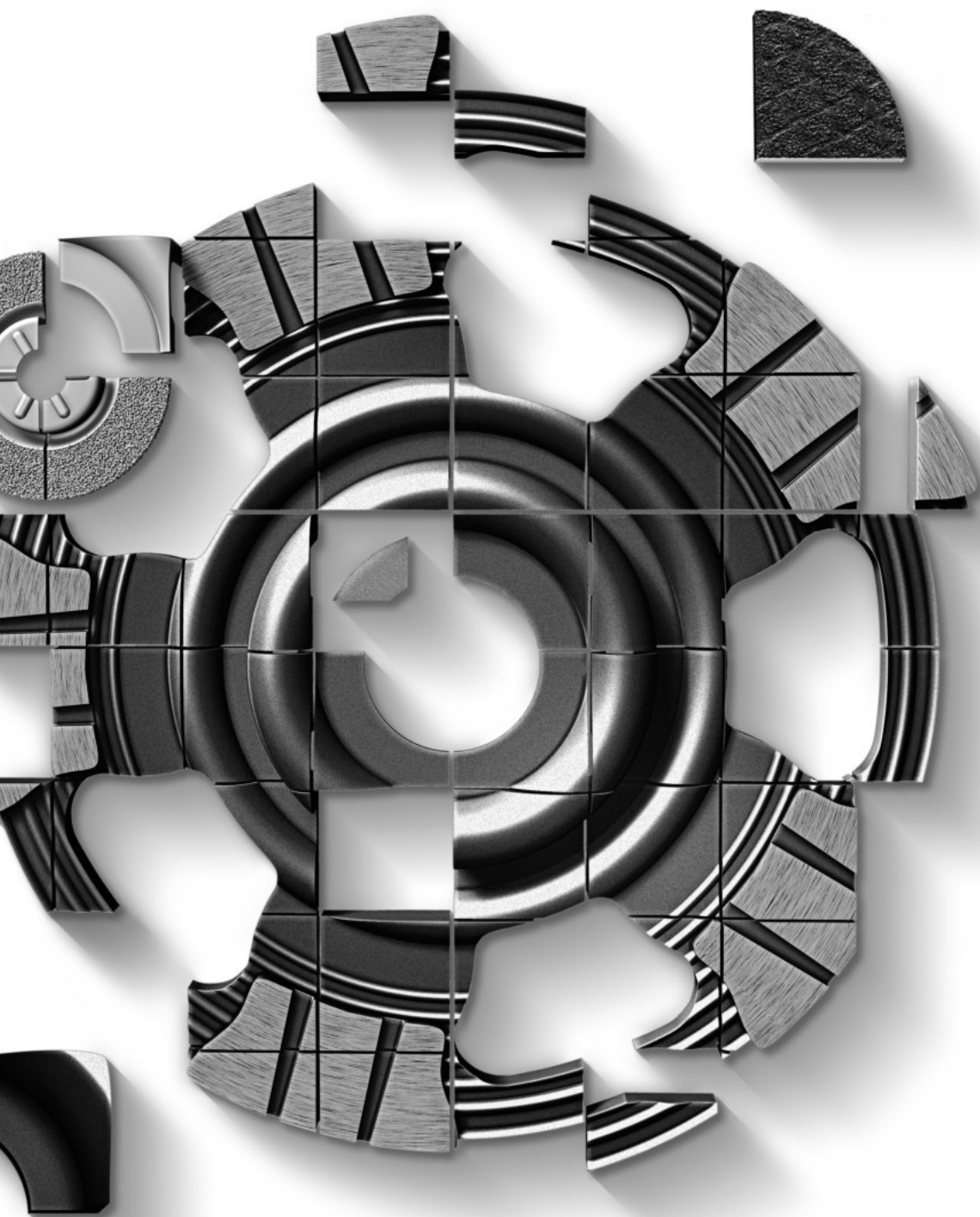


# ROUGH GRINDING



6.1 Grinding discs

1–10

TECHNICAL INFORMATION AND PRODUCT INFORMATION

LUKAS grinding discs

SHELF LIFE

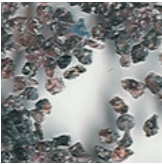
Resin-bonded grinding discs for handheld use may only be used up to three years after the manufacture date. The expiry date (month and year) is stamped on the metal ring, e.g. V07/2022.



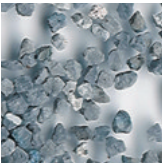
LABELLING SYSTEM FOR RESIN-BONDED GRINDING DISCS

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.

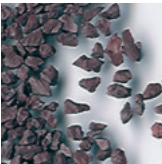
The following overview provides all the information concerning the abbreviations and markings.



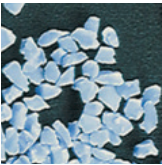
A  
Semi-friable  
aluminium oxide



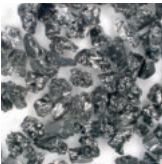
Z  
Zirconia alumina



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

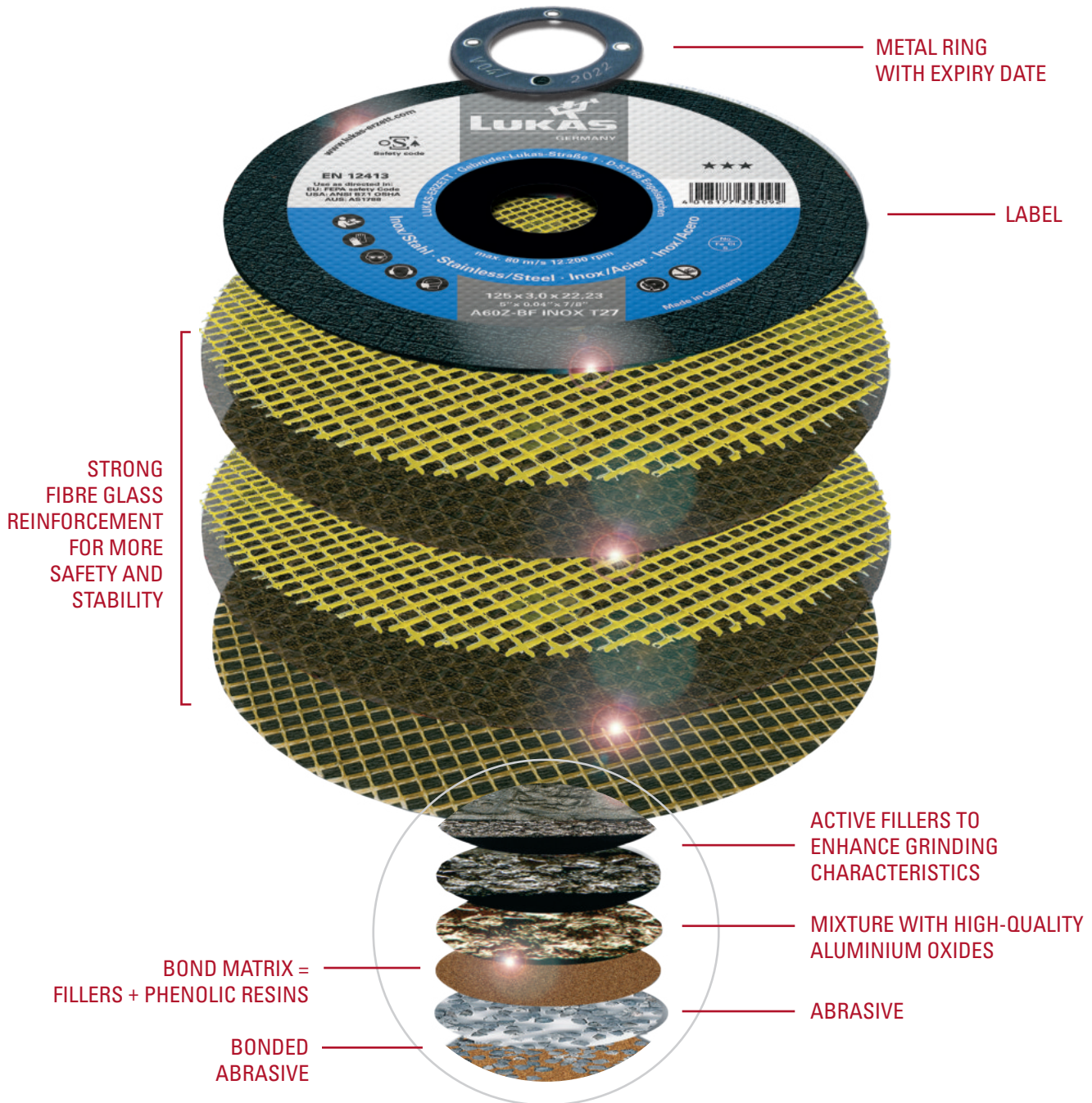
BOND

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

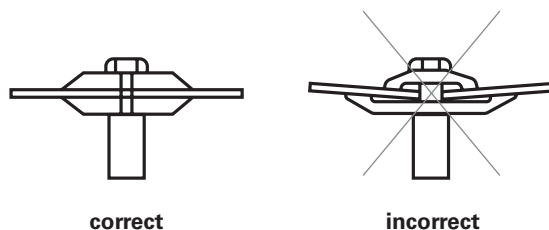
- Safety requirements for bonded abrasive products: EN 12413
- Safety requirements for superabrasive products: EN 13236

## 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.







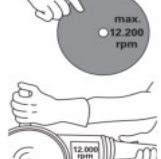
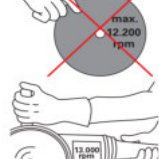




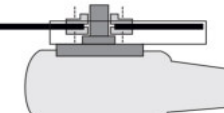







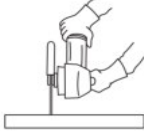







## CLAMPING SYSTEM

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).



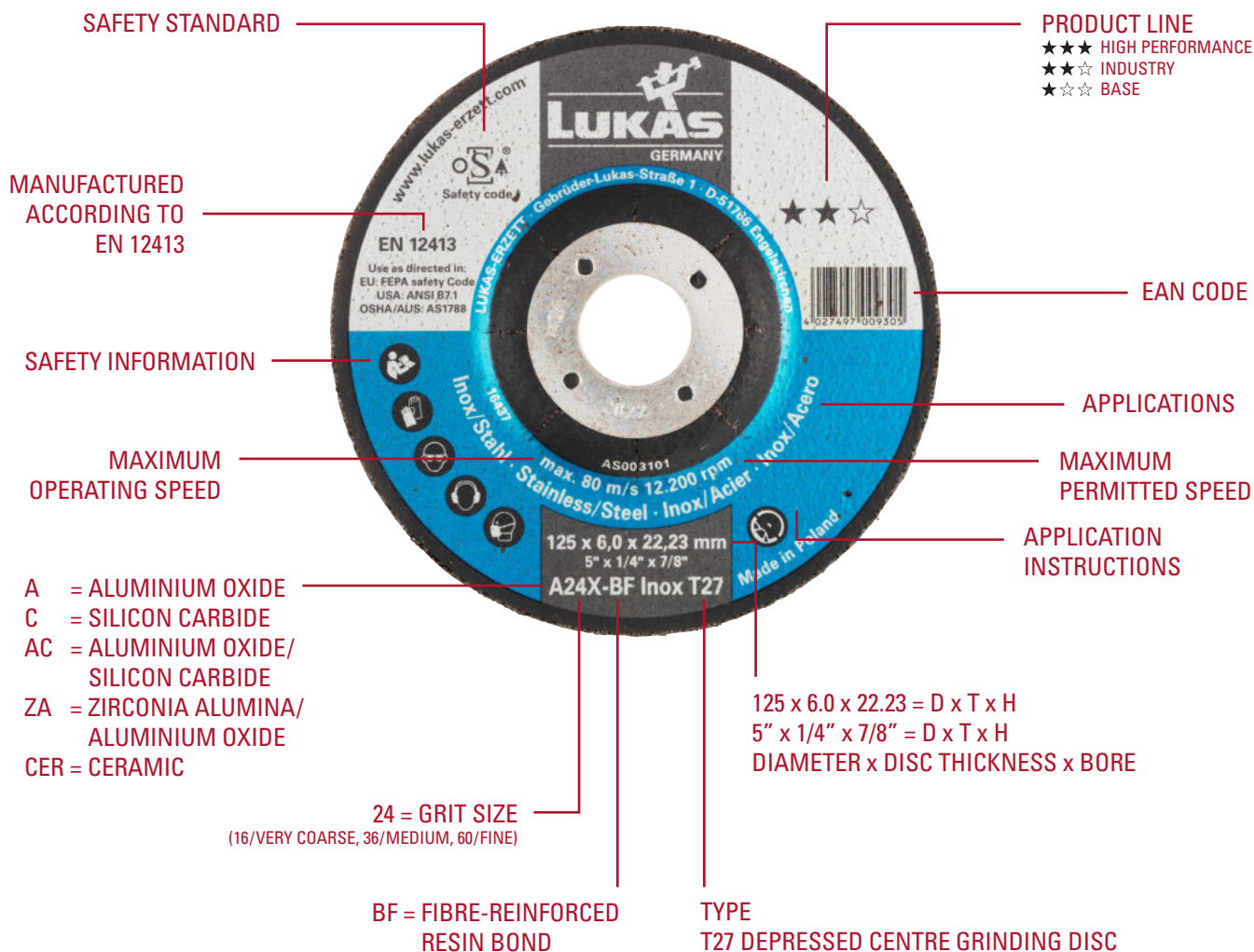
## WORK SAFETY

## Safe instructions

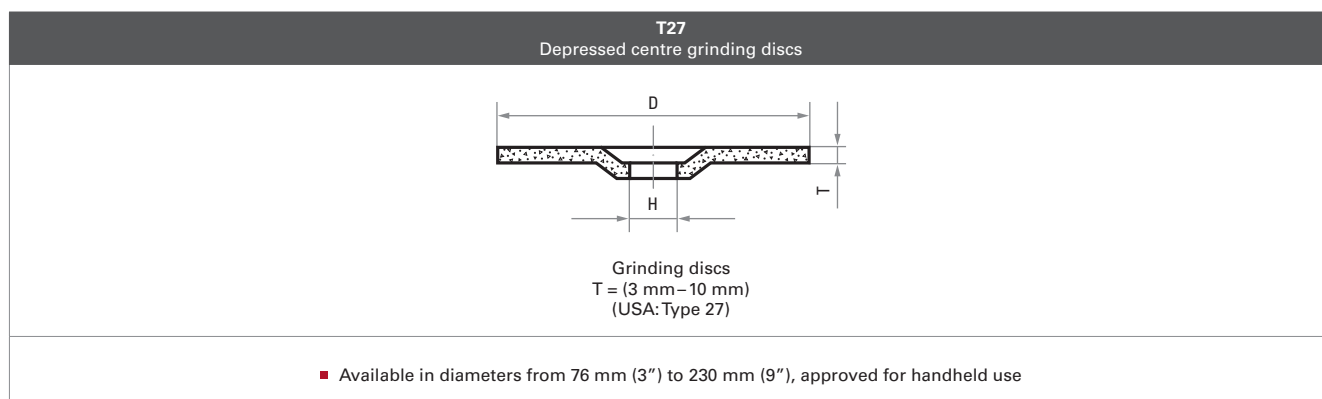
			
			
			
			
			
			
			

## LABELLING

## All important markings on the label




## TYPES OF RESIN-BONDED GRINDING DISCS



## AREA OF USE

## Overview of types of LUKAS grinding discs

■ best suitable    ■ suitable

Type	Page	Reference/ Qualities	Product line	Materials							
				●	●	●	●	●	●	●	●
				Inox/Stainless- Rust-, acid- and heat-resistant steel	General purpose Steel	Alloyed/ tempered steels	Tool steels	Aluminium, magnesium and copper alloys	Stone/ Construc- tion material	Cast iron	Titanium and nickel alloys
<b>Handheld cutting discs for angle grinders</b> Diameter 100–230 mm 	8	A24X-BF Inox	★★☆	■	■	■	■	■			
	9	A24X-BF Steel	★★★		■					■	
	10	A30T-BF Steel	★★☆		■	■	■				
	10	A30V-BF Steel	★★☆		■	■	■		■		
	10	A24/30S-BF Steel	★★☆		■	■	■				
	10	A24V-BF Steel	★★☆		■	■	■				
	10	A24/30S-BF Steel	★☆☆		■	■	■				

THE PERFECT ALTERNATIVE TO THE GRINDING  
DISC: THE iQ-SERIES FLAP DISK FROM LUKAS!  
GO TO **SECTION 4.1 PAGES 6–18** AND TEST THEM



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.

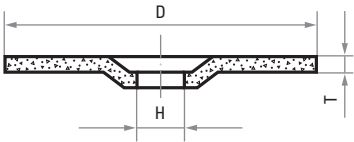
- maximum tool life and grinding performance with innovative bonding technology
- high maximum speed at a cool grinding temperature
- low odour and dust levels in daily use
- ergonomic work position and maximum tool life without use of excessive force
- maximum shelf life with high levels of stability 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 ergonomic working with little use of force

Product number	Description	Quality	D mm	T mm	H mm	n <sub>max</sub> rpm	Pack contains
5DA115702204024	T27 115x6.0 A24X Inox	A24X-BF Inox	115	6.0	22.23	13,300	10
5DA178652218251	T27 178x6.5 A24/30S Inox	A24/30S-BF Inox	178	6.5	22.23	8,500	10
5DA230702204024	T27 230x6.0 A24X Inox	A24X-BF Inox	230	6.0	22.23	6,600	10

Recommended for: ● Inox/Steel ● Steel ● Aluminium

# TWO WORK STEPS WITH ONE TOOL

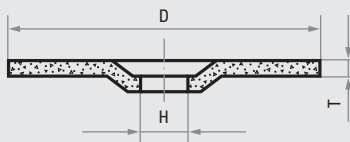
CUTTING AND GRINDING WITHOUT CHANGING TOOLS: THE COOL JOBBER FROM LUKAS



PRACTICAL, PRECISE AND SAFE! DISCOVER THE LUKAS COOL JOBBER **IN SECTION 5.1 ON PAGE 8**



- 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 ergonomic working with little use of force



## Grinding disc for machining steel

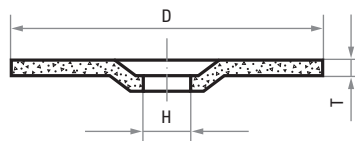


★★★

Product number	Description	Quality	D mm	T mm	H mm	n <sub>max</sub> rpm	Pack contains
5DA115702208024	T27 115x7.0 A24X BF Steel	A24X-BF Steel	115	7.0	22.23	13,300	10
5DA230702208024	T27 230x7.0 A24X BF Steel	A24X-BF Steel	230	7.0	22.23	6,600	10

Recommended for: ● Steel

## Grinding disc for machining steel



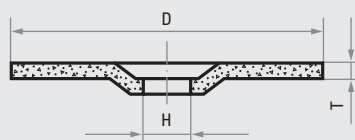
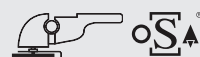
- cut steel with ease
- tested quality: high level of safety through regular testing
- precise removal with high speed
- low odour and dust levels in daily use
- allows for ergonomical working with little use of force

★★☆

Product number	Description	Quality	D mm	T mm	H mm	$n_{max}$ rpm	Pack contains
5DA100601615051	T27 100x6.0 A30T-BF Steel	A30T-BF Steel	100	6.0	16.00	15,300	10
5DA115602215051	T27 115x6.0 A30V-BF Steel	A30V-BF Steel	115	6.0	22.23	13,300	10
5DA125602215051	T27 125x6.0 A24/30S-BF Steel	A24/30S-BF Steel	125	6.0	22.23	12,200	10
5DA230602218251	T27 230x6.0 A24V-BF Steel	A24V-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
5DA178652218251	T27 178x7 A24/30S-BF Steel	A24/30S-BF Steel	180	7.0	22.23	8,500	10

Recommended for: ● Steel