, 20, 25	51	
		20, 25, 32, 40, 63	76	
		16, 20, 25, 32	32, 76	14A, 54C, 64C / F100-F180 K-Q

TYPE	OUTER DIAMETER D, MM	HEIGHT T, MM	DIAMETER OF TOOL BORE H, MM	MARK OF GRINDING MATERIAL/GRIT, HARDNESS
1	250	6, 8, 10, 13, 16, 20, 25, 32, 40	32	14A, 25A, 54C, 64C / F46-F80 K-Q
		6, 8, 10, 13, 16, 20, 25, 32, 40, 50, 63	76	
		16, 20, 25, 32	32, 76	14A, 54C, 64C / F100-F180 K-Q
1	300	32	32	14A, 25A, 54C, 64C / F46-F80 K-Q
		8, 10, 11, 13, 14, 16, 18, 20, 22, 25, 28, 32, 40, 50, 63, 80, 100	76, 127	
		10, 13, 16, 20, 25, 32, 40, 50, 100	76, 127	14A, 54C, 64C / F100-F180 K-Q
1	350	8, 10, 13, 16, 20, 25, 32, 40, 50, 63, 80, 100, 150	127	14A, 25A, 54C, 64C / F46-F80 K-Q
		40, 63, 80, 100, 150	203	
1	400	10, 13, 16, 20, 25, 32, 40, 50, 63, 80, 100	127	
		8, 10, 13, 16, 20, 25, 32, 40, 50, 63, 80, 100, 150	203	
1	450	25, 32, 40, 50, 63, 80, 100	127	
		25, 32, 40, 50, 63, 80	203	
1	500	13, 16, 20, 25, 32, 40, 50, 63, 80, 100, 125, 150	203	
		13, 16, 20, 25, 32, 40, 50, 63, 75, 80, 100, 125, 150, 200, 250	305	
1	500	16, 20, 25, 32, 40, 50, 63, 80, 100, 125, 150	203, 305	14A, 54C, 64C / F100-F180 K-Q
1	600	13, 16, 20, 25, 28, 32, 34, 35, 40, 45, 50, 55, 63, 75, 80, 100, 110, 125, 135, 140, 150, 160, 200, 250	305	14A, 25A, 54C, 64C / F46-F80 K-Q
		20, 25, 68, 86, 100	305	14A, 54C, 64C / F100-F180 K-Q
1	750	20, 25, 28, 32, 40, 45, 50, 63, 78, 80, 100	305	14A, 54C, 64C / F46-F80 K-Q
1	900	25, 28, 29, 31, 32, 33, 35, 39, 40, 43, 50, 52, 63, 80, 100	305	

Type 3

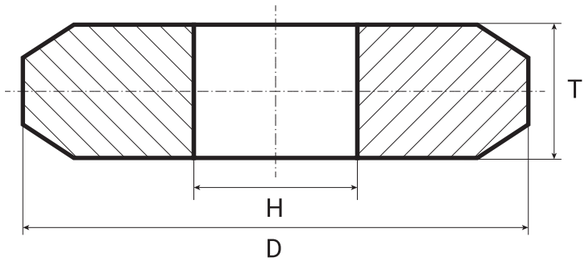
They are used for gear grinding, sharpening cutting tools, and processing complex gear wheel profiles.



TYPE	OUTER DIAMETER D, MM	HEIGHT T, MM	DIAMETER OF TOOL BORE H, MM	MARK OF GRINDING MATERIAL/GRIT, HARDNESS
3	125, 150, 175	8, 10, 13, 16, 20	32	14A, 25A, 54C, 64C/F46-F80, K-Q
	200	10, 13, 16, 20, 25	32, 51	
	250	8, 10, 13, 20, 25	76	
		16	32, 76	
	300	8, 10, 25, 32	76	
		8, 10, 13, 20	127	

Type 4

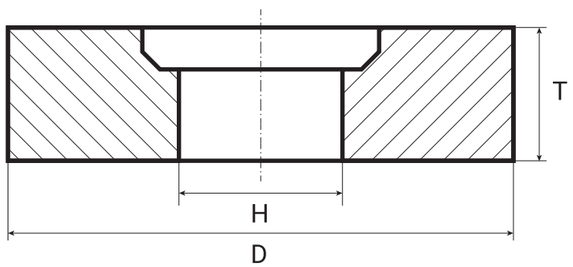
They are used for grinding, processing threads and grooves, and sharpening threading tools.



TYPE	OUTER DIAMETER D, MM	HEIGHT T, MM	DIAMETER OF TOOL BORE H, MM	MARK OF GRINDING MATERIAL/GRIT, HARDNESS
3	250, 300, 350, 400	10, 13, 16, 20, 25, 20, 25, 32	76 127	I4A, 25A, 54C, 64C/F46-F80, K-Q

Type 5

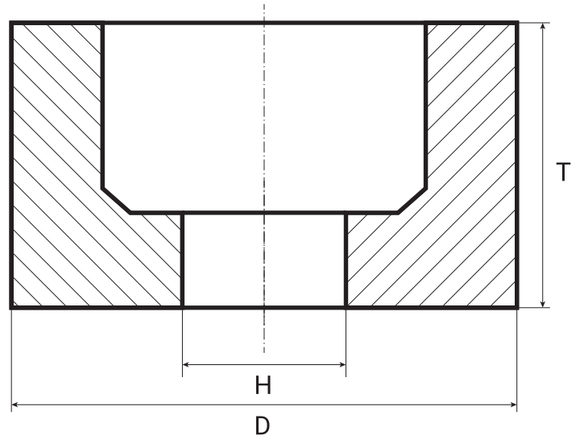
They are used for round external, centerless, internal, and flat grinding and for processing parts with shaped surfaces.



TYPE	OUTER DIAMETER D, MM	HEIGHT T, MM	DIAMETER OF TOOL BORE H, MM	MARK OF GRINDING MATERIAL/GRIT, HARDNESS
5	200	32, 40	76	14A, 25A, 54C, 64C/ F46-F80, K-Q
	250	40	76	
	300	50, 63	127	
	350	40, 50	127	
	400	40, 50	203	
	600	50, 63, 80	305	

Type 6

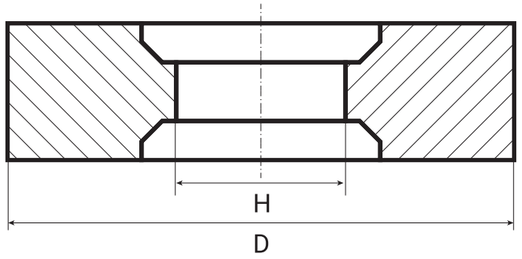
They are used for flat end grinding and sharpening the teeth of cutting tools, such as circular saws. They are also often used to sharpen guillotine knives, disc cutters, and cutters.



TYPE	OUTER DIAMETER D, MM	HEIGHT T, MM	DIAMETER OF TOOL BORE H, MM	MARK OF GRINDING MATERIAL/GRIT, HARDNESS
6	100	50	20	14A, 25A, 54C, 64C/ F46-F80, K-Q
	125	63	32	
	150	80	32, 51	
	200	63	32, 51	
	250	100	150	

Type 7

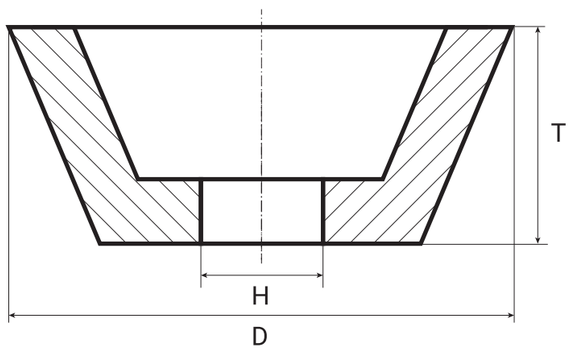
They are used for round external, centerless, internal and flat grinding and for processing complex parts.



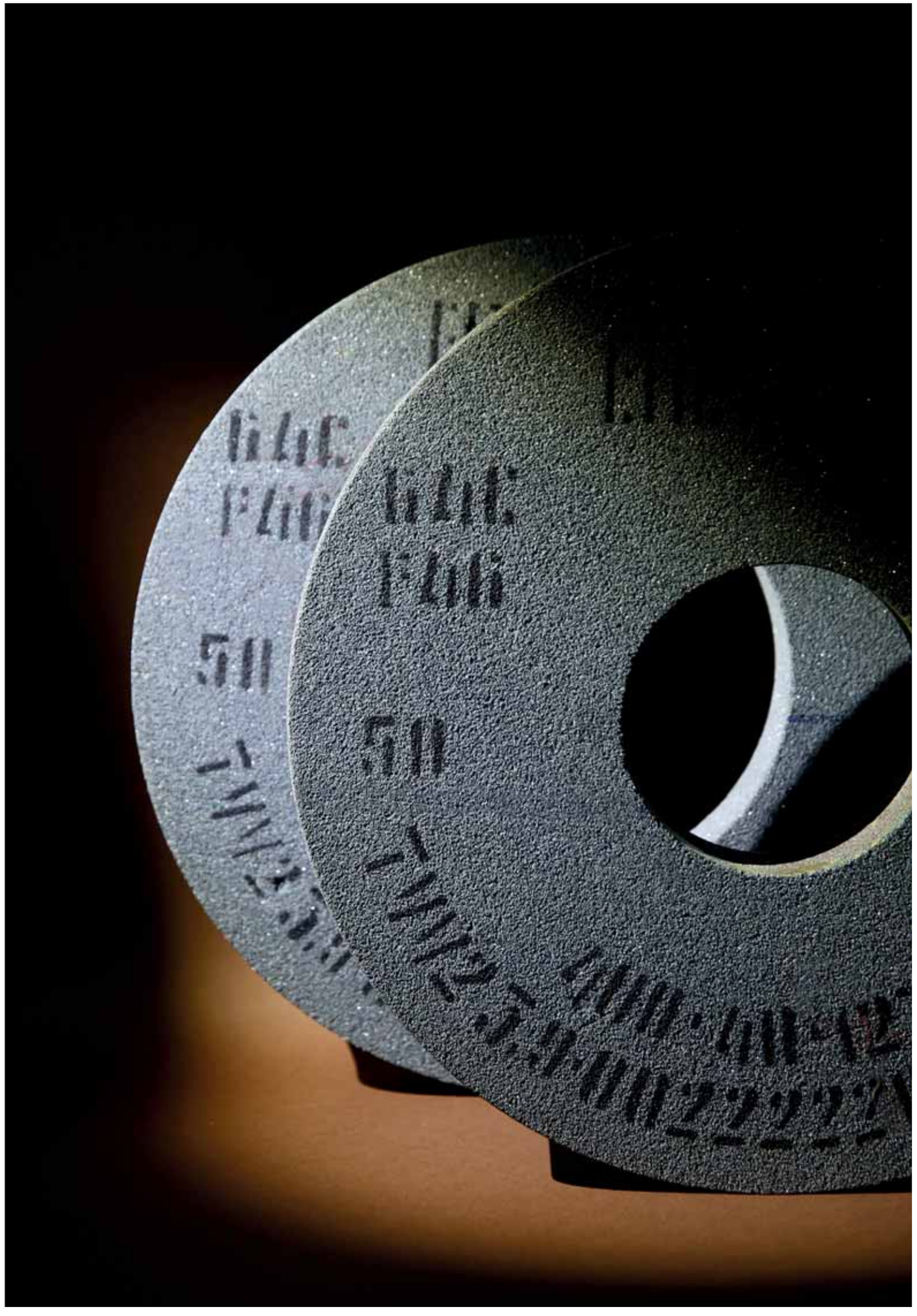
TYPE	OUTER DIAMETER D, MM	HEIGHT T, MM	DIAMETER OF TOOL BORE H, MM	MARK OF GRINDING MATERIAL/ GRIT, HARDNESS
7	600	63, 80, 100	305	14A, 25A, 54C, 64C/F46-F80, K-Q

Type 11

They are used for flat face grinding and sharpening the teeth of the cutting tool. They are widely used for processing stone, such as marble and granite, as well as for sharpening cutters and grinding guillotine knives.

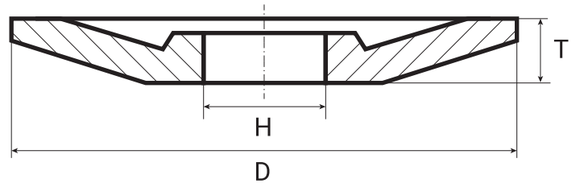


TYPE	OUTER DIAMETER D, MM	HEIGHT T, MM	DIAMETER OF TOOL BORE H, MM	MARK OF GRINDING MATERIAL/ GRIT, HARDNESS
11	125, 150	40, 50	32	14A, 25A, 54C, 64C/F46-F80, K-Q
	175	63	32	
	250	100	150	



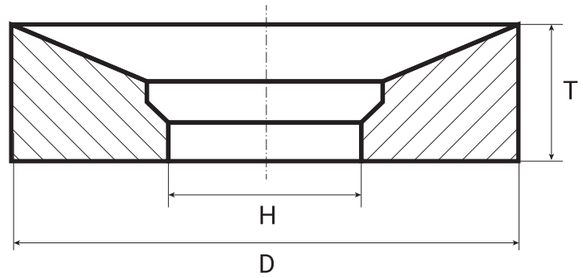
Type 12

They are used for sharpening multi-bladed cutting tools, gear teeth, milling cutters, reamers and countersinks.



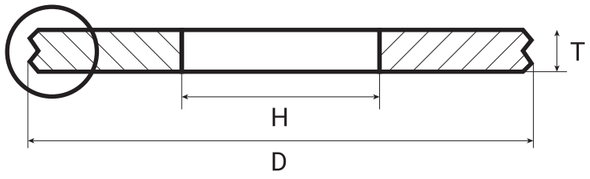
TYPE	OUTER DIAMETER D, MM	HEIGHT T, MM	DIAMETER OF TOOL BORE H, MM	MARK OF GRINDING MATERIAL/ GRIT, HARDNESS
12	125	13	32	14A, 25A, 54C, 64C/F46-F80, K-Q
	150	16	32	
	175	16, 20	32	
	200	63	32	
	250	20, 25	32	

Type 23



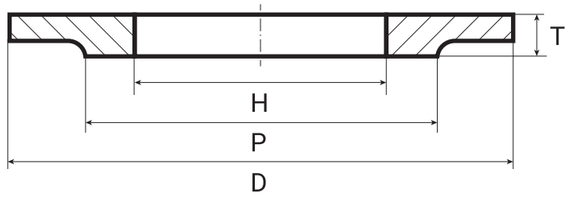
TYPE	OUTER DIAMETER D, MM	HEIGHT T, MM	DIAMETER OF TOOL BORE H, MM	MARK OF GRINDING MATERIAL/GRIT, HARDNESS
23	600	80	305	I4A, 25A, 54C, 64C/F46-F80, K-Q

Angle Section



TYPE	OUTER DIAMETER D, MM	HEIGHT T, MM	DIAMETER OF TOOL BORE H, MM	MARK OF GRINDING MATERIAL/ GRIT, HARDNESS
AS	750	30, 40	305	I4A, 25A, 54C, 64C/F46-F80, K-Q

Profiled Outline



TYPE	OUTER DIAMETER D, MM	HEIGHT T, MM	DIAMETER OF TOOL BORE H, MM	MARK OF GRINDING MATERIAL/ GRIT, HARDNESS
PO	600	20	305	14A, 25A / F46-F80, K-Q

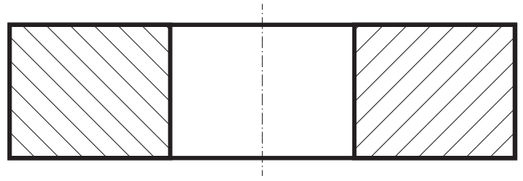
GRINDING WHEELS FOR BEARING BALL GRINDING

TYPE	OUTER DIAMETER D, MM	HEIGHT T, MM	DIAMETER OF TOOL BORE H, MM	MARK OF GRINDING MATERIAL/ GRIT, HARDNESS
1	800	100	290	14A/54C fr. -160/F320 (2,7-2,96)-103 kg/m^3

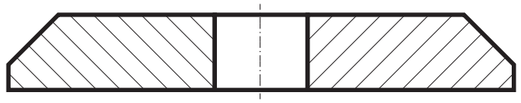
WHEEL FOR DECORTICATIONS, DEFUZZING WHITE STRAW CROPS

TYPE	OUTER DIAMETER D, MM	HEIGHT T, MM	DIAMETER OF TOOL BORE H, MM	MARK OF GRINDING MATERIAL/ GRIT, HARDNESS
1	250	40, 63	76, 127	54C / F16-F22, F46, P-T, U
	300	40	76, 127	
	350	63	127, 203	
	400	40	127, 203	
	450	50	203	
2	250	125	35	54C / F16-F22, F46, P-T, U
7	250	63	127	
7-C	450	50	203	54C / F16-F22, F46, Q-T, U

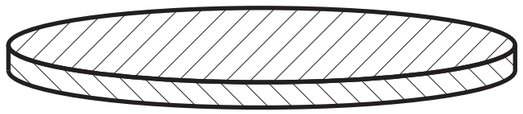
ABRASIVE PRODUCTS OF ECONOMIC PURPOSE ON CERAMIC BOND



Grinding wheels for electric sharpening 150 x 20-40 x 32 14A J-Q 30 m/s

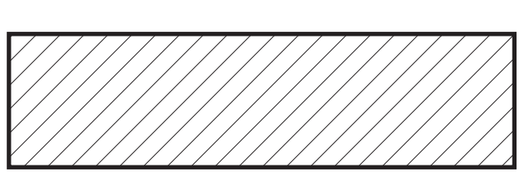


Grinding wheels for saw filing
250 x 10 x 32 14A P46-P80 J-Q 30 m/s

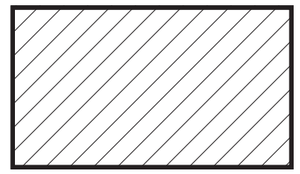


Whetstone «Boat» for scythes sharpening
225 x 40 x 18 14A P46-P80 J-Q 30

It is used for sharpening scythes, sickles, knives, and other tools. It is also used for cleaning surfaces and rounding the edges of objects made of steel, cast iron, and cast steel.



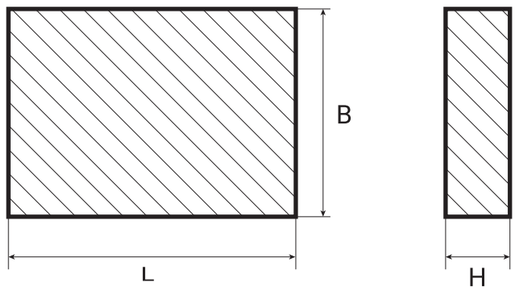
Commercial bar 200x20x40 14A K-O



Carpenter's 150x25x52 14A, K-O

SET OF HEAT-RESISTANT CARBORUNDUM PLATES FOR LINING FIREPOTS OF HOUSEHOLD OVENS

LENGTH OF PLATE L, MM	WIDTH OF PLATE B, MM	HEIGHT THE PLATE H, MM	NUMBER OF PLATES IN THE SET, PC
280	180	25	1
330			2



ABRASIVE TOOLS ON BAKELITE BOND

Bakelite bond is strong and heat-resistant, allowing the tool to withstand high loads and temperatures during operation. This type of tool is widely used for deburring, rough grinding, grinding and processing various materials, ensuring efficiency in machining.

AREAS OF APPLICATION

- foundry production
- shipbuilding
- construction industry
- aircraft construction
- automotive industry
- mechanical engineering
- metallurgical industry
- railway industry
- metalworking
- welding industry

Abrasive tools on bakelite bond are manufactured from materials of marks 14A, 25A, 54C and 64C, with grit F12-F150 and hardness H-U:

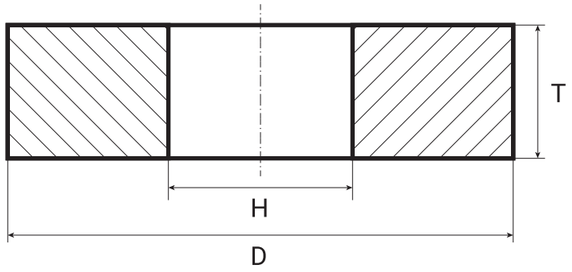
- different types of wheels (1, 2, 11, 36, 40)
- different types of segments (5C, 6C, 9C)

Tool working speed from 25 to 50 m/s according to the current regulatory documentation at the plant.

STRIPING WHEELS

Type 1

They are used for rough stripping operations: removal of burrs and deposits from iron castings, cleaning of welds, ingots, forgings and finished rolled products, as well as for removing scale from metal surfaces.

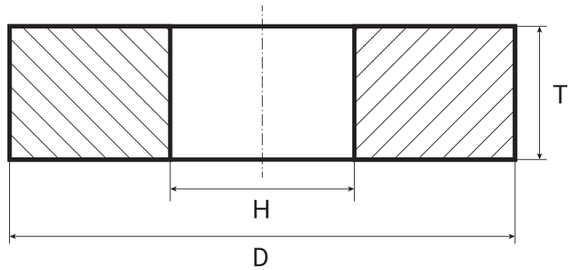


TYPE	OUTER DIAMETER D, MM	HEIGHT T, MM	DIAMETER OF TOOL BORE H, MM	MARK OF GRINDING MATERIAL/GRIT, HARDNESS
1	125, 150, 200	20, 25, 32	32	14A/F16-F22, O-T, U
	250	20, 25, 32, 40	32, 76	
	300	32, 40, 50	50, 76	
	400	32, 40, 50	127, 203	14A, 54C / F16-F22, O-T, U
	500	40, 50, 63, 80	203	14A, 54C / F16-F22, O-T, U
	600	63, 75, 80	305	
	750	63, 80	305	

GRINDING WHEELS

Type 1

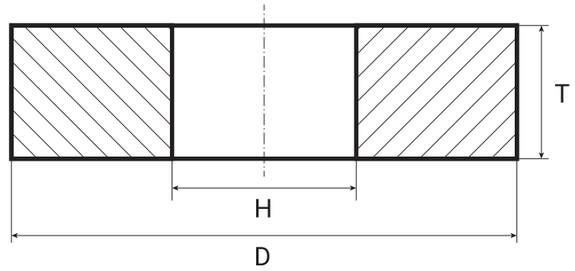
They are used for rough and precision grinding of various materials, such as steel, cast iron, aluminium, concrete, and ceramics. They are also used to sharpen cutting tools on stationary, pendulum, and manual machines.



TYPE	OUTER DIAMETER D, MM	HEIGHT T, MM	DIAMETER OF TOOL BORE H, MM	MARK OF GRINDING MATERIAL/ GRIT, HARDNESS
1	125, 150, 175, 200	20, 25, 32	32	14A, 54C / F46-F80, H-Q
	250	20, 25, 32, 40, 63	32, 76	
	300	32, 40	76, 127	
	350	40, 50, 100	127, 203	
	400, 450	32, 40, 50, 63, 80	127, 203	
	500	50, 63, 80, 100, 125, 150, 200	203, 305	
	600	50, 63, 75, 80, 100, 125, 150, 200	305	
	750, 900	30, 32, 40, 50, 63, 80, 100	305	

Type 2

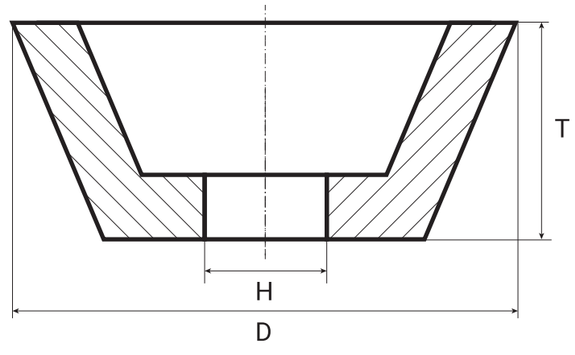
They are used for flat end grinding of metal, concrete and ceramic surfaces.



TYPE	OUTER DIAMETER D, MM	HEIGHT T, MM	DIAMETER OF TOOL BORE H, MM	MARK OF GRINDING MATERIAL/GRIT, HARDNESS
2	450	150	250	14A, 54C / F46-F80, H-O
	500	150	380	
	685	150	580	

Type 11

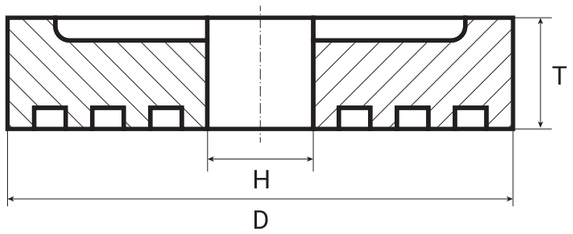
They are used for flat-face grinding, sharpening hardened steel bands and disc saws, and rough sharpening combined harvester knives and other agricultural equipment.




ZAPORIZHZHIA
ABRASIVE PLANT
EN 12413 • TYPE 1
ВИРОБНИК:
вул. Олексія Поради, 44,
м. Запоріжжя, Україна,
69104
GRINDING WHEEL
ZAPORIZHZHIA
ABRASIVE PLANT
EN 12413 • BF • F22 • R • TYPE 1
150x25x32 14A
6400 • 50 m/s
GRINDING WHEEL
MADE IN UKRAINE
02/2025
21223-25

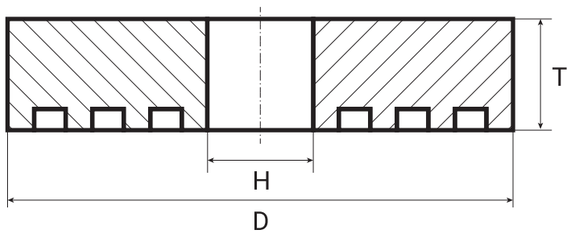
TYPE	OUTER DIAMETER D, MM	HEIGHT T, MM	DIAMETER OF TOOL BORE H, MM	MARK OF GRINDING MATERIAL/GRIT, HARDNESS
11	125, 150	50	32	14A/F40-F80, K-Q

GRINDING WHEELS FOR FACE GRINDING



40(PNR) with pressed on fasteners, corrugated

• 40 (PNR) — Used for flat face grinding, for example, for restoration of concrete surfaces and sharpening of knives of tobacco cutting machines.



36(PN) with pressed on fasteners

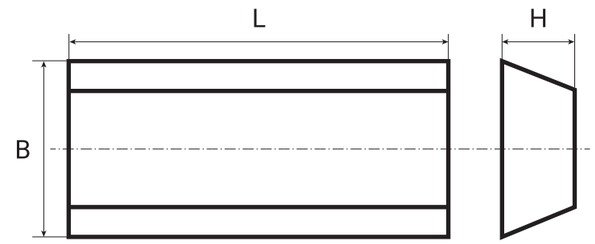
• 36 (PN) — For flat face grinding, widely used in the bearing and railway industries.

TYPE	OUTER DIAMETER D, MM	HEIGHT T, MM	DIAMETER OF TOOL BORE H, MM	MARK OF GRINDING MATERIAL/GRIT, HARDNESS
36	600	75	305	14A, 54C / F46-F150, J-Q
	750	70	25	
		75	305	
40	750	70	25	
		45	350	

GRINDING SEGMENTS

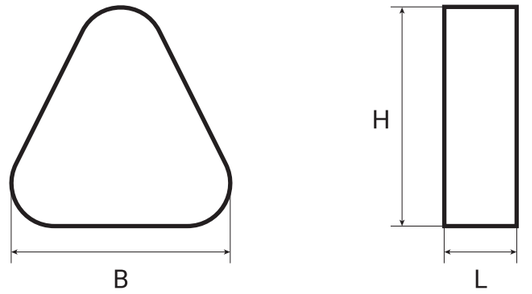
Type 5C

Type 5C – used for flat grinding of steels of various brands and hardnesses.



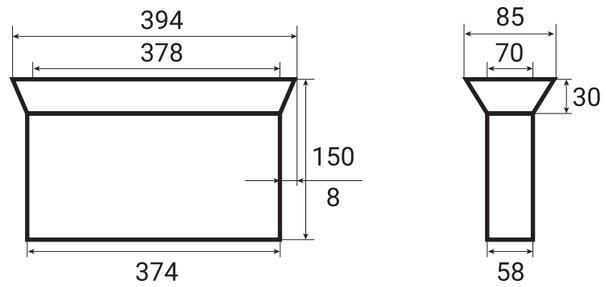
Type 6C

Type 6C - used for grinding mosaic and concrete floors.



Type 9C

They are used for rough grinding flat surfaces, especially in metalworking (scraping of rolled sheets).



TYPE	OUTER DIAMETER D, MM	HEIGHT T, MM	DIAMETER OF TOOL BORE H, MM	MARK OF GRINDING MATERIAL/ GRIT, HARDNESS
5C	100	40	150	14A / F46-F80, K-Q
6C	85	78	50	
9C	394	150	86	14A/F16-F22, O-Q

CUTTING-OFF AND GRINDING WHEELS ON BAKELITE BOND WITH REINFORCED COMPONENTS

Cutting and grinding wheels have an optimal combination of binder and grains for high wheel performance and fast, smooth cutting. They comply with the European safety standard EN 12413.

AREAS OF APPLICATION

- foundry production
- locksmith works
- shipbuilding
- construction industry
- aircraft construction
- automotive industry
- mechanical engineering
- metallurgical industry
- railway industry
- metalworking
- metal construction production
- welding industry
- domestic use

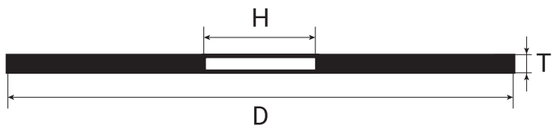
CUTTING-OFF WHEELS

Cutting-off wheels made of straight section - type 41 and with the depressed center - type 42. Wheels are designed to perform cutting and slotting operations of metal and non-metal materials with the hand tools and pneumatic tools, stationary and portable machines using.

THE CHOICE OF GRINDING MATERIAL, USED FOR THE CUTTING-OFF WHEELS MANUFACTURING UNDER THE DIFFERENT OPERATIONS

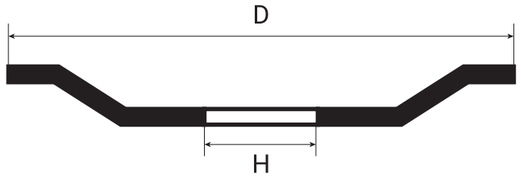
MARK OF ABRASIVE MATERIAL	GRIT	OPERATION
14A	F24	For multi-purpose cutting of steel workpieces, including casting and heavy in section, cast iron, etc.
	F30	For cutting of steel workpieces of high-tensile-strength, instrument, heat-resistant steels, cast iron. As well as heavy in section non-ferrous metal stock materials, etc.
	F36	For cutting of steel workpieces of high-tensile-strength, instrument, heat-resistant steels (including pipes, steel plate), cast iron and non-ferrous metal workpieces of small cross section.
	F46, F60	For cutting a thin metal sheet, thin-walled tubes and profiles, including stainless steel, instrument steel and aluminum.
54C	F24	For cutting workpieces from titanium and its alloys, asphalt, concrete, granite, marble, basalt.
	F30	For cutting parts and fragments of concrete and pumice compression, granite, ceramics, porcelain, tile, slate, ceramic pipes, fireclay and building bricks.
	F36	For cutting operations of small cross section workpieces of granite, technical ceramics, electrotechnical porcelain, tile, slate, ceramic pipes, special glass, polymeric materials.
	F46	For precision cutting of ceramic and the other tiles, glass products, plastic materials, etc.

Type 41



USED EQUIPMENT	D, MM	T, MM	H, MM	TYPE ABRASIVE	GRAIN SIZE	HARDNESS	MAXIMUM OPERATING SPEED, M/S
Group of processed materials			STEEL				
Portable electric or pneumatic tool	115	1,0; 1,2; 1,6; 2,0; 2,5; 3,0	22,23	14A	F24, F36, F46, F60	SI 37...43	80
	125	1,0; 1,2; 1,6; 2,0; 2,5; 3,0	22,23				80
	150	1,2; 1,6; 2,0; 2,5; 3,0	22,23				80
	180	1,6; 2,0; 2,5; 3,0	22,23				80
	230	1,6; 2,0; 2,5; 3,0	22,23				80
	300	3,0; 3,5; 4,0	32				80
Stationary or portable machines	350	2,5; 2,8; 3,0; 3,5; 4,0	25,4	14A	F24	SI 37...43	80
	350	3; 3,5; 4,0	32				80
	400	3,0; 3,5; 4,0	25,4; 32				80, 100
	500	5,0	32				80
Group of processed materials			STONE				
Portable electric or pneumatic tool	115	2,5; 3,0	22,23	54C	F24	SI 37...43	80
	125	2,5; 3,0	22,23				80
	150	2,5; 3,0	22,23				80
	180	2,5; 3,0	22,23				80
	230	2,5; 3,0	22,23				80
Stationary or portable machines	300	3,0	32				80
	400	3,0; 4,0	32				80
	500	5,0	32				80

Type 42



USED EQUIPMENT	D, MM	T, MM	H, MM	TYPE ABRASIVE	GRAIN SIZE	HARDNESS	MAXIMUM OPERATING SPEED, M/S
Group of processed materials - STEEL							
Portable electric or pneumatic tool	115	3,0	22,23	14A	F24	SI 37...43	80
	125	3,0	22,23				80
	180	3,0	22,23				80
	230	3,0	22,23				80

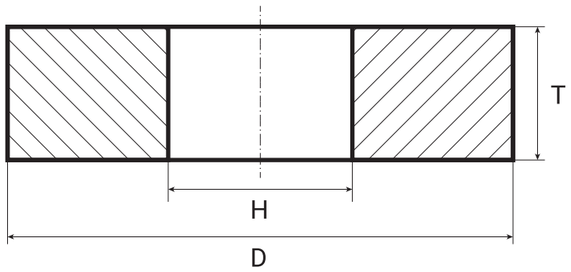

ZAPORIZHZHIA
ABRASIVE PLANT
КРУГ
ВІДРІЗНИЙ
CUT-OFF
WHEEL
SMART
125x1,6x22,23 mm
2,0x22,23 mm

GRINDING WHEELS

Grinding wheels are manufactured of straight profile - type 1 and with depressed center - type 27.

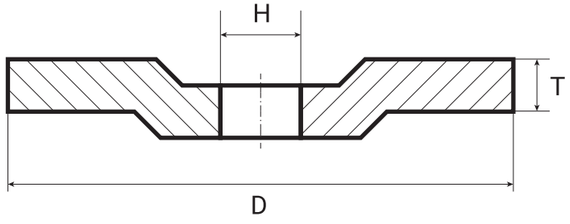
Wheels are used to perform the metallic materials stripping, using portable electric and pneumatic tools, stationary and portable machines.

Type 1

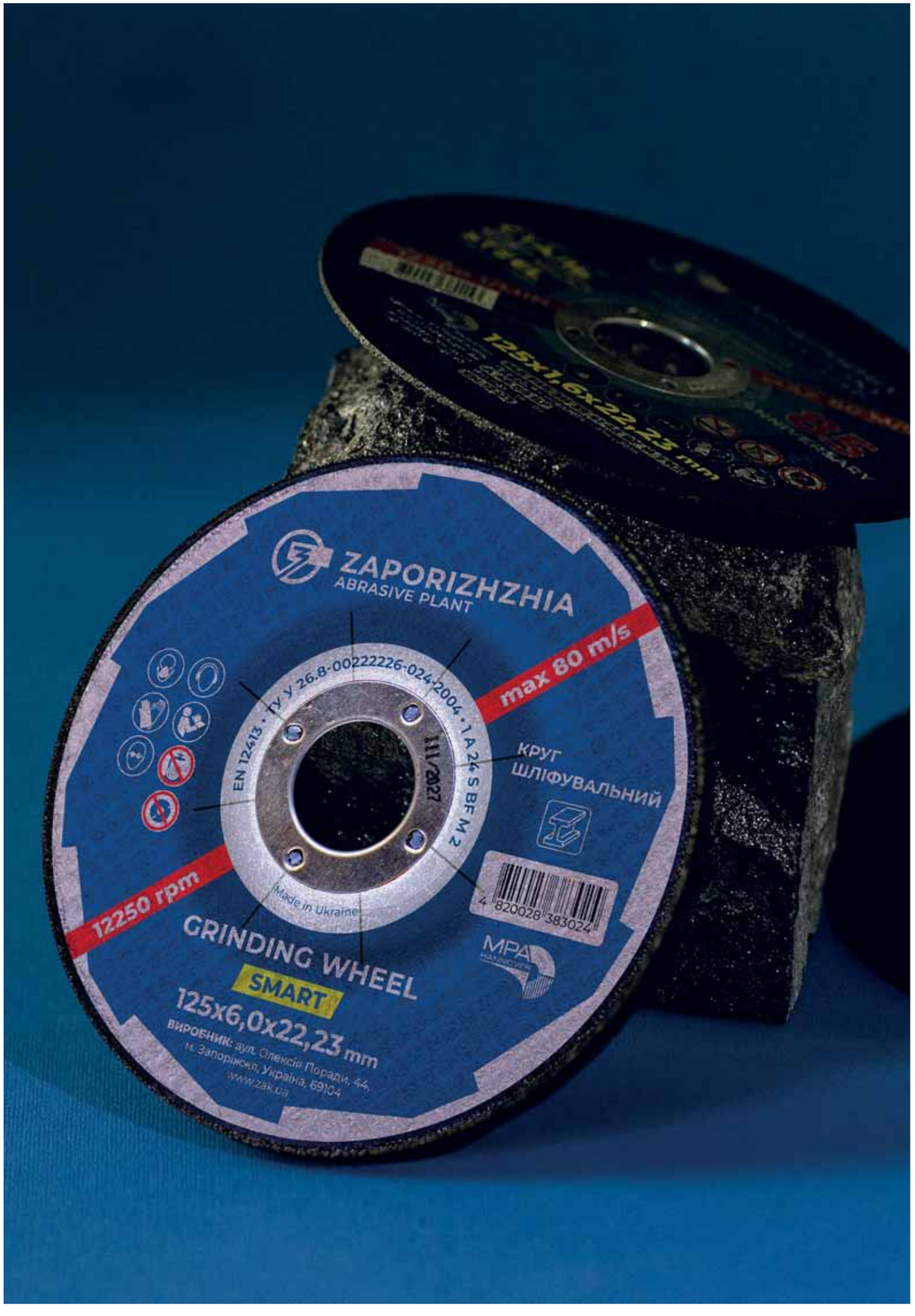


USED EQUIPMENT	D, MM	T, MM	H, MM	TYPE ABRASIVE	GRAIN SIZE	HARDNESS	MAXIMUM OPERATING SPEED, M/S
Group of processed materials - STEEL							
Portable electric or pneumatic tool	115	6,0; 6,4; 8,0	22,23	14A	F24	SI 37...43	80
	125	6,0; 8,0	22,23				80
	150	6,0	22,23				80
	180	6,0; 8,0	22,23				80
	230	6,0; 8,0	22,23				80

Type 27



USED EQUIPMENT	D, MM	T, MM	H, MM	TYPE ABRASIVE	GRAIN SIZE	HARDNESS	MAXIMUM OPERATING SPEED, M/S
Group of processed materials - STEEL							
Portable electric or pneumatic tool	115	6,0; 6,4; 8,0	22,23	14A	F24, F30	SI 37...43	80
	125	6,0; 6,4; 8,0	22,23				80
	150	6,0	22,23				80
	180	6,0; 6,4; 8,0	22,23				80
	230	6,0; 6,4; 8,0	22,23				80



PRIVATE LABEL

Zaporizhzhia Abrasive Plant has been cooperating with customers within the framework of contract production for more than ten years.

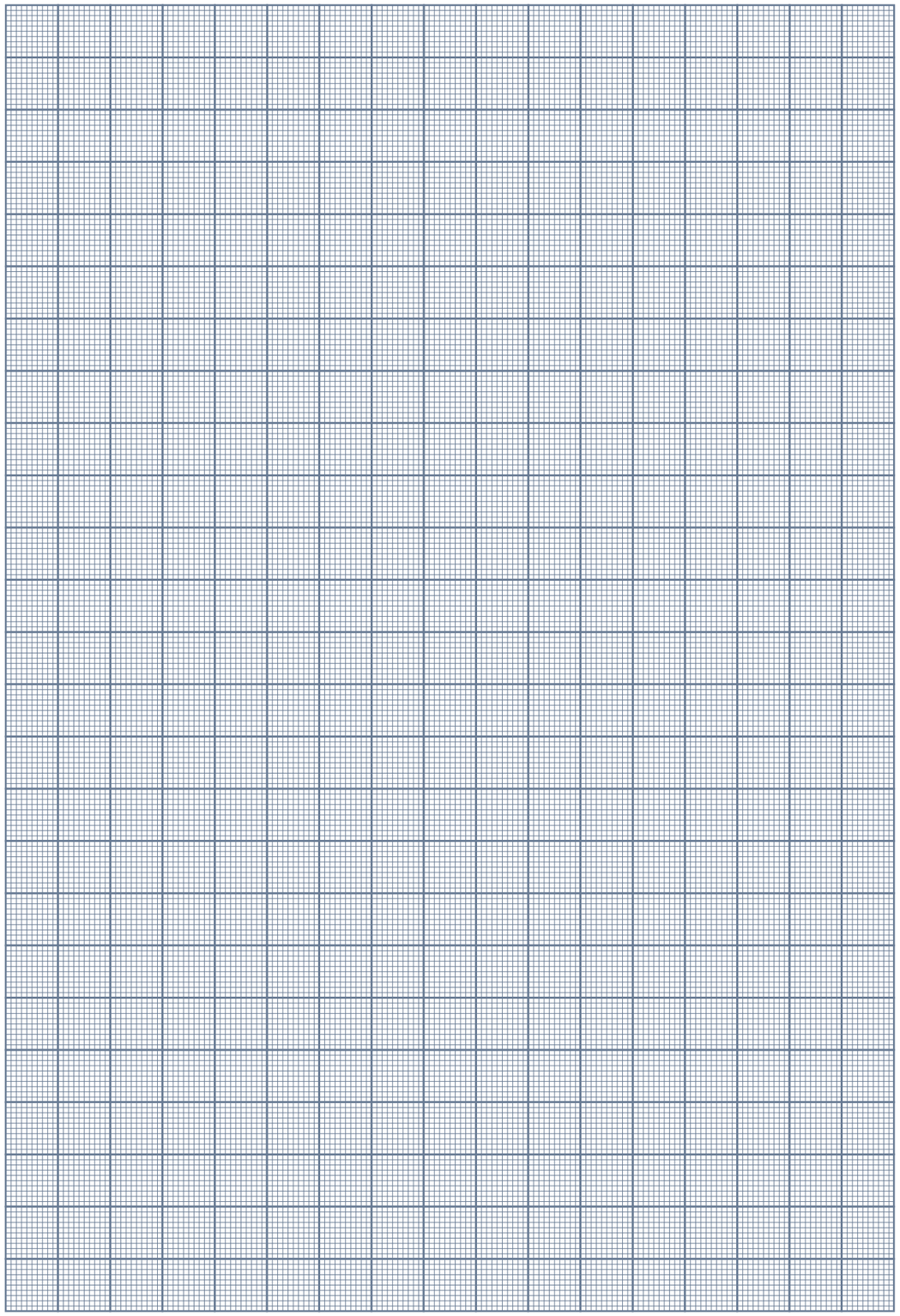
The contract production of manufacture provides a complete production cycle, starting from the development of a unique formulation to the mass production of circles of any size. Our enterprise has modern equipment, advanced technologies and qualified personnel, which allows us to guarantee the high quality of abrasive tools.

We produce:

- Cutting and grinding tool on a bakelite bond
- Grinding tool on a ceramic bond

Advantages of working for Private Label from Zaporizhabrasive

- **EXPERIENCE:** Almost 70 years of abrasive tool production
- **FULL PRODUCTION CYCLE:** From recipe development to mass production
- **INDIVIDUAL APPROACH:** We implement your ideas and concepts, flexible terms of payment and delivery
- **QUALITY STANDARDS:** Our products meet international quality and safety standards: ISO 9001, MPA Hannover certificates
- **LAUNCH STAGES:** From briefing to delivery – quality control at each stage



Zaporizhzhia Abrasive Plant is the only manufacturer of grinding materials in Ukraine and one of the largest manufacturers of abrasives in Eastern Europe.

- The company was founded in 1939
- 20 million cutting-off wheels per year
- ISO 9001 certificate, MPA Hannover
- Warehouse stock of finished products for the needs of the client
- Delivery of samples of our products to you if necessary
- Arranging a meeting for a brief discussion/presentation of our products and capabilities

Our plant is a full member of Silicon Carbide Manufacturers Association (SiCMa) and FEPA.

ZAPORIZHZHIA ABRASIVE PLANT PJSC
OLEKSIYA PORADY STR, 44,
ZAPORIZHZHIA, 69014, UKRAINE

WWW.ZAK.UA

UKRAINE, 2024