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As a technologically leading manufacturer of powerful and innovative milling, grinding, polishing and cutting tool solutions, LUKAS-ERZETT GmbH & Co. KG from Germany, based in the greater Cologne area, always focuses on the requirements of its customers and the latest developments in many different industries worldwide. **AGILE, SUSTAINABLE, RELIABLE and FUTURE-ORIENTED** – LUKAS thinks further, develops tailor-made solutions, and is always one step ahead of market requirements.

LUKAS has maintained an official representative office in China since 2006 and has also had its own branch office, including a product warehouse, in Shanghai since 2020. This guarantees direct local points of contact and fast delivery times. The internationally operative company with branches and agencies on every continent has been active throughout Asia for several years now, convincing industrial customers and dealers with quality tools manufactured in Germany, its own patents, special solutions, and new tool innovations on a regular basis.

TOOLS MADE IN GERMANY

LUKAS-ERZETT SETS STANDARDS WORLDWIDE IN MATERIAL PROCESSING

IMPRESSIVE TOOL SOLUTIONS TAILORED TO THE ASIAN REGION

In this catalogue, you will find our highest quality products compiled specifically for the Asian region. Discover the entire product range produced by the German manufacturer from LUKAS burrs through to polishing tools and the very latest flap disc.

The LUKAS carbide burrs shown on **pages 11 to 23** are manufactured using high-quality solid carbides on modern CNC automatic grinding machines – with these, LUKAS always guarantees you the highest degree of manufacturing precision and repeatability of cutting angle, tooth profile and twist actions. LUKAS burrs can also be individually optimised with modern coatings (**page 16**).

LUKAS bundles tools from its proprietary high-performance line under the family name "iQ-Serie" (**shown on pages 54 to 62**). Among them are our lamellar flap discs, which feature LUKAS's patented flap shape and arrangement for ultimate grinding performance. The latest product from this innovative series is the Steel Profi Hybrid-Perfection on **page 57**.

All of the products that we manufacture and sell stand for outstanding quality characteristics such as powerful working, a long service life, excellent ergonomics and the very best results. Let the LUKAS quality convince you.



20 SECTORS AND INDUSTRIES PUT THEIR TRUST IN OUR **QUALITY AND EXPERIENCE**

TOP-LEVEL QUALITY

LUKAS IS DEDICATED TO QUALITY

We don't talk about quality, we let it speak for itself, every day, and in everything we do. This practice makes LUKAS tools a safe, reliable factor in your manufacturing process and ensures the best possible production quality.













- made in Germany
- premium raw materials
- modern testing facilities
- quality management system to ISO 9001:2015
- active member of industry associations



NEXT LEVEL SOLUTIONS

EXCELLENT AVAILABILITY • BROAD RANGE OF PRODUCTS • CUSTOMISED PRODUCTION

700 **FMPI OYFFS**

TAKE THE FUTURE INTO YOUR HANDS TODAY

LUKAS has been manufacturing leading-edge tools for over 80 years. We know that new challenges call for new solutions - so that's exactly what we're working on every day. We combine quality and safety with forward-thinking solutions that always keep new developments in different industries in mind. This focus gave us the lead early in the market and still does to this day.

FIRMLY ESTABLISHED ON THE MARKET

With around 700 employees, state-of-the-art production sites, an enormous wealth of experience and a broad product portfolio, LUKAS is well established on the market. We focus on our customers, combining a pioneering spirit with flexibility and a human touch.

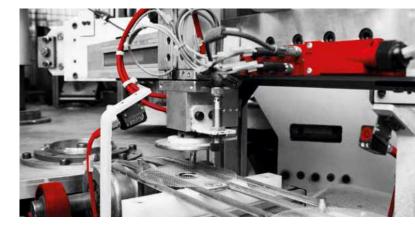






• POLISHING • CUTTING • CUSTOMISED TOOLS

DEVELOPING TOOLS FOR **80** YEARS



SPECIALIST FOR INNOVATIVE SOLUTIONS

Today, we are known around the world for our innovative solutions and high-performance tools. If standard solutions don't suit, we develop customised solutions to satisfy every application. This way, both your products and ours will always be ready for whatever the future holds.

10000 CUSTOMISED SOLUTIONS AND NUMEROUS INNOVATIONS DEPLOYED WORLDWIDE

EXPERTISE ON CALL

Our development team has many years of experience and a deep knowledge of customers, production and industry. This expertise allows us to help you on site with whatever challenges you are facing. Our experienced experts familiarise themselves with your tasks, applications and processes, so that they can develop a solution that fits perfectly. From developing new products or variations to testing and optimisation, we make sure that your products and services are successful.

LOGISTICS AND KNOWLEDGE SHARING



MODERN LOGISTICS

OPTIMISED PROCESSES FOR ON-DEMAND DELIVERY

FAST, FLEXIBLE AND ON TIME

Our smart logistics system simplifies your warehouse management. High delivery capability, an ultra-modern logistics centre and our speedy shipping agents ensure that the right tool is always there at the right time.

8000 SQUARE METERS OF LOGISTICS SPACE



PERSONAL ON-SITE CONSULTATION

WE SHARE OUR KNOWLEDGE FOR YOUR SUCCESS

SHARING OUR KNOWLEDGE

Visit our TECHNIKUM – where you can have our expertise at your fingertips. Straight after the training class, you'll have a chance to put the theory into practice in our grinding centre next door. And if you have any specific application problems, our application and design engineers have an answer to (almost) every question.

200 PEOPLE ATTEND OUR SEMINARS EVERY YEAR

Make the most of our "mobile TECHNIKUM"; too. The LUKAS van contains everything you need for a professional tool seminar. Why not use the LUKAS van for a time-saving staff training session at your own premises?

Our popular LUKAS training courses and knowledge transfers are also available in digital form, e.g. as online seminars. Please ask us for details!

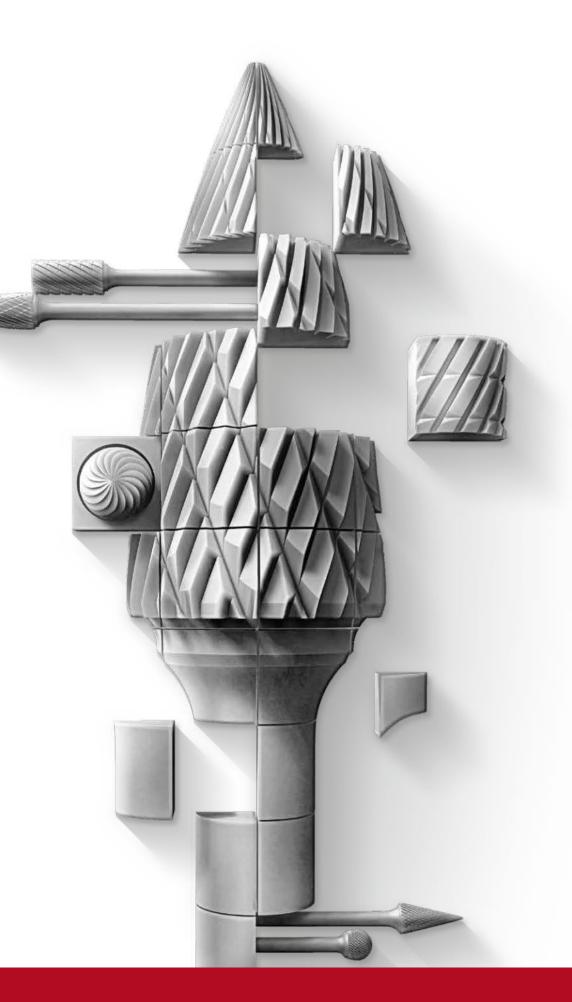
EXPERTISE WITH A HUMAN TOUCH

LUKAS SERVICE AND SALES STAFF ARE JUST A CALL AWAY WORLDWIDE

We want our tools to increase your efficiency and success. We know the challenges you face in your day-today work. Our experienced LUKAS sales staff have the technical expertise required to give you advice on the phone. They can also come to you to co-develop the right product and application solutions with you. We speak your language and can help you find the right tool for the job. Get in touch with us!

- expert technical consultation
- Iocal contact partners
- collaborative consultation
- excellent service
- personal customer relations
- help and advice in the event of problems

Contact our sales team at: **le@lukas-erzett.de**



MILLING

1.0

MILLING

LUKAS tungsten carbide burrs

QUALITY

LUKAS carbide burrs are manufactured using high-quality solid carbides on modern CNC automatic grinding machines in order to guarantee precision and repeatability of angle, profile and twist. We manufacture solid carbide burrs to your drawings and specifications to help you solve difficult stock removal problems.

APPLICATION

Selecting the right cut and speed is key for achieving the best results when working with a variety of materials. Please refer to the tables for cut and cutting speed on **page 15**.

POWER TOOLS

Electrical or pneumatic tools, with bearings and collets that are in good condition and run true, are key to getting perfect results. Vibration and chatter will cause premature wear and tooth breakage. Excessive working pressure will increase wear but not increase performance.

SHANKS

For safety reasons, always choose the largest shank diameter available from the table. All burr shanks from LUKAS have a shank diameter tolerance of h9 to ensure safe and smooth assembly. Other shank lengths and diameters are available upon request. See **page 18** for a selection of burrs with extralong shank.

ROBOT APPLICATION

LUKAS solid carbide burrs are precision tools that have proven themselves in deburring work with industrial robots. We can also develop the perfect tool to suit your application.

SPECIAL TOOLS

We manufacture solid carbide burrs to your drawings and specifications to help you solve difficult stock removal problems.

PACKAGING

We use plastic packaging. Please refer to the product tables for the respective packaging units.

RECOMMENDATIONS FOR USE

Select the cut according to the material to be machined. The rule of thumb is: **the harder the material, the finer the cut**.

Selecting the right speed is key when it comes to achieving perfect working results and long tool life. The following pages contain information that can help you determine the right speed for your process.

Use the highest speeds possible within the ranges listed. **Speeds that are too low cause vibration, chipping and premature wear!** Reduce the speed of the burrs only when working with large contact angles or materials with low heat conductivity. **Never allow blue discolouration to appear on the shank and head.** For safety reasons, the use of longer shanks requires lower speeds.

Always ensure the settings of your power tool are properly adjusted for the job and material at hand. Avoid a reduction in speed caused by insufficient drive power, especially when using pneumatic machines. Only use collets that run true. Run-out and vibration will result in chipping and premature wear. For the same reasons, make sure that the machine bearings are in perfect condition. To avoid vibrations and shank breakage, select the shortest shank overhang possible.

MILLING

SHAPE

A summary of available shapes

Shape		Application	Shape upon request	*	Application
	HFA Cylindrical			HFE Oval	
	HFC Cylindrical round nose			HFH Flame	
	HFD Spherical		-[]	HFI Internal	
	HFF Arch round nose			HFJ Counter sink	
	HFG Arch pointed nose			HFM Conical pointed nose	
	HFL Conical round nose			HFN Inverted cone	
	Burrs for radius trimming (internal)			Burrs for radius trimming (external)	

LUKAS BURR SETS

Have the right tool for any application. Choose from our assortment of burrs to try out, test, for your toolbox and much more on **page 21**.

POWER TOOLS

You can find the right power tools for our LUKAS tools on **pages 113–122**. Our power tools are designed for use with LUKAS tools and ensure highly efficient use. *THE SHAPES ON THE RIGHT ARE AVAILABLE UPON REQUEST!

Three steps to your perfect tungsten carbide burr

STEP 1

STEP 2

Begin by selecting the right **material** and **machining mode** (coarse to fine) from the table.

Read off the recommended **cut** and **cutting speed**.

Material	Strength (N/mm²)	Machining	Cut	Recommended cutting speed v _e (m/min)
		coarse	Z3, Z7 Steel, ZX	500-700
	up to 800	medium	Z5, Z42 Inox/Steel	300-500
		fine	ZF3	500-700
		coarse	Z7 Steel, ZX	400-600
 Steel, cast steel 	800 to 1,200	medium	Z5	300-400
		fine	ZF3	400-600
		coarse	Z7 Steel, Z4	300-500
	from 1,200	medium	Z5	300-400
		fine	ZF3	400-600
		coarse	Z2, Z6	400-500
Stainless steel	up to 800	medium	Z3, Z7 Steel, Z4, Z5, Z42 Inox/Steel	300-500
		fine	ZF3	400-600
			Cast, Z6	400-600
	150 to 300	medium	Z7 Steel	300-500
Cast material		coarse	Cast, Z7 Steel	300-500
	300 to 450	medium	Z5	300-500
		fine	ZF3	400-700
		coarse	Z9 Alu	600-1,000
Aluminium	up to 450	medium	Z1	500-900
	up to 450	coarse	Z9 Alu, Z1	400-800
Brass and bronze		medium	Z2	400-600
5101120	from 450	fine	ZF3	500-600
		coarse	Z6	300-500
	up to 900	medium	Z7 Steel	300-400
		fine	ZF3	500-700
Titanium		coarse	Z4	300-400
	900 to 1,500	medium	Z5	400-500
		fine	ZF3	400-600
		coarse	Composite coarse/fine, Z1, Z9 Alu	600-1,000
Plastic	20 to 400	fine	Composite coarse/fine, Wood	500-900
and wood		coarse	Composite coarse/fine, Z1	500-800
	400 to 1,000	fine	Composite coarse/fine, Z2, Wood	400-800

MACHINING





STEP 3

Determine the appropriate **speed** for your power tool in the second table, based on the tool diameter and cutting speed.

	Recommended cutting speed v _c (m/min)												
		300	400	500	600	700	800	900	1,000				
	2	48,000	64,000	80,000	95,000	111,000	127,000	143,000	159,000				
	3	32,000	42,000	53,000	64,000	74,000	85,000	95,000	106,000				
(mm)	4	24,000	32,000	40,000	48,000	56,000	64,000	72,000	80,000				
	6	16,000	21,000	27,000	32,000	37,000	42,000	48,000	53,000				
diameter	8	12,000	16,000	20,000	24,000	28,000	32,000	36,000	40,000				
	10	10,000	13,000	16,000	19,000	22,000	25,000	29,000	32,000				
Tool	12	8,000	11,000	13,000	16,000	19,000	21,000	24,000	27,000				
	16	6,000	8,000	10,000	12,000	14,000	16,000	18,000	20,000				
	20	5,000	6,000	8,000	10,000	11,000	13,000	14,000	16,000				
					Speed	(rpm)							

TIP: You can find the full overview of shapes

for your perfect burr on page 13.

Cut		Properties	Page	Cut		Properties	Page
	Z9 Alu	very coarse single cut with faceting for soft materials	19		ZX	universal cross cut for almost all applications	17/18
Other cuts are available u	ipon request			Other cuts are available ι	ıpon request		
	Z1	coarse cut for soft materials			Z42 Inox/ Steel	robust faceted toothing for Inox and steel	
	Z2 Brass	robust single cut for high stock remov	val		Z4	fine cross cut for hard materials	
	Z3	medium single cut	t		Z6	robust cross cut	
	Z5 Hard	very fine single cut f high-quality surface		\bigcirc	Z7 Steel	medium cross cut	
	ZF1 to ZF3	fine cross cuts from coarse to very fi for perfect surfaces			Cast	robust cross cut specially designec for cast materials	
	Wood	rasp cut for pattern constructio	n		Composite Coarse and Fine	cross cut for machining plastic	

CUTS

COATINGS

Custom optimisation with LUKAS coatings

The use of hard coatings like TiN, TiCN, TiALN and LTE on cutting tools from LUKAS can help:

- increase tool life
- make the tool more efficient and reduce machine load
- improve chip removal

The increase in tool life is mainly the result of the considerably higher surface hardness of the coating in comparison to the base material of the tool itself. The high chemical stability of the coatings also minimises reactions between the cutting edge of the tool and the chip. The reduction of machine load and the improvement in chip removal are achieved through a reduction in the friction between the free cutting zone of the tool and workpiece on the one hand, and the cutting edge of the tool and the chip removed on the other. The reduction in friction is due to the coating improving the surface finish and largely preventing chemical reactions. Our technicians would be pleased to help you in the selection of the correct coating.

	Special feature	Properties	Coating	Friction on steel µm
LightFlow	easy chip removal	 combines high wear resistance with outstanding friction and non-stick properties when used on graphite, aluminium, copper, carbon, wood and titanium alloys perfect surface treatment for significantly reduced wear 	TT[®]-ta-C (carbon layer made from solid carbon) see page 19	0.05–0.10 (dry)
AllCoat*	general purpose	 general-purpose wear protection when machining ferrous metals (like steel and cast iron) and plastic high toughness food safe biocompatible 	TiN (titanium nitride)	0.65-0.70
HeavyDuty*	suitable for extreme thermal and mechanical shock loads	 high-performance coating with high hardness and low heat conductivity for use when machin- ing highly abrasive and hard materials (such as steel, non-rusting steels and stainless steel) for milling under extreme conditions for high-performance cutting 	TiAIN (titanium aluminium nitride)	0.30-0.35
ThermoShock*	high and sudden thermal shock loads	 wear-resistant coating, particularly well suited to machining difficult-to-process steel alloys (high and low-alloy steels) for fine deburring 	TiCN (titanium carbon nitride)	0.10-0.20
LowFriction*	lotus effect	 special coating with lotus effect for long chip and smearing non-ferrous metals, especially aluminium alloys significantly reduces friction and adhesive wear reduces loading 	LTE (hard, carbon-based coating)	0.10-0.20
* upon request				

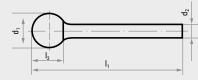
MILLING

ZX UNIVERSAL - SUCCESSFUL ON EVERY MATERIAL

KEEP TOOL CHANGES TO A MINIMUM WITH UNIVERSAL CROSS CUT

ZX Universal burr

★☆☆





• the all-rounder for universal applications

• with cross cut for high performance

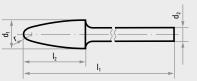
Product number	Description	Shape	Cut	Similar to DIN 8033	d ₁ mm	l ₂ mm	d₂ mm	l ₁ mm	Pack contains
A10010616622	HFA 0616.06 BASE-X		ZX Universal	ZYA 0616	6	16	6	50	10
A10011020622	HFA 1020.06 BASE-X		ZX Universal	ZYA 1020	10	20	6	60	10
A10011225622	HFA 1225.06 BASE-X		ZX Universal	ZYA 1225	12	25	6	65	5
A10020613322	HFC 0613.03 BASE-X		ZX Universal	WRC 0613	6	13	3	43	10
A10020820622	HFC 0820.06 BASE-X		ZX Universal	WRC 0820	8	20	6	60	10
A10021020622	HFC 1020.06 BASE-X		ZX Universal	WRC 1020	10	20	6	60	10
A10021225622	HFC 1225.06 BASE-X		ZX Universal	WRC 1225	12	25	6	65	5
A10030403322	HFD 0403.03 BASE-X		ZX Universal	KUD 0403	4	3	3	34	10
A10030807622	HFD 0807.06 BASE-X		ZX Universal	KUD 0807	8	7	6	47	10
A10031210622	HFD 1210.06 BASE-X		ZX Universal	KUD 1210	12	10	6	51	5
A10100313322	HFF 0313.03 BASE-X		ZX Universal	RBF 0313	3	13	3	40	10
A10100618622	HFF 0618.06 BASE-X		ZX Universal	RBF 0618	6	18	6	50	10
A10101225622	HFF 1225.06 BASE-X		ZX Universal	RBF 1225	12	25	6	65	5
A10040313322	HFG 0313.03 BASE-X		ZX Universal	SPG 0313	3	13	3	40	10
A10040613322	HFG 0613.03 BASE-X		ZX Universal	SPG 0613	6	13	3	43	10
A10040820622	HFG 0820.06 BASE-X		ZX Universal	SPG 0820	8	20	6	60	10
A10041020622	HFG 1020.06 BASE-X		ZX Universal	SPG 1020	10	20	6	60	10
A10041225622	HFG 1225.06 BASE-X		ZX Universal	SPG 1225	12	25	6	65	5
A10041230622	HFG 1230.06 BASE-X		ZX Universal	SPG 1230	12	30	6	65	5
			Recommer	nded for:	Steel 🛛 🔴 (Cast material	lnox/S	Steel 🕕 Ti	itanium



ZX Universal burr with extra-long shank







shank length: 150 mm

• the all-rounder for universal applications

with cross cut for high performance

Product number	Description	Shape	Cut	d ₁ mm	l₂ mm	d₂ mm	l ₁ mm	n _{max} rpm	Pack contains
A10020820622150	HFC 0820.06 BASE-X		ZX Universal	8	20	6	170	5,500	1
A10021225622150	HFC 1225.06 BASE-X		ZX Universal	12	25	6	175	3,600	1
A10030807622150	HFD 0807.06 BASE-X	\bigcirc	ZX Universal	8	7	6	157	7,900	1
A10031009622150	HFD 1009.06 BASE-X		ZX Universal	10	9	6	159	6,600	1
	Recommended for: 🔍 Steel 🔍 Cast material 🌓 Inox/Steel 🕕 Titanium								



* ☆ ☆

SAFETY ADVICE

To prevent shank breakage, never exceed the maximum permitted speed when there is no tool contact (see product table). You may work at twice the maximum permitted speed only if the burr is in contact with the workpiece or inserted into a channel or borehole before the power tool is switched on, and remains there until the power tool comes to a complete standstill.

REDUCING WEAR WITH LIGHTFLOW

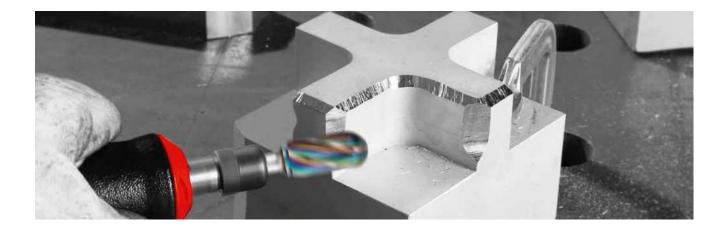
IDEAL SURFACE TREATMENT WITH OUTSTANDING NON-STICK PROPERTIES

The new LightFlow coating from LUKAS is perfect for reducing friction between the tool and the material surface. It lets you create excellent surfaces while also extending the tool life of the burr. This coating prevents the burr from becoming clogged with aluminium chips, therefore reducing machine load and maintaining a consistent speed. There is no sticking or smear-

ing. This lets you work for longer without having to clean or replace the tool.

Application areas of the coating:

cutting graphite, aluminium, copper, carbon composites and wood





- process aluminium with razor-sharp cutting edges
- the perfect synergies between burr and LightFlow coating
- high chip volume thanks to coarse cut for quick work
- faceted toothing for perfect surface results
- maximum cutting cross section for effortless processing



Z9 Alu burr with LightFlow coating



 $\star\star\star$

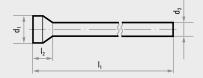
Product number	Description	Shape	Cut	Similar to DIN 8033	d ₁ mm	l₂ mm	d₂ mm	l ₁ mm	Pack contains	
A10020616609LF	HFC 0616.06		Z9 Alu	WRC 0616	6	16	6	50	1	
A10021225609LF	HFC 1225.06		Z9 Alu	WRC 1225	12	25	6	65	1	
A10100618609LF	HFF 0618.06		Z9 Alu	RBF 0618	6	18	6	50	1	
A10101225609LF	HFF 1225.06		Z9 Alu	RBF 1225	12	25	6	65	1	
A10071230609LF	HFL 1230.06		Z9 Alu	KEL 1230	12	30	6	70	1	
	Recommended for: 🔶 Aluminium 🔶 Plastic/Wood									

BACK DEBURRING MADE EASY

CREATE CHAMFERS IN PIPES, CONTAINERS AND DESIGN COMPONENTS

Z3 Universal inverse deburring tool (internal)







- defined 45° bevel
- for different bore diameters
- variable chamfer width
- fast work result

Applications:

- back deburring of boreholes on difficult-to-reach areas
- excellent for use in pipes, containers and design components
- back chamfering of boreholes

Product number	Description	Cut	d ₁ mm	l₂ mm	d₂ mm	l ₁ mm	Pack contains		
A10170504303	HFT 0504.03	Z3 Universal	5	4	3	40	1		
A10170705303	HFT 0705.03	Z3 Universal	7	5	3	40	1		
A10171006603	HFT 1006.06	Z3 Universal	10	6	6	60	1		
A10171207603	HFT 1207.06	Z3 Universal	12	7	6	65	1		
A10171811803	HFT 1811.08	Z3 Universal	18	11	8	120	1		
	Recommended for: 🌑 Steel 🌒 Inox/Steel 🌓 Aluminium 🌒 Cast material 🌒 Titanium								

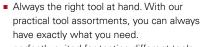


★★☆

SAFETY ADVICE

Reduced speed for burrs with a total length I₁= 120 mm: max. 11,000 m²

Carbide burrs assortments



- perfectly suited for testing different tools
- just as suitable for use in the home, hobby workshop or in industry

100	
	5
	Contraction of the second

Set HM INOX S6

Set HM ALU S6

★★☆

Product number	Description	Cut	Shank Ø mm		Content 1 per pack		Pack contains		
A1039001020	Set HM INOX S6	Z42 Inox/Steel	6	10 parts: HFA 0616 HFA 1225 HFC 1225 HFD 0605 HFG 0618 HFG 1225 HFF 1225		HFC 0616 HFD 1210 HFF 0618	1		
				Recommended for:	Inox/Steel	Steel Cas	t material		
A10390005096	Set HM ALU S6	Z9 Alu	6	5 parts: HFA 0616 HFF 0618	HFC 0616 HFD 0605	HFM 0618	1		
	Recommended for: 🥊 Aluminium 💛 Plastic/Wood								



- Always the right tool at hand. With our practical tool assortments, you can always have exactly what you need.
- perfectly suited for testing different tools
- just as suitable for use in the home, hobby
- workshop or in industrythe all-round burr for universal applications, with cross cut for high performance





F5 S3 BASE-X

★☆☆

Product number	Description	Cut	Shank Ø mm		Content 1 per pack		Pack contains
A10390053	F5 S3 BASE-X	ZX Universal	3	5 parts: HFA 0313 HFF 0313	HFC 0313 HFG 0313	HFD 0605	1
A10390056	F5 S6 BASE-X	ZX Universal	6	5 parts: HFA 1225 HFF 1225	HFC 1225 HFG 1225	HFD 1210	1
			Recommended	for: 🔵 Steel	Cast material	Inox/Steel	itanium



GRINDING AND POLISHING (with bonded tools) 24-35

36-47

2.1 Mounted points 2.2 Polishing tools

TECHNICAL INFORMATION AND PRODUCT INFORMATION

Mounted points from LUKAS

EFFICIENT AND PROFESSIONAL GRINDING

LUKAS mounted points are premium grinding tools with a long tool life that deliver high removal performance. They are perfect for efficient and effective rough processing, fettling, preparing and reworking weld seams, and for deburring.

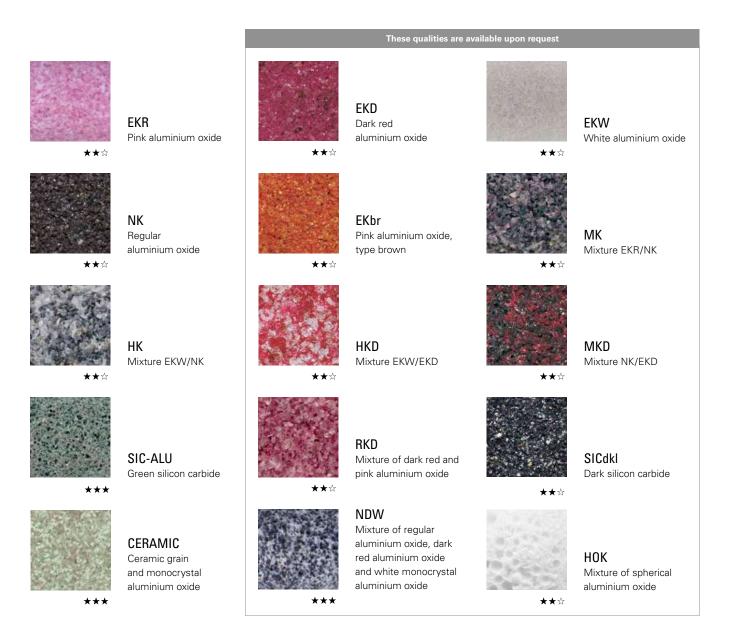
From cutting to fine machining, we offer a range of mounted points in various shapes, sizes and finishes so that you always have the right grinding tool for the job. LUKAS mounted points are designed for grinding all kinds of material (steel, cast steel, tool steel, cast iron, aluminium alloys, titanium and nickel alloys, plastic, glass, ceramic and many more).

QUALITY

Grinding covers a broad spectrum of processes, from rough cutting to fine machining. This requires mounted points that deliver the right balance of machining performance and tool life, while achieving the desired surface quality. Manufacturing quality mounted points involves knowing the conditions in which the tools will be used, selecting the raw materials and understanding how to combine them in the right specification.

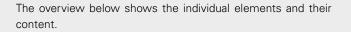
EKR ABRASIVE

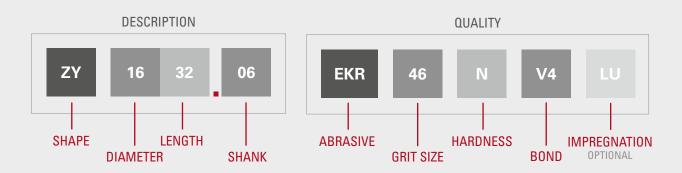
LUKAS offers you the abrasive you need for every application – tailored to your requirements and the materials you are working with. The following overview contains all raw materials for LUKAS mounted points. The abbreviations for the respective abrasives can be found in the quality designation of the LUKAS tools (see right).



All the important information in the product designation

LUKAS bonded grinding and polishing tools have all the important values and identifiers in the product designation, making it easy for you to find the right one for your requirements.





46

GRIT SIZES AS PER ISO 525

From coarse to very fine, the numerical grit size value is clearly displayed in the quality designation.

coarse	medium	fine	very fine
4	30	70	230
5	36	80	240
6	46	90	280
7	54	100	320
8	60	120	360
10	_	150	400
12	_	180	500
14	_	220	800
16	_	-	1.200
20	-	-	2.000
24	_	_	_

HARDNESS AS PER ISO 525

The hardness indicates the strength holding the abrasive grain bonded to the grinding wheel. It is determined using special measuring tools. Letters are used to indicate the hardness grade. The hardness increases with alphabetical order.

extreme soft	very soft	soft	medium	hard	very hard	extreme hard
А	E	Н	L	Р	т	х
В	F	I.	М	Q	U	Y
с	G	Jot	N	R	v	Z
D	-	К	0	S	W	-



BOND

The bond holds the abrasive grain to the grinding wheel. The most important bond types as per ISO 525 are:

Vitrified bond:

V = vitrified bond

The code following the bond identifier is a factory-internal designation.

Organic bond:

- BA = resin bond
- R = rubber bond or bond using other elastomers
- RF = rubber bond, reinforced

IMPREGNATION (OPTIONAL)

Impregnation can improve the grinding properties of all vitrified bonds, especially for processing certain steels:

- Lu = with resin
- W = with wax

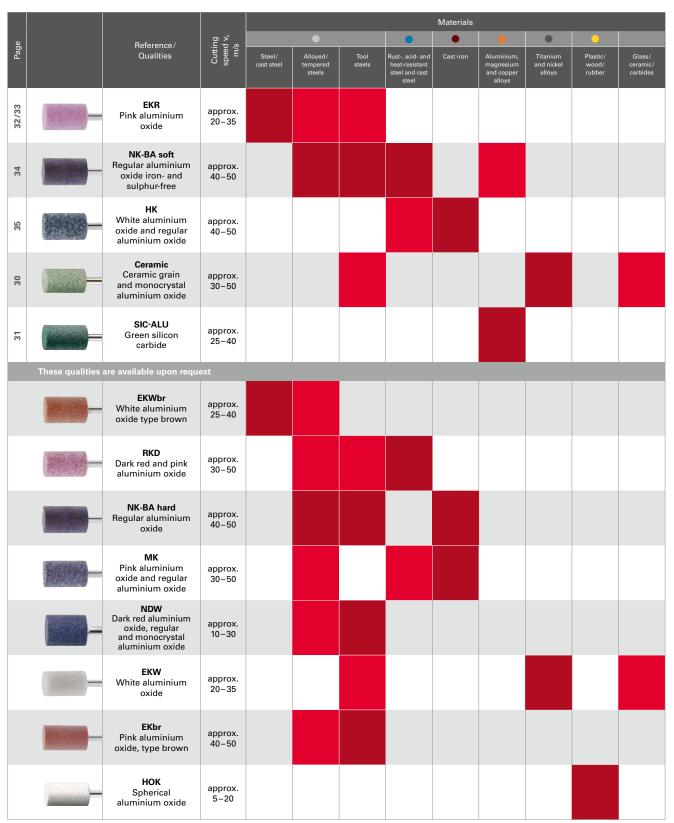
TECHNICAL INFORMATION

Qualities and areas of application

We have created a range of different shapes and dimensions in proven qualities from the full spectrum of possibilities described here. These mounted points are available from stock. Quality recommendations apply for ideal operating conditions.

best suitable

suitable



Speeds for grinding tools



				Recomme	ended cutting spee	ed v _c (m/s)			
		5	10	20	30	40	50	63	80
	2	47,700	95,500	191,000	286,500	382,000	477,500	601,600	763,900
	3	31,800	63,700	127,300	191,000	254,600	318,300	601,600	509,300
	4	23,900	47,700	95,500	143,200	191,000	238,700	300,800	382,000
	5	19,100	38,200	76,400	114,600	152,800	191,000	240,600	305,600
	6	15,900	31,800	63,700	95,500	127,300	159,200	200,500	254,600
	8	11,900	23,900	47,700	71,600	95,500	119,400	150,400	191,000
E E	10	9,500	19,100	38,200	57,300	76,400	95,500	120,300	152,800
eter (13	7,300	14,700	29,400	44,100	58,800	73,500	92,600	117,500
liam	20	4,800	9,500	19,100	28,600	38,200	47,700	60,200	76,400
Tool diameter (mm)	25	3,800	7,600	15,300	22,900	30,600	38,200	48,100	61,100
	32	3,000	6,000	11,900	17,900	23,900	29,800	37,600	47,700
	40	2,400	4,800	9,500	14,300	19,100	23,900	30,100	38,200
	50	1,900	3,800	7,600	11,500	15,300	19,100	24,100	30,600
	60	1,600	3,200	6,400	9,500	12,700	15,900	20,100	25,500
	80	1,200	2,400	4,800	7,200	9,500	11,900	15,000	19,100
	100	1,000	1,900	3,800	5,700	7,600	9,500	12,000	15,300
					Speed	(rpm)			

safety advice Safe grinding

PERIPHERAL SPEEDS

Our mounted points are manufactured to state-of-the-art standards, and carefully checked and tested. Their safety corresponds to EN 12413.

We produce mounted points with vitrified and resin bonds for an increased maximum peripheral speed of 50 m/s.

The maximum peripheral speed is limited by the following criteria:

- 1. Mass (weight) of the mounted point
- 2. Shape of the mounted point
- 3. Shank diameter
- 4. Shank overhang
- 5. Shank material
- 6. The concentricity of the mounted point

SAFETY

Safety is an essential mark of quality for any grinding tool. When using and storing mounted points, always observe the safety and accident prevention regulations, along with the FEPA safety recommendations.

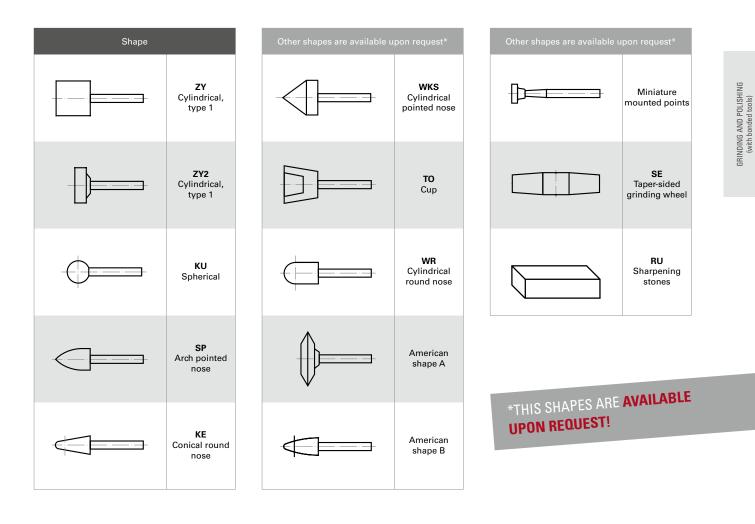
Our products are delivered with a safety ticket, as shown below, which indicates the maximum permitted speed for a certain overhang length (open shank length).

We do not use raw materials in our grinding wheels that are hazardous to health.

MULTILINGUAL PRODUCT DESIGNATION	Schleifkörper keramisch Brousicí tělíska keramická Mounted points - vitrified Muelas cerámicas Meules vitrifiées Sciernice spojone ceramicznie	LUKAS GERMANY * * ☆	PRODUCT LINE
PRODUCT NUMBER AND PRODUCT SPECIFICATION	A200002032602 ZY 2032.06 EKR 36 N V4	Menge / VPE 20 EN 12413	SAFETY STANDARD
TECHNICAL INFORMATION	Lo(mm) max.rpm 10 40.600 15 34.500 20 29.700 Lo min. 10	FA1488310	SERIAL NUMBER
	LUKAS-ERZETT Vereinigte Schleif- und Fräswerkzeugfabriken GmbH & Co. KG Gebrüder-Lukas-Straße 1 - 51766 Engelskirchen Made in Germany	4 027497 013296	EAN CODE

SHAPE

Summary of available shapes



POWER TOOLS

You can find the right power tools for our LUKAS tools on **pages 113–122**. Our power tools are designed for use with LUKAS tools and ensure highly efficient use.

QUALITIES AND PROPERTIES Mounted points for machining tool steels



CERAMIC Mixture of ceramic grain and monocrystal aluminium oxide

GRINDING AND POLISHING (with bonded tools)

MATERIAL PROPERTIES

In the mould and die industry it is all about precision. Tool steels are produced to be hard and strong enough for their purpose. As a result, special grinding tools are required to process workpieces to the limits of their tolerances.

INDUSTRIES

- Tool construction
- Pattern construction
- Mould-making
- Aerospace engineering

PROCESSING EXAMPLES

- Re-grinding transitions
- Groove grinding
- Fine deburring
- Fine grinding

Lap grinding

- Coordinate grinding
- Ball bearing grinding
- Turbine blades

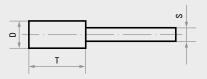
LUKAS GRINDING TOOLS

LUKAS mounted points for mould and die industry are extremely dimensionally stable and can cut even the hardest materials. Ceramic grain is extremely friable due to its microcrystal structure, making it self-sharpening. Materials that are difficult to cut (e.g. nickel-based alloys) can therefore be machined without any problems. Moreover, the use of special grain qualities ensures a long tool life. Our comprehensive product range lets you reach and process even the most inaccessibleareas.

Ceramic mounted point

 $\star \star \star$





maximum sharpness and hardness with ceramic self-sharpening effect

- impressive tool life
- high and fast removal rate, especially on hardened surfaces, scale, hard coatings and reinforced weld seams

Product number	Description	Shape	Quality	D mm	T mm	S mm	Pack contains
A200000613377	ZY 0613.03		Ceramic 80 L V118	6	13	3 x 30	20
A200001325677	ZY 1325.06		Ceramic 46 L V118	13	25	6 x 40	20
A200001632677	ZY 1632.06		Ceramic 46 L V118	16	32	6 x 40	20
A200200816377	SP 0816.03		Ceramic 80 L V118	8	16	3 x 30	20
A200201320677	SP 1320.06		Ceramic 80 L V118	13	20	6 x 40	20
A201101010677	KU 1010.06	\bigcirc	Ceramic 46 L V118	10	10	6 x 40	20
			Recommended for	: 🌔 Inox/	Steel 🏾 🗨 S	Steel 🛛 T	itanium

Mounted points for machining non-ferrous metals



SIC-ALU Green silicon carbide

MATERIAL PROPERTIES

Aluminium and its respective alloys have many varied and positive characteristics, making it the second most widely used metal after steel.

Aluminium has only 1/3 the density of steel. The purer the metal, the weaker it becomes, but this allows for better shape forming. Using unsuitable mounted points, however, can lead to smearing and clogging.

INDUSTRIES

- Transportation (railways, ships, automotive, aerospace)
- Metal construction (bridges, cranes, silos)
- Apparatus engineering
- Aluminium die-cast

- Chemical industry
- (vessels, pumps, pipes)
- Engines, transmission parts
- and many more

PROCESSING EXAMPLES

- Deburring
- Fettling
- Finishing
- Surface finishing

LUKAS GRINDING TOOLS

Our SIC-ALU mounted points were developed specifically for this application. A special structure ensures maximum tool life whilst preventing material from clogging the pores. The self-sharpening effect is aided by the use of a special impregnation.



0



SIC-ALU mounted point

 $\star\star\star$

special	auality	/ for	arindina	aluminium	

Product number	Description	Shape	Quality	D mm	T mm	S mm	Pack contains
A200001013618A	ZY 1013.06		SIC-ALU 80 V27 W	10	13	6 x 40	20
A200001332618A	ZY 1332.06		SIC-ALU 80 V27 W	13	32	6 x 40	20
A200001632618A	ZY 1632.06		SIC-ALU 80 V27 W	16	32	6 x 40	20
A201501632618A	KE 1632.06		SIC-ALU 80 V27 W	16	32	6 x 40	20
				Reco	ommended fo	or: 🔶 Alui	

Mounted points for machining steel and cast steel



EKR Pink aluminium oxide

★★☆

MATERIAL PROPERTIES

The wide range of different steel types and workpieces made from them require mounted points with properties that cover this broad spectrum as much as possible.

INDUSTRIES

- Mechanical engineering
- Automotive engineering
- Toolbuilding
- Vessel and equipment manufacturing
- Shipyards
- and many more

PROCESSING EXAMPLES

- General rough grinding
- Fettling
- Rough grinding of weld seams
- Finish grinding of weld seams
- Deburring

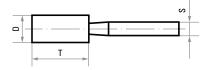
LUKAS GRINDING TOOLS

The wide selection of LUKAS grinding tools includes countless shapes, sizes and qualities. You will find the correct tool from our standard range to solve most grinding problems, irrespective of the material, type of power tool or any other influencing factors. These mounted points are designed for high stock removal and long tool life.



EKR mounted point

★★☆





- perfect results on structural steel and for rough grinding with aluminium oxide
- extremely hard and sharp for a long tool life
- also cuts harder materials efficiently

Product number	Description	Shape	Quality	D mm	T mm	S mm	Pack contains
A20000306302	ZY 0306.03		EKR 100 N V4	3	6	3 x 30	20
A200000510302	ZY 0510.03		EKR 80 N V4	5	10	3 x 30	20
A200000610302	ZY 0610.03		EKR 60 N V4	6	10	3 x 30	20
A20000816602	ZY 0816.06		EKR 60 N V4	8	16	6 x 40	20
A200001013302	ZY 1013.03		EKR 60 N V4	10	13	3 x 30	20
A200001020602	ZY 1020.06		EKR 60 N V4	10	20	6 x 40	20
A200001320602	ZY 1320.06		EKR 46 N V4	13	20	6 x 40	20
A200001632602	ZY 1632.06		EKR 46 N V4	16	32	6 x 40	20
A200002032602	ZY 2032.06		EKR 36 N V4	20	32	6 x 40	20
A200002040602	ZY 2040.06		EKR 36 N V4	20	40	6 x 40	20
A200002532602	ZY 2532.06		EKR 36 N V4	25	32	6 x 40	20
A200003232602	ZY 3232.06		EKR 30 N V4	32	32	6 x 40	20
A200004040602	ZY 4040.06		EKR 30 N V4	40	40	6 x 40	20
A201301303302	ZY2 1303.03		EKR 80 N V4	13	3	3 x 30	20
A201302506602	ZY2 2506.06		EKR 60 N V4	25	6	6 x 40	20
A201303208602	ZY2 3208.06		EKR 46 N V4	32	8	6 x 40	20
A201305010602	ZY2 5010.06		EKR 30 N V4	50	10	6 x 40	20
A200200510302	SP 0510.03		EKR 80 N V4	5	10	3 x 30	20
A200200816302	SP 0816.03		EKR 60 N V4	8	16	3 x 30	20
A200201320602	SP 1320.06		EKR 46 N V4	13	20	6 x 40	20
A200202032602	SP 2032.06		EKR 36 N V4	20	32	6 x 40	20
A201100808302	KU 0808.03		EKR 60 N V4	8	8	3 x 30	20
A201101010602	KU 1010.06	L	EKR 60 N V4	10	10	6 x 40	20
A201101616602	KU 1616.06		EKR 46 N V4	16	16	6 x 40	20
A201102020602	KU 2020.06	Т	EKR 36 N V4	20	20	6 x 40	20
A201102525602	KU 2525.06		EKR 36 N V4	25	25	6 x 40	20
A201501632602	KE 1632.06		EKR 46 N V4	16	32	6 x 40	20
A201502032602	KE 2032.06		EKR 36 N V4	20	32	6 x 40	20
A201502570602	KE 2570.06		EKR 36 N V4	25	70	6 x 40	20
					Recommen	ded for:	Steel

Mounted points for machining non-rusting steels



NK-BA SOFT

Regular aluminium oxide with resin bond, iron- and sulphur-free

MATERIAL PROPERTIES

Non-rusting steels are difficult to machine. They tend to smear due to the nickel content, while their poor heat conductivity often causes the material to overheat within the grinding contact zone.

INDUSTRIES

- Steel construction and fabrication (façades, handrails, sanitary equipment)
- Vessel manufacturing
- Casings and panelling
- Medical technology
- Shipyards
- Food industry
- and many more

PROCESSING EXAMPLES

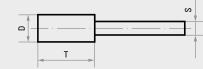
- Rough and finish grinding
- Deburring
- Fettling
- Finishing weld seams
- Surface finishing

LUKAS GRINDING TOOLS

LUKAS has developed particularly highperformance tools for non-rusting steels that deliver exceptional stock removal, even under adverse conditions.

These tools do not contain any iron, sulphur or halogens. This generally prevents chemical reactions (corrosion) of the workpiece material in the grinding contact zone.

NK soft mounted point



for non-rusting steels

 excellent removal rates, also under difficult conditions

★★☆

Product number	Description	Shape	Quality	D mm	T mm	S mm	Pack contains
A200001632627W	ZY 1632.06		NK 24 N BA soft	16	32	6 x 40	20
A200002040627W	ZY 2040.06		NK 24 N BA soft	20	40	6 x 40	20
A200002532627W	ZY 2532.06		NK 24 N BA soft	25	32	6 x 40	20
A200003232627W	ZY 3232.06		NK 24 N BA soft	32	32	6 x 40	20
A200004020627W	ZY 4020.06		NK 24 N BA soft	40	20	6 x 40	20
A200005020627W	ZY 5020.06		NK 24 N BA soft	50	20	6 x 40	20
A201305004627W	ZY2 5004.06		NK 24 N BA soft	50	4	6 x 40	20
A201305010627W	ZY2 5010.06		NK 24 N BA soft	50	10	6 x 40	20

Mounted points for machining cast materials



HK

Mixture of white aluminium oxide and regular aluminium oxide

MATERIAL PROPERTIES

The characteristics of the various types of cast materials are normally determined by their carbon content and the way in which the carbon is removed from the material structure. Cast materials are generally rough machined. The skin contains inclusions of sand from the casting process; large burrs, sprues and risers, holes and cracks must all be removed by grinding. These areas to be ground are often difficult to reach.

INDUSTRIES

Manufacturers of cast components such as engine blocks, gear box casings, cylinder heads, frames, stands, machine slides, gears, crankshafts, pump and turbine housings, machine tool components and many more.

PROCESSING EXAMPLES

- Deburring
- Fettling
- Polishing
- Finish grinding of repair welds
- Removing holes and cracks

LUKAS GRINDING TOOLS

LUKAS mounted points for grinding cast materials contain special grain mixtures and tough bonding systems, delivering excellent performance in the applications mentioned above.

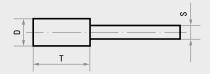
The aggressiveness of the abrasive grain and the smooth running of the mounted points allow for ergonomic machining with minimum force. Mounted points with specially extended shanks are also available on request.



perfect for grinding cast materials

- special grain mixture ideally suited to the material
- for ergonomical working with minimum force

HK mounted point





A200001632633 ZY 1632.06 A200002032633 ZY 2032.06	HK 30 N V13 HK 30 N V13	16	32	6 x 40	20
A200002032633 ZY 2032.06	HK 30 N V13			1	
		20	32	6 x 40	20
A200002532633 ZY 2532.06	HK 30 N V13	25	32	6 x 40	20
A200004020633 ZY 4020.06	HK 30 N V13	40	20	6 x 40	20
A201305010633 ZY2 5010.06	HK 30 N V13	50	10	6 x 40	20

GRINDING AND POLISHING (with bonded tools)

GENERAL INFORMATION AND PRODUCT INFORMATION

Polishing tools from LUKAS - groups P1 to P7

Whether you need to achieve certain technical surface values for your product or just want to make it shine, there are many good reasons to choose polishing tools from LUKAS.

In sectors such as the automotive industry, aerospace, and pump and turbine engineering, there are plenty of sealing surfaces and fits that must be produced with high precision to achieve the right result. In the food and pharmaceutical industries, polished surfaces ensure hygienic clean working conditions. In mould and die industry, surfaces are polished to a mirror finish; with any casting, the result is a perfect end product.

In response to the growing importance of fine machining, LUKAS has developed a wide range of polishing tools, featuring a variety of raw materials, grain combinations and hardness levels. LUKAS polishing tools are categorised into groups P1 to P7 according to the respective application. These tools include polishing wheels, points and sticks to cover a wide variety of applications. The diagram on the next page provides an overview.

Bonding type	Properties	Page
P1*	Polishing points consist of a hard rubber bonding with size 100 abrasive grains. They are suitable for fine finishing applications and the preparation of surfaces that require further polishing.	-
P2	Polishing points and wheels are manufac- tured using a soft rubber bond in grit sizes 46 to 800. These tools are perfect for creating grained to dash-dot matted finishes on small surface areas. To achieve the required result, tools with different grit sizes should be should be used one after the other.	39/40
P3	Felt polishing tools are used in combination with SIC or diamond polishing paste to achieve the best results, even up to a mirror finish.	41-43
P4*	Polishing sticks are manufactured from pol- yurethane (PU). Areas of application and the results are similar to those detailed in group P2. Polishing sticks are used manually.	_
P5*	Polishing points contain a fibre reinforce- ment for a longer tool life. The surface finish achieved lies between group P1 and P2.	_
P6	Polishing tools are available in various forms – polishing points, marbling points, rolls for satin finishes, polishing wheels and polishing discs. The hardness of the polyurethane bond- ing (PU) can be divided into seven grades, from soft to hard, with available grit sizes of SIC 24 to F1200. This makes the tools suitable for many different uses, including larger surfaces. The main application with polishing wheels is on stationary polishing machines, e.g. cylindrical polishing of tubes.	44-48
P7*	Polishing points with a 2.35 mm shank diameter use SIC grain in sizes 240 or 400 in a silicon bond. These small tools are very soft and are ideal for polishing jewellery and other small parts.	_
* upon ree	quest	

SAFETY INSTRUCTIONS AND AREAS OF APPLICATION

Safe polishing with tested tools

SAFETY INSTRUCTIONS

The LUKAS polishing points in groups P1 and P5 are manufactured according to EN 12413 and have a maximum permitted peripheral speed of 50 m/s. Products in group P2 may be operated up to a maximum speed of 16 m/s. The maximum permitted peripheral speed of product group P6 depends on the tool hardness. For MWP, for example, this is 20 m/s.

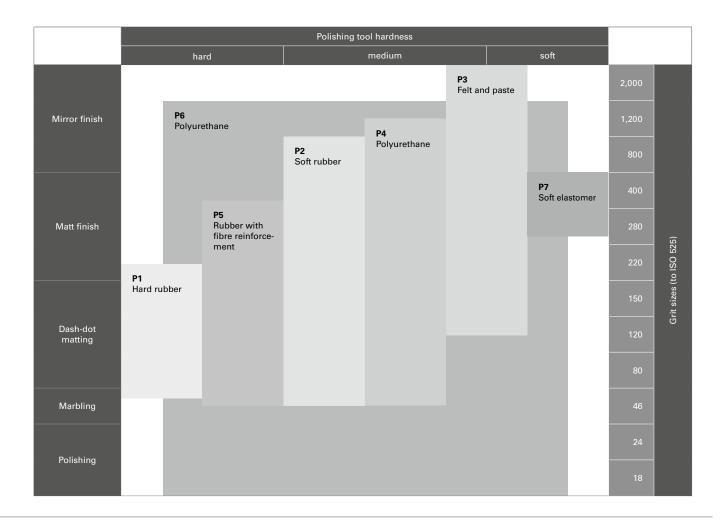
The ideal speed generally lies below the maximum permitted speed, however. This reduces the generated heat and prolongs the increases tool life. LUKAS polishing points are delivered with a safety ticket indicating the maximum speeds for the various shank overhangs.

To ensure safe use of polishing points and wheels, please observe the following operating instructions:

- FEPA safety recommendations for the correct use of abrasive products
- FEPA safety code for bonded abrasives

FIND THE RIGHT POLISHING TOOL FOR YOUR PROCESS STEP

The LUKAS range of polishing tools covers a variety of shapes and sizes. Specially developed for fine processing and polishing on surfaces, we offer a broad spectrum of polishing tools to help you achieve the desired result every time. Made from premium raw materials, our polishing points, wheels, sticks and rollers let you polish in a way that's best suited to the application, all the way to a gloss or high-gloss polish. Simply choose your desired polishing finish from the table below and find the right LUKAS polishing tool group (P1–P7) to achieve it.



TECHNICAL INFORMATION

Speeds for polishing tools

Recommended cutting speed v_c (m/s)												
		2	5	8	10	16	20	25	32	50		
٩							F	1				
rou	(Bonds)	P2/P4/P6 WP / P7 P3										
0 0	spr		10				P5					
hin	Boı				P6 I	MWP			I.			
olis						P6		P6 SHP				
<u>م</u>								P6 SH	IP CG			
		9,500	23,800	38,100	47,700	76,300	95,400	119,300	152,700	238,700		
		6,300	15,900	25,400	31,800	50,900	63,600	79,500	101,800	159,100		
	8	4,700	11,900	19,000	23,800	38,100	47,700	59,600	76,300	119,300		
	10	3,800	9,500	15,200	19,000	30,500	38,100	47,700	61,100	95,400		
~	16	2,300	5,900	9,500	11,900	19,000	23,800	29,800	38,100	59,600		
Tool diameter (mm)	20	1,900	4,700	7,600	9,500	15,200	19,000	23,800	30,500	47,700		
er (r	25	1,500	3,800	6,100	7,600	12,200	15,200	19,000	24,400	38,100		
met	32	1,100	2,900	4,700	5,900	9,500	11,900	14,900	19,000	29,800		
dia	40	900	2,300	3,800	4,700	7,600	9,500	11,900	15,200	23,800		
lool	50	700	1,900	3,000	3,800	6,100	7,600	9,500	12,200	19,000		
	75	500	1,200	2,000	2,500	4,000	5,000	6,300	8,100	12,700		
	100	300	900	1,500	1,900	3,000	3,800	4,700	6,100	9,500		
	150	200	600	1,000	1,200	2,000	2,500	3,100	4,000	6,300		
	200	100	400	700	900	1,500	1,900	2,300	3,000	4,700		
	250	100	300	600	700	1,200	1,500	1,900	2,400	3,800		
						Speed (rpm)						

A

The ideal/recommended speed for polishing tools is usually lower than the maximum speed. Excessively high speeds generate more heat.

SHAPE Summary of available shapes

Shape	Shape			
	Cylindrical, type 1	P1*, P2, P3, P5*, P6*		
	Cylindrical, type 2	P1*, P2		
	Conical	P1*, P2, P3*		
\bigcirc	Spherical	P2, P3, P5*		
		* upon request		
Other shapes are available u	pon request			
×//////// •///////	Roll	P6		
	Stick	P4		

Shape	Shape		
	Arch pointed nose	P2, P3, P5*	
	Cylindrical round nose	P1*, P2	
	Wheel	P3, P6*	
	Flap disc	P6	
		* upon request	
Other shapes are available u	pon request		
	Disc	Ρ7	
	Lens	Ρ7	

POLISHING GROUP P2 Matt finish even on small surfaces

The polishing points in this group are available in the seven grit sizes shown below, and in a variety of shapes and sizes. They are colour-coded to prevent any confusion and to avoid any errors in the polishing process. The soft rubber bonding allows for a very soft grinding effect. Polishing points in the P2 group are mainly used on a pre-machined surface where a fine to gloss polished finish is required. Polishing wheels in this group are also available with a max. diameter of 200 mm in the indicated grit sizes. Exact dimensions and prices are available on request.

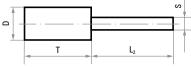


Product image				
Colour	black	pale grey	red	brown
Grit size	46	80	120	220

Product image			
Colour	green	white	orange
Grit size	280	400	600

P2 polishing point (as per DIN 69170)





$\star \star \star \star$

XXX							5111 00170	
Product number	Description	Shape	Grit size	D mm	T mm	S mm	L ₂ mm	Pack contains
A2610006103080	P2ZY 0610.03		80	6	10	3	30	20
A2610006103120	P2ZY 0610.03		120	6	10	3	30	20
A2610006103220	P2ZY 0610.03		220	6	10	3	30	20
A2610006103280	P2ZY 0610.03		280	6	10	3	30	20
A2610010103046	P2ZY 1010.03		46	10	10	3	30	20
A2610010103080	P2ZY 1010.03		80	10	10	3	30	20
A2610010103120	P2ZY 1010.03		120	10	10	3	30	20
A2610010103220	P2ZY 1010.03		220	10	10	3	30	20
A2610010103280	P2ZY 1010.03		280	10	10	3	30	20
A2610016206280	P2ZY 1620.06		280	16	20	6	40	10
A2610016206400	P2ZY 1620.06		400	16	20	6	40	10
A2610016206600	P2ZY 1620.06		600	16	20	6	40	10
A2610016326080	P2ZY 1632.06		80	16	32	6	40	10
A2610016326120	P2ZY 1632.06		120	16	32	6	40	10
A2610016326220	P2ZY 1632.06		220	16	32	6	40	10
A2611013206120	P2SP 1320.06		120	13	20	6	40	10
A2611020326220	P2SP 2032.06		220	20	32	6	40	10
A2615008083120	P2KU 0808.03	1	120	8	8	3	30	20
A2615016166120	P2KU 1616.06		120	16	16	6	40	10
A2615016166220	P2KU 1616.06	Т	220	16	16	6	40	10
A2617032106120	P2ZY 3210.06		120	32	10	6	40	10
A2617032106220	P2ZY 3210.06		220	32	10	6	40	10
A2618016326120	P2WR 1632.06		120	16	32	6	40	10
A2619010206080	P2KE 1020.06		80	10	20	6	40	10
A2619010206120	P2KE 1020.06		120	10	20	6	40	10
	Recomme	ended for: 🕒 Inox/Steel	🔵 Steel 🛛 🛑 A	luminium	Cast mate	erial 🔵 Tit	tanium 🌓	Plastic

manufactured as per DIN 69170

GRINDING AND POLISHING (with bonded tools)

POLISHING GROUP P3 Excellent results all the way to a mirror finish



LUKAS felt polishing points are available in two qualities:

- H3 as per DIN 61200
- H3-S* super hard and particularly effective when used in combination with diamond paste (* upon request)

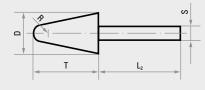
The ideal peripheral speed for LUKAS felt polishing points is 2 to 8 m/s.

The LUKAS range of felt polishing tools reflects our many years of experience in this field and covers all the most common shapes and sizes. Thanks to their extreme flexibility, felt polishing points used together with LUKAS diamond paste are ideally suited for polishing highly complex shapes like pressure and injection moulds, drawing, press and cutting tools, dies, bearings, spindles, rolls, gauges, etc.

★★☆



P3 polishing point





perfect for polishing highly complex shapes

manufactured as per DIN 69170

Product number	Description	Shape	Quality	D mm	T mm	S mm	L ₂ mm	Pack contains
A3700006103	P3ZY 0610.03		H3	6	10	3	40	20
A3700010123	P3ZY 1012.03		H3	10	12	3	38	20
A3700012153	P3ZY 1215.03		H3	12	15	3	40	20
A3700016206	P3ZY 1620.06		H3	16	20	6	40	10
A3700020256	P3ZY 2025.06		H3	20	25	6	40	10
A3700025306	P3ZY 2530.06		H3	25	30	6	40	10
A3700030406	P3ZY 3040.06		H3	30	40	6	40	10
A3701006103	P3SP 0610.03		H3	6	10	3	40	20
A3701010123	P3SP 1012.03		H3	10	12	3	40	20
A3701012206	P3SP 1220.06		H3	12	20	6	40	10
A3701020256	P3SP 2025.06		НЗ	20	25	6	40	10
A3701025306	P3SP 2530.06		H3	25	30	6	40	10
A3703006063	P3KU 0605.03		H3	6	5,5	3	39,5	20
A3703010106	P3KU 1009.06	\wedge	H3	10	9	6	41	10
A3703012126	P3KU 1211.06	∇	НЗ	12	11	6	39	10
A3703020206	P3KU 2019.06		H3	20	19	6	41	10
		Recommended for: •	nox/Steel	Steel 🛛 🔴 C	ast material	Titaniu	m 🌓 Alu	minium

GRINDING AND POLISHING (with bonded tools)

CAPABLE OF MACHINING THE MOST COMPLEX SHAPES

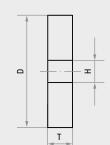
ELASTICALLY TO HIGH-GLOSS POLISHING

Thanks to its outstanding elasticity, the S1 shaped felt polishing disc from the P3 group is especially suited for polishing highly complex shapes such as pressure and injection moulds, drawing, press and cutting tools, cold heading dies, dies, bearings, spindles, rollers and gauges.

In combination with different diamond pastes, this polishing disc can be used with great flexibility.

Felt polishing wheel, shape S1





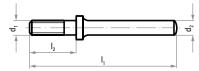


Product number	Description	Quality	D mm	T mm	H mm	Pack contains
A3750040106	P3S1 4010.06	H3	40	10	6	10
A3750050206	P3S1 5020.06	НЗ	50	20	6	10
A3750060206	P3S1 6020.06	НЗ	60	20	6	10
	Recommended for:	Inox/Steel 🔵 Steel 🔵 C	ast material	Titaniui	m 🌓 Alu	minium

Arbors for felt polishing wheels







Delivery includes the following for each arbor:

• two washers, Ø 18 mm

two washers, Ø 30 mm

and one hex nut.

Product number	Description	d₁ mm	l₂ mm	d ₁ mm	l, mm	n _{max} rpm	Pack contains
A1630780	ASB 780	M6	20	6	63	7,000	5
A1630781	ASB 781	M6	30	6	73	7,000	5

SUPER-E DIAMOND PASTE

GET THE GLOSS YOU WANT WITH JUST A TINY AMOUNT

Thanks to the high concentration of diamond grains, you can polish even the hardest materials quickly and efficiently. The optimal shape of the monocrystalline diamonds and the very narrow grain size distribution guarantee perfect polishing results. Because of its agglomerate-free production and high viscosity – which can be gradually diluted with water, oil or alcohol – our diamond paste is also ideal for use in machines. The paste was specially developed for mould making.

FEATURES

- high grain concentration
- perfect grain size
- free from agglomerates
- narrow grain size distribution
- monocrystalline
- high viscosity

BENEFITS/USES

- polishes the hardest materials quickly and efficiently
- optimised for machine application
- highly effective
- ideal for mould making
- dilute with water, oil or alcohol





Monocrystalline diamond pastes



★★☆

•	highly versatile for both manual
	and machine polishing

resists temperatures of up to 130 °C

Product number	Description	Quality	Grain size in μm	Colour	Content g	Pack contains
A3410119105	E-091	Super-E	1	blue	5	1
A3410119110	E-091	Super-E	1	blue	10	1
A3410119205	E-092	Super-E	3	green	5	1
A3410119210	E-092	Super-E	3	green	10	1
A3410119305	E-093	Super-E	6	yellow	5	1
A3410119310	E-093	Super-E	6	yellow	10	1
A3410119405	E-094	Super-E	9	red	5	1
A3410119410	E-094	Super-E	9	red	10	1
A3410119505	E-095	Super-E	15	light brown	5	1
A3410119510	E-095	Super-E	15	light brown	10	1
		Recommended for:	Inox/Steel	Steel Cast	material 🛛 T	itanium

POLISHING GROUP P6 Polishing with polyurethane bonding

Products in group P6 are manufactured with a polyurethane bond (PU) in different hardnesses.

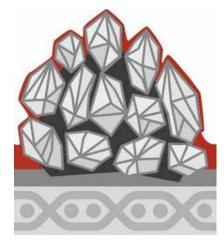
These tools:

- can be easily profiled
- quickly generate an excellent surface finish
- do not tent to clogg
- require no dressing
- contain no softeners
- do not increase in hardness after long storage
- are ideal for both stationary and manual application

These polishing tools are used to improve the surface finish and dimensional accuracy of polishing and finishing steel, brass, precious metals, sintered metals and plastic, as well as for very fine and effect grinding.

Due to their long tool life and a good edge-fray resistance, the tools are ideally suited for automated processes such as cylindrical polishing of tubes or marbling of high-alloyed steel plates.

Many cutting edges combined in one grain



The compact grain (CG) consists of many abrasive grains and reactive filler, which are bonded to each other before adding them to the tool. During grinding, individual worn particles break out of the compact grain, exposing the underlying abrasive particles with new, sharp cutting edges. As a result, tools with compact grain do not clog even with softer or smearing materials. Due to the double adhesive bonding in the compact grain and abrasive layer, the grinding particles adhere better than with just a single adhesive bonding. This means a longer useful life without premature tool changes. The high density of the cutting edges within the compact grain guarantees the very high stock removal rate, while the filler ensures a cool cut.

RECOMMENDED FOR The right polishing tool for every job

Find the perfect tool for your application! Simply find your process and the corresponding material in the table to discover the perfect grit size for your LUKAS P6 polishing tool.

	cl 1	oving leaning tarnish emova], I		ndrical Ice grir		Sharp dres	ening, sing	dasł	oling, n-dot ting		Debu fettl roundi	ing,			Fine gi	rinding	1		Pre-fir	hishing		Polis	hing
	MWP	МР	SHP CG	SHP	SHP CG	SHP+	SHP	SHP+	WP	MWP	WP	MWP	MP	HP	WP	MWP	МР	HP	WP	MWP	MP	HP	WP	MWP
														410									400	400
																			240	240			800	
Gold, silver,																	150		150				1,200	
nickel, aluminium,																120	120							
brass										80			80	80		80								
									46	46				46		46								
									24															
Structural		150	120		120	36																		
steel	46		60		60	30																		
							400																400	400
							240													240	240		800	240
		150												150			150			150	150		1,200	
Stainless			120		120		120									120	120			120				
steel, titanium					60		80			80	80	80		80	80	80	80	80						
			60					36		46		46			46	46	46	46						
								30	24					24										
									16															
				240																		240	400	
Hardened				150														150					800	
steel, tungsten				120	120													120					1,200	
carbide				80	60	36		36				80												
						30		30				46												
																				400				
																		100		240				
Glass																		80		150				
												80						46						
Rubber			60															80						
Wood																	80							
Paint	46	150																						
Solder	240				120																			
						36										80								
Tin						30										46								
											Grit s	sizes												

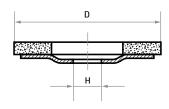
The following grades are available:

- **WP** = soft, very flexible
- **MWP** = medium to soft
- **MP** = medium for general application
- **HP** = hard and resilient, mainly for flat surfaces
- **SHP** = super hard, for stationary applications
- **SHP CG** = super hard, with compact grain
- **SHP+** = super hard, for manual applications

The bonding is mixed with silicon carbide "SIC", aluminium oxide white "EKW" or aluminium oxide "A" as abrasive in the FEPA grit sizes 24 to 1,200.



P6PT polishing disc, CG quality



- very hard PU bonding
- can be used on a variety of materials
- contains compact grain (CG)
- suitable for removing irregularities and defects before polishing

and detects before polishing produces good surfaces

incredible tool life

$\star\star\star$

Product number	Description	Quality/grit size	Type/surface result	D mm	H mm	n _{max} rpm	Pack contains
A671612506014	P6PT 125 (flat)	EKW 60 SHP CG	extra coarse	125	22.23	12,200	5
A671612512014	P6PT 125 (flat)	EKW 120 SHP CG	coarse	125	22.23	12,200	5
		Recommended for: 🛛 🔵 Inox	/Steel 🔵 Steel 🛑 A		Cast mat	erial 🔹 🕕 Ti	itanium

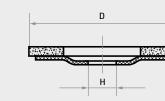
The new tools in the P6 Compact Grain series let you remove scratches and irregularities on workpieces, whilst also creating a good surface. This helps you save time and removes the need for annoying tool changes. Their incredible tool life is down to the very hard PU bonding and the compact grain technology. P6 CG tools are perfect for grinding before polishing with other P6 tools with hardness ranging from WP to HP.

Ideal for:

- cleaning surfaces
- removing scratches
- removing paint and undercoats
- p reparing surfaces for polishing

P6PT polishing discs

★★☆



- polishing a wide range of surfaces
- cleaning and derusting
- removing paint and coatings
- replaces cloth discs, felt discs and polishing pastes
- for standard controlled angle grinders
- clean working conditions, as no grinding paste is required
- quicker work progress

Product number	Description	Quality	Type/ surface result	D mm	H mm	n _{max} rpm	n _{recom} rpm	Pack contains	
A671612515014	P6PT 125 (flat)	SIC 150 MP	medium	125	22.23	4,800	2,700	5	
A671612524014	P6PT 125 (flat)	SIC 240 MWP	fine	125	22.23	4,800	2,700	5	
A671612540014	P6PT 125 (flat)	SIC 400 WP	very fine	125	22.23	4,800	2,700	5	
A671612580014	P6PT 125 (flat)	SIC 800 WP	ultra-fine	125	22.23	4,800	2,700	5	
Recommended for: 🕒 Inox/Steel 🕒 Cast material 🌑 Titanium 🕕 Steel 🌓 Aluminium									

FROM COARSE TO FINE - THE PERFECT POLISHING SET

TEST THE LUKAS POLISHING DISCS NOW!

The P6PT polishing disc makes improving the surface quality and dimensional accuracy of your workpiece easy. This disc with silicon carbide grinds cool and generates few sparks, making it suitable for use in aerospace engineering. Even hard materials like stone, glass and high-alloyed materials can be processed efficiently. The hard and sharp abrasive grain ensures a long tool life. Whether it's cleaning, grinding or polishing – this LUKAS polishing disc takes care of any job with flying colours. It is perfectly suited for working with a standard controlled angle grinder.

The polishing disc can be used for both wet and dry grinding and requires no additional grinding paste.

Its light, stable and flexible design lets you achieve outstanding surface results. The glass fibre carrier plays no role here. The disc is highly resistant to breakage and generates little vibration when working. Combined with its easy handling, it is ideal for manual use. The P6 group of polishing discs are perfect for quickly processing large metal surfaces.

THE LUKAS POLISHING DISC SET

Get the polishing result you want quickly with the polishing disc set from LUKAS. Simply use the various polishing discs in the set one after another. Go from rusty to a mirror finish quickly and easily with just a few tool changes and one machine.





P6PT polishing disc set

★★☆



- from rusty to a mirror finish with the LUKAS polishing disc set
- use these tools one after another to achieve the finish you want

Product number	Description	Shape	Quality	D mm	H mm	n _{max} rpm	n _{recom} rpm	Contents 1 per pack	Pack contains	
A6700023	P6PT 125 (flat) SET		P6PT	125	22.23	4,800	2,700	P150, 240, 400, 800	1	
	Recommended for: 🕒 Inox/Steel 🔍 Cast material 🔍 Titanium 🕕 Steel 🎈 Aluminium									



GRINDING AND POLISHING (with flexible tools)

ļ	3.1	Lamellar flap discs	53-65
,	3.2	Flap wheels	66/67
,	3.3	Mounted flap wheels	68-72
,	3.4	Abrasive bands and mandrels	73-76
,	3.5	Abrasive caps and mandrels	77-80
,	3.6	Abrasive discs and carriers	81-88
,	3.7	Fibre discs and backing pads	89/91

1. Sector

The most important product information at a glance

GENERAL

Our flexible grinding and polishing tools are made of high quality abrasive cloth and abrasive fleece. They consist of a flexible backing coated with abrasive grain (see pages 51 to 52).

Backings used:

cloth, polyester, fleece, fibre

Grain types used:

regular aluminium oxide (NK), silicon carbide (SIC), zirconia alumina (ZK), ceramic (Ceramic)

Our flexible grinding and polishing tools are available in many different shapes and dimensions. Applications range from high chip removal through to achieving an extremely fine surface finish.

SAFETY ADVICE

Please note our recommended operating speeds. Pay attention to the safety and accident prevention regulations, including the FEPA safety recommendations, when using and storing flexible grinding and polishing tools. The tools are marked with the appropriate pictograms for correct usage.

APPLICATION RECOMMENDATIONS

At high speed coarse grain produces a finer finish, while at low speed a fine grain produces a coarser finish.

Do not apply too much pressure when using LUKAS grinding tools: excessive pressure does not improve the performance, and will instead result in premature wear. Even if the chip removal is unsatisfactory, you do not apply more pressure. Use a coarser grain instead to prevent unnecessary tool wear and effort. Using grinding additives can also improve efficiency.

OUALITY AND APPLICATIONS The right abrasive for every application

LUKAS offers you the right abrasive for every job – tailored to your requirements and the materials you want to machine. The high quality abrasives from LUKAS are ideal for many industries, areas and requirements, and therefore offer you a very wide choice.

The overview below lists all abrasives for use with flexible grinding and polishing tools. Read through the properties and application areas for various workpiece materials to establish the most suitable abrasive grain type and tools to meet your requirements.

Quality	Properties	Application areas/ machining	available as	Page
NK Abrasive cloth Regular aluminium oxide	very tough abrasive, high resilience	forged steel, malleable iron, grey cast iron, carbon steel, deep-drawn steel, steel band, zinc die castings, non-ferrous metals, wood	Flap wheels Mounted flap wheels Abrasive bands Abrasive discs	67 69/70 75 85
NKE Abrasive cloth Regular aluminium oxide with active abrasive surface layer	very tough abrasive, high resilience	chrome-nickel and other non-rusting steels, deep-drawn steel, titanium and titanium alloys, heat-resistant steel	Abrasive discs	86
ZK Abrasive cloth Zirconia alumina	exceptionally resilient grain with high pressure resistance	forged steel, metals that are difficult to machine and with extremely hard surfaces (overlay welding), titanium and titanium alloys, heat-resistant steel	Lamellar flap discs Mounted flap wheels Abrasive bands Fibre discs Abrasive discs	61 64/65 71 74 75 84
Z-Power Abrasive cloth Zirconia alumina with active abrasive surface layer	excellent removal rate, with long tool life	stainless steel	Lamellar flap discs Abrasive discs	61 84
ZKS Abrasive cloth Zirconia alumina with active abrasive surface layer	with M-bonding on polyester backing for excellent removal rate with long tool life	forged steel, metals that are difficult to machine and with extremely hard surfaces (overlay welding), titanium and titanium alloys, heat-resistant steel	Lamellar flap discs	61
NKS Abrasive cloth Regular aluminium oxide with active abrasive surface layer	excellent removal rate with long tool life	corrosion and heat-resistant steels, plastics, aluminium and non-ferrous metals	Abrasive caps	79
SIC Abrasive cloth Silicon carbide	minimum heat generation, special quality for the aerospace industry	aluminium and alloys, titanium materials, glass, ceramic, heat-resistant steel, plastic	Lamellar flap discs	62
Ceramic Abrasive cloth Ceramic grain	excellent removal rate without grain shredding, particularly stable thanks to reinforced backing, cool cutting	non-rusting steels, nickel alloys	Lamellar flap discs Abrasive bands Abrasive caps Abrasive discs	60 74 79 83
Ceramic4x Abrasive cloth Ceramic grain	excellent removal rate without grain shredding, particularly stable thanks to reinforced backing, cool cutting	steel, rust- and acid-resistant steel	Lamellar flap discs	57 60 63
PG Reinforced abrasive cloth with ceramic grain	maximum removal rate and tool life thanks to self-sharpening ceramic grain	inox, steel, hardened/coated surfaces	Lamellar flap discs	55
A Mounted flap wheels Flap rolls	the combination with abrasive cloth enhances the grinding effect	chrome-nickel alloys and other stainless steels, zinc die castings, non-ferrous metals, wood	Mounted flap wheels	72

FURTHER QUALITIES ON REQUEST

On request, we can also offer the following additional qualities which are not listed in this catalogue. If you want to order a prod-

uct of a different quality than the one listed in this overview, please do not hesitate to contact us!

Quality	Properties	Application areas/ machining	available as
NK Abrasive fleece Regular aluminium oxide	polishing effect with the fibre structure, consistent results thanks to contin- uous exposure of new abrasive particles	chrome-nickel alloys and other non-rusting steels, zinc die castings, non- ferrous metals, wood	Mounted flap wheels Flap rolls
SIC Abrasive fleece Silicon carbide	polishing effect with the fibre structure, consistent results thanks to contin- uous exposure of new abrasive particles	titanium and titanium alloys, silver and silver plating, aluminium and aluminium alloys, plastics	Mounted flap wheels Flap rolls Semi-flexible grinding disc
Z Abrasive fleece Zirconia alumina	polishing effect with the fibre structure, improved aggressiveness	chrome-nickel alloys and other stainless steels, zinc die castings, non-ferrous metals	Mounted flap wheels
TF Abrasive fleece/cloth Regular aluminium oxide reinforced fleece	with the combination mounted flap wheels, the abrasive cloth and fleece flaps wear more evenly, improved removal rate	ideal for surface finishing of sheet metal products made from non-rusting steel such as stainless steel sinks and containers	Mounted flap wheels Flap rolls
C Abrasive fleece/cloth Silicon carbide	the combination with abrasive cloth enhances the grinding effect	titanium and titanium alloys, silver and silver plating, aluminium and aluminium alloys, plastics	Lamellar flap discs Mounted flap wheels
AS Polyamide fleece	impregnated with aggressive abrasive grain	removal of paint and adhesives, cement and concrete resithankss, derusting, cleaning and polishing a wide variety of surfaces, graining and cleaning of wood	Flap disc Grinding wheel

TECHNICAL INFORMATION AND PRODUCT INFORMATION

LUKAS lamellar flap discs from coarse cutting through to surface finishing

GENERAL

We offer lamellar flap discs for practically every requirement. These tools are manufactured with a wide selection of backing materials (e.g. glass fabric, plastic, metal, as well as renewable raw materials) to suit every application. The large selection of available grit sizes covers coarse grinding applications (from grit size 36) through to finishing (grit size 240).

ERGONOMICS

Using lamellar flap discs brings clear advantages in terms of ergonomics compared to conventional grinding discs. Noise levels during grinding are halved and vibrations are also significantly reduced. The tools are also lighter so less pressure needs to be applied. These advantages create a healthy and fatigue-free working environment.

The lamellar flap discs are available in the diameters 100 mm (with 16 mm bore), 115 mm, 125 mm, 150 mm, 178 mm (22.23 mm bore) and 230 mm for use with commercially available angle grinders.

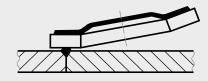
APPLICATION

You can choose between the flat or angled version depending on the job in hand.

Application examples:

- deburring
- fettling
- derusting
- smoothening
- weld seam removal

Using the flat version Use this version for grinding edges and flat surfaces with a working angle of 0 – 15°



Using the angled version for spot grinding e.g. a weld, with the ideal working angle of 15 – 25°

IQ SERIES FROM LUKAS Developed for high-performance applications

Our high-performance tools are grouped together in our iQ series. Among them are the lamellar flap discs, which have a patented flap shape and arrangement for ultimate grinding performance. This catalogue does not show all of our iQ-Serie flap discs. The following products are available on request: V4 Purple Power, V4 Master, variants of the SLTT and the SLTflex.



Purple Grain Powerful tools for heavy-duty applications

AGGRESSIVE. DURABLE. ERGONOMIC.

- high stability and durability
- integrated backing pad in recycled fibre
- even wearing without overheating,
- becoming brittle or shredding of the graininnovative ceramic grain: sharp to the end



innovative

Ceramic grain



operating

angle < 10°





no backing

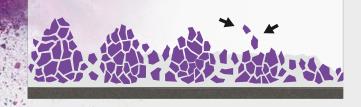
pad required



low vibration

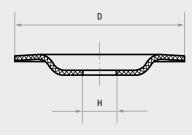
WITH THE SELF-SHARPENING EFFECT

The self-sharpening ceramic grain ensures sustained cool grinding even at low grinding pressure. The tools retain their sharpness down to the last grain.





Even with a minimum effort, "Purple Grain Single" achieves stunning removal rates. The integrated backing pad made of eco-friendly recycled fibre assures high stability and durability. The innovative design provides for even wear without overheating, becoming brittle or shredding of the grain. The deep recess allows you to work at a flat angle. Thanks to its special tool geometry, the "Purple Grain Single" can also reach inaccessible areas, which offers more application possibilities than a conventional tool.



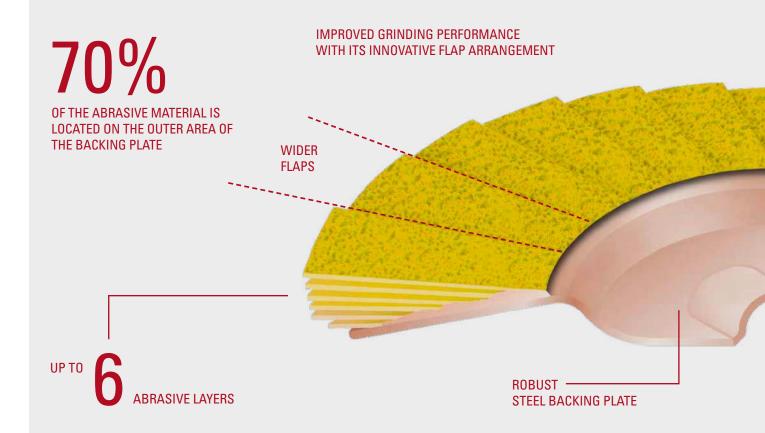
Purple Grain Single compact grinding disc



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Product number	Description	Gri	D mm	H mm	n _{max} rpm	Pack contains	
A27601250361547	Purple Grain Single 125	Ceramic 36		125	22.23	12,200	10
	Recommended fo	or: 🔵 Inox/Steel	Steel	🛑 Aluminium	Titanium	🕕 Cast r	naterial





SLTT HybridPerfection^{Ceramic4x} lamellar flap discs <

The efficient, high-performance SLTT lamellar flap discs from LUKAS are a better alternative to grinding discs and conventional lamellar flap discs.

Compared to grinding discs, the LUKAS patented flap shape and arrangement provides for 50 % lower noise levels, less vibration, faster operation, greater efficiency and better surface results. The flat orientation of the abrasive flaps not only makes for safer working, but also reduces tool wear.

A particularly large concentration of abrasive grain on the outer perimeter of these tools results in an exceptionally high stock removal rate per minute. Thanks to the multi-layer abrasive coating, these lamellar flap discs remain sharp throughout the tool life. As the flaps wear, the fresh abrasive coating of the flaps underneath is exposed. Consequently, they achieve a long tool life with consistent results.



Patented LUKAS flap shape and arrangement with more abrasive grains than the norm

PROPERTIES

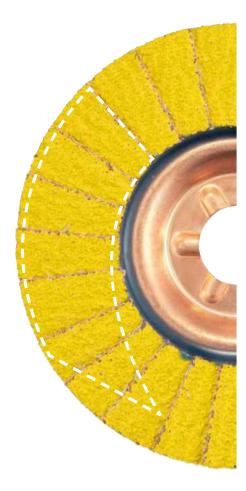
- outstanding cutting performance
- exceptional tool life
- robust steel back plate
- low noise and vibration levels

APPLICATION

Ideal for machining welds, deburring, derusting, fettling and smoothening. Thanks to its 22.23 mm bore, it fits onto all commonly used angle grinders.

OTHER SLTT VERSIONS

Our other SLTT variants (Heavy Duty, Inox and Steel) are available on request.





- the professional tool for the toughest jobs on steel, ship's steel plate and Hardox steel
- achieves impressively high stock removal rates when rough grinding steel, edging and removal of welds
- with additional active abrasive layer for stainless steel
- designed for endurance
- outstanding price-to-performance ratio



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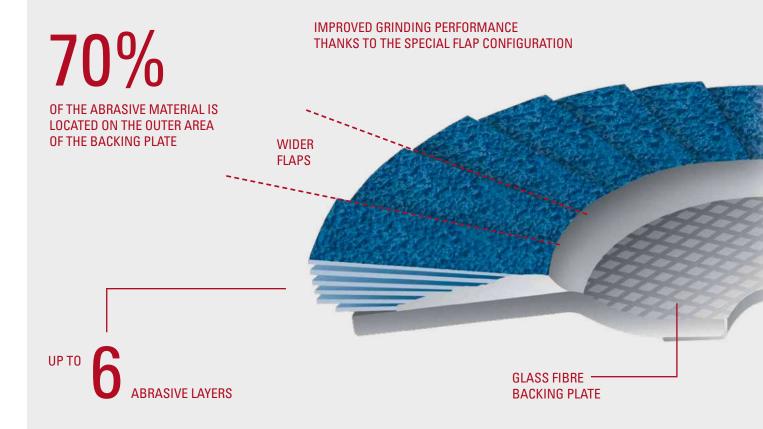
NEW

Product number	Description	Grit	D mm	H mm	n _{max} rpm	Pack contains
A27201150400044	HybridPerfection 115	Ceramic4x 40	115	22.23	13,300	10
A27201150600044	HybridPerfection 115	Ceramic4x 60	115	22.23	13,300	10
A27201250400044	HybridPerfection 125	Ceramic4x 40	125	22.23	12,200	10
A27201250600044	HybridPerfection 125	Ceramic4x 60	125	22.23	12,200	10
	Recommended for: • Inox/Steel	🔵 Steel 🛛 🛑 Aluminium 🛛 🔵 Cas	t material	Titanium	Plastic	:/Wood

UNBEATABLE ON STEEL:THE NEW LUKAS HYBRIDPERFECTION Thanks to its innovative Ceramic4x abrasive cloth and patented flaps, this lamellar flap disc quickly achieves exceptionally high stock removal rates on steel. EXPERIENCE AT FIRST HAND THE **IMPRESSIVE PERFORMANCE** OF THE NEW HYBRID PERFECTION AND **TEST IT NOW FOR YOURSELF**.

THE V2 POWER - FOR UNIVERSAL USE

EXPERIENCE THE EFFICIENCY COMPARED TO CONVENTIONAL LAMELLAR FLAP DISCS



The efficient, high-performance LUKAS V2 Power lamellar flap discs with a glass fibre backing are a better alternative to grinding discs and conventional lamellar flap discs.

The flexibility, light weight and stability of the elastic glass fibre backing result in an exceptional surface finish. The high resistance to shredding and minimal vibration during operation, not to mention its easy handling, perfectly round off the characteristics of the V2 Power lamellar flap disc.

Compared to grinding discs, the LUKAS patented flap shape and arrangement gives 50% lower noise levels, less vibration, faster operation, greater efficiency and better surface results. The flat orientation of the abrasive flaps not only makes for safer working, but also reduces tool wear.

A particularly large concentration of abrasive grains on the outer perimeter results



innovative patented LUKAS flap shape and arrangement with more abrasive grains than usual

in an exceptionally high stock removal rate per minute. Thanks to the multi-layer abrasive coating, these lamellar flap discs additionally remain sharp throughout the tool life. As the flaps wear, the fresh abrasive coating of the flaps underneath is exposed. Consequently, they achieve a long tool life with consistent results.

PROPERTIES

- exceptional grinding performance
- Iong tool life
- robust glass fibre backing

APPLICATION

Ideal for machining weld seams, deburring, derusting, fettling and smoothening.



THE FIVE V2 POWER VERSIONS



Ceramic4x Ceramic4x abrasive cloth	Heavy Duty Ceramic abrasive cloth	Inox Z Power abrasive cloth	Steel ZK abrasive cloth	ALU SIC abrasive cloth
 all the benefits of the powerful LUKAS V2 Power flap disc coupled with the outstandingly innovative abrasive cloth for the toughest jobs with steel, ship steel and Hardox steel free of iron, sulphur and chlorine 	 developed for the most demanding and toughest grinding applications especially robust for edge grinding, quenched and tempered steels, scale surfaces or coated surfaces free of iron, sulphur and chlorine 	 developed for grinding stainless steel no glazing or heating of the flaps thanks to the active abrasive surface layer equally efficient for edge and surface applications free of iron, sulphur and chlorine 	 optimised for universal application on a wide variety of steels and aluminium exceptionally tough grain and resistant to high pressure 	 particularly suitable for preparing welds and finishing aluminium also ideal for fibre-rein- forced materials such as CFRP and GFRP

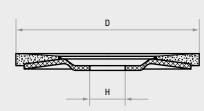
 achieves impressively high removal rates when coarse-machining steel and grinding edges and welds

• free of iron, sulphur and chlorine

★	★	★

Product number	Description	Grit	D mm	H mm	n _{max} rpm	Pack contains
A6744100040141501	V2 Power 100	Ceramic4x 40	100	15.00	15,300	10
A6744100060141501	V2 Power 100	Ceramic4x 60	100	15.00	15,300	10
	Recommended for: 🔵 Inox/Steel	🔵 Steel 🛛 🛑 Aluminium 🛛 🔵 Cas	t material	• Titanium	🔵 Plastic	/Wood

V2 Power Heavy Duty lamellar flap disc





 especially robust for edge grinding, quenched and tempered steels, scale surfaces or coated surfaces

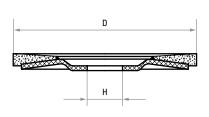
free of iron, sulphur and chlorine

\star	★	★

Product number	Description	Grit	D mm	H mm	n _{max} rpm	Pack contains
A27441250401450	V2 Power 125	Ceramic 40	125	22.23	12,200	10
A27441250601450	V2 Power 125	Ceramic 60	125	22.23	12,200	10
A27441780401450	V2 Power 178	Ceramic 40	178	22.23	8,500	10
A27441780601450	V2 Power 178	Ceramic 60	178	22.23	8,500	10
A27442300401428	V2 Power 230	Ceramic 40	230	22.23	6,600	10
	Recommended for: Inox/Steel	🔵 Steel 🔹 Titanium 🌓 Alumi	nium 🌒 (Cast material	🌔 Plastie	c/Wood



V2 Power Inox lamellar flap disc



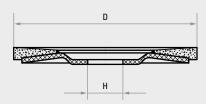


- optimised for grinding stainless steel
- no glazing or heating of the flaps
- equally efficient for edge and surface applications
- free of iron, sulphur and chlorine

Product number	Description	Grit	D mm	H mm	n _{max} rpm	Pack contains	
A67441000401445	V2 Power 100	Z-Power 40	100	15.00	15,300	10	
A67441000601445	V2 Power 100	Z-Power 60	100	15.00	15,300	10	
Recommended for: 🌑 Inox/Steel 🕕 Steel							



V2 Power Steel lamellar flap disc



• ideally suited for universal use on steel

 exceptionally tough grain and resistant to high pressure

Product number	Description	Grit	D mm	H mm	n _{max} rpm	Pack contains
A67441000401465	V2 Power 100	ZK 40	100	15.00	15,300	10
A67441000601465	V2 Power 100	ZK 60	100	15.00	15,300	10
A27441000401465	V2 Power 100	ZK 40	100	16.00	15,300	10
A27441000601465	V2 Power 100	ZK 60	100	16.00	15,300	10
A27441250401465	V2 Power 125	ZK 40	125	22.23	12,200	10
A27441250601465	V2 Power 125	ZK 60	125	22.23	12,200	10
A27441780401465	V2 Power 178	ZK 40	178	22.23	8,500	10
A27441780601465	V2 Power 178	ZK 60	178	22.23	8,500	10
A27442300401418	V2 Power 230	ZKS 40	230	22.23	6,600	5
	Recommended for: 🛛 Steel 🗨) Inox/Steel 🏾 🌓 Aluminium 🔹 Cas	t material	Plastic/W	/ood 🛛 🕕 Ti	tanium

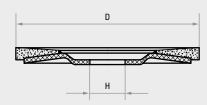


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V2 Power Alu lamellar flap disc





 Silicon carbide (SIC) is ideally suited for the preparation and finishing of welds of various aluminium alloys.

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 Silicon carbide (SIC) is also very suitable for machining modern materials such as CFRP and GFRP.

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Product number	Description	Grit	D mm	H mm	n _{max} rpm	Pack contains
A67441000361434	V2 Power 100	SIC 36	100	15.00	15,300	10
A67441000401434	V2 Power 100	SIC 40	100	15.00	15,300	10
		Becommended for:	Aluminium	Titanium	Plastic	:/Wood

IMPRESSIVE TOOL LIFE WITH HIGH ERGONOMICS

HIGH-PERFORMANCE LUKAS LAMELLAR FLAP DISCS WITH RECTANGULAR FLAPS

- ideal for deburring, fettling, derusting, smoothening and weld seam machining
- for use on steel, ship's steel plate and Hardox steel
- achieves high removal stock rates when rough grinding steel
- with self-sharpening effect thanks to innovative Ceramic4x abrasive grain
- very good price-to-performance ratio thanks to the rectangular flaps
- always remains sharp throughout the tool life thanks to the multi-layer coating
- Glass fibre backing
- the perfect alternative to grinding discs
- D н



SLTO^{Ceramic4x} / SLTR^{Ceramic4x} lamellar flap disc **NEW**

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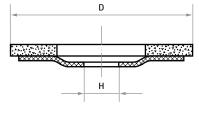
A6715100040144401 SL	TO 400					
	TO 100	Ceramic4x 40	100	15.00	15,300	10
A6718100040144401 SL	TR 100	Ceramic4x 40	100	15.00	15,300	10

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★★☆



- achieves high removal rates on hard and tough materials and a long tool life
- for deburring, fettling, derusting, smoothening and weld seam machining
- very good price-to-performance thanks to the rectangular flaps
- always remains sharp throughout the tool life thanks to the multi-layer coating
- glass fibre backing
- the efficient alternative to grinding discs

Product number	Description	Grit	Drawing	D mm	H mm	n _{max} rpm	Pack contains
A67151000401435	SLTO 100	ZK 40		100	15.00	15,300	10
A67151000401465	SLTO 100	ZK 40		100	15.00	15,300	10
A27151250401406	SLTO 125	ZK 40		125	22.23	12,200	10
A27151250601406	SLTO 125	ZK 60		125	22.23	12,200	10
A27151250801406	SLTO 125	ZK 80		125	22.23	12,200	10
A27151780361401	SLTO 178	ZK 36		178	22.23	8,500	10
A27151780401401	SLTO 178	ZK 40		178	22.23	8,500	10
A27151781201401	SLTO 178	ZK 120		178	22.23	8,500	10
A67181000401435	SLTR 100	ZK 40		100	15.00	15,300	10
A67181000401465	SLTR 100	ZK 40		100	15.00	15,300	10
A27181000401423	SLTR 100	ZK 40		100	16.00	15,300	10
A27181000601423	SLTR 100	ZK 60		100	16.00	15,300	10
A27181000801423	SLTR 100	ZK 80		100	16.00	15,300	10
A27181250361406	SLTR 125	ZK 36		125	22.23	12,200	10
A27181250401406	SLTR 125	ZK 40		125	22.23	12,200	10
A27181250601406	SLTR 125	ZK 60		125	22.23	12,200	10
A27181250801406	SLTR 125	ZK 80		125	22.23	12,200	10
A27181251201406	SLTR 125	ZK 120		125	22.23	12,200	10
A27181500401416	SLTR 150	ZK 40		150	22.23	10,200	10
A27181500601416	SLTR 150	ZK 60		150	22.23	10,200	10
A27181500801416	SLTR 150	ZK 80		150	22.23	10,200	10
A27181780361401	SLTR 178	ZK 36		178	22.23	8,500	10
A27181780401401	SLTR 178	ZK 40		178	22.23	8,500	10
A27181780601401	SLTR 178	ZK 60		178	22.23	8,500	10
A27181780801401	SLTR 178	ZK 80		178	22.23	8,500	10
			Recommended for: 🛛 Inox/Stee	l 🛛 Steel	📕 🕘 Cast ma	terial 🌒 Ti	tanium

THE ECONOMICAL BASE-X

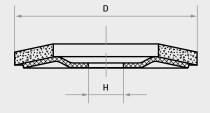
ACHIEVE HIGH REMOVAL RATES WITH HARD AND SHARP ZIRCONIA ALUMINA



SLTO/SLTR BASE-X lamellar flap disc 🔨 💵



- the economical alternative to grinding discs
- for deburring, fettling, derusting, smoothening and weld seam machining
- good price-to-performance ratio thanks to the rectangular flaps
- always remains sharp throughout the tool life thanks to the multi-layer coating
- glass fibre backing



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Product number	Description	Grit	Drawing	D mm	H mm	n _{max} rpm	Pack contains
A27151250401535	SLTO 125 BASE-X	ZK 40		125	22.23	12.200	10
A27151250601535	SLTO 125 BASE-X	ZK 60		125	22.23	12.200	10
A27151250801535	SLTO 125 BASE-X	ZK 80		125	22.23	12.200	10
A27181250401535	SLTR 125 BASE-X	ZK 40		125	22.23	12.200	10
A27181250601535	SLTR 125 BASE-X	ZK 60		125	22.23	12.200	10
A27181250801535	SLTR 125 BASE-X	ZK 80		125	22.23	12.200	10
A27181251201535	SLTR 125 BASE-X	ZK 120		125	22.23	12.200	10
A27181780401535	SLTR 178 BASE-X	ZK 40		178	22.23	8.500	10
A27181780601535	SLTR 178 BASE-X	ZK 60		178	22.23	8.500	10
A27181780801535	SLTR 178 BASE-X	ZK 80		178	22.23	8.500	10
A27181781201535	SLTR 178 BASE-X	ZK 120		178	22.23	8.500	10
			Recommended for: • Inox/Stee	I 🔍 Steel	🔴 Cast ma	terial 🛛 🕕 Ti	tanium

TECHNICAL INFORMATION AND PRODUCT INFORMATION

Flap wheels from LUKAS

LSL, FLAP WHEELS OF ABRASIVE CLOTH, **CUSTOMER SOLUTIONS**

These wheels, which are available with different bore sizes, are designed to be used with both handheld and stationary machines. The LSL consists of single flaps which are embedded radially to the axis in a solid plastic core. Please pay attention to the rotational direction of the tool!

Application examples:

- Cleaning
- Deburring
- Derusting
- Surface
- preparation
- Texturing
 - Roughening

GRINDING AND POLISHING (with flexible tools)

LSV, FLAP WHEELS OF ABRASIVE FLEECE, CUSTOMER SOLUTIONS

These wheels, which are available with different bore sizes, are designed to be used with both handheld and stationary machines. The LSV consist of abrasive fleece flaps. The use of fibre fleece makes the tool elastic and allows it to adapt itself to the shape of the workpiece.

LSM, FLAP WHEELS MADE BY COMBINING ABRASIVE FLEECE AND CLOTH, CUSTOMER SOLUTIONS

These wheels, which are available with different bore size, are designed to be used with both handheld and stationary machines. The combination of abrasive cloth and abrasive fleece results in a higher stock removal rate compared to type LSV. Please pay attention to the rotational direction of the tool!

Application examples:

- Matt finishing
- Satin-matt
- finishing
- Polishing
- Smoothening
 - Final finishing of the workpiece surfaces

Application examples:

- Cleaning
 - Roughening
- Surface preparation

Derustina

Texturing

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FLAP WHEELS FOR ANGLE GRINDERS

FOR DERUSTING, PAINT STRIPPING, WELD SEAM MACHINING AND MANY OTHER USES

Each flap of this wheel of abrasive cloth is embedded radially to the axis in a solid plastic core. Used with a handheld tool, it is therefore ideal for derusting, removing paint and annealing lacquers, reworking welding seams and for grinding work in container and railing construction, as well as in assembly facilities.

The regular aluminium oxide used for this wheel boasts an impressive tool life on many materials and allows you to work in a cost-effective manner.

The integrated M14 thread means that no additional tool is required for fast and easy mounting of the flap wheel.





- fits on commercially available angle grinders and is used in place of mounted flap wheels with shanks
- can be used without a clamping nut
 ideal for rowarking wold scame on
- ideal for reworking weld seams on stainless steels
- ideal for derusting, removing paint and annealing lacquers, reworking welding seams and for grinding work in container and railing construction, as well as in assembly facilities
- grinding is only permitted with the peripheral surface

LSL, flap wheel of abrasive cloth with thread



★★☆

Product number	Description	Grit	D mm	T mm	Thread	n _{recom} rpm	n _{max} rpm	Pack contains
A2280125200040	LSL 125020	NK 40	125	20	M14	9,600	12,200	5
A2280125200040001	LSL 125020	NK 40	125	20	5/8"	9,600	12,200	5
A2280125200060	LSL 125020	NK 60	125	20	M14	9,600	12,200	5
A2280125200060001	LSL 125020	NK 60	125	20	5/8"	9,600	12,200	5
A2280125200080	LSL 125020	NK 80	125	20	M14	9,600	12,200	5
A2280125200080001	LSL 125020	NK 80	125	20	5/8"	9,600	12,200	5
A2280125200120	LSL 125020	NK 120	125	20	M14	9,600	12,200	5
A2280125200120001	LSL 125020	NK 120	125	20	5/8"	9,600	12,200	5

TECHNICAL INFORMATION AND PRODUCT INFORMATION

Mounted flap wheels made of abrasive cloth, abrasive fleece and a combination of both

SFL, MOUNTED FLAP WHEEL MADE OF ABRASIVE CLOTH

These tools comprise individual flaps which are radially fixed around the axis of the tool. They are mainly used on handheld power tools. We offer our mounted flap wheels made of abrasive cloth in the qualities Ceramic, NK, NKE and SIC.

SPEED

The stated maximum permissible speeds apply for a maximum open shank length L_0 of 20 mm.

Application examples:

- Smoothening
- Derusting
 - , • F
- FettlingDeburring
- Texturing

Surface grinding

- Bevelling

These qualities are available upon request

SFB, SLOTTED FLAP WHEEL

The slits around the circumference of the flaps add greater flexibility compared to a regular mounted flap wheel. This allows the slotted flap wheel to adapt itself even better to the contour of the workpiece.

SFT, MOUNTED FLAP WHEEL WITH RECESS

These tools are suitable for both face and peripheral grinding.

SFI AND SFA, MOUNTED FLAP WHEELS MADE OF ABRASIVE CLOTH WITH INTERNAL OR EXTERNAL THREAD INCL. TOOL ADAPTERS

In contrast to the SFL, these mounted flap wheels also have a thread. With the appropriate adapter, the tool can be changed quickly without removing the tool adapter from the power tool. The adapter extends the shaft and optimises set-up time.

SFV, MOUNTED FLAP WHEEL MADE OF ABRASIVE FLEECE

These tools comprise single fleece flaps fixed radially around the axis of the tool; they are available in regular aluminium oxide (A), silicon carbide (C) and zirconia aluminium oxide (Z). SFV are mainly used on handheld power tools.

SFR, MOUNTED FLAP WHEEL MADE OF ABRASIVE FLEECE DISCS

These special tools are compromised of individual elastic fleece discs staked one upon the other. This makes them particularly suitable for machining profiled workpieces.

SFM, MOUNTED FLAP WHEEL MADE OF COMBINED ABRASIVE FLEECE AND CLOTH

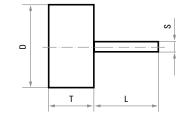
These tools comprise single fleece and cloth flaps radially fixed around the axis of the tool; they are available in regular aluminium oxide (A) and silicon carbide (C). The combination of abrasive cloth and abrasive fleece results in a higher stock removal rate compared with type SFV. SFM are mainly used on handheld power tools.

SFM, MOUNTED FLAP WHEEL MADE OF TF MATERIAL

These tools are specially designed for use with non-rusting materials. The abrasive fleece with its reinforced backing guarantees even wear of the abrasive fleece and cloth flaps. Please pay attention to the rotating direction of the tool!



- good tool life on different materials for rough and fine grinding
- regular aluminium oxide for cost-effective applications
- used as a handheld tool, ideal for smoothening, derusting, fettling, deburring, surface grinding, texturing and bevelling





SFL mounted flap wheel

★★☆

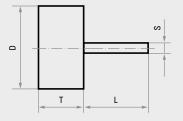
Product number	Description	Grit	D mm	T mm	S mm	L mm	n _{recom} rpm	n _{max} rpm	Pack contains
A2200010103080	SFL 01010.03	NK 80	10	10	3	40	26,000	35,000	10
A2200010103120	SFL 01010.03	NK 120	10	10	3	40	26,000	35,000	10
A2200010103150	SFL 01010.03	NK 150	10	10	3	40	26,000	35,000	10
A2200010103240	SFL 01010.03	NK 240	10	10	3	40	26,000	35,000	10
A2200020103080	SFL 02010.03	NK 80	20	10	3	40	20,000	28,000	10
A2200020103120	SFL 02010.03	NK 120	20	10	3	40	20,000	28,000	10
A2200020103150	SFL 02010.03	NK 150	20	10	3	40	20,000	28,000	10
A2200020106080	SFL 02010.06	NK 80	20	10	6	40	20,000	38,200	10
A2200020106120	SFL 02010.06	NK 120	20	10	6	40	20,000	38,200	10
A2200025103080	SFL 02510.03	NK 80	25	10	3	40	16,000	18,000	10
A2200025103120	SFL 02510.03	NK 120	25	10	3	40	16,000	18,000	10
A2200030053080	SFL 03005.03	NK 80	30	5	3	40	16,000	18,000	10
A2200030053150	SFL 03005.03	NK 150	30	5	3	40	16,000	18,000	10
A2200030156060	SFL 03015.06	NK 60	30	15	6	40	16,000	25,400	10
A2200030156080	SFL 03015.06	NK 80	30	15	6	40	16,000	25,400	10
A2200030156120	SFL 03015.06	NK 120	30	15	6	40	16,000	25,400	10
A2200030156150	SFL 03015.06	NK 150	30	15	6	40	16,000	25,400	10
A2200040206040	SFL 04020.06	NK 40	40	20	6	40	12,000	19,100	10
A2200040206060	SFL 04020.06	NK 60	40	20	6	40	12,000	19,100	10
A2200040206080	SFL 04020.06	NK 80	40	20	6	40	12,000	19,100	10
A2200040206120	SFL 04020.06	NK 120	40	20	6	40	12,000	19,100	10
A2200040206150	SFL 04020.06	NK 150	40	20	6	40	12,000	19,100	10
A2200040206240	SFL 04020.06	NK 240	40	20	6	40	12,000	19,100	10
A2200050206040	SFL 05020.06	NK 40	50	20	6	40	9,000	15,300	10
A2200050206060	SFL 05020.06	NK 60	50	20	6	40	9,000	15,300	10
A2200050206080	SFL 05020.06	NK 80	50	20	6	40	9,000	15,300	10
A2200050206120	SFL 05020.06	NK 120	50	20	6	40	9,000	15,300	10
A2200060306040	SFL 06030.06	NK 40	60	30	6	40	8,000	12,700	10
A2200060306060	SFL 06030.06	NK 60	60	30	6	40	8,000	12,700	10
A2200060306080	SFL 06030.06	NK 80	60	30	6	40	8,000	12,700	10
A2200060306120	SFL 06030.06	NK 120	60	30	6	40	8,000	12,700	10
A2200060306150	SFL 06030.06	NK 150	60	30	6	40	8,000	12,700	10
A2200080506040	SFL 08050.06	NK 40	80	50	6	40	6,000	7,500	10
A2200080506060	SFL 08050.06	NK 60	80	50	6	40	6,000	7,500	10
A2200080506080	SFL 08050.06	NK 80	80	50	6	40	6,000	7,500	10
A2200080506120	SFL 08050.06	NK 120	80	50	6	40	6,000	7,500	10
	Recommende	ed for: 🔵 Inox/Steel	Steel	luminiur 🔴	m 🔴 Cas	t material	Plastic/W	/ood ① T	itanium



MFS mini flap wheel

★★☆





- deburring bores
- manufacturing and cleaning of glass products
- internal pipe machining
- machining aluminium tyre rims
- machining bores in turbine blades

versatile special applications

Product number	Description	Grit	D mm	T mm	S mm	L mm	n _{max} rpm	Pack contains
A2205015306150001	MFS 01530,06	NK 150	15	30	6	100	18,000	10
A2205020306150001	MFS 02030,06	NK 150	20	30	6	100	18,000	10
A2205025306150001	MFS 02530,06	NK 150	25	30	6	100	18,000	10
	Recommended for:	Inox/Steel Steel	e Aluminiu	m 🛛 Cas	t material	Plastic/W	/ood 🛛 🛈 Ti	

SAFETY INFORMATION

To safely use mini flap wheels with a long shan, they must be placed against the workpiece or inserted into bores or channels

before starting up the power tool. Contact with the workpiece must be assured until the power tool is switched off.

LUKAS MOUNTED FLAP WHEELS MADE OF ABRASIVE FLEECE

READY FOR EVERY WORK SCENARIO

The fleece flaps or discs of the LUKAS mounted flap wheels with abrasive fleece are made with regular aluminium oxide, zirconia alumina or silicon carbide. This means that LUKAS can cover a broad spectrum of machining materials from steel and titanium through to ceramics and tungsten carbide. Different designs allow you to specify the application even further.

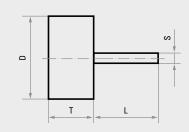
Abrasive fleece is probably the most flexible of all abrasives and can be used for many different jobs. Its wide variety of designs enables LUKAS to offer you a broad spectrum of machining options: matt finishing, satin-matt finishing, polishing, smoothening and final surface finishing – with LUKAS mounted flap wheels made of abrasive fleece, you can master any scenario.

LUKAS mounted flap wheels made of abrasive fleece comprise individual flaps, which are fixed radially fixed around the axis of the tool. Thanks to the use of polyamide, the abrasive fleece also adapts itself perfectly to uneven surfaces. You need less effort and time for your work, and yet still achieve perfect surface results.





- achieves especially high stock removal rates on hard and tough materials such as stainless steel and a long tool life
- manufactured with zirconia alumina for extreme hardness and sharpness
- used as a handheld tool, ideal for matt finishing, satin-matt finishing, polishing, cleaning or final finishing of workpiece surfaces
- adapts itself perfectly to uneven surfaces for cost-efficient working







Product number	Description	Grit	D mm	T mm	S mm	L mm	n _{recom} rpm	n _{max} rpm	Pack contains
A2203040206306	SFV 04020.06	ZK 180	40	20	6	40	7,500	14,000	10
A2203060306306	SFV 06030.06	ZK 180	60	30	6	40	5,000	9,000	10
A2203080506306	SFV 08050.06	ZK 180	80	50	6	40	4,000	7,000	10
	Recommended for	: Inox/Steel	Steel	Aluminiu	m 🔴 Cas	t material	Plastic/W	/ood 🌒 Ti	itanium

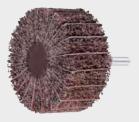
GRINDING AND POLISHING (with flexible tools)

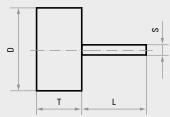
THE ABRASIVE COMBINATION FOR HIGH REMOVAL RATES

PERFECT MACHINING OF LARGE AND UNEVEN SURFACES USING ABRASIVE FLEECE AND CLOTH

SFM mounted flap wheel, combined abrasive fleece and cloth, regular aluminium oxide







for continuous working

 used as a handheld tool, ideal for the cleaning, derusting, surface preparation, texturing and roughening of workpiece surfaces

Pack n _{max} Т L n " Description Product number mm mm rpm contain mm mm A 104/80 A2204030306104 SFM 03030.06 30 30 6 40 10.000 14.000 10 A 104/80 7,500 A2204040206104 SFM 04020.06 40 20 6 40 14.000 10 A2204040206106 SFM 04020.06 A 106/150 40 20 6 40 7,500 14.000 10 7,500 A2204040206107 SFM 04020.06 A 107/240 40 20 6 40 14,000 10 A2204050206104 SFM 05020.06 A 104/80 50 20 6 40 6,000 11,000 10 SFM 06040.06 A 104/80 60 40 6 40 5,000 9,000 10 A2204060406104 A 104/80 80 50 6 40 4,000 7,000 10 A2204080506104 SFM 08050.06 A2204080506106 SFM 08050.06 A 106/150 80 50 6 40 4,000 7,000 10 A2204080506107 SFM 08050.06 A 107/240 80 50 6 40 4,000 7,000 10 Inox/Stee Cast material Titanium

TECHNICAL INFORMATION AND PRODUCT INFORMATION

Abrasive bands and mandrels from LUKAS

SBZY ABRASIVE BANDS, CYLINDRICAL SHAPE

We offer a large selection of abrasive bands and matching mandrels. They are available in many different dimensions and qualities. Abrasive bands are made of abrasive cloth which is spirally wound onto a fabric with a backing. Mounted on matching mandrels, they are used with handheld machines (straight grinders or machines with a flexible shaft). **Pages 74–75**

STZY ABRASIVE BAND MANDRELS, CYLINDRICAL SHAPE

Our mandrels are used solely for mounting our cylindrical abrasive bands. Due to the special slots in the mandrel, the abrasive bands are firmly secured as speed increases. **Pages 76**

These qualities are available upon request

SBZY ABRASIVE BANDS, CYLINDRICAL SHAPE WITHOUT LINING

These particularly flexible abrasive bands are made of abrasive cloth. They are used on handheld machines (straight grinders or machines with flexible shafts) and are mounted on matching soft mandrels.

SBKE ABRASIVE BANDS, CONICAL SHAPE

Conical abrasive bands are comparable in their design and usage with the cylindrical version. The taper (sleeve shape) allows the grinding of workpieces with hard-to-reach areas.

STKE ABRASIVE BAND MANDRELS, CONICAL SHAPE

Our mandrels are used solely for mounting our conical abrasive bands. Due to the special slot design, the abrasive bands are firmly secured as speed increases.

STWS ABRASIVE BAND MANDRELS FOR ABRASIVE BAND ROLLS

These especially soft mandrels are provided with a 19 mm bore and four keyways in order to be used with our corresponding abrasive band on handheld surface grinders (conditioning machines).

Application examples:

Cleaning

Refining

- Light deburring
- Surface and contour grinding
- Fine grinding

SBZY Ceramic abrasive band, cylindrical shape



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	T →

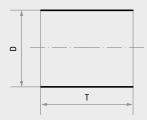


- especially robust ceramic grain for hard materials
- high stock removal rate and long tool life
- Hardened surfaces, wear-resistant steels, scale and hard coatings, titanium alloys and reinforced weld seams can be machined quickly.
- for cleaning, light deburring, refining, surface and contour grinding as well as fine grinding
- The matching mandrels can be found on page 76.

Product number	Description	Grit	D mm	T mm	Pack contains
A240603030040	SBZY 03030	Ceramic 40	30	30	50
A240603030060	SBZY 03030	Ceramic 60	30	30	50
A240606030040	SBZY 06030	Ceramic 40	60	30	25
A240606030060	SBZY 06030	Ceramic 60	60	30	25
	Recom	nmended for: 🔵 Inox/Steel 🔵 Steel	• Cast mat	erial 🛛 🗨 Ti	tanium

SBZY zirconia alumina abrasive band, cylindrical shape

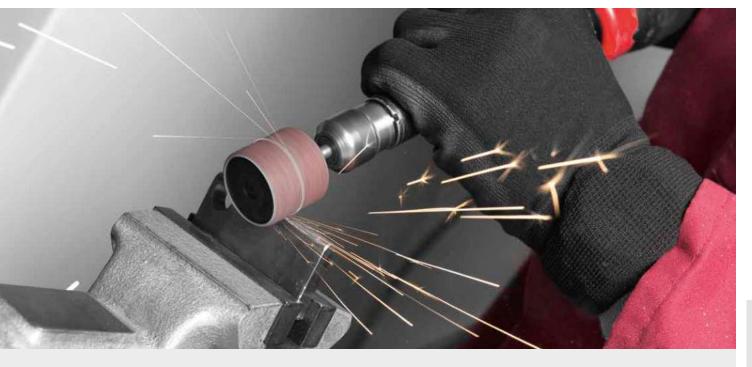






- made of abrasive cloth with zirconia alumina
- for cleaning, light deburring, refining, surface and contour grinding as well as fine grinding
- in combination with mandrels for use with straight grinders or machines with flexible shafts
- The matching mandrels can be found on page 76.

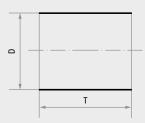
Product number	Description	Grit	D mm	T mm	Pack contains
A240201530050	SBZY 01530	ZK 50	15	30	50
A240201530060	SBZY 01530	ZK 60	15	30	50
A240203030036	SBZY 03030	ZK 36	30	30	50
A240203030050	SBZY 03030	ZK 50	30	30	50
A240204530036	SBZY 04530	ZK 36	45	30	50
A240204530050	SBZY 04530	ZK 50	45	30	50
A240204530060	SBZY 04530	ZK 60	45	30	50
A240206030036	SBZY 06030	ZK 36	60	30	50
A240206030050	SBZY 06030	ZK 50	60	30	50
	Becom	nmended for: 🔵 Inox/Steel 🔍 Steel	Cast mat	erial 🛛 🕕 Ti	itanium





- Regular aluminium oxide has good tool life when used on structural steel and for rough grinding.
- for cleaning, light deburring, refining, surface and contour grinding as well as fine grinding
- in combination with mandrels for use with straight grinders or machines with flexible shafts
- The matching mandrels can be found on page 76.

SBZY regular aliminium oxide abrasive band, cylindrical shape



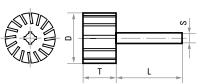


Product number	Description	Grit	D mm	T mm	Pack contains
A240001225080	SBZY 01225	NK 80	12	25	50
A240001225150	SBZY 01225	NK 150	12	25	50
A240001530040	SBZY 01530	NK 40	15	30	50
A240001530050	SBZY 01530	NK 50	15	30	50
A240001530060	SBZY 01530	NK 60	15	30	50
A240001530080	SBZY 01530	NK 80	15	30	50
A240001530150	SBZY 01530	NK 150	15	30	50
A240002220060	SBZY 02220	NK 60	22	20	50
A240002220080	SBZY 02220	NK 80	22	20	50
A240002220150	SBZY 02220	NK 150	22	20	50
A240003030040	SBZY 03030	NK 40	30	30	50
A240004530040	SBZY 04530	NK 40	45	30	50
A240004530060	SBZY 04530	NK 60	45	30	50
A240004530080	SBZY 04530	NK 80	45	30	50
A240004530150	SBZY 04530	NK 150	45	30	50
A240006030040	SBZY 06030	NK 40	60	30	50
A240006030060	SBZY 06030	NK 60	60	30	50
A240006030080	SBZY 06030	NK 80	60	30	50
A240006030150	SBZY 06030	NK 150	60	30	50
A240007530040	SBZY 07530	NK 40	75	30	50
R	ecommended for: Steel Cast mat 	erial 💛 Plastic/Wood 🌓 Inox/Steel	lumir 🌓	nium 🛛 🕁 T	itanium

STZY hard abrasive band mandrel, cylindrical shape







The stated maximum permissible speeds apply for a maximum overhang length L_0 of 20 mm. The maximum permissible speed must be calculated separately for other overhang lengths!

Product number	Description	Туре	D mm	T mm	S mm	L mm	n _{max} rpm	Pack contains
A2500012256	STZY 01225.06	hard	12	25	6	40	46,500	5
A2500015306	STZY 01530.06	hard	15	30	6	40	38,000	5
A2500022206	STZY 02220.06	hard	22	20	6	40	26,000	5
A2500025256	STZY 02525.06	hard	25	25	6	40	22,500	5
A2500030306	STZY 03030.06	hard	30	30	6	40	19,000	5
A25000453060001	STZY 04530.06	hard	45	30	6	40	13,000	5
A25000603060001	STZY 06030.06	hard	60	30	6	40	9,500	5
A25000753080001	STZY 07530.08	hard	75	30	6	40	6,500	2

TECHNICAL INFORMATION AND PRODUCT INFORMATION

LUKAS abrasive caps and mandrels

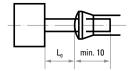
Our abrasive caps and sleeves consist of high-quality abrasive cloth and are manufactured to fit perfectly on our corresponding mandrels. We offer a large assortment of tools with the corresponding mandrel for various applications.

Application examples:

- Fine and ultra-fine grinding work, especially in hard-to-reach areas
- Machining in tool- and mouldmaking industry as well as pattern construction

PERMISSIBLE SPEEDS

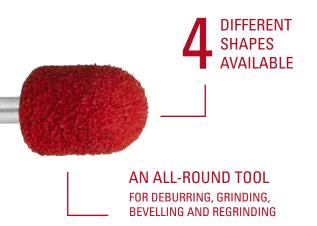
The maximum permissible speeds indicated in the respective table of abrasive cap mandrels apply for a maximum overhang length of 15 mm. The maximum permissible speed must be calculated separately for other overhang lengths!



ABRASIVE CAP CERAMIC	ABRASIVE CAP SPECIAL
***	★★☆
Self-sharpening ceramic grain for machining the most challenging materials. Hardened and wear-resistant steels, titanium alloys, weld seams and hard coatings are no longer a problem with this grain.	Special quality for the machining of corrosion and heat-resistant steels in the tool- and mouldmaking in- dustry as well as for the universal machining of plas- tics, aluminium and non-ferrous metals. The surface layer with active abrasive additives enables enhanced stock removal rate and a longer tool life.



Whether tool steel, cast steel or titanium alloys – an increasing amount of extremely hard and tough metals are machined in industry. With the ceramic abrasive cap, a tool for straight grinders is now available that makes machining smaller parts and deburring extremely easy. An extra-long tool life is an added bonus thanks to the self-sharpening effect.



These abrasive caps are perfect for grinding uneven surfaces, machining small parts, deburring and regrinding small radii. The abrasive caps can even be used for stainless steel because they generate little heat during grinding.

SELF-SHARPENING EFFECT REDUCES TOOL COSTS

Thanks to self-sharpening, Ceramic abrasive caps achieve a tool life many times that of ordinary caps. Tool changes are required much less frequently, thus reducing tool costs.

NO MORE GLAZING

The grinding particles embedded in a resin matrix break off when worn and make way for new particles with sharp cutting edges. The dulling known as "glazing" familiar with other grinding tools does not occur when machining hard materials. As a result, the Ceramic abrasive cap continues to work like new despite wear.

MAXIMUM CUTTING PERFORMANCE

The abrasive caps with ceramic grain were developed for machining the most demanding materials. Hardened and wearresistant steels, titanium alloys, weld seams and hard coatings are no longer a problem when using these abrasive caps. Due to its self-sharpening effect, this aggressive grinding behaviour is retained for a very long time.

THE TROUBLESHOOTER FOR MACHINING METAL

The Ceramic abrasive caps represent a valuable addition as a tool for all industries in which hard metals are machined. These include the tool and mould industries as well as demanding mechanical and steel engineering and also the aerospace industry.

THE SELF-SHARPENING EFFECT

Worn grinding particles break off, exposing new particles with sharp cutting edges. That's why the abrasive cap remains as sharp as new for a long time.





SK Ceramic abrasive cap

- self-sharpening
- for the hardest materials
- exceptionally long tool life
- precise fit

also for stainless steel

						×××
Product number	Description	Shapes	Grit	H mm	T mm	Pack contains
A21120102080	SKWR 1015		Ceramic 80	10	15	100
A21120102150	SKWR 1015		Ceramic 150	10	15	100
A21120132080	SKWR 1319		Ceramic 80	13	19	100
A21120132150	SKWR 1319		Ceramic 150	13	19	100
A21120162080	SKWR 1626		Ceramic 80	16	26	100
A21120162150	SKWR 1626		Ceramic 150	16	26	100
A21120103080	SKWK 1015		Ceramic 80	10	15	100
A21120103150	SKWK 1015		Ceramic 150	10	15	100
A21120133080	SKWK 1319		Ceramic 80	13	19	100
A21120133150	SKWK 1319		Ceramic 150	13	19	100
A21120163080	SKWK 1626		Ceramic 80	16	26	100
A21120163150	SKWK 1626		Ceramic 150	16	26	100
		Recommended for:	Inox/Steel	🔴 Cast ma	terial 🛛 🔴	Titanium

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- enhanced stock removal rate using regular aluminium oxide with active abrasive surface layer
- suitable for corrosion and heat-resistant steels as well as for universal machining of plastics, non-ferrous metals and many other materials



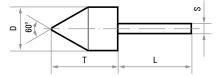
SKS Special abrasive cap



Product number	Description	Shapes	Grit	H mm	T mm	Pack contains
A21020052080	SKWRS 0511		NKS 80	5	11	100
A21020052150	SKWRS 0511		NKS 150	5	11	100
A21020072080	SKWRS 0713		NKS 80	7	13	100
A21020072150	SKWRS 0713		NKS 150	7	13	100
A21020102060	SKWRS 1015		NKS 60	10	15	100
A21020102080	SKWRS 1015		NKS 80	10	15	100
A21020102150	SKWRS 1015		NKS 150	10	15	100
A21020132060	SKWRS 1319		NKS 60	13	19	100
A21020132080	SKWRS 1319		NKS 80	13	19	100
A21020132150	SKWRS 1319		NKS 150	13	19	100
A21020132320	SKWRS 1319		NKS 320	13	19	100
		Recommended for:	Inox/Steel	🔵 Cast ma	aterial 🔵 -	Titanium

Abrasive cap mandrel





Product number	Description	Shapes	D mm	T mm	Shank diameter x length mm	n _{max} rpm	Pack contains
A250000521	GTWR 0511		5	11	1/8" x 25	95,000	5
A250000523	GTWR 0511		5	11	3 x 25	95,000	5
A250000721	GTWR 0713		7	13	1/8" x 25	65,000	5
A250000723	GTWR 0713		7	13	3 x 25	65,000	5
A250001021	GTWR 1015		10	15	1/8" x 25	45,000	5
A250001023	GTWR 1015		10	15	3 x 25	45,000	5
A250001323	GTWR 1319		13	19	3 x 25	35,000	5
A250001621	GTWR 1626		16	26	1/8" x 25	18,000	5
A250001623	GTWR 1626		16	26	3 x 25	18,000	5
A250001626	GTWR 1626		16	26	6 x 40	30,000	5
A250001033	GTWK 1015		10	15	3 x 25	45,000	5
A250001333	GTWK 1319		13	19	3 x 25	35,000	5
A250001633	GTWK 1626		16	26	3 x 25	18,000	5
A250001636	GTWK 1626		16	26	6 x 40	30,000	5

TECHNICAL INFORMATION AND PRODUCT INFORMATION

Abrasive discs and carriers from LUKAS

PSG/PSR* SELF-CLAMPING ABRASIVE DISCS

LUKAS abrasive discs – PSG/PSR – are self-clamping. The back of the abrasive discs is fitted with a "quick lock" made of metal or plastic (PSG) or a plastic thread (PSR*). The abrasive disc is attached to the corresponding carrier with a small twist. In this tool category, the PSG abrasive discs represents our most extensive range. Numerous diameters, many different grit sizes, and above all abrasive qualities for every application, help you to solve your grinding problem.

Find out more about these abrasive discs on pages 82-88.

*upon request



These qualities are available upon request

PSK ADHESIVE ABRASIVE DISCS

LUKAS abrasive discs – PSK – are self-adhesive. The rubberised back of the abrasive discs is covered with a protective film. After removing this film, the abrasive discs are stuck to the respective carrier. These discs are suitable for machining many different surfaces. The adhesive bond does not permit reuse once the disc has been peeled off the carrier. These abrasive discs are available in regular aluminium oxide and silicon carbide as well as with different grit sizes, as illustrated in the following tables.

PSH SELF-FIXING ABRASIVE DISCS

LUKAS abrasive discs – PSH – are self-fixing. The abrasive discs have a Velcro backing, with the corresponding carriers covered with hooked fabric. These discs are suitable for machining both flat and concave surfaces. Abrasive discs that have not been completely worn down during machining can be removed and reused another time. These abrasive discs are available in a quality and grit size adapted to the respective application as illustrated in the following tables.



PSG ABRASIVE DISCS QUALITY and applications

LUKAS offers you the right abrasive for every job – tailored to your requirements and the materials you want to machine. The high-quality abrasives from LUKAS are ideal for many industries, applications and requirements, and therefore offer you a very wide selection.

You will find all abrasive discs from the PSG range in the following overview. Read through the properties and application details of the different workpiece materials to find the right quality to meet your requirements.

Quality	Properties	Application areas/machining	Page
NK Abrasive cloth Regular aluminium oxide	very tough abrasive, high resilience	universal grinding and deburring	85
NKE Abrasive cloth Regular aluminium oxide with reinforced backing material	very tough abrasive, high resilience	The reinforcement makes these discs suitable for the toughest demands and beveling.	86
ZK Abrasive cloth Zirconia alumina	exceptionally resilient grain with high pressure resistance	ideal for Hastelloy, Inconel, non-rusting steel and metals that are difficult to machine	84
Z-Power Abrasive cloth Zirconia alumina with active abrasive surface layer	excellent stock removal rate, long tool life	ideal for machining non-rusting steel; special surface layer prevents clogging	84
Ceramic Abrasive cloth Ceramic grain	excellent stock removal rate without grain shredding, particularly stable due to reinforced backing, cool cutting	ideal for machining non-rusting steel and nickel alloys	83
SIC Abrasive cloth Silicon carbide	minimum heat accumulation, special quality for the aerospace industry	Ideal for machining titanium, titanium alloys and aluminium (aviation industry). Plastics and ceramics can also be processed.	88
Abrasive fleece Regular aluminium oxide coarse/brown			
Abrasive fleece Regular aluminium oxide medium/red-brown	polishing effect with the fibre structure, consistent results due to continuous exposure of new grinding particles; long tool life	ideal for removing rust or paint, scratches and pre-grinding marks; general improvement of surface quality	87
Abrasive fleece Regular aluminium oxide fine/blue			

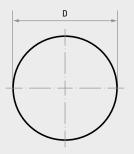
MACHINE ULTRA-HARD MATERIALS

INNOVATIVE CERAMIC GRAIN WITH SELF-SHARPENING EFFECT



- especially robust ceramic grain for hard materials
- fitted with a "quick lock" fastened to the respective carrier by a small twist
- high stock removal rate and long tool life
- Hardened surfaces, wear-resistant steel, scale and hard coatings, titanium alloys and reinforced weld seams can be machined quickly.
- The matching tool carriers can be found on page 88.

PSG Ceramic self-clamping abrasive disc





★★☆

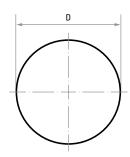
GRI NDING AND POLISHING (with flexible tools)

Product number	Description	Quality/grit size	D mm	n _{max} rpm	Matching abrasive disc carrier	Pack contains
A33790250360458	PSG 025	Ceramic 36	25	38,000	GTG 025	100 NE
A33790250600458	PSG 025	Ceramic 60	25	38,000	GTG 025	100 NE
A33790250800458	PSG 025	Ceramic 80	25	38,000	GTG 025	100 NE
A33790251200458	PSG 025	Ceramic 120	25	38,000	GTG 025	100 NE
A33790380360458	PSG 038	Ceramic 36	38	25,000	GTG 038	100
A33790380600458	PSG 038	Ceramic 60	38	25,000	GTG 038	100
A33790380800458	PSG 038	Ceramic 80	38	25,000	GTG 038	100
A33790381200458	PSG 038	Ceramic 120	38	25,000	GTG 038	100
A33790500360458	PSG 050	Ceramic 36	50	25,000	GTG 038 and GTG 050	100
A33790500500458	PSG 050	Ceramic 50	50	25,000	GTG 038 and GTG 050	100 NE
A33790500600458	PSG 050	Ceramic 60	50	25,000	GTG 038 and GTG 050	100
A33790500800458	PSG 050	Ceramic 80	50	25,000	GTG 038 and GTG 050	100
A33790501200458	PSG 050	Ceramic 120	50	25,000	GTG 038 and GTG 050	100
A33790750360458	PSG 075	Ceramic 36	75	20,000	GTG 075	50
A33790750600458	PSG 075	Ceramic 60	75	20,000	GTG 075	50
A33790750800458	PSG 075	Ceramic 80	75	20,000	GTG 075	50
A33790751200458	PSG 075	Ceramic 120	75	20,000	GTG 075	50



PSG Z-Power self-clamping abrasive disc





- made of zirconia alumina with active abrasive surface layer
- ideal for machining stainless steel

special surface layer prevents clogging

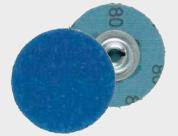
 fitted with a "quick lock" – fastened to the respective carrier by a small twist

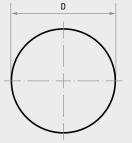
The matching tool carriers can be found on **page 88**.

★★☆

Product number	Description	Quality/grit size	D mm	n _{max} rpm	Matching abrasive disc carrier	Pack contains
A33770380360458	PSG 038	Z-Power 36	38	25,000	GTG 038	100
A33770380600458	PSG 038	Z-Power 60	38	25,000	GTG 038	100
A33770380800458	PSG 038	Z-Power 80	38	25,000	GTG 038	100
A33770381200458	PSG 038	Z-Power 120	38	25,000	GTG 038	100
A33770500360458	PSG 050	Z-Power 36	51	25,000	GTG 038 and GTG 050	100
A33770500600458	PSG 050	Z-Power 60	51	25,000	GTG 038 and GTG 050	100
A33770500800458	PSG 050	Z-Power 80	51	25,000	GTG 038 and GTG 050	100
A33770750360458	PSG 075	Z-Power 36	76	20,000	GTG 075	50
A33770750600458	PSG 075	Z-Power 60	76	20,000	GTG 075	50
A33770750800458	PSG 075	Z-Power 80	76	20,000	GTG 075	50
A33770751200458	PSG 075	Z-Power 120	76	20,000	GTG 075	50
		Recommend	led for: 🛛 🔵	Inox/Steel	🔍 Steel 🛛 🗨 Cast material 🗨) Titanium

PSG self-clamping zirconia alumina abrasive disc





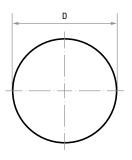


- made from abrasive cloth with zirconia alumina
- ideal for Hastelloy, Inconel, stainless steel and metals that are difficult to machine
- fitted with a "quick lock" fastened to the respective carrier by a small twist
- The matching tool carriers can be found on page 88.

Product number	Description	Quality/grit size	D mm	n _{max} rpm	Matching abrasive disc carrier	Pack contains
A33530250600458	PSG 025	ZK 60 25 38,000 GTG 025		100		
A33530250800458	PSG 025	ZK 80	25	38,000	GTG 025	100
A33530380600458	PSG 038	ZK 60	38	25,000	GTG 038	100
A33530380800458	PSG 038	ZK 80	38	25,000	GTG 038	100
A33530500360458	PSG 050	ZK 36	51	25,000	GTG 038 and GTG 050	100
A33530500600458	PSG 050	ZK 60	51	25,000	GTG 038 and GTG 050	100
A33530500800458	PSG 050	ZK 80	51	25,000	GTG 038 and GTG 050	100
A33530750360458	PSG 075	ZK 36	76	20,000	GTG 075	50
A33530750600458	PSG 075	ZK 60 76 20,000 GTG 075		50		
		Recommend	led for:	Inox/Steel	Steel Cast material	Titanium



PSG self-clamping regular aluminium oxide abrasive disc





★★☆

for universal grinding and deburring work
fitted with a "quick lock" – fastened to the respective carrier by a small twist

The matching tool carriers can be found on page 88.

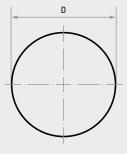
Product number	Description	Quality/grit size	D mm	n _{max} rpm	Matching abrasive disc carrier	Pack contains
A33510200600458	PSG 020	NK 60	19	47,000	GTG 020	100
A33510200800458	PSG 020	NK 80	19	47,000	GTG 020	100
A33510201200458	PSG 020	NK 120	19	47,000	GTG 020	100
A33510250360458	PSG 025	NK 36	25	38,000	GTG 025	100
A33510250600458	PSG 025	NK 60	25	38,000	GTG 025	100
A33510250800458	PSG 025	NK 80	25	38,000	GTG 025	100
A33510251200458	PSG 025	NK 120	25	38,000	GTG 025	100
A33510380360458	PSG 038	NK 36	38	25,000	GTG 038	100
A33510380600458	PSG 038	NK 60	38	25,000	GTG 038	100
A33510380800458	PSG 038	NK 80	38	25,000	GTG 038	100
A33510381200458	PSG 038	NK 120	38	25,000	GTG 038	100
A33510500360458	PSG 050	NK 36	51	25,000	GTG 038 and GTG 050	100
A33510500500458	PSG 050	NK 50	51	25,000	GTG 038 and GTG 050	100
A33510500600458	PSG 050	NK 60	51	25,000	GTG 038 and GTG 050	100
A33510500800458	PSG 050	NK 80	51	25,000	GTG 038 and GTG 050	100
A33510501200458	PSG 050	NK 120	51	25,000	GTG 038 and GTG 050	100
A33510501800458	PSG 050	NK 180	51	25,000	GTG 038 and GTG 050	100
A33510502400458	PSG 050	NK 240	51	25,000	GTG 038 and GTG 050	100
A33510750600458	PSG 075	NK 60	76	20,000	GTG 075	50
A33510750800458	PSG 075	NK 80	76	20,000	GTG 075	50
A33510751200458	PSG 075	NK 120	76	20,000	GTG 075	50
	Recommended for	: 🔍 Steel 🛛 🔍 Cast materia	I <mark>O</mark> Plasti	ic/Wood	🕽 Inox/Steel 🌓 Aluminium 🏾 🕕	Titanium

CAN ALSO HANDLE EDGES

THANKS TO THE REINFORCED BACKING MATERIAL ALSO SUITABLE FOR THE TOUGHEST APPLICATIONS

PSG reinforced self-clamping regular aluminium oxide abrasive disc





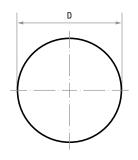
made of abrasive cloth with regular aluminium oxide and reinforced backing material

- The reinforcement makes these discs suitable for the toughest applications and beveling.
- fitted with a "quick lock" fastened to the respective carrier by a small twist
- The matching tool carriers can be found on page 88.

Product number	Description	Quality/grit size	D mm	n _{max} rpm	Matching abrasive disc carrier	Pack contains
A33520250600458	PSG 025	NKE 60	25	38,000	GTG 025	100
A33520250800458	PSG 025	NKE 80	25	38,000	GTG 025	100
A33520251200458	PSG 025	NKE 120	25	38,000	GTG 025	100
A33520251800458	PSG 025	NKE 180	25	38,000	GTG 025	100
A33520252400458	PSG 025	NKE 240	25	38,000	GTG 025	100
A33520380600458	PSG 038	NKE 60	38	25,000	GTG 038	100
A33520380800458	PSG 038	NKE 80	38	25,000	GTG 038	100
A33520381200458	PSG 038	NKE 120	38	25,000	GTG 038	100
A33520500360458	PSG 050	NKE 36	51	25,000	GTG 038 and GTG 050	100
A33520500600458	PSG 050	NKE 60	51	25,000	GTG 038 and GTG 050	100
A33520500800458	PSG 050	NKE 80	51	25,000	GTG 038 and GTG 050	100
A33520501200458	PSG 050	NKE 120	51	25,000	GTG 038 and GTG 050	100
A33520501800458	PSG 050	NKE 180	51	25,000	GTG 038 and GTG 050	100
A33520502400458	PSG 050	NKE 240	51	25,000	GTG 038 and GTG 050	100
A33520750800458	PSG 075	NKE 80	76	20,000	GTG 075	50
	Recommended for	: 🔍 Steel 📃 Cast materia	l 😑 Plasti	c/Wood	• • Inox/Steel • Aluminium • •	Titanium



PSG self-clamping abrasive disc, abrasive fleece



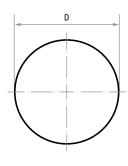


- ideal for removing rust or paint, scratches and pre-grinding marks
- Improvement of surface quality
- fitted with a "quick lock" fastened to the respective carrier by a small twist
- The matching tool carriers can be found on page 88.

Product number	Description	Quality/grit size	D mm	n _{max} rpm	Matching abrasive disc carrier	Pack contains
A33740250040458	PSG 025	P coarse	25	15,000	GTG 025	50 NEW
A33740250020458	PSG 025	P medium	25	15,000	GTG 025	50 NEW
A33740380050458	PSG 038	P fine	38	10,000	GTG 038	50
A33740380040458	PSG 038	P coarse	38	10,000	GTG 038	50
A33740380020458	PSG 038	P medium	38	10,000	GTG 038	50
A33740500050458	PSG 050	P fine	50	7,500	GTG 038 and GTG 050	50
A33740500040458	PSG 050	P coarse	50	7,500	GTG 038 and GTG 050	50
A33740500020458	PSG 050	P medium	50	7,500	GTG 038 and GTG 050	50
A33740750050458	PSG 075	P fine	75	5,000	GTG 075	25
A33740750040458	PSG 075	P coarse	75	5,000	GTG 075	25
A33740750020458	PSG 075	P medium	75	5,000	GTG 075	25
A33550380040458	PSG 038	V coarse	38	10,000	GTG 038	50 NEW
A33550380020458	PSG 038	V medium	38	10,000	GTG 038	50 NEW
A33550380050458	PSG 038	V fine	38	10,000	GTG 038	50 NEW
A33550500040458	PSG 050	V coarse	50	8,000	GTG 038 and GTG 050	50 NEW
A33550500020458	PSG 050	V medium	50	8,000	GTG 038 and GTG 050	50 NEW
A33550500050458	PSG 050	V fine	50	8,000	GTG 038 and GTG 050	50 NEW
	Recommended for:	🔹 🌔 Inox/Steel 🛛 🌑 Steel	Plastic/	Wood 🌓 /	Aluminium 🌓 Cast material 🌓	Titanium

PSG self-clamping silicon carbide abrasive disc





- no heat accumulation
- ideal for machining titanium and titanium alloys, aluminium (aerospace industry), as well as plastics and ceramics

<u><u></u></u>

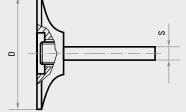
- fitted with a "quick lock" fastened to the respective carrier by a small twist
- The matching tool carriers can be found at the bottom of this page.

★★☆

Product number	Description	Quality/grit size	D mm	n _{max} rpm	Matching abrasive disc carrier	Pack contains
A33780380360458	PSG 038	SIC 36 38 25,000 GTG 038		100		
A33780380600458	PSG 038	SIC 60	38	25,000	GTG 038	100
A33780380800458	PSG 038	SIC 80	38	25,000	GTG 038	100
A33780500600458	PSG 050	SIC 60	51	25,000	GTG 038 and GTG 050	100
A33780500800458	PSG 050	SIC 80	51	25,000	GTG 038 and GTG 050	100
A33780501200458	PSG 050	SIC 120	51	25,000	GTG 038 and GTG 050	100
	Recommended for	: 🛑 Aluminium 💛 Plastic	/Wood 🛛 🔍	Titanium	● Inox/Steel ● Steel ● Cast	material

GTG abrasive disc carrier for self-clamping abrasive discs





The carriers are supplied in a universallyused medium hardness. This medium type is suitable for almost every application. Please use the hard type for the toughest machining jobs (Z-Power and Ceramic).

Product number	Description	Туре	D mm	S mm	n _{max} rpm	Pack contains
A335002000260458	GTG 020.06	medium	18	6	47,000	1
A335002500260458	GTG 025.06	medium	23	6	38,000	1
A335003800260458	GTG 038.06	medium	33	6	30,000	1
A335005000260458	GTG 050.06	medium	45	6	25,000	1
A335005000360458	GTG 050.06	hard	45	6	25,000	1
A335007500260458	GTG 075.06	medium	70	6	20,000	1
A335007500360458	GTG 075.06	hard	70	6	20,000	1



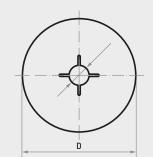
FINE AND CONSISTENT SURFACE FINSH

LUKAS FIBRE DISCS FOR YOUR REQUIRED SURFACE RESULTS



- single layer of abrasive for the toughest applications
- made of exceptionally tough zirconia alumina with high resilience to pressure
- used together with a backing pad on angle grinders
- The matching tool carriers can be found on page 90.

FIS zirconia alumina fibre disc with cross slot

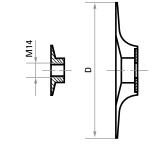




Product number	Description	Grit	D mm	Bore mm	n _{max} rpm	Pack contains
A38301250362	FIS 125	ZK 36	125	22	12,200	50
A38301250402	FIS 125	ZK 40	125	22	12,200	50
A38301250602	FIS 125	ZK 60	125	22	12,200	50
A38301250802	FIS 125	ZK 80	125	22	12,200	50
		Recommended for: Inox/Ste	eel 🔍 Ste	el 🛛 🔍 Cast ma	iterial 🛛 🕕 🤉	ītanium



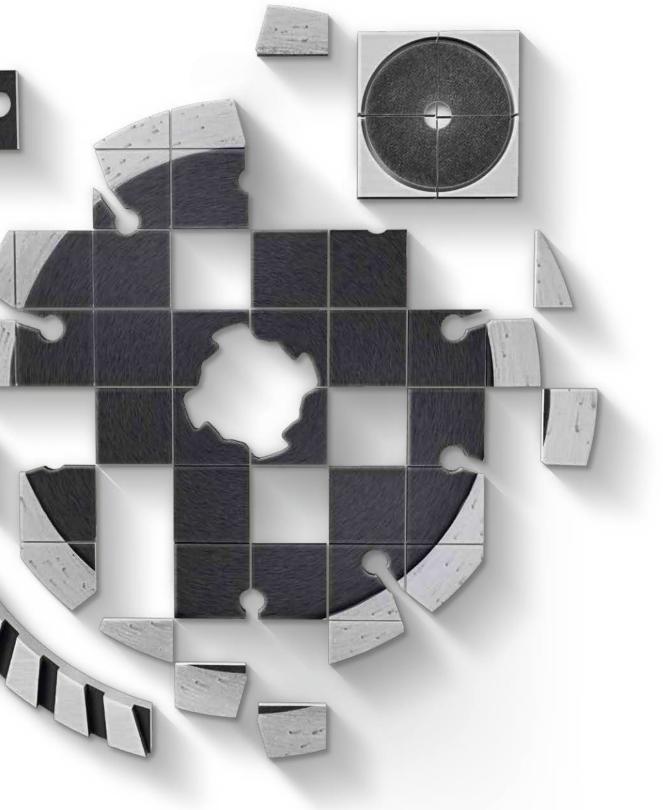




The carriers are supplied in a universally applicable degree of hardness; our medium type is suitable for almost every application. Other types are available on request for roughing work or radius grinding.

nuts included

Product number	Description	D mm	Thread	n _{max} rpm	Pack contains
A38311251001	STF 125	123	M14	12,200	1



CUTTING

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.







CUTTING





А

Semi-friable

aluminium oxide





А Ceramic-coated annealed aluminium

oxide

CER Ceramic grain

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						
А	Aluminium oxide					
с	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
М	R	U
Р	S	V
Q	т	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

С

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.

	Cutting disc diameter (mm)										
Maximum operating speed	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

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

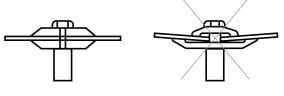
SAFETY INFORMATION

- Avoid improper handling of the discs. Use only fibrereinforced 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 only in a position where you have full control and are well balanced.

CLAMPING SYSTEM

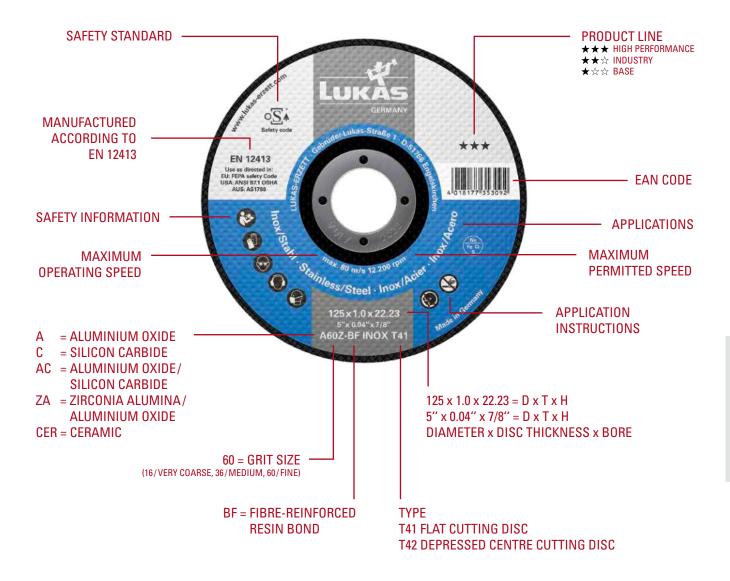
The use of flanges with different diameters is not permitted. Both flanges between which the bonded abrasive is mounted must have the same outer diameter and similar contact areas (according to EN 60745-2-3:2007 and ANSI B.7.1).



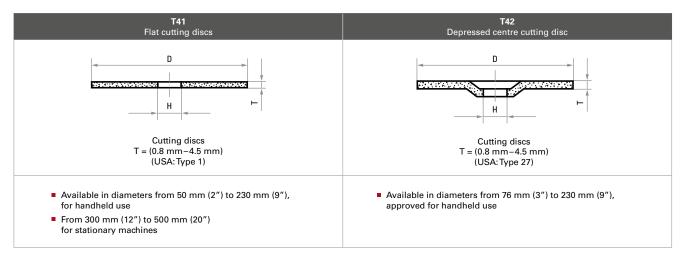
correct

incorrect

All important markings on the label



TYPES OF RESIN-BONDED CUTTING DISCS



AREA OF USE

Overview of types of LUKAS cutting discs

-				Material		
Туре	Product line	Inox/Steel	Steel	e Aluminium	Stone/ Construction material	Cast metal/ Construction material

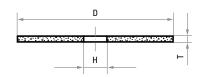
		Page 97	upon request		upon request	upon request
Handheld cutting discs for angle grinders Diameter 100–230 mm	★★☆	upon request	upon request	Page 99	upon request	
		Lunchs	Luncha		Lunchs	
	★☆☆					
Handheld		Page 97	upon request		upon request	
cutting discs with X-LOCK system for angle grinders Diameter 115–125 mm	★★☆					
		Page 98			upon request	

Stationary cutting discs					upon request	upon request
Larger than 230 mm	★★☆				upon request	

		upon request	upon request			



- 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 disc for stainless steel

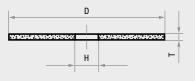


Product number	Description	Quality	D mm	T mm	H mm	n _{max} rpm	Pack contains
AT100010V9802	T41 100x1.0	A46Z-BF Inox	100	1.0	15.00	15,300	25
AT007233V9802	T41 125x1.0	A60Z-BF Inox	125	1.0	22.23	12,200	50
AT007237V9802	T41 125x1.6	A46Z-BF Inox	125	1.6	22.23	12,200	50
AT007243V9802	T41 180x1.6	A46Z-BF Inox	180	1.6	22.23	8,500	25
	Recomr	nended for: 🕒 Inox/Steel 🔵	Steel 🛛 T		Aluminium	Cast n	naterial



• 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



Cutting disc for stainless steel



*☆☆

Product number	Description	Quality	D mm	T mm	H mm	n _{max} rpm	Pack contains
AT003108V9802	T41 100x1.0	A60S-BF Inox	100	1.0	16.00	15,300	50
	Recomm	nended for: 🔵 Inox/Steel 🛛 S	Steel 🏾 🌓 A		Cast mat	erial 🛛 🕕 Ti	tanium

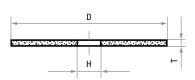


The handy choice, e.g.

safely packedmoisture-proof

for the construction sitecutting discs in a metal can

Cutting disc set





Product number	Description	Quality	D mm	T mm	H mm	n _{max} rpm	Pack contains
AT007233V9807010	T41 125x1.0	A60Z-BF Inox	125	1.0	22.23	12,200	10
	Recon	nmended for: 🔵 Inox/Steel 🔍	Steel 🛛 🗨 T		Aluminium	🕕 Cast n	naterial

TOOL CHANGE WITH JUST A CLICK

CHANGING CUTTING DISCS IS FASTER AND SIMPLER THAN EVER

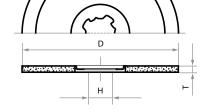
With the new X-LOCK system, simply position the LUKAS cutting disc on the angle grinder's mounting fixture, allow it to engage and you're done. The click sound tells you the disc is securely and safely in place and ready for use. The tool change now only takes a few seconds. There are also no parts like clamping nuts and keys that can get lost easily. That means tool changing is fast and easy, making lengthy tool-change times a thing of the past.

TOOL CHANGE IN NO TIME AT ALL

The X-LOCK allows you to change LUKAS cutting discs in seconds, as well as other LUKAS tool products such as the mounted flap discs which you can obtain on request.









 faster and simpler tool changes thanks to the latest X-LOCK system

- 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

\star	\star	公

Product number	Description	Quality	D mm	T mm	H mm	n _{max} rpm	Pack contains
AT115010V980201	T41 115x1,0x22,23 X-LOCK	A46U-BF Inox	115	1.0	22.23	13,300	50
AT125010V980202	T41 125x1,0x22,23 X-LOCK	A46U-BF Inox	125	1.0	22.23	12,200	50
	Recomm	nended for: 🔵 Inox/Steel 🏾 🌑	Steel 🛛 🗨 T		Aluminium	🌓 Cast r	naterial

CUTS EVEN THE SOFTEST MATERIALS WITHOUT ANY PROBLEMS

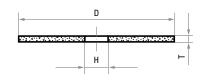
THE CUTTING DISC FOR ALUMINIUM



easily cuts soft, light metals
no smearing when used on aluminium
ideal combination of abrasive grit and

bonding agent

Cutting disc for machining non-ferrous metals

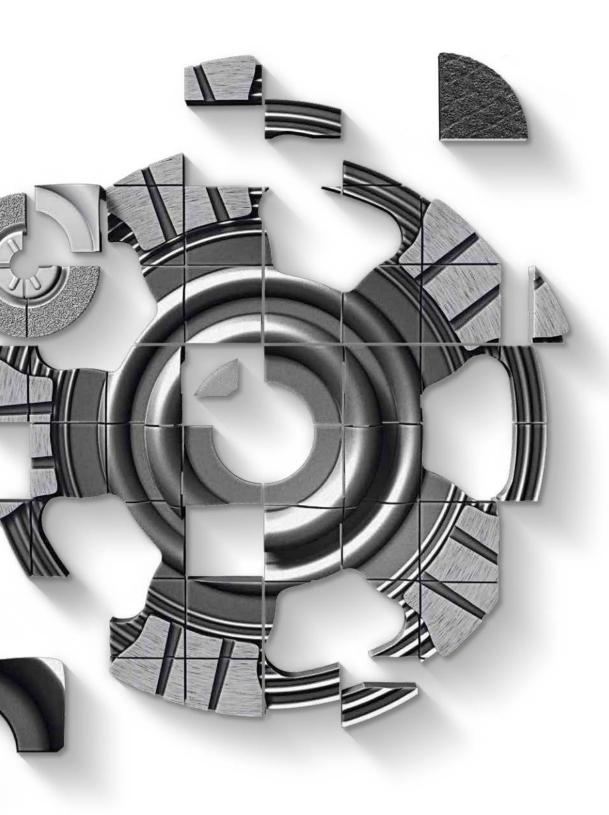




Product number	Description	Quality	D mm	T mm	H mm	n _{max} rpm	Pack contains
AT000950V9802	T41 125x1,0	A60N-BF Alu	125	1.0	22.23	12,200	50
AT001789V9802	T41 230x2,5	A36N-BF Alu	230	2.5	22.23	6,600	25
				Becc	ommended fo	.r. 🦲 Alur	minium



ROUGH GRINDING



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



ROUGH GRINDING

Ζ Zirconia alumina





А Ceramic-coated annealed aluminium oxide



Ceramic grain

С

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					
А	Aluminium oxide				
С	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
М	R	U
Р	S	V
Q	т	Z

BOND

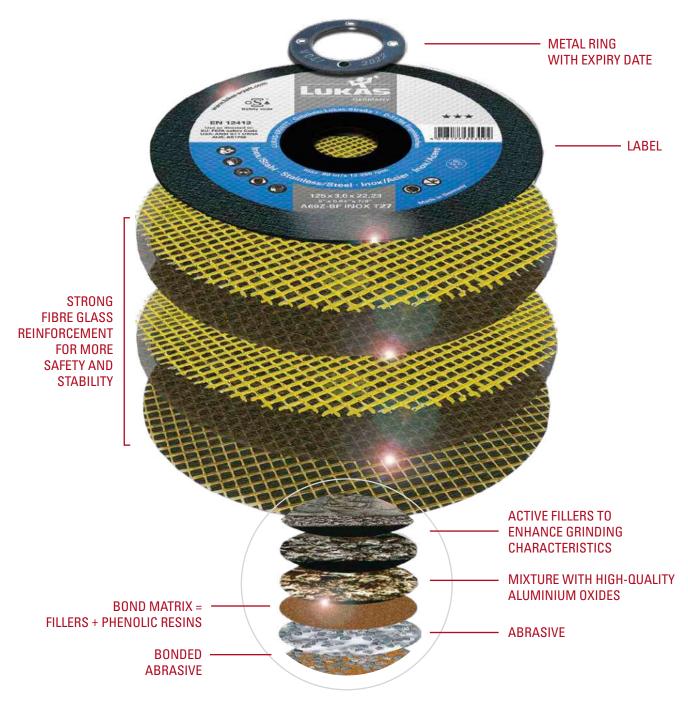
The bond holds the abrasive grain to the grinding disc. LUKAS grinding discs are available with the following bonds:

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

QUALITY

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.

		Grinding disc diameter (mm)									
Maximum operating speed	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

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

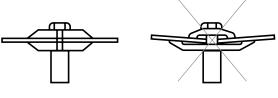
SAFETY INFORMATION

- Avoid improper handling of the discs. Use only fibrereinforced 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

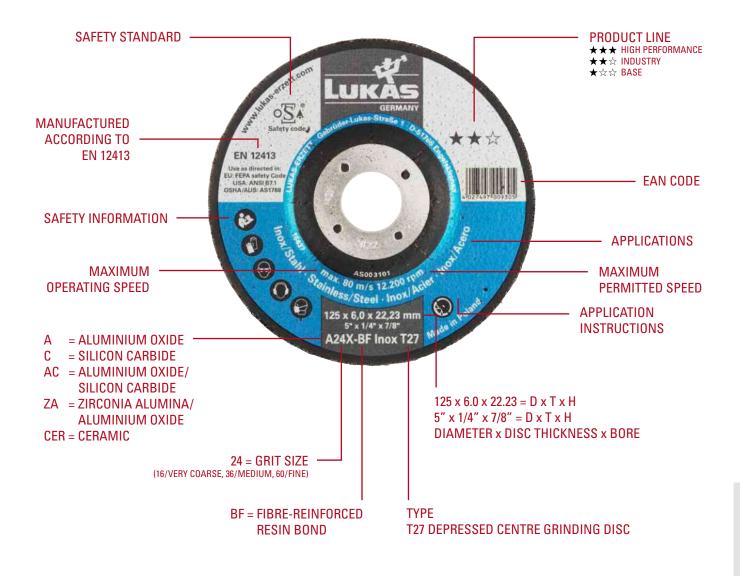
The use of flanges with different diameters is not permitted. Both flanges between which the bonded abrasive is mounted must have the same outer diameter and similar contact areas (according to EN 60745-2-3:2007 and ANSI B.7.1).



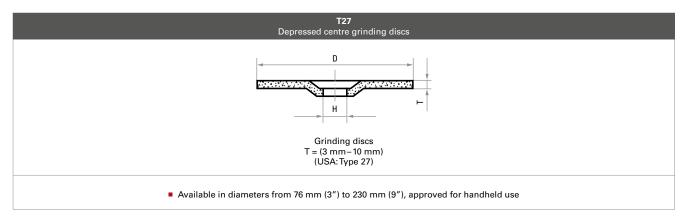
correct

incorrect

All important markings on the label



TYPES OF RESIN-BONDED GRINDING DISCS

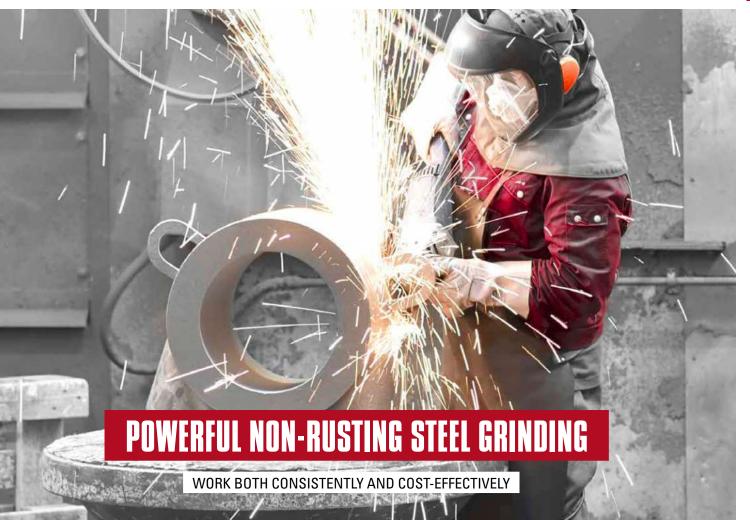


AREA OF USE

Overview of types of LUKAS grinding discs

			Mat	erial		
Туре	Product line	Inox/Steel	Steel	e Aluminium	Stone/ Construction material	Cast material

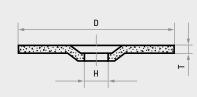
Handheld grinding discs for angle grinders	★★☆	upon request	upon request	Page 108	upon request	upon request
	**		upon request			
Diamond cup wheels for angle grinders	★★☆				upon request	
Tungsten carbide granulate-tipped disc for angle grinders	★★☆				upon request	





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
- Iow 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
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
Recommended for: 🕒 Inox/Steel 🕚 Steel 🌗 Aluminium							

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ROUGH GRINDING

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



⊈⊂∽∿∘∑▲

Pack

contain

10

n_{ma}

rpn

12,200

- 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
- Iow 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 AS001708V9802 T27 125x7,0 A24N-BF Alu 125 7,0 22.23

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GENERAL INFORMATION AND PRODUCT INFORMATION

LUKAS BRUSHES, FLEECE AND ABRASIVE CLOTH -All you need for cleaning and more

No matter whether you want to remove wood, car paint or concrete residue or prepare, roughen, derust, debur, clean, polish or texture a wide variety of materials like aluminium, stainless steel, cast material, steel or titanium, at LUKAS you will find the right tool to suit your application. From abrasive paper to cleaning fleece and wire brushes in a wide range of shapes and types, LUKAS offers you the right cleaning tool for construction sites, production lines or your DIY workshop at home.

MACHINE-POWERED CLEANING TOOLS

LUKAS cleaning tools can be used with standard power tools. For instance, you can use the wheel brushes on angle grinders or wire brushes on drilling machines and cordless screwdrivers. The shank dimensions make it easy to fit the brushes into commercially available drilling machines.

LUKAS end brushes let you easily clean even the most inaccessible areas. Depending on the required thickness and elasticity, they are available in both twist-knotted and crimped types.

AS **EXPERTS FOR CLEANING BRUSHES**, WE CAN ALWAYS SUPPLY YOU WITH JUST THE RIGHT TOOL FOR YOUR CHAL-LENGE. **ASK FOR YOUR INDIVIDUAL SOLUTION TODAY!**

TOOLS FOR MANUAL USE

In addition to hand wire brushes for cleaning surfaces or finishing weld seams, LUKAS also offers abrasive fleece and paper, both of which are ideal for manually removing old paint from both wood and metal or for cleaning stainless steel. LUKAS abrasive fleece is available in rolls or pads that are perfect for manual use.

GENERAL INFORMATION AND PRODUCT INFORMATION

LUKAS high-quality technical brushes

FILAMENT QUALITY

High quality steel wire

We use high-quality steel wire with high tensile strength, which ensures an exceptionally long and economical tool life.

Stainless steel wire

This wire is used where residues from normal steel wire would impair surfaces such as stainless steel, aluminium and other non-ferrous metals.

Abrasive impregnated nylon filaments

Abrasive impregnated nylon filaments are very flexible and optimally follow the contour of the workpiece without being too aggressive. During use, new abrasive grains are constantly exposed, thus achieving a consistent performance and long tool life.

TYPES

We supply brushes in both wire qualities with crimped or twist-knotted filaments. Compared to crimped types, brushes with twist-knotted steel wire generally offer a longer tool life and more rugged abrasive performance and are thus suited for extreme requirements. We also supply brushes in high quality crimped steel wire embedded in a resin bond, thus enhancing their performance. These brushes are ideally suited for achieving uniform surfaces and precise edges.

APPLICATIONS

A wide range of jobs can be performed with steel wire brushes. Here are just a few examples: deburring, descaling, derusting, surface cleaning, roughening and paint stripping. Brushes with abrasive impregnated nylon filaments are perfect for removing stains on metal surfaces, graining soft wood, car body repair jobs, stripping off paint residues etc.

WORKING MODE AND POWER TOOLS

Technical brushes are flexible tools that follow the contours of the workpiece. In order to achieve best results, only the tip of the filament should be in contact with the workpiece. Elasticity of the brush depends on the exposed length of the filaments, and in the case of steel wire brushes, on the wire thickness. Brushes with very long filaments are very flexible and should only be used with low pressure. Excessive pressure reduces the life of the brush and results in premature wearing. Technical brushes can be used on stationary and handheld power tools.

OPERATING SPEEDS

Steel wire brushes have a harder effect at higher speeds and a softer effect at low speeds. We recommend the following operating speeds for crimped types to achieve the desired results:

- Machining steel: approx. 30 m/s
- Machining non-ferrous metals: approx. 18 20 m/s
- Machining plastic: approx. 15 m/s

Higher operating speeds can be selected for twist knotted types e.g.:

Machining steel: approx. 40 m/s

Brushes made from nylon filaments achieve best results at operating speeds of 18 to 22 m/s, depending on the material to be machined.

SAFETY ADVICE

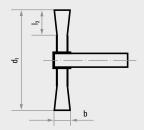
Technical brushes are manufactured according to a rigorous quality control (according to EN 1083-2). However, it is always advisable to wear safety clothing when working with technical brushes.

FLEXIBLE MACHINING OF THE MOST COMPLEX CONTOURS

CLEANING METAL SURFACES WITH LUKAS HIGH QUALITY STEEL WIRE

BS wheel brush with shank





- follow the contours of every workpiece thanks to their flexibility
- for deburring, descaling, derusting, surface cleaning, roughening and paint stripping
- made of high-quality steel wire with high tensile strength
- "Stainless" quality is used where residues from normal steel wire would impair surfaces such as stainless steel, aluminium and other non-ferrous metals.
- perfect dimensional stability: fits optimally into power tools
- shank diameter: 6 mm

Product number	Description	Material	Туре	d ₁ mm	b mm	l₂ mm	Wire Ø mm	n _{max} rpm	Pack contains
A351004036	BSVW 04011	stainless	crimped	40	11	9	0.2	18,000	10
A350105014211	BSVW 05014	stainless	crimped	50	14	12	0.2	15,000	10
A351006036	BSVW 06018	stainless	crimped	60	16	17	0.2	15,000	10
A350107018213	BSVW 07018	stainless	crimped	70	16	19	0.3	15,000	10
A351007036	BSVW 07018	stainless	crimped	70	16	19	0.2	15,000	10
Recommended for: 🔵 Inox/Steel 🔍 Steel 🔍 Titanium									

★★☆



POWER TOOLS

POWER TOOLS

The most important product information at a glance

GENERAL

Our pneumatic power tools are characterised by high performance and low air consumption. The robust vane motors remain undamaged even when they stop under load.

The tools are fitted with a speed limiter, always keeping the idle speed within the specified tolerance. The service-friendly design allows wearing parts to be replaced quickly and easily.

COMPRESSED AIR SUPPLY

The motors operate at full power from a flow pressure of just 0.63 MPa (= 6.3 bar). We would be happy to advise you regarding the ideal specifications for the compressed air supply line. Please refer to the technical information for details about hose cross sections.

Air consumption (see machine data)	Connecting thread				
0.05–0.5 m³/min	G 1/4"				
0.15–0.9 m³/min	G 3/8"				
0.5–1.5 m³/min	G 1/2"				
0.8–6.0 m³/min	G 3/4"				

VANE MOTOR LUBRICATION

A maintenance unit, comprising a water separator and an oiler, reliably protects the vane motors against wear, minimises the maintenance requirements, and prolongs their service life.

ERGONOMICS AND SAFETY

Vibration

To protect the operators, all of our power tools are tested and labelled in compliance with the current European Noise and Vibration Directive. The vibrations are recorded and calculated in three dimensions.

Ergonomics

Compared to electrical power tools, pneumatic motors offer greater performance at a lower weight. Thanks to their ergonomically shaped and insulated handles, the tools lie comfortably in the hand and won't tire the user.

Even difficult-to-access workpieces can be effortlessly machined using LUKAS pneumatic tools, as the spindle length, air outlet and valve design of many of the machine tools can be perfectly adapted to suit the user's requirements.

Safety

They can even be used in areas where there is a risk of explosion.

Quality

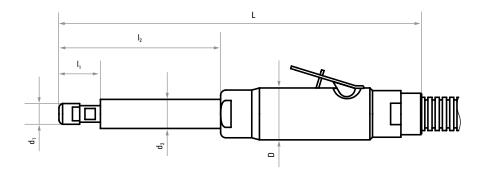
All of our power tools have a robust aluminium casing and are designed for use in harsh environments. The motors cannot overheat even when used continuously at maximum power. As part of our full quality control policy, all tools are subjected to speed and performance tests before they leave the factory.

Safety advice

Only tools that are suitable and approved in terms of safety for the peripheral speeds that can be attained with the respective machines may be used.

TECHNICAL INFORMATION

All LUKAS power tools at a glance



Power tool	Description	Speed rpm	Power kW	d₁ mm	l₁ mm	d₂ mm	l₂ mm	D mm	L mm	Page
Straight grinder, insulated	AMIN 20-030 GD	20,000	0.300	16	26	-	-	35	195	117
Straight grinder, insulated	AMIN 30-030 GD	30,000	0.300	14	16	-	-	36	190	118
Straight grinder, insulated	AMIN 32-027 GD	32,000	0.270	13	20	23	35	29	210	119
Straight grinder, insulated	AMIN 55-011 GD	55,000	0.110	9	14	-	-	20	125	120
Straight grinder, insulated	AMIN 72-013 GD	72,000	0.130	10	15	-	-	29	165	121
Conditioning machine	ESM 1310 S	1,300-3,050	1,300	_	_	-	-	_	_	122

	TI	nese power tools a	are available upo	n request					
Power tool	Description	Speed rpm	Power kW	d₁ mm	l ₁ mm	d₂ mm	l₂ mm	D mm	L mm
Belt grinder, insulated	AMIN 30 BSH	30,000	0.300	19	28	h =	= 86	35	220
	AMIN 12-030 GD	12,000	0.300	16	26	-	-	35	195
Straight grinder, insulated	AMIN 15-030 GD	15,000	0.300	16	26	-	-	35	195
	AMIN 12-030 GH	12,000	0.300	16	26	_	-	35	195
Straight grinder with extension, insulated	AMIN 15-070 GH2L	15,300	0.700	24	35	24	440	46	630
Straight grinder,	AMIN 19-100 GH	19,000	1.000	24	37	34	148	51	350
insulated	AMIN 19-100 GHK	19,000	1.000	24	44	-	-	35 35 35 35 35 35 35 35 35 35 35 35 35 35 35 35 35 35 35 36 36	245
Straight grinder, insulated	AMIN 20-030 GH	20,000	0.300	16	26	_	-	35	195
Straight grinder, insulated	AMIN 30-030 GH	30,000	0.300	14	16	-	-	36	190
Straight grinder,	AMIN 45-030 GD	45,000	0.300	14	16	_	-	36	190
insulated	AMIN 45-030 GH	45,000	0.300	14	16	-	-	36	190

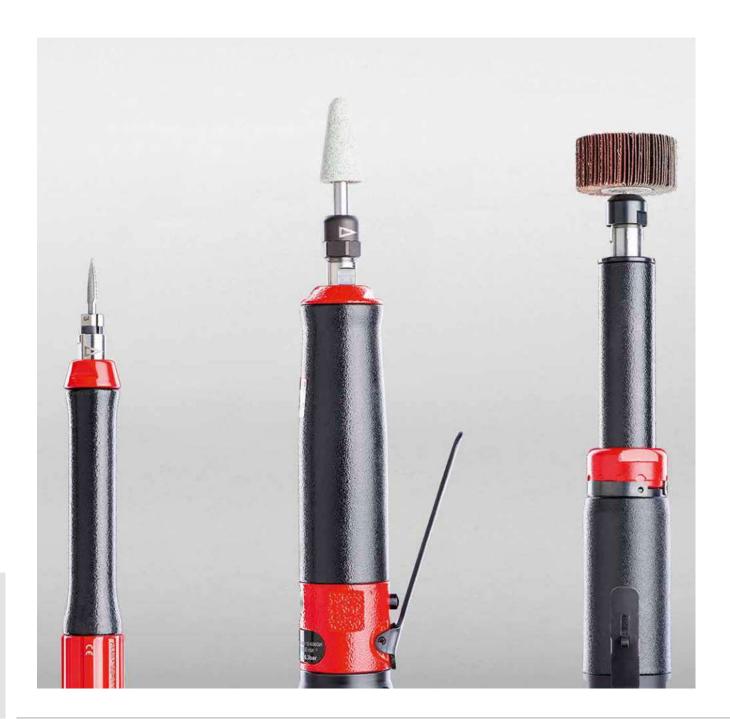
POWER TOOLS

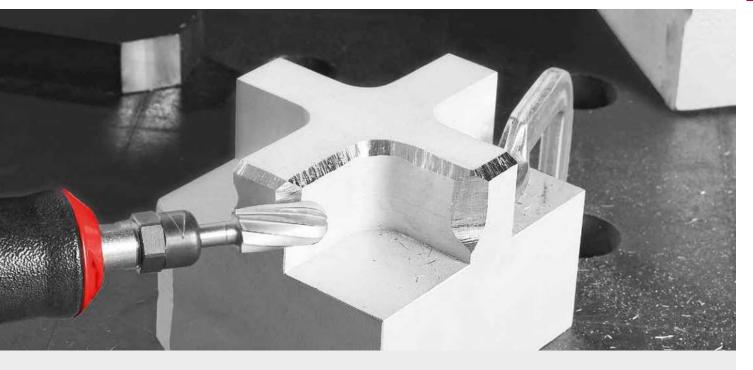
MADE TO TACKLE THE TOUGHEST CHALLENGES

PREMIUM-QUALITY POWER TOOLS FOR PREMIUM-QUALITY TOOLS

A range of LUKAS pneumatic grinders and LUKAS pneumatic tools is available so that you can use LUKAS tools in the most effective way. Our range of pneumatic grinders and pneumatic tools includes angle grinders (with turbine drive), belt grinders and a wide variety of straight grinders.

LUKAS pneumatic grinders and pneumatic tools are designed according to the most stringent quality requirements for withstanding extreme strain and to get the most out of LUKAS top-performance tools. LUKAS power tools are characterised by their high performance and low air consumption during use. The robust vane motors achieve steadfast performance, even for harder cutting work. Even stopping under load won't damage them! Speed limiters keep the idle speed within the design tolerances. As an added benefit, replacing the wearing parts of LUKAS pneumatic grinders and pneumatic tools can be done quickly and easily.





Included with the machine:

- air feed hose
- exhaust air hose with muffler
- collet: 6 mm
- operating tool/spanner

Special accessories:

 collets for Ø 3 mm, 4 mm, 5 mm, 1/8", 3/16", 1/4"

Technical details:

- length: approx. 175 mm
- casing diameter: 34.5 mm
- weight: approx. 0.90 kg
- drive type: vane motor, integrated speed control
- Further technical details can be found on page 115.



★★☆

Product number	Description	Valve	ldle speed (rpm)	Power kW	Air consumption under load m³/min	Collet Ø mm	Nominal hose size mm	Pack contains
A3993101120	AMIN 20-030 GD	Twist	20,000	0.3	0.53	6	8	1

	Can be used with the following LUKAS tools	Dimensions	Catalogue page
	Tungsten carbide burrs	up to Ø 12 mm	17-21
9	SFL mounted flap wheels	Ø 20 mm	69
20-030	SBZY abrasive bands	up to Ø 19 mm	74/75
N 20	SK/SKS abrasive caps	up to Ø 13 mm	79
AMIN	Mounted points, shank 6 mm	Ø 22 mm, 25 mm, 32 mm, 40 mm	33-35
	P2 polishing points	Ø 13 mm	40







Technical details:

- Iength: approx. 175 mm
- casing diameter: 34.5 mm
- weight: approx. 0.70 kg
- drive type: vane motor, integrated speed control
- Further technical details can be found on page 115.

Included with the machine:

- air feed hose
- exhaust air hose with muffler
- collet: 6 mm
- operating tool/spanner

Special accessories:

 collets for Ø 3 mm, 3.25 mm, 4 mm, 5 mm, 1/8", 3/16", 1/4"

★★☆

Product number	Description	Valve	ldle speed (rpm)	Power kW	Air consumption under load m ³ /min	Collet Ø mm	Nominal hose size mm	Pack contains
A3993101130	AMIN 30-030 GD	Twist	30,000	0.3	0.45	6	6	1

	Can be used with the following LUKAS tools	Dimensions	Catalogue page
	Tungsten carbide burrs	up to Ø 8 mm	17–21
B	Mounted points	up to Ø 32 mm	33-35
30-030	P2 polishing points	up to Ø 10 mm	40
N 30	P3 polishing points	up to Ø 10 mm	41
AMIN	SK/SKS abrasive caps	up to Ø 10 mm	79
	SBZY abrasive bands	up to Ø 12 mm	74/75





Included with the machine:

- air feed hose
- exhaust air hose with muffler
- collet: 6 mm
- operating tool/spanner

Special accessories:

collets for Ø 3 mm, 1/8", 1/4"

- length: approx. 206 mm
- casing diameter: approx. 30 mm
- spindle casing diameter: approx. 23 mm
- weight: approx. 0.40 kg
- drive type: vane motor
- frontal exhaust air (partial, can be shut off)
- Further technical details can be found on page 115.

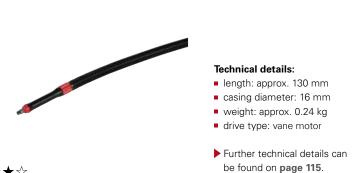


★★☆

Product number	Description	Valve	ldle speed (rpm)	Power kW	Air consumption under load m³/min	Collet Ø mm	Nominal hose size mm	Pack contains
A3993101132	AMIN 32-027 GD	Twist	32,000	0.27	0.3	6	6	1

	Can be used with the following LUKAS tools	Dimensions	Catalogue page
	Tungsten carbide burrs	up to Ø 8 mm	17-21
GD	Mounted points	up to Ø 32 mm	33-35
-027	P2 polishing points	up to Ø 10 mm	40
N 32-	P3 polishing points	up to Ø 10 mm	41
AMIN	SK/SKS abrasive caps	up to Ø 10 mm	79
	SBZY abrasive bands	up to Ø 12 mm	74/75





Properties:

- most powerful tool in its class
- compact design
- Iockable speed switch

Included with the machine:

- air feed hose
- exhaust air hose with muffler
- collet: 3 mm
- operating tool/spanner

Special accessories:

collets for Ø 2 mm, 3.25 mm, 1/8", 3/32"

★★☆

Product number	Description	Valve	ldle speed (rpm)	Power kW	Air consumption under load m ³ /min	Collet Ø mm	Nominal hose size mm	Pack contains
A3993101155	AMIN 55-011 GD	Twist	55,000	0.11	0.15	3	3	1

	Can be used with the following LUKAS tools	Dimensions	Catalogue page
6	Tungsten carbide burrs	up to Ø 5 mm	17-21
AMIN 55-011 GD	Mounted points	up to Ø 16 mm	30-35
	P2 polishing points	up to Ø 5 mm	40
	SK/SKS abrasive caps	up to Ø 5 mm	79
	SBZY abrasive bands	up to Ø 10 mm	74/75



Included with the machine:

- air feed hose
- exhaust air hose with muffler
- collet: 3 mm

A

operating tool/spanner

Special accessories:

collets for Ø 2 mm, 3.25 mm, 1/8", 3/32"

Technical details:

- Iength: approx. 154 mm
- casing diameter: 27.5 mm
- weight: approx. 0.45 kg
- drive type: vane motor



Further technical details can be found on page 115.

★★☆

Product number	Description	Valve	ldle speed (rpm)	Power kW	Air consumption under load m ³ /min	Collet Ø mm	Nominal hose size mm	Pack contains
A3993101172	AMIN 72-013 GD	Twist	72,000	0.13	0.21	3	5	1

	Can be used with the following LUKAS tools	Dimensions	Catalogue page
- m	Tungsten carbide burrs	up to Ø 4 mm	17-21
AMIN 72-01 GD	Mounted points	up to Ø 13 mm	30-35
	P2 polishing points	up to Ø 4 mm	40



Conditioning machine Image: State of the st

Properties:

- heavy-duty motor (stable)
- double gear reduction (long service life)
- dust-protected bearings (low wear)
- Shadow-free metal, wood or plastic surfaces without transitions can be achieved with the ideal tool.

With the appropriate tool, perfect for:

- conditioning
- structuring
- polishing
- brushing
- smoothening
- deburring
- matt finishing

Product number	Description	ldle speed (rpm)	Power kW	Tool max. Ø mm	Tool width mm	Tool holder mm	Pack contains
A3995ESM1310	ESM 1310 S	1,300-3,050	1.3	120	100	19	1

A

Abrasive bands and mandrels71–75	,
SBZY Ceramic abrasive band, cylindrical shape	ŀ
 SBZY regular aliminium oxide abrasive band, 	
cylindrical shape75	;
SBZY zirconia alumina abrasive band, cylindrical shape74	ŀ
 STZY hard abrasive band mandrel, cylindrical shape 76 	
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SK Ceramic abrasive cap79)
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Abrasive discs and carriers81–88	\$
GTG abrasive disc carrier for self-clamping	
abrasive discs88	3
PSG Ceramic self-clamping abrasive disc83	3
PSG reinforced self-clamping regular aluminium	
oxide abrasive disc86	5
PSG self-clamping abrasive disc, abrasive fleece87	/
PSG self-clamping regular aluminium	
oxide abrasive disc85	;
PSG self-clamping silicon carbide abrasive disc88	3
PSG self-clamping zirconia alumina abrasive disc84	ŀ
PSG Z-Power self-clamping abrasive disc84	ŀ
Accessories	
 Arbors for felt polishing wheels42 	
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General terms and conditions

I. SCOPE OF APPLICATION

- The following conditions are final and an integral part of the contract. They apply to all (current and future) agreements, contracts and other services. All offers are exclusively based on our General Terms of Business which are deemed accepted upon order placement or acceptance of delivery. We shall not be bound to any conflicting or differing terms of business submitted to us by the buyer even if we do not expressly object to such other terms.
- Oral ancillary agreements besides or in addition to these Terms of Business do not exist. Any ancillary agreements, differing terms or amendments to our 2 General Terms of Business become applicable and binding only upon our written confirmation. This applies in particular to agreements regarding the quality and condition of our products
- 3 These General Terms of Business only apply to companies, legal entities under public law or public special funds or assets ("Sondervermögen" pursuant to German law).

II. OFFERS AND PROPOSALS

- Our offers and proposals are subject to change and not binding. Any documents in connection therewith, such as drawings, illustrations, technical data, references to applicable standards, and any information given in brochures, shall not be deemed an agreement regarding the quality and condition of the product, unless expressly designated as such in writing.
- Any samples as well as specifications regarding the composition, quality and 2. condition of our products are based on our experience and expertise, but do not constitute any guarantee or other binding commitment.
- 3. We reserve the right of ownership and copyright to all brochures, illustrations, drawings, sketches and any other documents. Any such materials may not be reproduced, copied from the Internet or made available to any third party without our prior permission, and must be returned to us immediately upon our request.

III. CONTRACT CONCLUSION

- An order is deemed accepted if it has been confirmed in writing or delivered.
- Content and scope of an order are subject to order confirmation. 2
- The buyer is liable for the correctness of any documents to be supplied by them, such as drawings, samples, etc. Oral agreements about dimensions, etc. are required to be in writing.

IV. PRICING

- Our prices are quoted in euros ex works Engelskirchen (pursuant to Incoterms 2020), excluding packaging, freight, postage, customs duties and tariffs, and insurance. Surcharges and discounts are based on the basic price. The same applies to any partial or express shipments requested by the buyer. The minimum order value is EUR 130.00 net. For orders under EUR 130.00 we
- 2 charge a handling fee of EUR 15.00.
- All prices are net prices and subject to the currently applicable VAT
- The prices given in the order confirmation apply to deliveries with a delivery period of up to four months. Deliveries with a delivery period of more than four months are subject to the prices applicable at the day of delivery in case the cost price, material, labour and other production costs have changed and the applicable prices are within reason for the buyer.

V. TERMS OF PAYMENT

- Payments are due within 14 days of the date of invoice less 2% discount or 30 days net. Payments are deemed to be made on time if they are received in our accounts no later than on the due date.
- 2. In the event of default, interest at the legal rate of currently 9% above the base rate of the European Central Bank (as of 2019) will be added. We retain the right to claim higher damages for default if applicable.
- First deliveries are always required to be paid upfront or by cash on delivery.
- If doubts arise regarding the solvency of the buyer, e.g. due to an application for the opening of insolvency proceedings, imminent suspension of payments or a significant deterioration of the financial status of the buyer, we are entitled to withhold further deliveries. In this case, we may declare the remaining debt due immediately, and set the customer a reasonable period for a deliveryagainst-payment transaction or the provision of collateral, even in the case of payment by check. After the fruitless expiry of such deadline, we are entitled to cease further fulfilment of our contractual obligations. In the event of an application for insolvency proceedings, we are entitled to immediately terminate the contract. This does not release the buyer from his or her duties and obligations arising in connection with those parts of the contract already fulfilled by us or in connection with earlier or not yet fulfilled contracts.
- We retain the right to assign any accounts receivable to a third party.
- The buyer is only entitled to a setoff if his counterclaims are res judicata, uncontested or accepted by us. Furthermore, the buyer is only entitled to a right of retention if his counterclaim is due and based on the same contractual relationship

VI. RESERVATION OFTITLE

- The delivered goods remain our property ("goods subject to retention of title") until full payment of all claims (current and future) has been made, including all ancillary claims (e.g. financing costs, interest, etc.) arising from the business relationship between us and the buyer. Payment is deemed to be made upon receipt of the countervalue of the delivered goods.
- The buyer is obliged to treat any goods that are subject to retention of title with 2 due care. We are entitled to insure any goods that are subject to retention of title against theft, breakage, fire, water and other damages at the buyer's expense unless they can demonstrate that they have taken out such insurance themselves.
- The buyer is entitled to process, combine, mix and/or resell the delivery items within the ordinary course of business. Any such processing or transformation of the delivery items by the buyer is always carried out for us as the manufacturer. If the delivery items are processed together with other items not our own, we become co-owners of the new item, whereby the value of such ownership is based on the ratio of the delivery item's initial value to that of the other processed items at the time of processing. Furthermore, any stipulations applicable to the goods subject to retention of title also apply to the processed goods.
- In the event that the buyer sells any delivery item prior to payment of all our accounts receivable secured by such delivery items, the buyer assigns to us, 4. at the time of conclusion of the delivery contract, the associated receivables against any such purchaser or other third party in connection with the resale, as collateral for our accounts receivable. We accept any such assignment. We authorise the buyer, until further notice, to collect the assigned accounts receivable. We are entitled to revoke this authorisation if our secured accounts receivable are in jeopardy, including, but not limited to the buyer being in default with their payments. The authorisation to collect expires without further notice at the time at which the buyer stops their payments or files an application for the opening of insolvency proceedings. After the revocation or expiration of such authorisation, we are entitled and the buyer is obliged to notify the debtor of the assigned accounts receivable about such assignment. The buyer must refrain from any collection but keep incoming amounts in a separate account for us. At our request, the buyer must provide us in writing with the contact details of the buyer of the resold delivery items and hand over to us all information and documents regarding the assigned accounts receivable.

Upon request of the buyer, we undertake to release any collateral we are entitled to, insofar as the value of such collateral exceeds the secured accounts receivable by more than 20 %. We reserve the right to select which collateral shall be released.

- 5. Extraordinary disposal of the collateral, including but not limited to possessory or non-possessory liens or assignment and security agreements, requires our prior consent. In the event of liens or other third-party claims, the buyer must inform us immediately in writing and submit to us any documents and information required for us to protect our rights. This also applies if such measures are imminent. The enforcement officer or the respective third party must be informed of our ownership. The buyer bears all costs in connection with the suspension of the seizure, lien or other type of execution and the replacement of the goods subject to retention of title, insofar as these costs cannot be collected from any third party.
- If the buyer is in breach of contract, including but not limited to default, we are, 6. after issuing a reminder, entitled to claim the return of the goods and the buyer is obliged to return them to us. If we terminate the contract as per section V.4 above due to an application for insolvency proceedings, we are entitled to claim the immediate return of any goods subject to retention of title.

VII. DELIVERY PERIODS

- Delivery periods may be agreed as binding or non-binding and are required to be in writing. They do not start before receipt of (i) all required documents from the buyer, (ii) all required releases and approvals, (iii) the agreed down payments and (iv) the fulfilment of all other obligations incumbent on the buyer.
- The delivery date is considered to be met if, by that date, the delivery items have 2. left our site or the buyer has been informed about the readiness for dispatch of the goods. In the case of unforeseeable events which we were unable to avert despite reasonable care, the delivery period can be reasonably extended even within the scope of a default – irrespective of whether these circum-stances occurred at our site or at our sub-suppliers' site(s), rendering them unable to supply us on time, including but not limited to operational disruptions, consequences of industrial or job actions, or similar.
- The delivery period shall be extended in particular if our non-compliance with 3. the delivery date is due to a late or defective delivery by our suppliers to us, which presupposes that we had concluded a so-called congruent or matching supply arrangement in good time ("kongruentes Deckungsgeschäft" as per German law) with our supplier at the time of contract conclusion with the buyer. We will prove to the buyer that we had concluded any such contract with our supplier upon request.
- If the delivery or service becomes impossible due to the events mentioned in sections 2 and 3, or if the delivery or service is delayed by more than six weeks, both the buyer and we are entitled to terminate the contract without either being subject to any claims for damages
- To a reasonable extent, we are entitled to make partial deliveries 5.

VIII. SCOPE AND EXECUTION OF DELIVERY; TRANSFER OF RISK

- The scope of delivery is subject to our delivery note. The minimum order quantity is one packaging unit.
- Inconsistencies in quantity must be communicated within eight days upon receipt of goods.
- Items on stock as listed in our catalogue are available in the specified packaging units and will be delivered and invoiced accordingly. We reserve the right to change the packaging units from time to time.
- Due to manufacturing conditions, changes of up to +/- 15% of the ordered quantity are permissible for products not held in stock.
- We reserve the right to technical modifications of our products resulting from continuous research and development.
- 6. Risk passes over to the buyer when the goods are handed over to the carrier or forwarding agent, but not later than at the time of departure from our warehouse or, in the case of drop-shipping, at the time of departure from the supplier's site. This also applies to any free-of-charge deliveries. Upon express request of the buyer, we will take out insurance against shipping damage at the buyer's expense.
- 7. In the case of call-off (aka blanket) orders, the goods are delivered upon call-off by the buyer. Call-off periods expire 12 months as of the date of order confirmation. We are entitled to manufacture the entire order quantity at once. Requests for changes to any order after order confirmation are not possible unless this has been expressly agreed upon beforehand. Any quantities that have not been called off by the buyer by the end of the call-off period will be shipped to the buyer and invoiced upon the expiration date.

IX. CLAIMS FOR DEFECTS

- 1. Claims for defects are only applicable if the buyer has fulfilled all obligations pursuant to the German Commercial Code to properly examine the goods and give notice of defects. If a delivery item is defective, we undertake, at our discretion, to either deliver a defect-free item (replacement) or rectify the defect. In the event of rectification, we bear all expenses incurring from such rectification provided that costs are not increased by the delivery item having been moved to a place other than the place of performance. If the rectification or the replacement ultimately fails or is considered to have failed, the buyer is entitled to either reduce the purchase price or rescind the contract, at their own discretion. As a rule, the seller is reasonably entitled to a minimum of two attempts to replace or rectify the defects.
- 2. Our liability for any replaced or rectified delivery items is equal to that for the originally delivered goods. In the event of a replacement delivery, the statute of limitations for claims for defects starts anew. The statute of limitations for claims for defects is 12 months as from the time of delivery of the goods to the buyer.
- 3. We do not assume any liability for damages caused by the following: unsuitable or improper storage or use, faulty assembly, implementation or commissioning by the buyer or third parties, natural wear and tear, faulty or negligent handling, unsuitable operating materials, and chemical, electrochemical or electrical influences, unless they are our fault. We are not liable for any consequential damages if such damages are caused by improper modifications or maintenance work by the buyer or any third party without our prior approval.

X. LIABILITY

- 1. We are fully liable for damages caused by our and our vicarious agents' (as per \$278 German Civil Code) willful misconduct or gross negligence. We are furthermore liable (i) for any breach of warranty, (ii) when accepting a procurement risk or any other binding assurances, (iii) in the event of culpable personal injury to life, body or health or (iv) within the scope of the German Product Liability Act. In the event of culpable breach of material contractual duties, i.e. of any such obligation that renders the proper execution of the contract possible in the first place and the fulfilment of which the buyer can or does therefore reasonably expect, we accept liability in so far as the prerequisites for any such claim are fulfilled. The amount of liability is were any exclude any further liability.
- Insofar as our liability is excluded or limited, such exclusion or limitation also applies to the personal liability of our staff, employee representatives and vicarious agents.
- 3. These provisions are not intended to reverse the burden of proof.

XI. RETURN AND/OR REPLACEMENT

The buyer is entitled to return and/or have the goods replaced without stating any reason within four weeks after delivery quoting our consignment number. Goods are to be returned free of charge for us. The right to return or have the goods replaced does not affect any claims for defects pursuant to section IX above.

Processing costs will be charged at EUR 25.00. Custom-made articles are excluded from this right and may not be returned or replaced.

XII. DATA PRIVACY

- Both the buyer and we undertake to comply with the applicable data protection laws and regulations, including but not limited to the GDPR and the Federal Data Protection Act of Germany.
- Further information on how we process data is available in our Privacy Policy at https://lukas-erzett.com/en/footer-navigation/privacy-note-gdpr.html or as attached. To the extent required by the applicable data protection laws, the buyer will make such data privacy statement available to the respective employees, service providers or any other involved third parties.

XIII. PLACE OF PERFORMANCE, FORUM, APPLICABLE LAW AND PARTIAL UNENFORCEABILITY

- 1. Place of performance for all obligations under any contract is Engelskirchen, Germany.
- 2. The exclusive forum for any litigation with buyers who are registered merchants (as per German law), a legal entity under public law or so-called public special funds or assets ("öffentlich-rechtliches Sondervermögen" as per German law) is the court competent for our headquarters. We reserve the right, however, to file any action at the buyer's headquarters.
- International deliveries are governed by German law. Regulations for the international sale or purchase of goods such as the CISG do not apply.
- 4. If individual provisions of these Terms or any delivery contract are or become invalid, the remaining provisions will continue to apply. If one of the provisions is or becomes partially invalid, the remaining part of such provision will continue to apply.

Issued: December 2019

SAFETY SYMBOLS

These may vary depending on the product



Wear ear

protection



Wear a mask



Observe safety

recommendations



Wear protective

gloves



Only to be used with a back-up pad



Do not use for

wet grinding

Wear eye

protection



Do not use for

face grinding



Do not use if

damaged

Do not use with hand-held grinding machine



POWER TOOLS



OUR PRODUCT LINES

★ ★ ☆

 \bigstar

Inox/Steel

Aluminium

Plastic/Wood





Flexible shaft grinder



The product line is indicated with a simple star system:

High Performance

Industry

OUR APPLICATION RECOMMENDATIONS Our application recommendations are divided into

Base

• best suitable and • suitable.

Hand-held angle grinder



PRINTER'S IMPRINT

Publisher LUKAS-ERZETT GmbH & Co. KG Gebrüder-Lukas-Straße 1 51766 Engelskirchen, Germany Phone +49 2263 84-0 Fax +49 2263 84-327 (Domestic Sales) Fax +49 2263 84-300 (International Sales) le@lukas-erzett.de

Realisation aliaz werbeagentur gmbh www.aliaz.de

As at August 2020

Steel

- Cast material
- Titanium
- Stone/Construction material

You can find the corresponding application recommendations for each product directly below every product table.



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