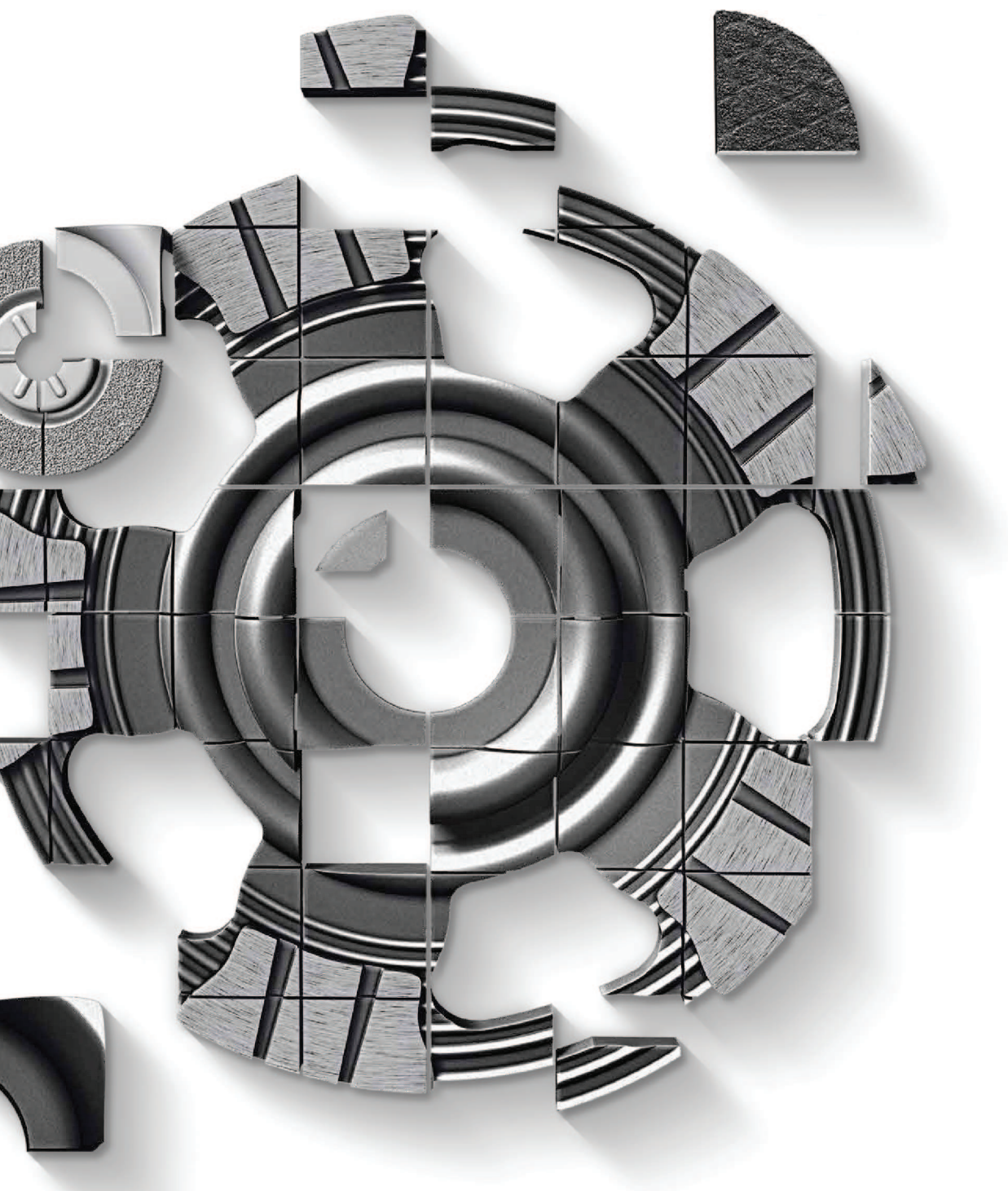


ROUGH GRINDING



6.1 Grinding discs	270–281
6.2 Diamond cup wheels	282
6.3 Tungsten carbide granulate-tipped tools	283

TECHNICAL INFORMATION AND PRODUCT INFORMATION

LUKAS grinding discs

SHELF LIFE

Resin-bonded grinding discs for handheld use may only be used up to three years after the manufacture date. The expiry date (month and year) is stamped on the metal ring, e.g. V07/2022.



LABELLING SYSTEM FOR RESIN-BONDED GRINDING DISCS

All of the important quality information about your LUKAS grinding disc is stated on the label: abrasive material, grit size, hardness and type of bond.

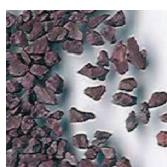
The following overview provides all the information concerning the abbreviations and markings.



A
Semi-friable aluminium oxide



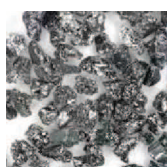
Z
Zirconia alumina



A
Ceramic-coated annealed aluminium oxide



CER
Ceramic grain



C
Silicon carbide

ABRASIVE

LUKAS offers you the abrasive you need for every application – tailored to your requirements and the materials you are working with.

Abrasive	
A	Aluminium oxide
C	Silicon carbide
Z	Zirconia alumina
CER	Ceramic grain

GRIT

From coarse to medium to fine, the grit size is indicated directly on the label.

coarse	medium	fine
12 to 24	36 to 54	60 to 120

HARDNESS

The hardness indicates the strength holding the abrasive grain bonded to the grinding disc. Letters are used to indicate the hardness grade.

soft	medium	hard
M	R	U
P	S	V
Q	T	Z

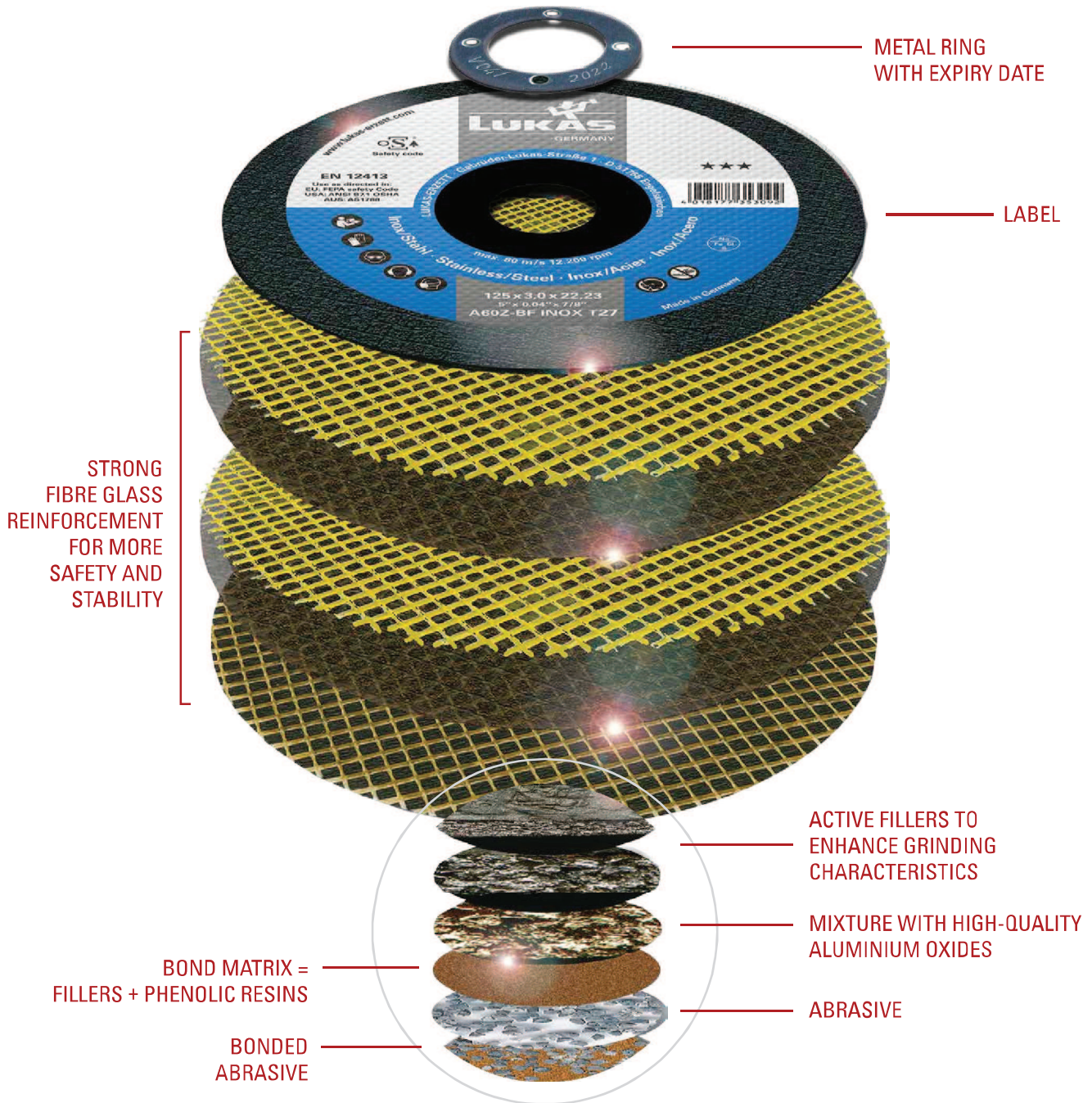
BOND

The bond holds the abrasive grain to the grinding disc. LUKAS grinding discs are available with the following bonds:

- **BA** = resin bond
- **BF** = fibre-reinforced resin bond

TECHNICAL INFORMATION

Construction and components of LUKAS grinding discs



OPERATING SPEED

LUKAS grinding discs are developed and tested for specified maximum operating speeds and grinding processes. Before fixing the grinding tool to the machine, always check that

the nominal speed of the machine (nameplate) is not higher than the maximum speed specified on the grinding disc.

Maximum operating speed	Grinding disc diameter (mm)										
	50	76	100	115	125	150	180	230	300	350	400
80 m/s	30,500	20,100	15,300	13,300	12,200	10,200	8,500	6,600	5,100	4,400	3,800
100 m/s	38,200	25,100	19,100	16,650	16,600	12,700	10,600	8,300	6,400	5,400	4,700
	rpm										

WORK SAFETY

Safely grinding with LUKAS tools

LUKAS makes a serious commitment to customers with respect to work safety and ergonomics. Our products are designed and manufactured according to the strictest quality standards to provide maximum customer value at minimum risk. We are a member of both the German Abrasives Association (VDS) and the Organisation for the Safety of Abrasives (oSa) and thus actively contribute to users' health and safety.

APPLIED STANDARDS

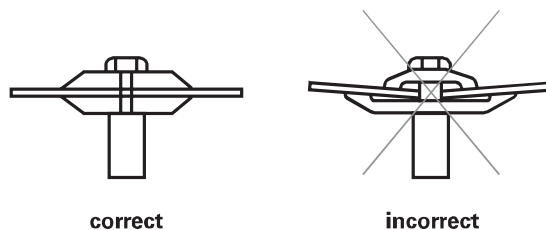
- Safety requirements for bonded abrasive products: EN 12413
- Safety requirements for superabrasive products: EN 13236

SAFETY INFORMATION

- **Avoid improper handling of the discs.** Use only fibre-reinforced grinding discs on power tools.
- Store discs **in a dry place at room temperature.**
- Don't **use damaged discs.**
- Never exceed the maximum permitted speed specified **on the disc.**
- Only use discs that can be mounted on the machine without requiring force.
- Never use **damaged, dirty or uneven mounting flanges.**
- Don't overtighten the mounting nut or locking flange, as this may lead to deformations.
- All tools may only be used with the appropriate **grinding disc protective cover.**
- Make sure that the **workplace is sufficiently ventilated** and wear appropriate **respiratory protection.**
- Avoid bending the disc.
- Don't press the disc on the edge or contact area in order to stop it from rotating. Always switch off the machine and allow the disc to spin freely until it stops.
- **Don't cant and seize** the disc **when** grinding.
- **Avoid applying excessive pressure** on the disc. It will cause the motor to slow down.
- **Don't drop handheld machines** or lower them to the floor by the cable or airline. The weight of the machine can cause the grinding disc to easily crack if it is put down with too much force. This is a common cause of disc breakage. When grinding with a depressed centre grinding disc, maintain an angle of more than 20° to the workpiece.
- Use the machine only in a position where you have full control and are well balanced.

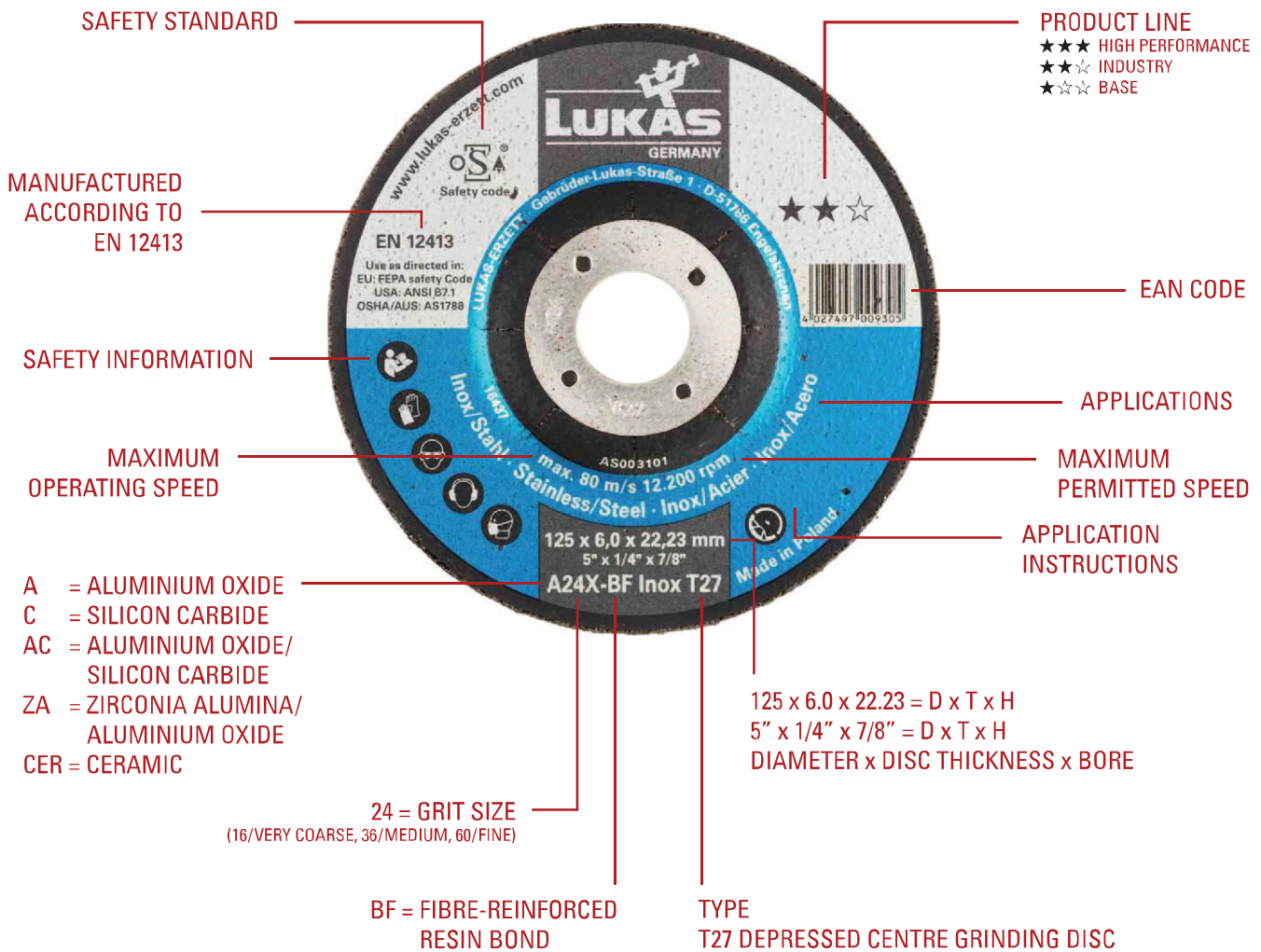
CLAMPING SYSTEM

The use of flanges with different diameters is not permitted. Both flanges between which the bonded abrasive is mounted must have the same outer diameter and similar contact areas (according to EN 60745-2-3:2007 and ANSI B.7.1).

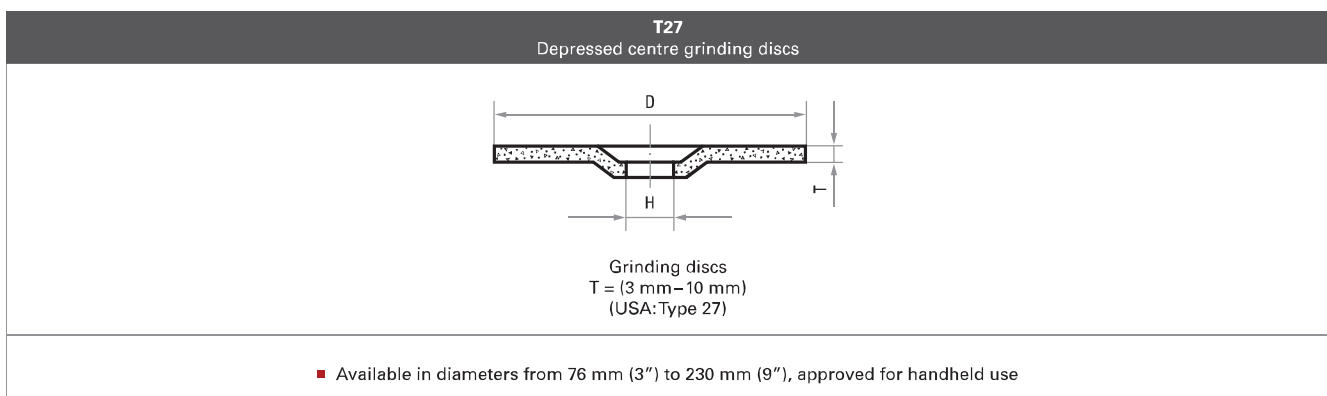


LABELLING

All important markings on the label

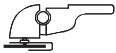








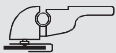





TYPES OF RESIN-BONDED GRINDING DISCS



AREA OF USE

Overview of types of LUKAS grinding discs

Type	Product line	Material				
		Inox/Steel	Steel	Aluminium	Stone/ Construction material	Cast material
Handheld grinding discs for angle grinders 	★★★	 Pages 275 and 276	 Page 278			
	★★☆	 Page 277	 Page 278	 Page 280	 Page 281	 Page 281
	★★☆		 Page 279			
Diamond cup wheels for angle grinders 	★★☆				 Page 282	
Tungsten carbide granulate-tipped disc for angle grinders 	★★☆				 Page 283	

THE PERFECT ALTERNATIVE TO THE GRINDING DISC: THE iQ-SERIES FLAP DISK FROM LUKAS!
GO TO **PAGES 134–151** AND TEST THEM NOW!

MAXIMUM PERFORMANCE AND COOL REMOVAL

EFFICIENTLY MACHINE EVEN THE HARDEST MATERIALS

The LUKAS grinding discs with ceramic grain are perfectly suited for highly productive machining of steels. Thanks to the fast but cool cutting, they can machine inox without any blue discoloration and have an exceptional tool life due to the self-sharpening effect. In addition, these require only little effort during use. The low applied grinding pressure also contributes to low operating temperatures.

EXTREME TOOL LIFE DUE TO SELF-SHARPENING EFFECT

The high-performance grinding discs consist of ceramic grain that constantly releases extremely fine particles in use. When

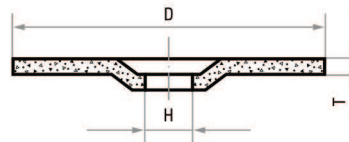
the particles break off due to wear, new, sharp abrasive particles are immediately exposed. Thanks to this self-sharpening effect, the grinding discs achieve outstanding tool lives.

AGGRESSIVE REMOVAL WITH LITTLE FINISHING WORK

Hard materials like Inox and steel can be machined with high productivity with the ceramic grain. In the process, the tool achieves an impressive surface quality for grinding discs – allowing you to get the desired finish quickly. Thanks to its long tool life based on the self-sharpening effect, the LUKAS ceramic grinding disc is also economical.



- extremely hard and sharp for an impressively long tool life
- energy optimised for the highest performance angle grinders
- little force required
- cool removal



Ceramic grinding disc **NEW**



★★★

Product number	Description	Quality	D mm	T mm	H mm	n _{max} rpm	Pack contains
AS008321V9802	T27 115x7.0	CER 30Q-BF Inox	115	7.0	22.23	13,300	25
AS008322V9802	T27 125x7.0	CER 30Q-BF Inox	125	7.0	22.23	12,200	25
AS008324V9802	T27 180x7.0	CER 30Q-BF Inox	180	7.0	22.23	8,500	25
AS008325V9802	T27 230x7.0	CER 30Q-BF Inox	230	7.0	22.23	6,600	25

Recommended for: ● Inox/Steel ● Steel ● Titanium



LUKAS GRINDING DISCS IN 3-STAR QUALITY

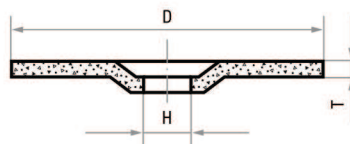
EXCELLENT QUALITY FOR TOP GRINDING PERFORMANCE

Thanks to innovative press technology and the highest quality raw materials, 3-star LUKAS grinding discs achieve the ultimate results. The minimum wear of 3-star quality noticeably reduces odours and dust, thus improving working conditions. Energy and ergonomically optimised for powerful machines, 3-star grinding discs make work quicker and easier. A high-strength fibreglass fabric guarantees high lateral stability and safety. Eco-friendly production combined with first-class raw materials, optimised formulas and the state-of-the-art production processes provide for high quality and a maximum storage time.

- maximum tool life and grinding performance with innovative bonding technology
- high maximum speed at a cool grinding temperature
- low odour and dust levels in daily use
- ergonomic work position and maximum tool life without use of excessive force
- maximum shelf life with high levels of stability in quality owing to top quality raw materials
- energy optimised for your high performance angle grinders
- environmentally friendly manufacturing process using up-to-date manufacturing processes and optimised formulas
- perfect for a wide variety of Inox and steel materials

ROUGH GRINDING

Grinding disc for machining stainless steel



- perfectly suited for grinding a wide variety of stainless steel and steel materials
- free of iron, chlorine and sulphur
- tested quality: high level of safety through regular testing
- precise removal with high speed
- low odour and dust levels in daily use
- allows for ergonomical working with little use of force

★★★

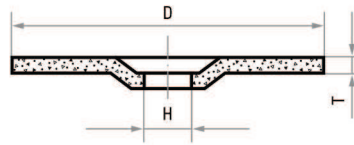
Product number	Description	Quality	D mm	T mm	H mm	n_{max} rpm	Pack contains
AS013491V9802	T27 115x7.0	A24U-BF Inox	115	7.0	22.23	13,300	10
AS013492V9802	T27 125x7.0	A24U-BF Inox	125	7.0	22.23	12,200	10
AS013496V9802	T27 230x7.0	A24U-BF Inox	230	7.0	22.23	6,600	10

Recommended for: ● Inox/Steel ● Steel ● Aluminium



Grinding disc for machining stainless steel

- perfectly suited for grinding a wide variety of stainless steel and steel materials
- free of iron, chlorine and sulphur
- tested quality: high level of safety through regular testing
- precise removal with high speed
- low odour and dust levels in daily use
- allows ergonomical working with little use of force



★★☆

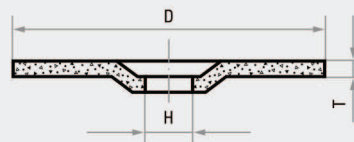
Product number	Description	Quality	D mm	T mm	H mm	n _{max} rpm	Pack contains
AS003100V9802	T27 115x6.0	A24X-BF Inox	115	6.0	22.23	13,300	10
AS003101V9802	T27 125x6.0	A24X-BF Inox	125	6.0	22.23	12,200	10
AS003103V9802	T27 180x6.0	A24X-BF Inox	180	6.0	22.23	8,500	10
AS003104V9802	T27 230x6.0	A24X-BF Inox	230	6.0	22.23	6,600	10

Recommended for: ● Inox/Steel ● Steel ● Aluminium



Grinding disc for machining stainless steel

- perfectly suited for grinding a wide variety of stainless steel and steel materials
- free of iron, chlorine and sulphur
- tested quality: high level of safety through regular testing
- precise removal with high speed
- low odour and dust levels in daily use
- allows for ergonomical working with little use of force



★★☆

Product number	Description	Quality	D mm	T mm	H mm	n _{max} rpm	Pack contains
AS002037V9802	T27 100x6.0	A24/30S-BF Inox	100	6.0	16.00	15,300	10
AS000105V980201	T27 115x6.0	A24/30S-BF Inox	115	6.0	22.23	13,300	10
AS000106V980201	T27 125x6.0	A24/30S-BF Inox	125	6.0	22.23	12,200	10
AS000107V9802	T27 150x6.0	A24/30S-BF Inox	150	6.0	22.23	10,200	10
AS000108V9802	T27 180x6.0	A24/30S-BF Inox	180	6.0	22.23	8,500	10
AS000109V9802	T27 230x6.0	A24/30S-BF Inox	230	6.0	22.23	6,600	10

Recommended for: ● Inox/Steel ● Steel

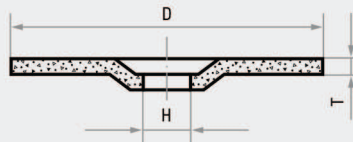
TWO WORK STEPS WITH ONE TOOL

CUTTING AND GRINDING WITHOUT CHANGING TOOLS: THE COOL JOBBER FROM LUKAS



PRACTICAL, PRECISE AND SAFE! DISCOVER THE LUKAS COOL JOBBER **ON PAGE 250**

Grinding disc for machining steel



- optimised for precise machining of steel
- tested quality: high level of safety through regular testing
- precise removal with high speed
- low odour and dust levels in daily use
- allows for ergonomical working with little use of force

★★★

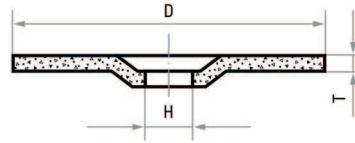
Product number	Description	Quality	D mm	T mm	H mm	n_{max} rpm	Pack contains
AS012451V9802	T27 115x7.0	A24X-BF Steel	115	7.0	22.23	13,300	10
AS012453V9802	T27 125x7.0	A24X-BF Steel	125	7.0	22.23	12,200	10
AS012466V9802	T27 180x7.0	A24X-BF Steel	180	7.0	22.23	8,500	10
AS012468V9802	T27 230x7.0	A24X-BF Steel	230	7.0	22.23	6,600	10

Recommended for: ● Steel



Grinding disc for machining steel

- cut steel with ease
- tested quality: high level of safety through regular testing
- precise removal with high speed
- low odour and dust levels in daily use
- allows for ergonomical working with little use of force



★★★

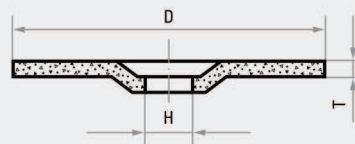
Product number	Description	Quality	D mm	T mm	H mm	n _{max} rpm	Pack contains
AS001679V9802	T27 115x6.0	A24/30T-BF Steel	115	6.0	22.23	13,300	10
AS001710V9802	T27 125x6.0	A24/30T-BF Steel	125	6.0	22.23	12,200	10
AS001811V9802	T27 230x6.0	A24/30T-BF Steel	230	6.0	22.23	6,600	10

Recommended for: ● Steel



Grinding disc for machining steel

- designed for easy machining of steel
- tested quality: high level of safety through regular testing
- precise removal with high speed
- low odour and dust levels in daily use
- allows for ergonomical working with little use of force



★★★

Product number	Description	Quality	D mm	T mm	H mm	n _{max} rpm	Pack contains
AS000667V9802	T27 115x6.0	A24/30S-BF Steel	115	6.0	22.23	13,300	10
AS000690V9802	T27 125x4.0	A24/30S-BF Steel	125	4.0	22.23	12,200	10
AS000692V9802	T27 125x6.0	A24/30S-BF Steel	125	6.0	22.23	12,200	10
AS000712V9802	T27 150x6.0	A24/30S-BF Steel	150	6.0	22.23	10,200	10
AS000737V9802	T27 180x7.0	A24/30S-BF Steel	180	7.0	22.23	8,500	10
AS000762V9802	T27 230x6.0	A24/30S-BF Steel	230	6.0	22.23	6,600	10

Recommended for: ● Steel

MACHINE SOFT LIGHT METALS TROUBLE-FREE

DESIGNED FOR PERFECTLY MACHINING ALUMINIUM

Aluminium and other non-ferrous metals are difficult to machine – especially because they are so soft. The LUKAS grinding disc for aluminium and non-ferrous metals machines light and non-ferrous metals without interruption.

GRINDING ALUMINIUM WITHOUT “SMEARING”

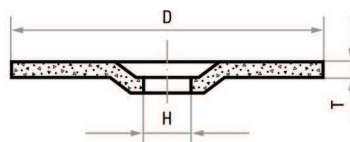
The major advantage of this grinding disc is that the "smearing" effect can be avoided. When machining pure aluminium and soft alloys, soft chips can stick to the aluminium edges if the tool is not designed specifically for this purpose. However, LUKAS grinding discs were developed and tested for aluminium. The special combination of abrasive grain and bonding agent is a reliable means to prevent this undesirable effect.

CAN BE USED ON STANDARD MACHINES

This tool can be used on standard angle grinders and is available in different sizes. This allows for light metals to be machined easily and above all with a high level of productivity.



NEW Grinding disc for machining non-ferrous metals



- for perfectly machining aluminium and non-ferrous metals
- no clogging or smearing
- tested quality: high level of safety through regular testing
- precise removal with high speed
- low odour and dust levels in daily use
- allows for economical working with little use of force

★★★

Product number	Description	Quality	D mm	T mm	H mm	n_{max} rpm	Pack contains
AS001708V9802	T27 125x7.0	A24N-BF Alu	125	7.0	22.23	12,200	10

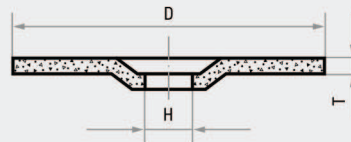
Recommended for: ● Aluminium

FLEXIBLY GRIND A WIDE RANGE OF BUILDING MATERIALS

ULTIMATE FLEXIBILITY FOR TRADESPEOPLE AND CONSTRUCTION WORKERS



- for universal use
- for use on construction sites
- preferable to diamond cutting discs thanks to its excellent value for money and high speed
- low odour and dust levels in daily use
- allows for ergonomical working with little use of force



Grinding disc for machining stone **NEW**



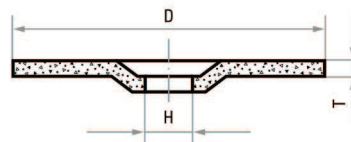
★★★

Product number	Description	Quality	D mm	T mm	H mm	n max rpm	Pack contains
AS115060V980201	T27 115x6.0	C24R-BF Stone	115	6.0	22.23	13,300	10
AS125060V980201	T27 125x6.0	C24R-BF Stone	125	6.0	22.23	12,200	10
AS000320V9802	T27 180x6.0	C24R-BF Stone	180	6.0	22.23	8,500	10
AS180080V980201	T27 180x8.0	C24R-BF Stone	180	8.0	22.23	8,500	10

Recommended for: ● Stone ● Cast material



- for quickly and reliably machining castings with inclusions and surface defects
- tested quality: high level of safety through regular testing
- precise removal with high speed
- low odour and dust levels in daily use
- allows for ergonomical working with little use of force



Grinding disc for machining cast material



★★★

Product number	Description	Quality	D mm	T mm	H mm	n max rpm	Pack contains
AS001711V9802	T27 125x6.0	ZA24R-BF Cast	125	6.0	22.23	12,200	10
AS001773V9802	T27 180x6.0	ZA24R-BF Cast	180	6.0	22.23	8,500	10
AS001812V980201	T27 230x6.0	ZA24R-BF Cast	230	6.0	22.23	6,600	10

Recommended for: ● Cast material