

ABRASIVE TOOLS

Catalogue
2026

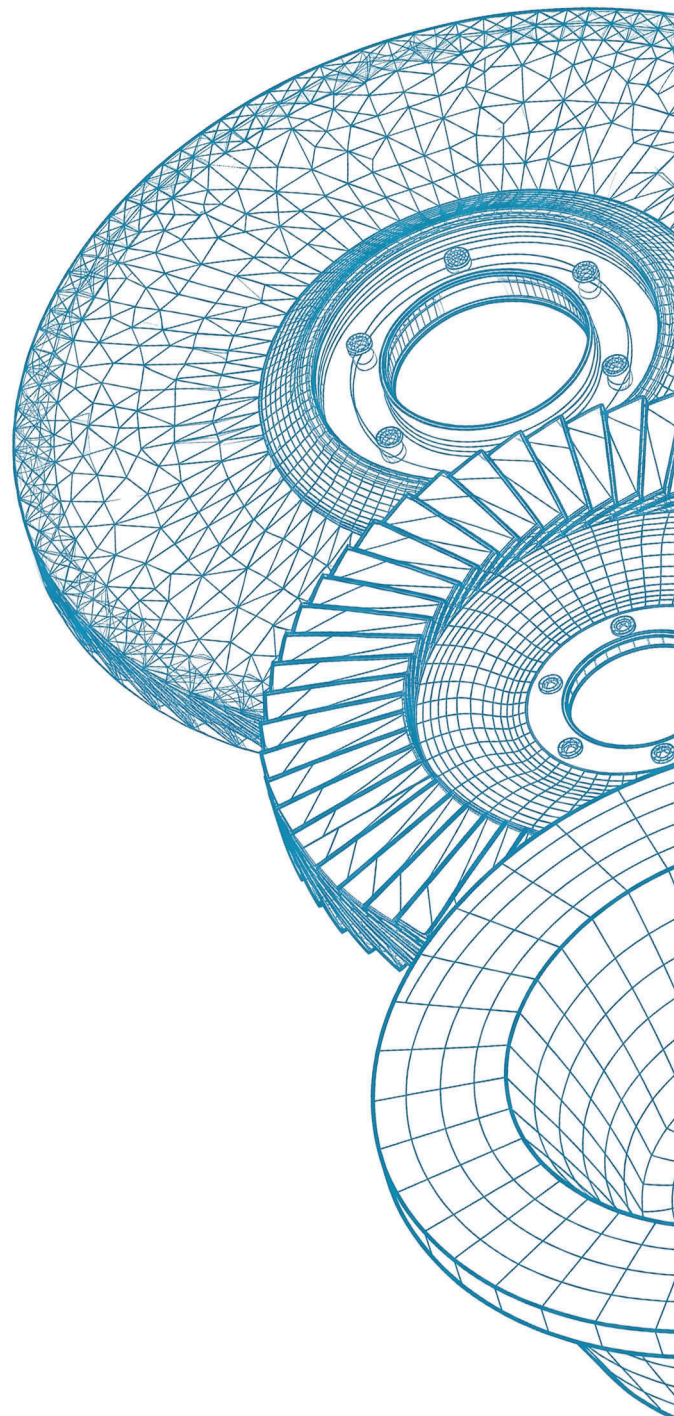
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TOOLS CATALOGUE

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85+

years of experience

Zaporizhzhia Abrasive Plant

is the only manufacturer of abrasive materials in Ukraine and one of the largest producers of abrasives in Eastern Europe.

Founded in 1939, the company has built a strong reputation as a reliable supplier of high-quality abrasive products for customers worldwide.

Based in Zaporizhzhia, Ukraine, we produce a broad range of abrasive materials – brown fused alumina, black silicon carbide, boron nitride, and boron carbide. Our abrasive tools portfolio includes sharpening and dressing stones, cut-off and grinding wheels, available with resinoid and vitrified bonds, and in a wide variety of types and sizes.

20

million cut-off wheels
per year

1,200+

employees



All products are manufactured using advanced technologies and undergo strict quality control to ensure compliance with the highest international standards.

1,500+

abrasive tool
types

Export to **20+**
countries

We serve our customers across multiple industries, including automotive, aerospace, construction, metallurgy, metalworking, and defense.

30+
private label programs

600
tons of resin-bonded grinding tools per year

Zaporizhzhia Abrasive Plant is recognized for its flexibility and ability to tailor products to specific customer and market requirements. We export our products to more than 20 countries, including Germany, the USA, France, Italy, Spain, Switzerland, the Czech Republic, Poland, Lithuania, Slovenia and Turkey.

450
tons of vitrified bonded tools per year

Zaporizhzhia Abrasive Plant is a full member of FEPA and SiCMA, reinforcing our commitment to safety, quality, and international industry standards.

40 000
tons per year

As a producer of brown fused alumina – the core raw material for abrasive tools – we maintain full control over quality, supply, and cost. This allows us to offer our clients greater production flexibility and consistently competitive pricing.



Quality Assurance

Full control over the production process – from raw materials to final inspection – ensures reliability and consistent quality.

Our products meet the highest European standards and are certified according to ISO 9001:2015, EN 12413, and MPA Hannover.



Contact Information

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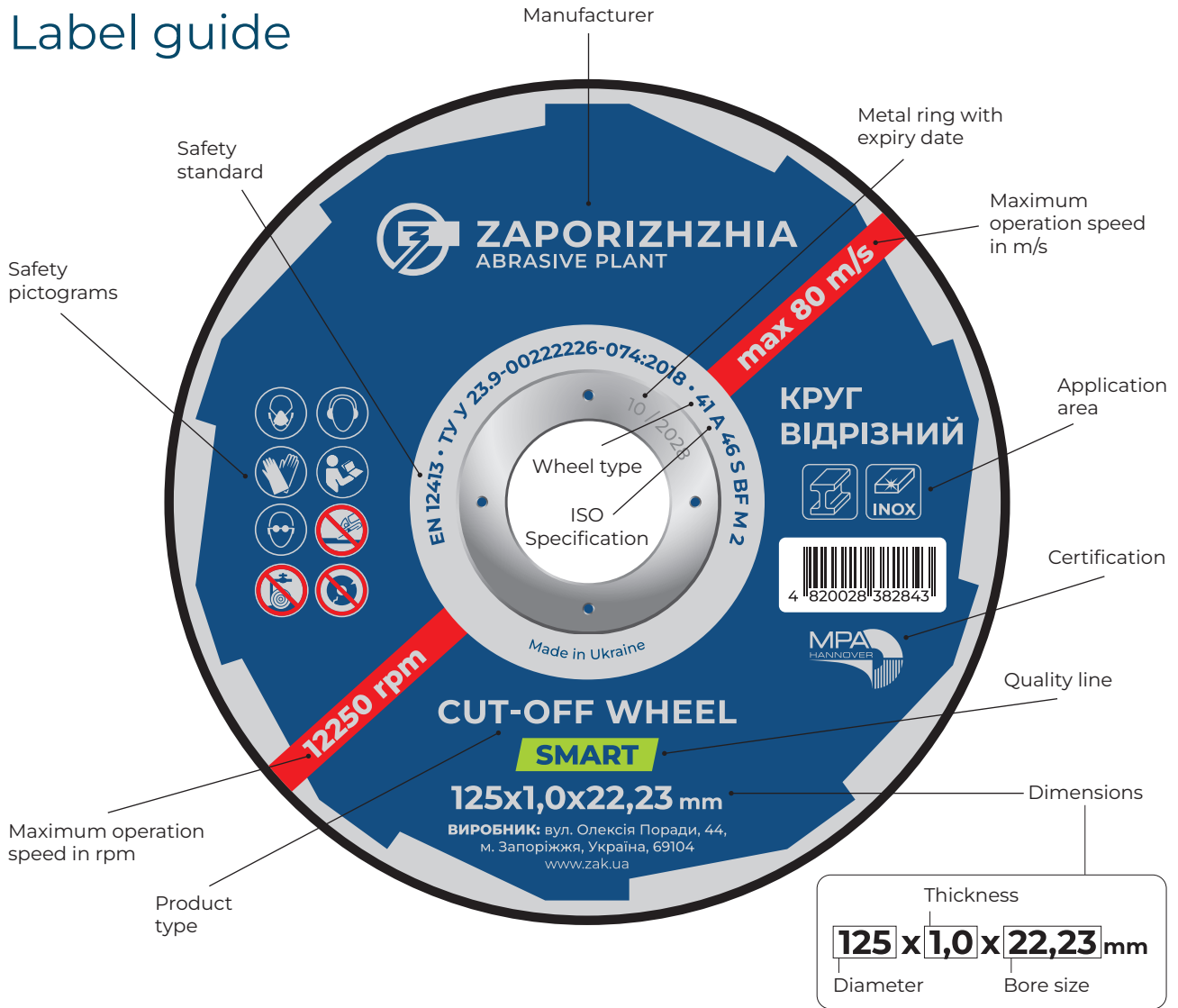
Website: www.zak.ua



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Label guide

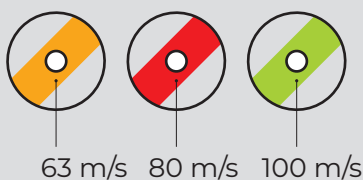


Operating speed

Before mounting the wheel, always ensure that the machine's nominal speed (as indicated on the nameplate) does not exceed the maximum operating speed marked on the wheel.

Maximum operating speed	Cutting wheel diameter (mm)									
	115	125	150	180	230	300	350	400	450	500
80 m/s	13 300	12 200	10 200	8 500	6 600	5 100	4 400	3 800	3 400	3 100
100 m/s	16 650	16 600	12 700	10 600	8 300	6 400	5 400	4 700	4 250	3 850
rpm										

Maximum operation speed



ISO Specification

- A** Abrasive Material
- 46** Grit size
- S** Hardness
- BF** Bond

Standards and Certification

EN 12413 Our products comply with the European safety standard and undergo mandatory testing.

MPA HANNOVER Certification confirming the high quality and safety of our tools.

Grit size

The grit size of the abrasive material determines the material removal rate and the quality of the resulting surface. Coarser grits provide faster stock removal and are suitable for more demanding grinding or cutting operations, but they produce a rougher surface finish and larger burrs. Finer grits, by contrast, create smoother surfaces and cleaner edges, although they require longer processing time and are less suitable for heavy stock removal.

coarse	medium	fine
12 to 30	36 to 54	60 to 120

Hardness

The hardness of an abrasive tool describes how strongly the abrasive grains are held in the bond. A softer bond releases worn and overheated grains more easily, keeping the tool sharp and helping to reduce heat generation on the workpiece. A harder bond holds the grains for longer and provides better form stability and durability, especially under higher mechanical loads.

soft	medium	hard
M to Q	R to T	U to Z

Bond

The bond type is selected according to the intended application of the abrasive tool. Cutting operations and grinding with handheld power tools require a tough and durable resin-based bond, often reinforced with glass fibre mesh. For stationary grinding operations where precision and surface quality are key, a vitrified ceramic bond is generally the preferred choice.

- B** resin bond
- BF** resin bond with fibre reinforcement
- V** ceramic bond

Through our technical expertise and production experience, we are able to combine and adjust all key components of an abrasive tool to provide users with the right solution for their application, not a compromise.

Abrasive materials



A
Brown fused aluminium oxide



ZK
Zirconia alumina



C
Silicon carbide

Symbols

Material



Steel



Stone



INOX



Rail



Non ferrous metal

Machines



Angle grinder

Safety



Use mask



Wet grinding is not permitted



Use goggles



Only permitted for wet grinding



Use hand protection



Read the user manual before use



Use ear protectors



Do not use damaged wheels



Do not use for side grinding



ZAPORIZHZHIA
ABRASIVE PLANT

max 80 m/s

КРУГ
ВІДРІЗНИЙ



EN 12413 • ТУ У 23.9-00222226-074:2018 • 41 A 60 S BFM 2



Made in Ukraine

12250 rpm

CUT-OFF WHEEL

SMART

125x1,0x22,23 mm

ВИРОБНИК: вул. Олексія Поради, 44,
м. Запоріжжя, Україна, 69104
www.zak.ua

CUT-OFF WHEEL

Cut-off wheels by Zaporizhzhia Abrasive Plant combine advanced engineering, strict quality control, and decades of manufacturing expertise.

Our products deliver a quality and performance level in line with the mid-tier segment of leading European manufacturers.

Cut-off wheels are available in two types: **Type 41** (flat) and **Type 42** (depressed centre), designed for cutting and slotting operations.

Our cut-off wheels provide:

- high cutting speed with reduced thermal load
- smooth, precise cutting performance
- extended tool life
- stability and reliability in operation
- robust solution for professional and industrial use

T41

Flat cutting wheel



D, mm	T, mm	H, mm	Specification	Pack contains	Product number
115	1	22.23	A 60 S BF	10	321285-990019
	1.6	22.23	A 40 S BF	10	321285-990021
	2.5	22.23	A 30 S BF	10	321285-990008
	3	22.23	A 30 S BF	10	321285-990033
125	1	22.23	A 60 S BF	10	321285-990026
	1.6	22.23	A 40 S BF	10	321285-990024
	2.5	22.23	A 30 S BF	10	321285-990001
150	1.6	22.23	A 40 S BF	10	321385-990005
180	1.6	22.23	A 40 S BF	10	321285-990025
230	1.9	22.23	A 36 S BF	10	321285-990013
	2.5	22.23	A 30 S BF	10	321285-990005
	3	22.23	A 30 S BF	10	321285-990006

T42

Depressed centre cutting wheel



D, mm	T, mm	H, mm	Specification	Pack contains	Product number
115	2	22.23	A 36 S BF	10	321289-990019
	2.5	22.23	A 30 S BF	10	321289-990005
	3	22.23	A 30 S BF	10	321289-990008
125	2	22.23	A 36 S BF	10	321289-990011
	2.5	22.23	A 30 S BF	10	321289-990006
	3	22.23	A 30 S BF	10	321289-990001
150	2	22.23	A 36 S BF	10	321289-990012
	2.5	22.23	A 30 S BF	10	321289-990013
	3	22.23	A 30 S BF	10	321289-990014
180	2	22.23	A 36 S BF	10	321289-990015
	2.5	22.23	A 30 S BF	10	321289-990016
	3	22.23	A 30 S BF	10	321289-990007
230	1.9	22.23	A 36 S BF	10	321289-990017
	2.5	22.23	A 30 S BF	10	321289-990018
	3	22.23	A 30 S BF	10	321289-990010



GRINDING WHEELS

Grinding wheels by Zaporizhzhia Abrasive Plant are designed to deliver high material removal rates, consistent performance, and reliable operation in demanding grinding applications.

Grinding wheels are available in two main types: **Type 1** (straight) and **Type 27** (depressed centre), designed for grinding and surface preparation.

Our grinding wheels provide::

- efficient material removal with minimal effort
- high grinding speed and precision
- excellent performance on stainless steel and steel
- low heat generation during operation
- consistent quality and a high level of safety through regular testing

T27

Depressed centre grinding wheel



D, mm	T, mm	H, mm	Specification	Pack contains	Product number
125	6	22.23	A 24 S BF	5	321288-990011
150	6	22.23	A 24 S BF	5	321288-990037
180	6	22.23	A 24 S BF	5	321288-990014
230	6	22.23	A 24 S BF	5	321288-990017

T1

Straight grinding wheel



D, mm	T, mm	H, mm	Specification	Pack contains	Product number
125	6	22.23	A 24 S BF	5	321288-990002
150	6	22.23	A 24 S BF	5	321288-990036
180	6	22.23	A 24 S BF	5	321288-990005
230	6	22.23	A 24 S BF	5	321288-990008



FLAP DISCS

Flap discs by Zaporizhzhia Abrasive Plant are a versatile solution for grinding, surface preparation, and finishing across a wide range of materials.

Zaporizhzhia Abrasive Plant offers two types of flap discs – **Type 27** and **Type 29**. Each one is tailored to specific grinding tasks – from flat and edge grinding to weld processing and surface cleaning.

Our flap discs provide:

- significantly lower weight compared to conventional grinding wheels
- reduced vibration and noise during operation
- precise control of surface finish due to a wide range of grit sizes
- efficient cooling of the working area
- excellent performance on welds and curved surfaces thanks to their flexibility

Abrasive materials for flap discs



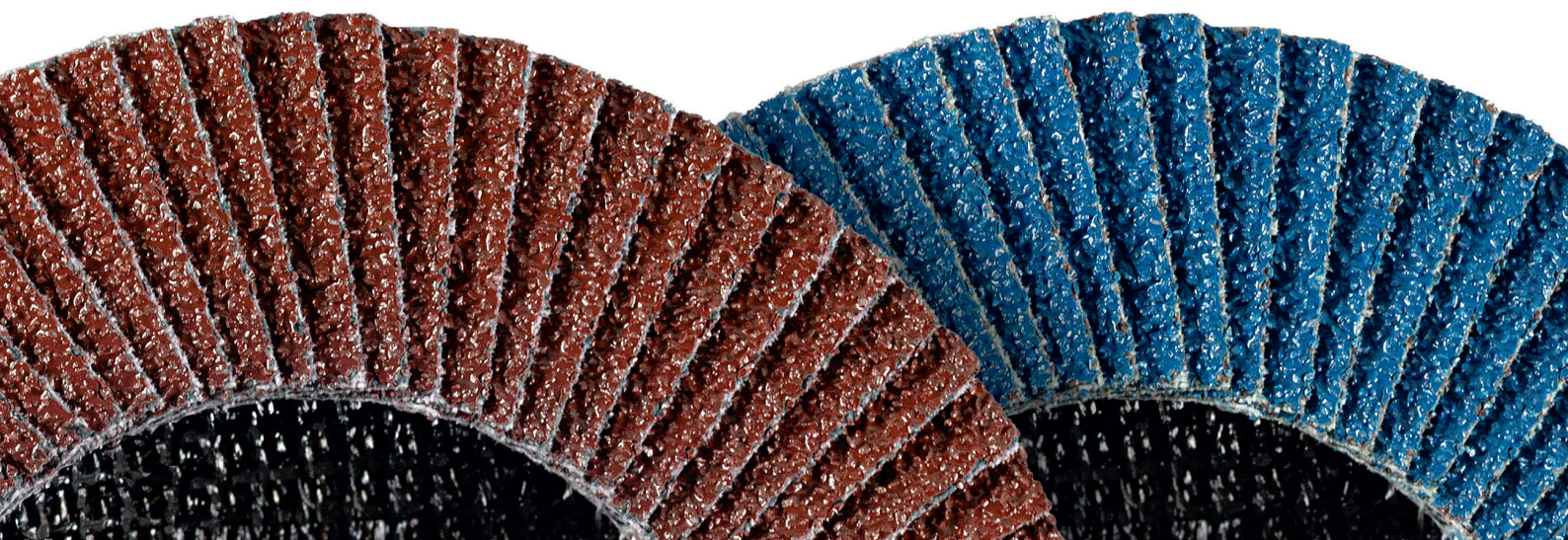
Aluminium Oxide

- universal cost-effective solution
- suitable for steel, non-ferrous metals, and wood, as well as for removing rust, paint, and coatings
- reliable performance, good cooling, and versatility in everyday applications



Zirconium

- professional-grade solution
- suitable for stainless and alloy steels, designed for higher loads and more demanding tasks
- high efficiency, longer service life, and precise control when working on welds and complex surfaces



T27

Depressed centre flap disc



D, mm	T, mm	Specification	Pack contains	Product number
125	22.23	A P40	10	685213-73000000040
	22.23	A P60	10	685213-73000000060
	22.23	A P80	10	685213-73000000080

T27

Depressed centre flap disc



D, mm	T, mm	Specification	Pack contains	Product number
125	22.23	ZK P40	10	685233-73990000040
	22.23	ZK P60	10	685233-73990000060
	22.23	ZK P80	10	685233-73990000080

T29

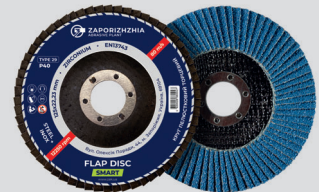
Depressed centre flap disc, convex shape



D, mm	T, mm	Specification	Pack contains	Product number
125	22.23	A P40	10	685213-93000000040
	22.23	A P60	10	685213-93000000060
	22.23	A P80	10	685213-93000000080
	22.23	A P100	10	685214-93000000100
	22.23	A P120	10	685214-93000000120

T29

Depressed centre flap disc, convex shape



D, mm	T, mm	Specification	Pack contains	Product number
125	22.23	ZK P40	10	685233-93990000040
	22.23	ZK P60	10	685233-93990000060
	22.23	ZK P80	10	685233-93990000080



SHARPENING STONES

Sharpening stones by Zaporizhzhia Abrasive Plant are reliable and practical solutions for manual sharpening and surface finishing of a wide range of cutting tools. Combining durability, efficiency, and ease of use, they are designed for both professional and everyday applications.

The product range includes:

Double Layer Sharpening Stone

Made of brown fused aluminium oxide, this stone features two working sides with different grit sizes, allowing both fast material removal and precise edge finishing. It is ideal for sharpening knives, garden tools, and various cutting instruments.

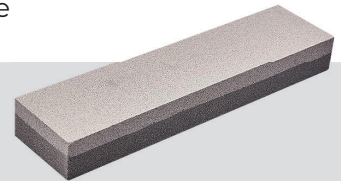
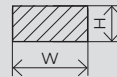
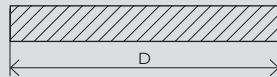
Scythe Stone

Designed for sharpening scythes, sickles, knives, and other hand tools with a curved blade. This universal stone is also suitable for surface cleaning and processing of steel, cast iron and cast steel products.

Our sharpening stones provide:

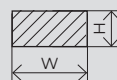
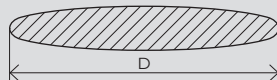
- efficient and controlled manual sharpening
- long service life and high wear resistance
- versatility across different tool types and materials
- stable performance in everyday and professional use

Double Layer Sharpening Stone



D, mm	W, mm	H, mm	Specification	Product number
200	40	20	A 120/240	430000-1821
	40	20	A 150/360	430000-1822

Scythe Stone



D, mm	W, mm	H, mm	Specification	Product number
225	40	18	A 90	430000-1813





CUP GRINDING WHEELS

Grinding cups by Zaporizhzhia Abrasive Plant are designed for demanding grinding applications where strength, durability, and thermal resistance are essential. Manufactured to ensure reliable performance under high loads, they provide efficient material removal and stable operation in industrial and maintenance environments.

Type 11 cup grinding wheels are primarily used for:

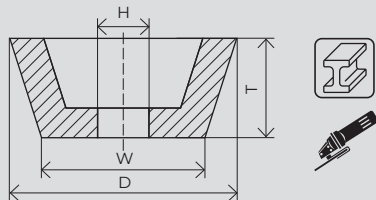
- flat-face grinding operations
- sharpening hardened steel band and circular saws
- rough sharpening of combine harvester knives
- maintenance of agricultural machinery components
- general-purpose grinding and reconditioning tasks

Our grinding cup wheels provide:

- high resistance to mechanical stress
- stable performance at elevated temperatures
- efficient stock removal and long service life
- reliable operation in heavy-duty applications
- precise and consistent grinding results

Type 11

Taper cup wheels



D, mm	W, mm	H, mm	T, mm	Specification	Product number
110	90	22.23	55	A 24 P BF	321274-10015
	90	22.23	55	A 60 P BF	321374-10039
	90	22.23	55	C 24 P BF	325274-2





Private Label

Zaporizhzhia Abrasive Plant has been successfully cooperating with national and international customers in contract manufacturing for over 20 years.

We offer a full-cycle production process – from the development of customized formulations to the mass production of abrasive tools in any required size.

Our plant is equipped with modern European machinery, advanced technologies, and supported by highly qualified personnel, ensuring consistently high product quality.

Our product range includes:

- Cutting and grinding tools on resin bond
- Grinding tools on ceramic bond

Advantages of our Private Label program

- Experience: Nearly 70 years in abrasive tool manufacturing
- Full-cycle production: From formulation development to mass production
- Individual approach: Implementation of your ideas and concepts for products and packaging
- Quality standards: Compliance with international standards, including ISO 9001, EN 12413 and MPA Hannover certification
- End-to-end process: From the initial briefing to final delivery, with quality control at every stage



Safety instructions for abrasive wheels

1. Avoid improper handling of the wheels.
2. Use only fibre-reinforced cutting wheels on power tools.
3. Store wheels in a dry place at room temperature.
4. Do not use damaged wheels.
5. Never exceed the maximum permitted speed specified on the wheel.
6. Use only wheels that can be mounted on the machine without applying force.
7. Never use damaged, dirty or uneven mounting flanges.
8. Do not overtighten the mounting nut or locking flange, as this may cause deformation.
9. All tools must be used only with the appropriate protective cover for grinding wheels.
10. Ensure that the workplace is well ventilated and use appropriate respiratory protection.
11. Do not apply lateral pressure to cutting wheels. Avoid bending the wheel.
12. Do not press the wheel on the edge or contact area to stop rotation. Always switch off the machine and allow the wheel to stop naturally.
13. Do not tilt or jam the wheel during cutting.
14. Avoid excessive pressure on the wheel, as this may cause the motor to slow down.
15. Do not drop handheld machines or lower them by the cable or airline. The weight of the machine may cause the grinding wheel to crack if placed with excessive force. This is a common cause of wheel breakage.
16. Operate the machine only in a stable position, maintaining full control and proper balance.



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