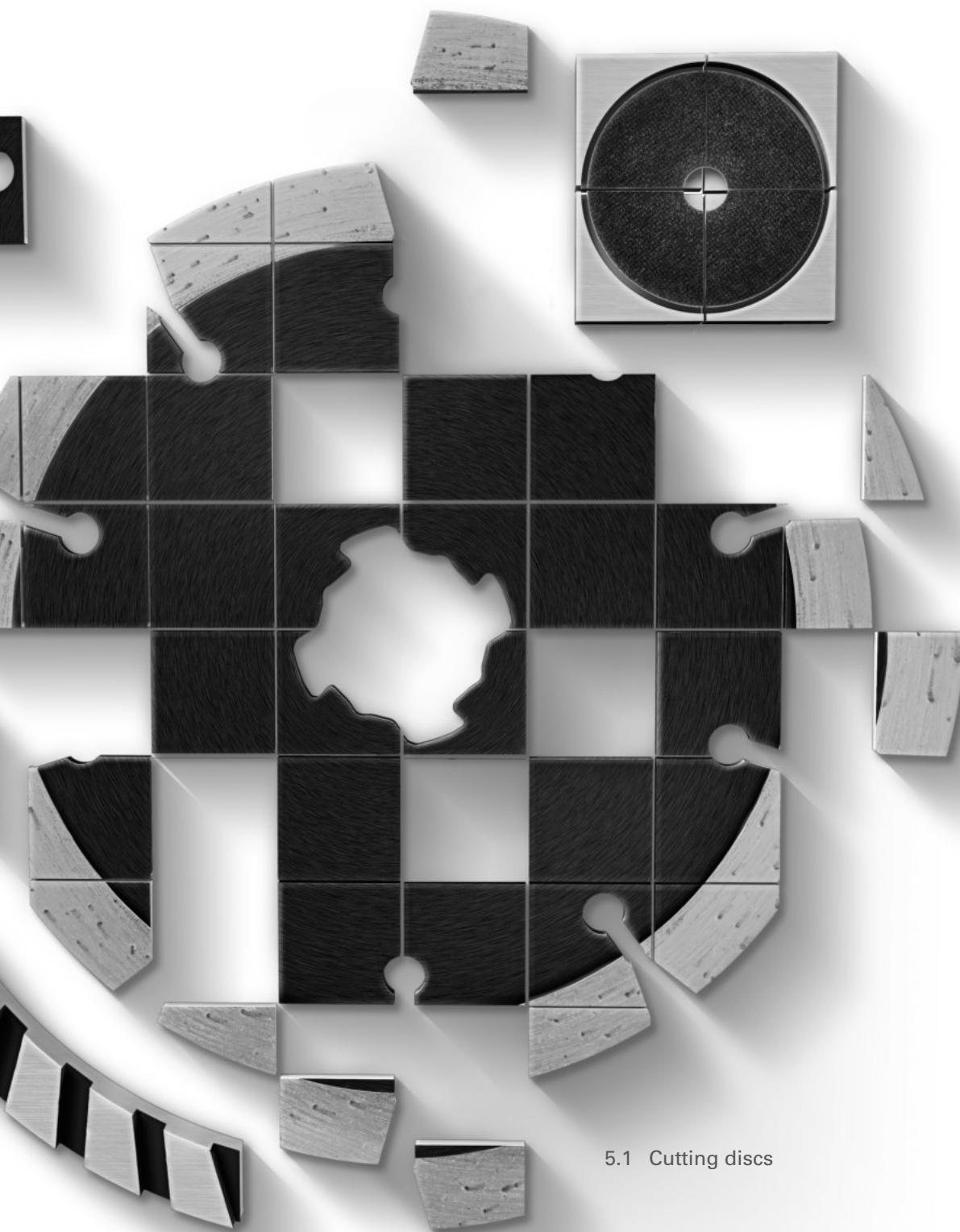


# CUTTING

5.1 Cutting discs

1–14



TECHNICAL INFORMATION AND PRODUCT INFORMATION

LUKAS cutting discs

SHELF LIFE

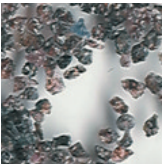
Resin-bonded cutting discs for handheld use may only be used for up to three years after the manufacture date. The expiry date (month and year) is stamped on the metal ring, e.g. V07/2022.



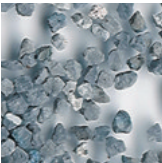
LABELLING SYSTEM FOR RESIN-BONDED CUTTING DISCS

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

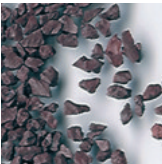
The following overview provides all the information concerning the abbreviations and markings.



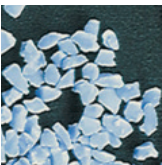
A  
Semi-friable  
aluminium oxide



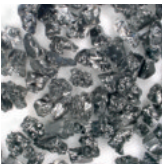
Z  
Zirconia alumina



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

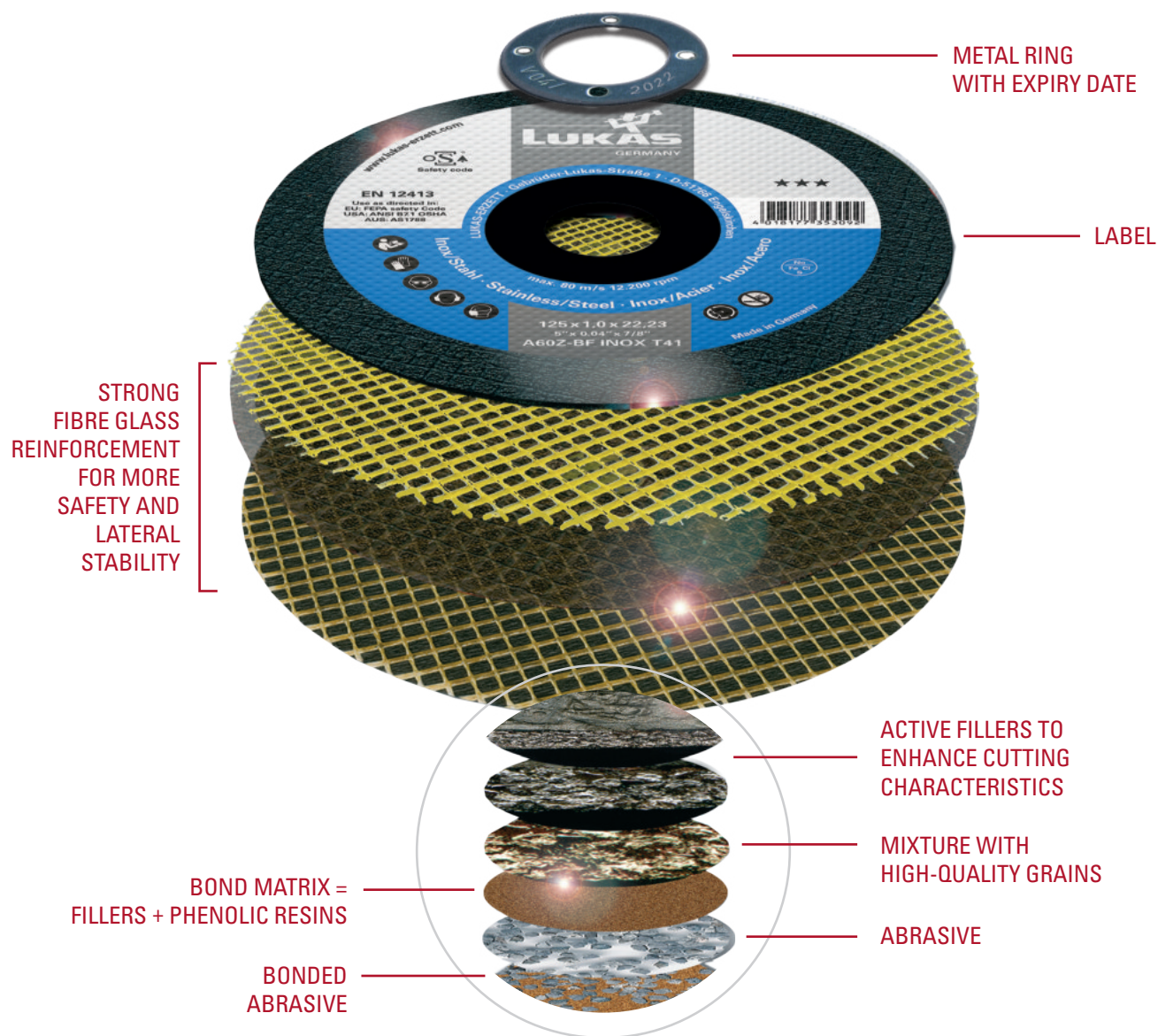
BOND

The bond is to hold the abrasive grain in the disc. LUKAS cutting discs are available with the following two types of bond:

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

## TECHNICAL INFORMATION

## Construction and components of LUKAS cutting discs



## OPERATING SPEED

LUKAS cutting discs are developed and tested for specified maximum operating speeds and grinding processes. Before attaching 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 cutting disc.

Maximum operating speed	Cutting 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

# Safe cutting 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

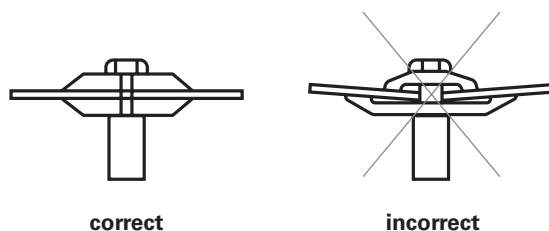
- Safety requirements for bonded abrasive products: EN 12413
- Safety requirements for superabrasive products: EN 13236

## SAFETY INFORMATION

- **Avoid improper handling of the discs.** Use only fibre-reinforced cutting discs on power tools.
- Store discs **in a dry place at room temperature.**
- Do not **use damaged discs.**
- Never exceed the maximum permitted speed specified **on the disc.**
- Use only 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.**
- Do not apply lateral pressure **to cutting discs.** Avoid bending the disc.
- Do not 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.
- **Do not cant and seize** the disc **when** cutting.
- **Avoid applying excessive pressure** on the disc. It will cause the motor to slow down.
- **Do not 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.
- Do only use the machine 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).






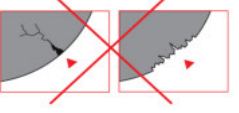








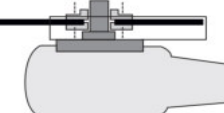
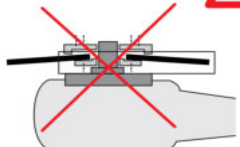


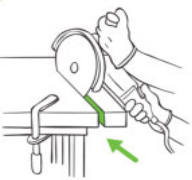
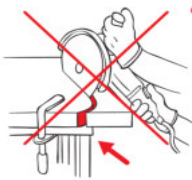


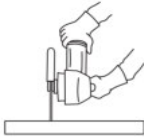

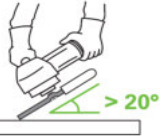





correct

incorrect



## WORK SAFETY

## Safe instructions

			
			
			
			
			
 T41/T42	 T41/T42	 T27	 T27
			

LABELLING

All important markings on the label

SAFETY STANDARD

MANUFACTURED  
ACCORDING TO  
EN 12413

SAFETY INFORMATION

MAXIMUM  
OPERATING SPEED

A = ALUMINIUM OXIDE  
C = SILICON CARBIDE  
AC = ALUMINIUM OXIDE/  
SILICON CARBIDE  
ZA = ZIRCONIA ALUMINA/  
ALUMINIUM OXIDE  
CER = CERAMIC

60 = GRIT SIZE  
(16/VERY COARSE, 36/MEDIUM, 60/FINE)

BF = FIBRE-REINFORCED  
RESIN BOND

PRODUCT LINE  
★★★ HIGH PERFORMANCE  
★★☆ INDUSTRY  
★☆☆ BASE

EAN CODE

APPLICATIONS

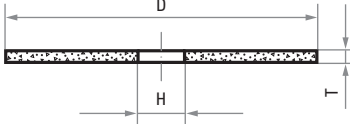
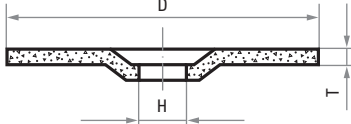
MAXIMUM  
PERMITTED SPEED

APPLICATION  
INSTRUCTIONS

125 x 1.0 x 22.23 = D x T x H  
5" x 0.04" x 7/8" = D x T x H  
DIAMETER x DISC THICKNESS x BORE

TYPE  
T41 FLAT CUTTING DISC  
T42 DEPRESSED CENTRE CUTTING DISC

TYPES OF RESIN-BONDED CUTTING DISCS

T41 Flat cutting discs	T42 Depressed centre cutting disc
 <p>Cutting discs T = (0.8 mm–4.5 mm) (USA: Type 1)</p>	 <p>Cutting discs T = (0.8 mm–4.5 mm) (USA: Type 27)</p>
<ul style="list-style-type: none"><li>Available in diameters from 50 mm (2") to 230 mm (9"), for handheld use</li><li>From 300 mm (12") to 500 mm (20") for stationary machines</li></ul>	<ul style="list-style-type: none"><li>Available in diameters from 76 mm (3") to 230 mm (9"), approved for handheld use</li></ul>

## TECHNICAL INFORMATION

# Qualities and areas of application

We have created a range of cutting discs in proven qualities from the full spectrum of possibilities described here. These cutting wheels are available from stock.

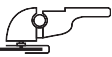


Quality recommendations apply for ideal operating conditions.



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	A36V-BF Inox COOL JOBBER	★★★								
	9	A60Z-BF Inox	★★★								
	10	A46Z-BF Inox	★★★								
	10	A30Z-BF Inox	★★★								
	10	A60X-BF Inox	★★☆								
	10	A46X-BF Inox	★★☆								
	10	A36U-BF Inox	★★☆								
	10	A46T-BF Inox	★☆☆								
	11	A30V-BF Steel	★★☆								
	11	A30VSP-BF Steel	★★☆								
	11	A30T-BF Steel	★☆☆								
	11	A46T-BF Steel	★☆☆								
<b>Stationary cutting discs</b> Diameter Larger than 230 mm 	13	WA30R-BFI Inox	★☆☆								
	13	A36S-BF Steel	★☆☆								
	13	A30P-BFI Steel	★☆☆								
	13	A30R-BF Steel	★☆☆								
	14	C24R-BF Ma	★☆☆								
		A36S-BF Inox	★★☆								
		NK24QUBA15 Inox	★★☆								
		NK36QUBA15 Inox	★★☆								



# LUKAS CUTTING DISCS IN 3-STAR QUALITY

TOP PERFORMANCE FOR THE TOUGHEST JOBS

CUTTING

Thanks to innovative press technology and the highest quality raw materials, 3-star LUKAS cutting 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 cutting discs make work quicker and easier. A high-strength fibreglass fabric guarantees high lateral stability and safety.

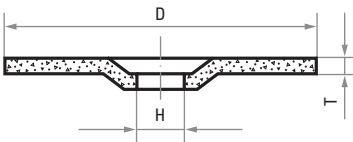
Eco-friendly production combined with first-class raw materials, optimised formulas and state-of-the-art production processes provide for high quality and a maximum storage time.

- maximum tool life and cutting performance with innovative bonding technology
- high cutting speed at a cool cutting 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 thanks to top quality raw materials
- energy optimised for your high-performance angle grinders
- environmentally friendly production using up-to-date manufacturing processes and optimised formulas
- perfect for a wide variety of inox and steel materials
- precise cutting

## COOL JOBBER – cutting and grinding disc for stainless steel



★★★



- for cutting and grinding with one tool
- carry out two work steps without changing tools
- practical, precise and safe

Product number	Description	Quality	D mm	T mm	H mm	n <sub>max</sub> rpm	Pack contains
5FA115302255024	T27 115x2.0 A36V-BF	A36V-BF Inox COOL JOBBER	115	2.0	22.23	13,300	25

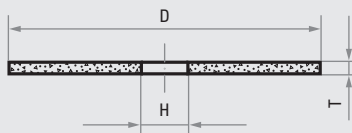
Recommended for: ● Inox/Steel ● Steel ● Aluminium






## Cutting disc for stainless steel

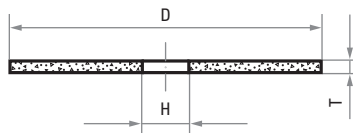
- iron-, chloride- and sulphur-free tool
- cuts precisely at a high cutting speed and low cutting temperature
- maximum tool life and cutting performance through innovative bonding technology
- high level of safety and lateral stability thanks to strong fibreglass fabric and regular testing



★★★







Product number	Description	Quality	Shape	D mm	T mm	H mm	n <sub>max</sub> rpm	Pack contains
5FA115102288024	T41 115x1.0 A60Z inox	A60Z-BF Inox		115	1.0	22.23	13,300	50
5FA115252208024	T41 115x2.5 A30Z inox	A30Z-BF Inox		115	2.5	22.23	13,300	25
5FA125102288024	T41 125x1.0 A60Z inox	A60Z-BF Inox		125	1.0	22.23	12,200	50
5FA230192208024	T41 230x2.0 A46Z inox	A46Z-BF Inox		230	2.0	22.23	6,600	25
5FA230252208024	T41 230x2.5 A30Z inox	A30Z-BF Inox		230	2.5	22.23	6,600	25
Recommended for: <div><div></div> Inox/Steel <div></div> Steel <div></div> Titanium <div></div> Aluminium <div></div> Cast material</div>								

## Cutting disc for stainless steel

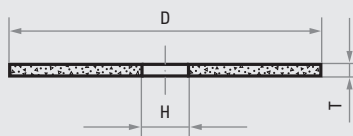


- free of iron, chlorine and sulphur
- cuts precisely at a high cutting speed and low cutting temperature
- long tool life and cutting performance with innovative bonding technology
- high level of safety and lateral stability thanks to strong fibreglass fabric and regular testing

★★☆







Product number	Description	Quality	Shape	D mm	T mm	H mm	n <sub>max</sub> rpm	Pack contains
5FA115102277024	T41 115x1.0 A60X inox	A60X-BF Inox		115	1.0	22.23	13,300	50
5FA115162216024	T41 115x1.6 A46X inox	A46X-BF Inox		115	1.6	22.23	13,300	50
5FA115202207024	T41 115x2.0 A36U inox	A36U-BF Inox		115	2.0	22.23	13,300	25
5FA125102277024	T41 125x1.0 A60X inox	A60X-BF Inox		125	1.0	22.23	12,200	50
5FA150162216024	T41 150x1.6 A46X inox	A46X-BF Inox		150	1.6	22.23	10,200	25
Recommended for: <span> Inox/Steel</span> <span> Steel</span> <span> Titanium</span> <span> Aluminium</span> <span> Cast material</span>								

## Cutting disc for stainless steel



- free of iron, chlorine and sulphur
- cuts precisely
- long tool life and cutting performance with innovative bonding technology
- high level of safety and lateral stability thanks to strong fibreglass fabric and regular testing

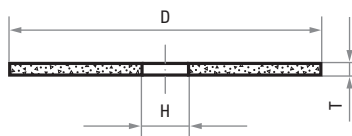
☆☆☆

Product number	Description	Quality	Shape	D mm	T mm	H mm	n <sub>max</sub> rpm	Pack contains
5FA115102201051	T41 115x1.0 A46T inox	A46T-BF Inox		115	1.0	22.23	13,300	50
5FA230182212024	T41 230x1.9 A46T inox	A46T-BF Inox		230	1.9	22.23	6,600	25
Recommended for: <span> Inox/Steel</span> <span> Steel</span> <span> Aluminium</span> <span> Cast material</span> <span> Titanium</span>								



## Cutting disc for steel

- cuts precisely at a high cutting speed and low cutting temperature
- long tool life and cutting performance with innovative bonding technology
- high level of safety and lateral stability thanks to strong fibreglass fabric and regular testing



★★☆

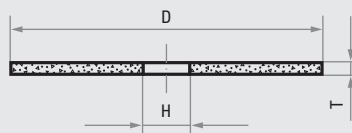
Product number	Description	Quality	Shape	D mm	T mm	H mm	n <sub>max</sub> rpm	Pack contains
5FA100201615051	T41 100x2.0 A30V	A30V-BF Steel		100	2.0	16.00	15,300	25
5FA115302215051	T41 115x2.5 A30V	A30V-BF Steel		115	2.5	22.23	13,300	25
5FA125302215051	T41 125x2.5 A30V	A30V-BF Steel		125	2.5	22.23	12,200	25
5FA178302218051	T41 180x2.0 A36U	A36U-BF Steel		180	2.0	22.23	8,500	25
5FA230302218051	T41 230x3.0 A30V	A30V-BF Steel		230	3.0	22.23	6,600	25
5FA230302215051	T41 230x3.0 A30V SP	A30VSP-BF Steel		230	3.0	22.23	6,600	25

Recommended for: ● Steel ● Cast material



## Cutting disc for steel

- cuts precisely
- long tool life and cutting performance with innovative bonding technology
- high level of safety and lateral stability thanks to strong fibreglass fabric and regular testing



★★☆

Product number	Description	Quality	Shape	D mm	T mm	H mm	n <sub>max</sub> rpm	Pack contains
5FA115302225051	T41 115x2.5 A30T	A30T-BF Steel		115	2.5	22.23	13,300	25
5FA230182215024	T41 230x1.9 A46T	A46T-BF Steel		230	1.9	22.23	6,600	25
5FA230302218151	T41 230x3.0 A30T	A30T-BF Steel		230	3.0	22.23	6,600	25

Recommended for: ● Steel ● Cast material

# THE DISC FOR UNIVERSAL USE

EFFICIENTLY CUT CONCRETE, STONE OR CAST MATERIAL

### FLEXIBLE, FAST WORKING

Especially in structural and civil engineering, for new buildings or structural alterations on existing ones and in road construction, tools are required that allow flexible machining of a broad range of building materials. Regardless of whether you are working with brickwork, cast pipes or concrete supports – LUKAS cutting discs for stone, concrete and cast material cut reliably and quickly. They are the perfect alternative for tradespeople who do not regularly use diamond cutting discs.

### BROAD RANGE OF APPLICATIONS

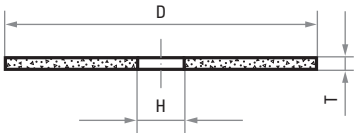
This disc is also used for fettling in many foundries and fettling shop, where they come into their own thanks to their high silicon carbide content. As a result, cast parts with inclusions and defects in the surface can be machined quickly and reliably. Risers and sprues can easily be cut off.




## Cutting disc for stone and cast material



★★☆



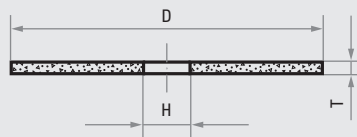
- for universal use
- for use on construction sites
- preferable to diamond cutting discs thanks to its excellent value for money and high speed

Product number	Description	Quality	Shape	D mm	T mm	H mm	n <sup>max</sup> rpm	Pack contains
5FC115302215051	T41 115x2.5 C30V stone	C30V-BF Stone		115	2.5	22.23	13,300	25
5FC125302215051	T41 125x3.0 C30T stone	C30T-BF Stone		125	3.0	22.23	12,200	25
5FC230302218051	T41 230x3.0 C30V stone	C30V-BF Stone		230	3.0	22.23	6,600	25
Recommended for:						<div><div></div> Stone</div>	<div><div></div> Cast material</div>	





## Stationary cutting disc for machining stainless steel



★☆☆

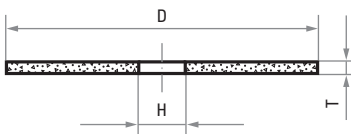
- free of iron, chlorine and sulphur
- optimised for stationary use
- cuts precisely
- long tool life and cutting performance with innovative bonding technology

Product number	Description	Quality	D mm	T mm	H mm	n <sub>max</sub> rpm	Pack contains
5UA35038255518	T41 350x3.8 WA30R-BFI inox	WA30R-BFI Inox	350	3.8	25.00	4,400	10

Recommended for: ● Inox/Steel ● Steel ● Titanium ● Aluminium ● Cast material



## Stationary cutting disc for machining steel



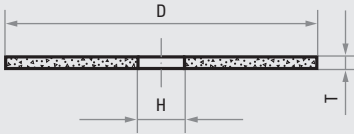
★☆☆

- optimised for stationary use
- cuts precisely
- long tool life and cutting performance with innovative bonding technology

Product number	Description	Quality	D mm	T mm	H mm	n <sub>max</sub> rpm	Pack contains
5UA30026251024	T41 300x2.6 A36S-BF	A36S-BF Steel	300	2.6	25.40	5,100/80 m/s	10
5UA30032250018	T41 300x3.2 A30P-BFI	A30P-BFI Steel	300	3.2	25.40	5,100/80 m/s	10
5UA30032251018	T41 300x3.2 A30R-BF	A30R-BF Steel	300	3.2	25.40	5,100/80 m/s	10
5UA30032400018	T41 300x3.2 A30P-BFI	A30P-BFI Steel	300	3.2	40.00	5,100/80 m/s	10
5UA30032401018	T41 300x3.2 A30R-BF	A30R-BF Steel	300	3.2	40.00	5,100/80 m/s	10
5UA35010025018	T41 350x10 A30P-BFI	A30P-BF Steel	350	10	25.40	4,400/80 m/s	10
5UA35026251024	T41 350x2.6 A36S-BF	A36S-BF Steel	350	2.6	25.40	4,400/80 m/s	10
5UA35032250018	T41 350x3.2 A30P-BFI	A30P-BFI Steel	350	3.2	25.40	4,400/80 m/s	10
5UA35032251018	T41 350x3.2 A30R-BF	A30R-BF Steel	350	3.2	25.40	4,400/80 m/s	10
5UA35032401018	T41 350x3.2 A30R-BF	A30R-BF Steel	350	3.2	40.00	4,400/80 m/s	10
5UA40032251024	T41 400x3.2 A36S-BF	A36S-BF Steel	400	3.2	25.40	3,800/80 m/s	10
5UA40040250018	T41 400x4.0 A30P-BFI	A30P-BFI Steel	400	4.0	25.40	3,800/80 m/s	10
5UA40040251018	T41 400x4.0 A30R-BF	A30R-BF Steel	400	4.0	25.40	3,800/80 m/s	10
5UA40040400018	T41 400x4.0 A30P-BFI	A30P-BFI Steel	400	4.0	40.00	3,800/80 m/s	10
5UA40040401018	T41 400x4.0 A30R-BF	A30R-BF Steel	400	4.0	40.00	3,800/80 m/s	10
5UA45040400018	T41 450x4.0 A30P-BFI	A30P-BFI Steel	450	4.0	40.00	3,400/80 m/s	10
5UA45040401018	T41 450x4.0 A30R-BF	A30R-BF Steel	450	4.0	40.00	3,400/80 m/s	10
5UA50040400018	T41 500x4.0 A30P-BFI	A30P-BFI Steel	500	4.0	40.00	3,000/80 m/s	10

Recommended for: ● Steel ● Cast material

Stationary cutting disc for masonry and non ferrous metals



☆☆☆

- optimised for stationary use
- cuts precisely
- long tool life and cutting performance with innovative bonding technology

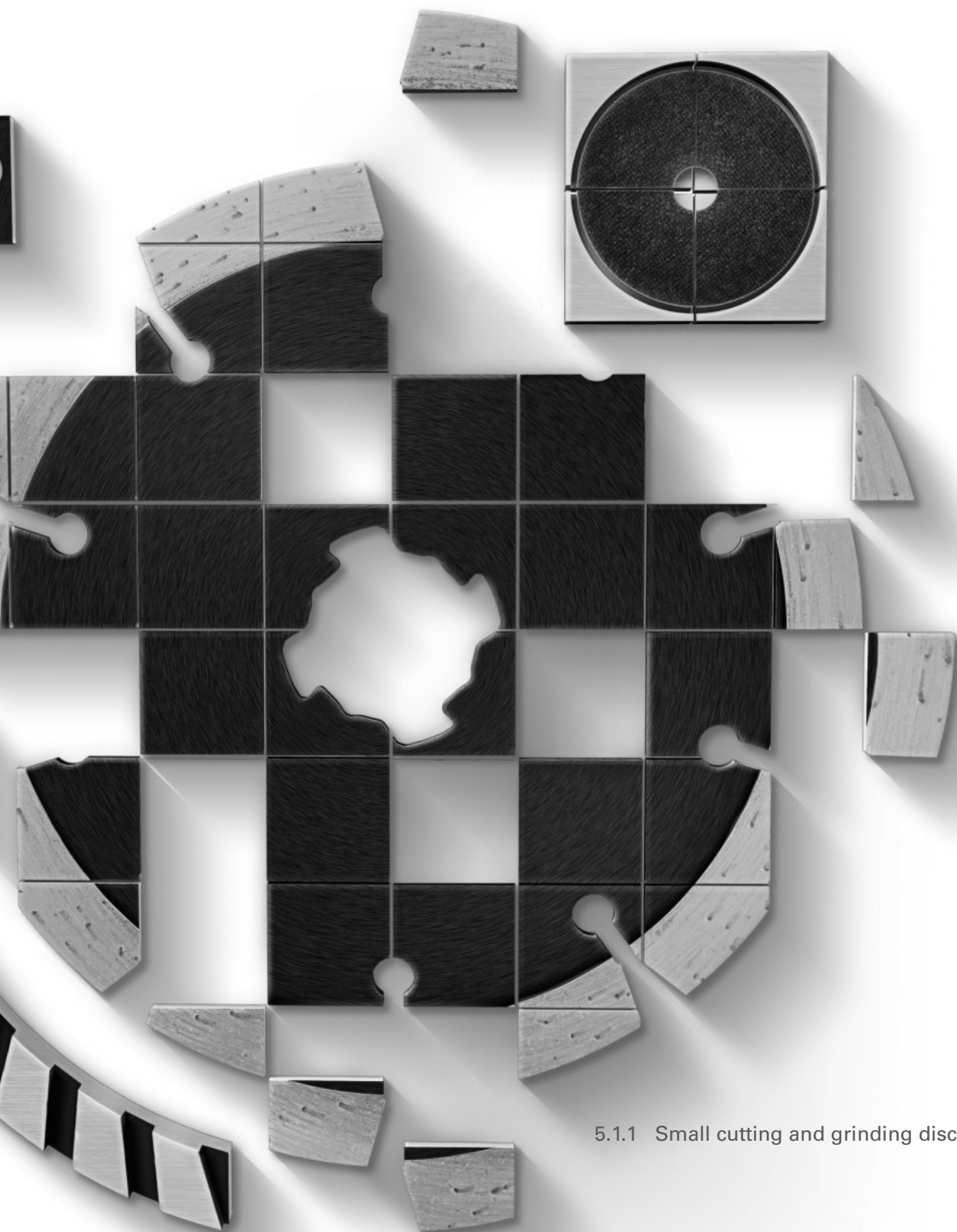
Product number	Description	Quality	D mm	T mm	H mm	n <sub>max</sub> rpm	Pack contains
5UC35032251018	T41 350x3.2 C24R-BF Masonry	C24R-BF Masonry	350	3.2	25.00	4,400/80 m/s	10
5UC35032401018	T41 350x3.2 C24R-BF MAsonry	C24R-BF Masonry	350	3.2	40.00	4,400/80 m/s	10

Recommended for: ● Stone ● Cast material

# CUTTING

5.1.1 Small cutting and grinding discs

1–3



## TECHNICAL INFORMATION AND PRODUCT INFORMATION

**LUKAS cutting and grinding Jetflex discs****DESCRIPTION**

Our small diameter product range starts from a diameter of 50mm up to 76 mm. All of these products are type 41 straight abrasive wheels. They are available in several thicknesses and bore sizes, perfect for those hard to reach areas. These discs can be used on both stainless steel and mild steel cutting-off and finishing/deburring applications. They can be mounted on electric or pneumatic horizontal/straight grinding machines paying attention to the required speed of the grinding wheel.

All products 3 mm thick or less work at a peripheral speed of 80 m/s. All products 6 mm thick or more work at a peripheral speed of 50m/s.

- iron-, chloride- and sulphur-free tool
- cuts precisely at a high cutting speed and low cutting temperature
- maximum tool life and cutting performance through innovative bonding technology
- high level of safety and lateral stability thanks to strong fibreglass fabric and regular testing

**CUTTING-OFF**

Cutting-off wheels thickness range is between 1,0mm and 3,0mm. These products are produced with two fiberglass reinforcing plies and are dedicated to cutting-off operations executed in hard to reach places.

They can be used for cutting-off of:

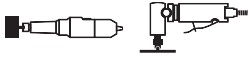
- plates
- section bars
- solid material workpieces

**DEBURRING**

Deburring wheels have a thickness in excess of 6,0mm.

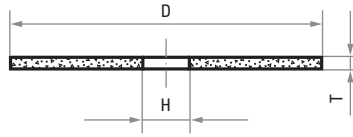
They can be used for welding beads machining/finishing, caulking, chamfering and deburring in hard to reach areas.





## Jetflex cutting and grinding discs for machining Inox and steel

- The thin width of less than a millimetre allows you to get to hard-to-reach places.
- delicately machine small parts
- free of iron, chlorine and sulphur
- high level of safety and lateral stability thanks to strong fibreglass fabric and regular testing

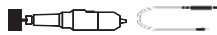


★★☆

Product number	Description	Quality	D mm	T mm	H mm	n <sub>max</sub> rpm	Pack contains
5JC5010085017	T41 50x1.0	A36S-BF Inox	50	1.0	8.0	30,600	100
5JC5020085017	T41 50x2.0	A36S-BF Inox	50	2.0	8.0	30,600	100
5JC7010085017	T41 70x1.0	A36S-BF Inox	70	1.0	8.0	19,100	100
5JC7030085017	T41 70x3.0	A36S-BF Inox	70	3.0	8.0	19,100	100
5JC8030105017	T41 80x3.0	A36S-BF Inox	80	3.0	10.0	19,100	100
5JG5060824024	T41 50x6.0	NK24QUBA15 Inox	50	6	8.0	19,000	100
5JG50121036024	T41 50x12.0	NK36QUBA15 Inox	50	12	10.0	19,000	100
5JG6513106524	T41 65x13.0	NK24QUBA15 Inox	65	13	10.0	14,600	100
5JG7613106524	T41 76x13.0	NK24QUBA15 Inox	76	13	10.0	12,500	100

Recommended for: ● Inox/Steel ● Steel

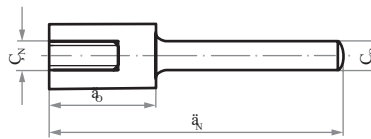
CUTTING



## Arbors for Jetflex wheels

Delivery includes the following for each arbor:

- two washers, IØ 8 mm O Ø 25 mm
- two M8 hex screws, L =16 mm, 25mm
- one 8 mm to 6 mm reducer
- one hex key



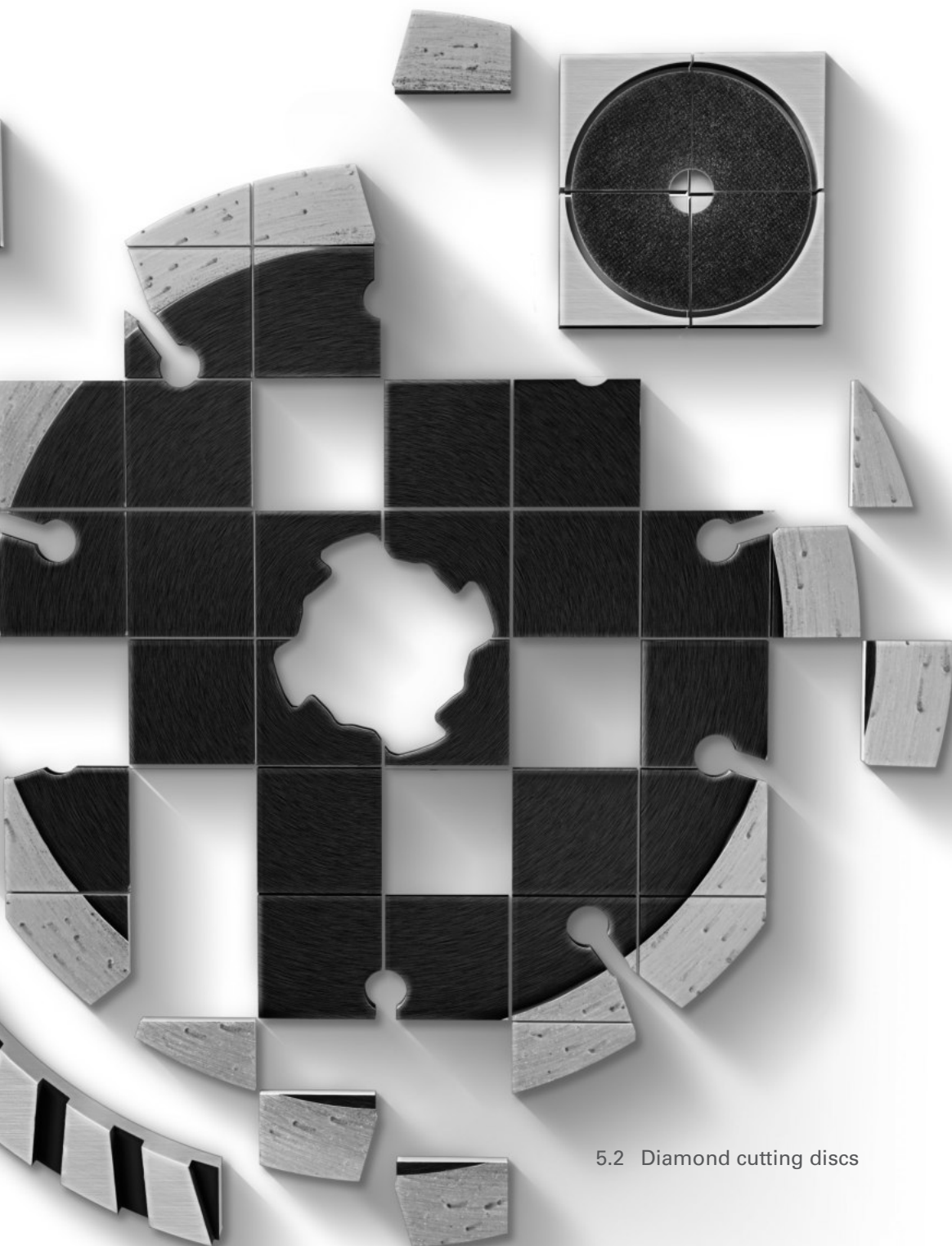
★★☆

Product number	Description	d <sub>1</sub> mm	l <sub>2</sub> mm	d <sub>2</sub> mm	l <sub>1</sub> mm	n <sub>max</sub> rpm	Pack contains
5JA06098	ASB 780	M8	25	6	55	30,600	1

# CUTTING

5.2 Diamond cutting discs

1–10



## TECHNICAL INFORMATION AND PRODUCT INFORMATION

# **LUKAS diamond cutting discs**

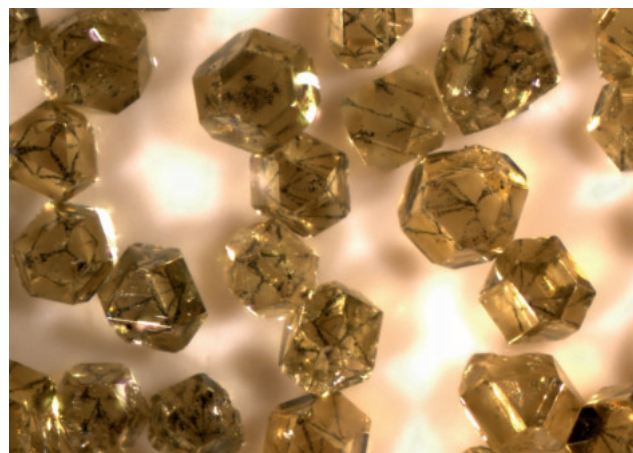
## **DIAMOND**

Diamond is the hardest material in the world. The type of diamond chosen depends on what it is used for. Only synthetic diamonds are used for the diamond cutting discs. Unlike natural diamonds, their properties can be reproduced and controlled.

The following characteristics are significant when selecting diamonds:

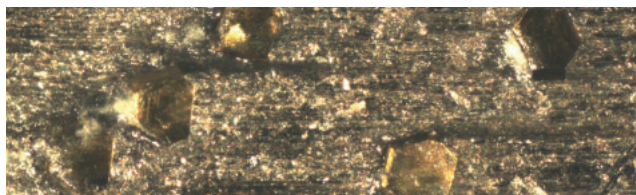
- degree of purity
- defined fracture strength
- sharp edges
- consistent geometry

Diamonds are classified by quality levels and grit sizes.



## **SEGMENT**

The segments consist of a diamond-embedded metal powder. The metal bond must be suited to the material to be cut. The metal powder consists of bronze, cobalt, iron, carbide, or tungsten carbide, for example. The various characteristics of the metal powder give the segment sharpness and the all-important wear resistance. The segment coating is produced by a sintering process. A hard bond is selected for abrasive construction materials, while a soft bond is needed for hard structural materials.



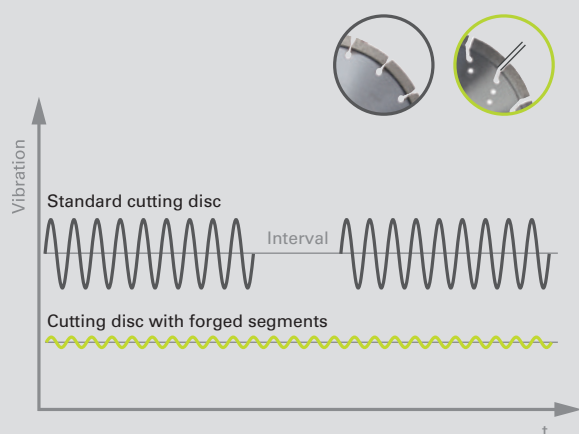
## **SEGMENT GEOMETRY**

The patented forged segment geometry allows even tall segments to be arranged very close to each other. This significantly reduces vibration for the user. Another crucial advantage is safety. The dense, porelessly forged segments have welds that provide much more safety against fracturing compared to the usual sintered segments.

- universal and fast due to new types of alloys in the segments
- less vibration through trapezium segment geometry
- more safety due to segment feet that are poreless and provide the utmost safety against fracturing
- long tool life thanks to taller segments and slower rate of diamond shedding

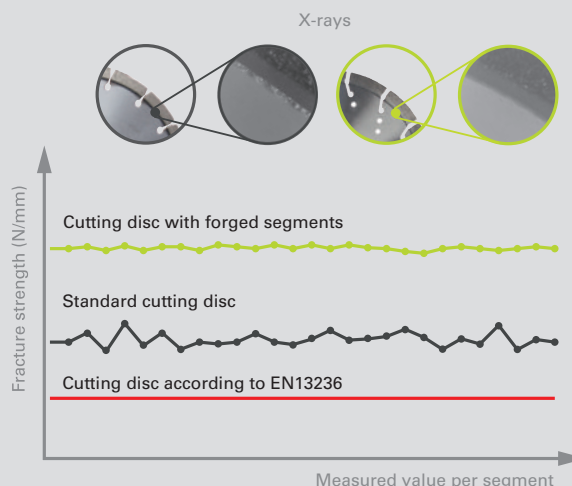
## **COMPARISON OF CUTTING PROPERTIES**

Low-vibration, narrow-gap cutting discs compared to cutting discs with forged segment



## **WELDING PROPERTIES OF FORGED SEGMENTS**

Highest level of safety against fracturing



## USAGE INSTRUCTIONS

# The right disc for your application

LUKAS has diamond cutting discs for a variety of materials. Whether you are working with concrete, tile or asphalt, you'll

find the perfect tool for every application. Select the material that you want to cut from the table below.

<div><div></div>best suitable<div></div>suitable</div>			Tile			Granite, hard materials			Concrete			Building material				Asphalt, abrasive materials				
Page	Product	Product line	Tile	Fine stoneware	Granite tile	Granite	Porphyry	Clinker brick	Reinforced concrete	Exposed aggregate concrete	Concrete products	Brick, masonry	Roof tiles	Gas concrete, pumice	Sand-lime brick	Refractory bricks	Screed	Fresh concrete	Asphalt	Grey iron
Segmented diamond cutting discs																				
4	VDC	★★★★																		
5	ASPHALT																			
5	REINFORCED																			
6	3 STAR SEGMENTED																			
7	2 STAR SEGMENTED	★★★☆☆																		
7	1 STAR SEGMENTED	★☆☆☆☆																		
Turbo cutting discs																				
8	3 STARTURBO	★★★★																		
8	2 STARTURBO	★★★☆☆																		
Continuous cutting discs																				
9	3 STAR CONTINUOUS	★★★★																		
10	2 STAR CONTINUOUS	★★★☆☆																		
10	1 STAR CONTINUOUS	★☆☆☆☆																		



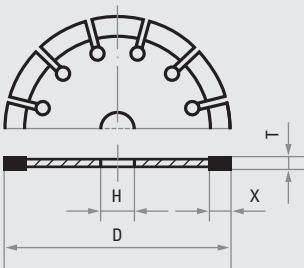
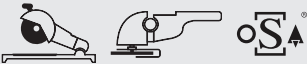
VDC – AGGRESSIVE APPLICATION  
WITH EXTREME TOOL LIFE

STAYS COOL. NO DUST OR ODOURS. NO EXPIRY DATE.



CUTTING

VDC diamond cutting disc



★★★

- the diamond cutting disc that revolutionised cutting cast iron
- ideal for cutting cast iron (GG, GGG), fibreglass reinforced plastics (GFRP) and mineralisation
- not suitable for high-alloy materials containing nickel!

Product number	Description	D mm	Segment height X mm	Segment width T mm	H mm	n <sub>max</sub> rpm	Pack contains
7DD115202203024	VDC 115.2.22 DIA	115	7.0	2.2	22.23	13,200	1
7DD230302203024	VDC 230.3.22 DIA	230	7.0	3.0	22.23	6,600	1
7DD350362503024	VDC 350.36.25 DIA	350	7.0	3.6	32.00	4,400	1

Recommended for: ● Stone/Construction material ● Cast material ● Plastic

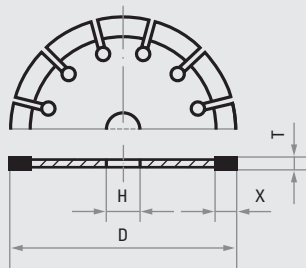
# HARD DIAMOND BOND FOR ASPHALT CUTTING

HIGHER SEGMENTS FOR EXTENDED TOOL LIFE

## Asphalt diamond cutting disc



- perfect for cutting concrete, green concrete and asphalt
- specially formed segments for high running smoothness and core protection
- laser-welded joints
- wet application



★★★

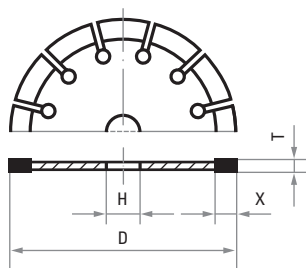
Product number	Description	D mm	Segment height X mm	Segment width T mm	H mm	n <sub>max</sub> rpm	Pack contains
7DB350302502003	ASPHALT 350.3.25 DIA	350	10	3.2	25.4	4,300	1

Recommended for: ● Stone/Construction material

## Reinforced concrete diamond cutting disc



- perfect for cutting concret
- specially formed segments for high running smoothness and core protection
- laser-welded joints
- wet application



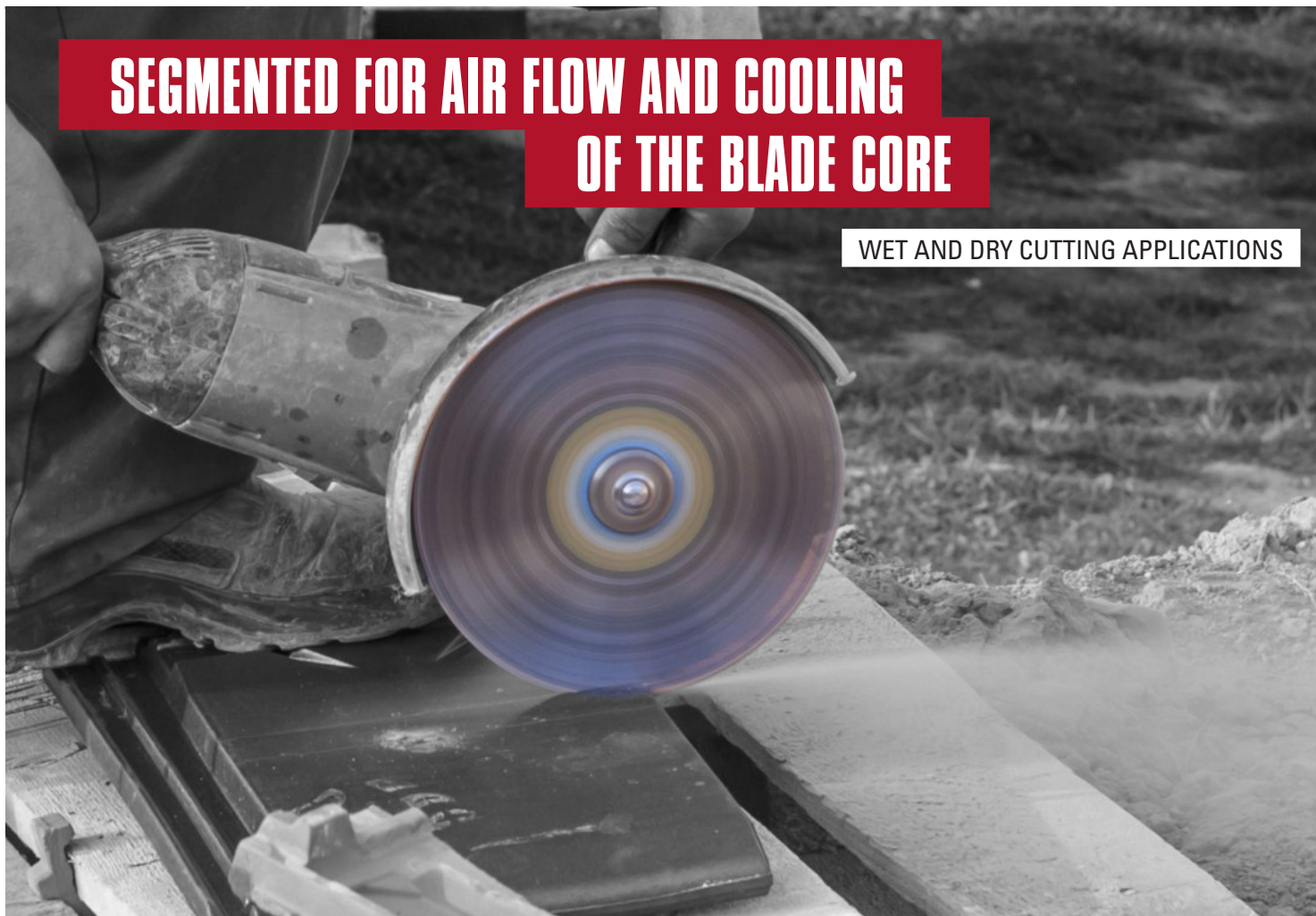
★★★

Product number	Description	D mm	Segment height X mm	Segment width T mm	H mm	n <sub>max</sub> rpm	Pack contains
7DB350302500003	REINFORC CON 350.3.25 DIA	350	10	3.2	25.4	4,300	1
7DB450302501003	REINFORC CON 450.36.60 DIA	450	12	3.6	60.0	3,400	1

Recommended for: ● Stone/Construction material

# SEGMENTED FOR AIR FLOW AND COOLING OF THE BLADE CORE

WET AND DRY CUTTING APPLICATIONS

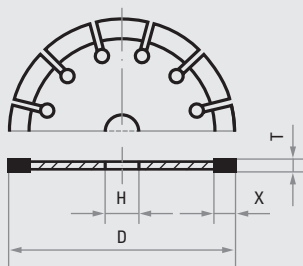


CUTTING

## Segmented diamond cutting disc



★★★



- professional disc for dry cutting of concrete and construction materials
- extremely versatile with optimum cutting speed
- long tool life
- Trapezium-shaped segments ensure low vibration.
- segment produced using forge technology

Product number	Description	D mm	Segment height X mm	Segment width T mm	H mm	n <sub>max</sub> rpm	Pack contains
7DB115302201003	3STR 115.30.22 SEG DIA	115	7	1.8	22.23	13,200	1
7DB125302201003	3STR 125.30.22 SEG DIA	125	7	1.9	22.23	12,200	1
7DB180302201003	3STR 180.30.22 SEG DIA	180	7	2.2	22.23	8,400	1
7DB180302501003	3STR 180.30.25 SEG DIA	180	7	2.2	25.00	8,400	1
7DB230302201003	3STR 230.30.22 SEG DIA	230	7	2.4	22.23	6,600	1
7DB350302501003	3STR 350.30.25 SEG DIA	350	10	3.2	25.00	5,500	1
7DB400302501003	3STR 400.30.25 SEG DIA	400	10	3.6	25.00	4,800	1

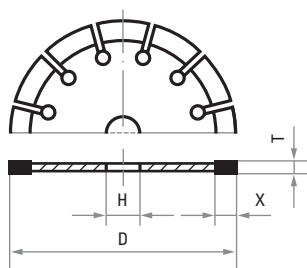
Recommended for: ● Stone/Construction material





## Segmented diamond cutting disc

- For universal applications but highly versatile with a high cutting rate in reinforced concrete and construction material
- dry cutting of masonry and concrete applications
- excellent price-performance ratio
- laser-welded joints



★★☆

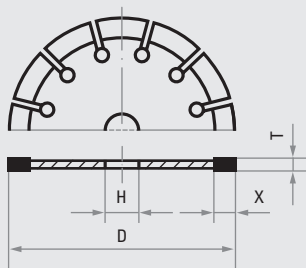
Product number	Description	D mm	Segment height X mm	Segment width T mm	H mm	n <sub>max</sub> rpm	Pack contains
7DB115302201103	2STR 115.30.22 SEG DIA	115	8	2.4	22.23	13,200	1
7DB230302201103	2STR 230.30.22 SEG DIA	230	8	2.4	22.23	6,600	1

Recommended for: ● Stone/Construction material



## Segmented diamond cutting disc

- especially popular on construction sites
- excellent price-performance ratio



★☆☆

Product number	Description	D mm	Segment height X mm	Segment width T mm	H mm	n <sub>max</sub> rpm	Pack contains
7DB115302201503	1STR 115.30.22 SEG DIA	115	8	2.0	22.23	13,200	1
7DB230302201503	1STR 230.30.22 SEG DIA	230	8	2.0	22.23	6,600	1

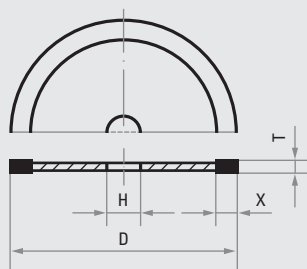
Recommended for: ● Stone/Construction material



# HIGH CUTTING RATE

INTEGRATED INTERWEAVING DIAMOND MATRIX

## TURBO diamond cutting disc



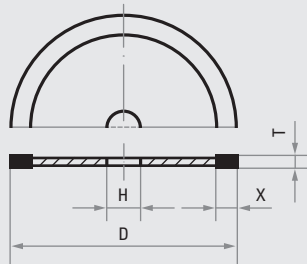
- ideal for cleanly cutting construction materials or concrete
- suitable for various applications
- wet or dry cutting of masonry, concrete and marble
- cut granite with "chip-free" cut

★★★★

Product number	Description	D mm	Segment height X mm	Segment width T mm	H mm	n <sub>max</sub> rpm	Pack contains
7DB115302202003	3STR 115.30.22 TRB DIA	115	7.0	1.9	22.23	13,200	1
7DB125302202003	3STR 125.30.22 TRB DIA	125	7.0	2.0	22.23	12,200	1
7DB180302202003	3STR 180.30.22 TRB DIA	180	7.0	2.2	22.23	8,400	1
7DB180302502003	3STR 180.30.25 TRB DIA	180	7.0	2.2	22.23	8,400	1
7DB230302202003	3STR 230.30.22 TRB DIA	230	7.5	2.6	22.23	6,600	1

Recommended for: ● Stone/Construction material

## TURBO diamond cutting disc



- the turbo disc for precise cutting
- great price-performance ratio
- wet or dry cutting of masonry, concrete and marble
- cut granite with "chip-free" cut

★★★☆☆

Product number	Description	D mm	Segment height X mm	Segment width T mm	H mm	n <sub>max</sub> rpm	Pack contains
7DB115302202103	2STR 115.30.22 TRB DIA	115	7.0	1.9	22.23	13,200	1
7DB230302202103	2STR 230.30.22 TRB DIA	230	7.5	2.6	22.23	6,600	1

Recommended for: ● Stone/Construction material

# LUKAS CONTINUOUS CUT DIAMOND CUTTING BLADE

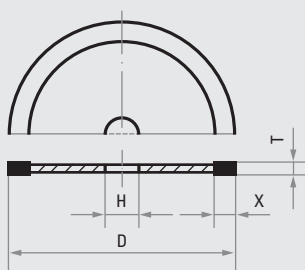
CONTINUOUS CUT FOR AN INCREASED QUALITY OF CUT

CUTTING



## Continuous diamond cutting disc

- extra-thin diamond cutting disc for ceramic and fine stone applications
- cuts through the hardest tiles quickly and cleanly
- wet cutting of ceramics, masonry and marble

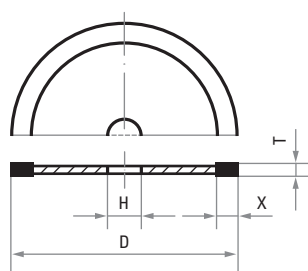


★★★

Product number	Description	D mm	Segment height X mm	Segment width T mm	H mm	n <sub>max</sub> rpm	Pack contains
7DB115302203003	3STR 115.30.22 CON DIA	115	6.5	1.8	22.23	13,200	1
7DB125302203003	3STR 125.30.22 CON DIA	125	6.5	1.9	22.23	12,200	1
7DB180302203003	3STR 180.30.22 CON DIA	180	6.5	2.0	22.23	8,400	1
7DB200302503003	3STR 200.30.25 CON DIA	200	7.0	2.2	25.4	7,600	1
7DB230302203003	3STR 230.30.22 CON DIA	230	5.0	2.4	22.23	6,600	1
7DB250302503003	3STR 250.30.25 CON DIA	250	7.0	2.4	25.4	6,100	1
7DB300302503003	3STR 300.30.25 CON DIA	300	7.0	3.0	25.4	6,100	1

Recommended for: ● Stone/Construction material

## Continuous diamond cutting disc



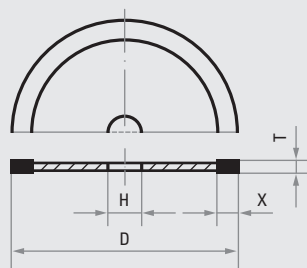
★★☆

- the popular choice cutting discs for tile and ceramic
- also cuts exactly through glazed ceramic

Product number	Description	D mm	Segment height X mm	Segment width T mm	H mm	n <sub>max</sub> rpm	Pack contains
7DB115302203103	2STR 115.30.22 CON DIA	115	7.5	1.8	22.23	13,200	1
7DB230302203103	2STR 230.30.22 CON DIA	230	7.5	2.4	22.23	6,600	1

Recommended for: ● Stone/Construction material

## Continuous diamond cutting disc



★★☆

- cuts through tiles with ease
- excellent price-performance ratio

Product number	Description	D mm	Segment height X mm	Segment width T mm	H mm	n <sub>max</sub> rpm	Pack contains
7DB115302203503	1STR 115.30.22 CON DIA	115	7.5	1.8	22.23	13,200	1
7DB230302203503	1STR 115.30.22 CON DIA	125	7.5	2.4	22.23	6,600	1

Recommended for: ● Stone/Construction material