



# GRINDING AND POLISHING

(with bonded tools)

3.1	Mounted points	66–96
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3.3	Precision tools – CBN and diamond	124–128

## 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

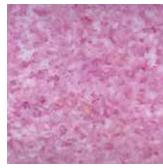
### ABRASIVE

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).



**NK**  
Regular  
aluminium oxide

★★☆



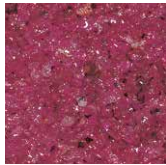
**EKR**  
Pink aluminium oxide

★★☆



**EKW**  
White aluminium oxide

★★☆



**EKD**  
Dark red  
aluminium oxide

★★☆



**EKbr**  
Pink aluminium oxide,  
type brown

★★☆



**MK**  
Mixture EKR/NK

★★☆



**HK**  
Mixture EKW/NK

★★☆



**HKD**  
Mixture EKW/EKD

★★☆



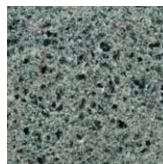
**MKD**  
Mixture NK/EKD

★★☆



**RKD**  
Mixture of dark red and  
pink aluminium oxide

★★☆



**SIC-ALU**  
Green silicon carbide

★★★



**SICdkl**  
Dark silicon carbide

★★☆



**NDW**  
Mixture of regular  
aluminium oxide, dark  
red aluminium oxide  
and white monocrystal  
aluminium oxide

★★★



**CERAMIC**  
Ceramic grain  
and monocrystal  
aluminium oxide

★★★



**HOK**  
Mixture of spherical al-  
uminium oxide

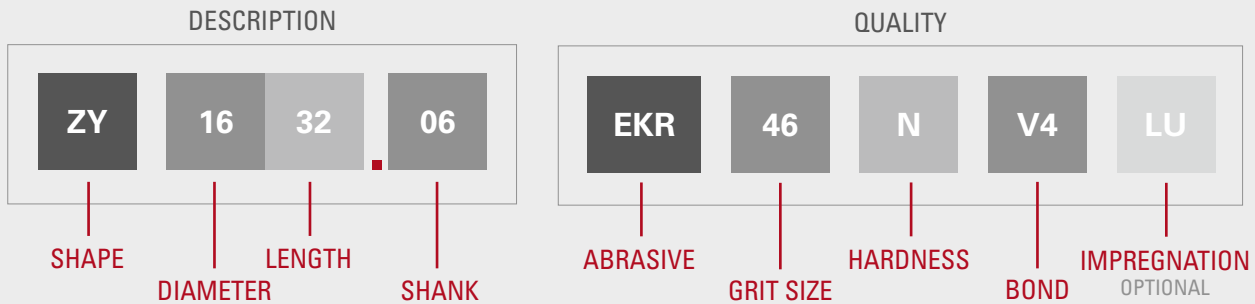
★★☆

## DESIGNATION OF MOUNTED POINTS

## 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.

The overview below shows the individual elements and their content.



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	–	–	–

N

## 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
A	E	H	L	P	T	X
B	F	I	M	Q	U	Y
C	G	Jot	N	R	V	Z
D	–	K	O	S	W	–

V4

## 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

LU

## 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

Page	Image	Reference/ Qualities	Cutting speed $v_c$ m/s	Materials											
				Steel/ cast steel	Alloyed/ tempered steels	Tool steels	Rust-, acid- and heat-resistant steel and cast steel	Cast iron	Aluminium, magnesium and copper alloys	Titanium and nickel alloys	Plastic/ wood/ rubber	Glass/ ceramic/ carbides			
															
78-81		<b>EKR</b> Pink aluminium oxide	approx. 20-35												
82		<b>EKWbr</b> White aluminium oxide type brown	approx. 25-40												
83/84		<b>RKD</b> Dark red and pink aluminium oxide	approx. 30-50												
84		<b>NK-BA soft</b> Regular aluminium oxide iron- and sulphur-free	approx. 40-50												
87		<b>NK-BA hard</b> Regular aluminium oxide	approx. 40-50												
88		<b>HK</b> White aluminium oxide and regular aluminium oxide	approx. 40-50												
89		<b>MK</b> Pink aluminium oxide and regular aluminium oxide	approx. 30-50												
74		<b>NDW</b> Dark red aluminium oxide, regular and monocrystal aluminium oxide	approx. 10-30												
73		<b>Ceramic</b> Ceramic grain and monocrystal aluminium oxide	approx. 30-50												
75		<b>EKW</b> White aluminium oxide	approx. 20-35												
75		<b>EKbr</b> Pink aluminium oxide, type brown	approx. 40-50												
77		<b>SIC-ALU</b> Green silicon carbide	approx. 25-40												
90		<b>HOK</b> Spherical aluminium oxide	approx. 5-20												



## TECHNICAL INFORMATION

## Speeds for grinding tools

GRINDING AND POLISHING  
(with bonded tools)

		Recommended cutting speed $v_c$ (m/s)							
		5	10	20	30	40	50	63	80
Tool diameter (mm)	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
	10	9,500	19,100	38,200	57,300	76,400	95,500	120,300	152,800
	13	7,300	14,700	29,400	44,100	58,800	73,500	92,600	117,500
	20	4,800	9,500	19,100	28,600	38,200	47,700	60,200	76,400
	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.



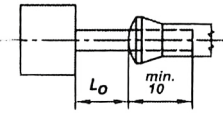

Our products are delivered with a safety ticket, as shown below, which indicates the maximum permitted speed for a certain overhang length (open shank length).

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

MULTILINGUAL  
PRODUCT DESIGNATION

PRODUCT NUMBER AND  
PRODUCT SPECIFICATION

TECHNICAL  
INFORMATION

<b>Schleifkörper keramisch</b> Brousicí tělíska keramická Mounted points - vitrified Muelas cerámicas Meules vitrifiées Sciernice spojone ceramiczne		 ★★★☆									
<b>A200002032602</b> ZY 2032.06 EKR 36 N V4		Menge / VPE 20	 EN 12413								
<table border="1"> <thead> <tr> <th>L<sub>o</sub>(mm)</th> <th>max. rpm</th> </tr> </thead> <tbody> <tr> <td>10</td> <td>40.600</td> </tr> <tr> <td>15</td> <td>34.500</td> </tr> <tr> <td>20</td> <td>29.700</td> </tr> </tbody> </table>	L <sub>o</sub> (mm)	max. rpm	10	40.600	15	34.500	20	29.700			FA1488310  4 027497 013296
L <sub>o</sub> (mm)	max. rpm										
10	40.600										
15	34.500										
20	29.700										
LUKAS-ERZETT Vereinigte Schleif- und Fräswerkzeugfabriken GmbH & Co. KG Gebrüder-Lukas-Straße 1 - 51786 Engelskirchen Made in Germany											

PRODUCT LINE

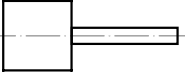
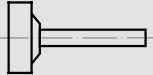
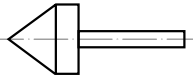
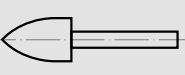
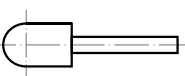
SAFETY STANDARD

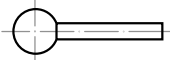
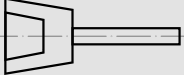
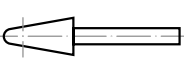
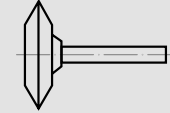
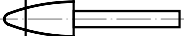
SERIAL NUMBER

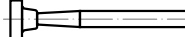
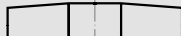
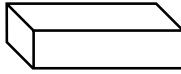
EAN CODE

SHAPE

# Summary of available shapes

Shape	
	<b>ZY</b> Cylindrical, type 1
	<b>ZY2</b> Cylindrical, type 1
	<b>WKS</b> Cylindrical pointed nose
	<b>SP</b> Arch pointed nose
	<b>WR</b> Cylindrical round nose

Shape	
	<b>KU</b> Spherical
	<b>TO</b> Cup
	<b>KE</b> Conical round nose
	American shape A
	American shape B

Shape	
	Miniature mounted points
	<b>SE</b> Taper-sided grinding wheel
	<b>RU</b> Sharpening stones

GRINDING AND POLISHING  
(with bonded tools)

POWER TOOLS

You can find the right power tools for our LUKAS tools on **pages 299–312**. Our power tools are designed for use with LUKAS tools and ensure highly efficient use.



## QUALITIES AND PROPERTIES

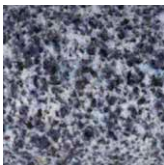
# Mounted points for machining tool steels



### CERAMIC

Mixture of ceramic grain and monocrystal aluminium oxide

★★★



### NDW

Mixture of regular aluminium oxide, dark red aluminium oxide and white monocrystal aluminium oxide

★★★



### EKbr

Pink aluminium oxide, type brown

★★☆



### EKW

White aluminium oxide

★★☆

## 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

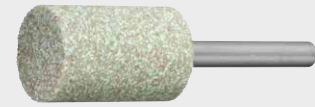
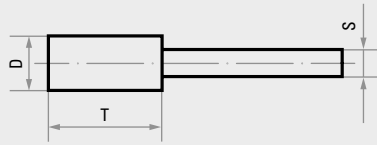
LUKAS mounted points for mould and die industry are extremely dimensionally stable and can cut even the hardest materials. Ceramic grain is extremely friable due to its microcrystal structure, making it self-sharpening. Materials that are difficult to cut (e.g. nickel-based alloys) can therefore be machined 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 inaccessible areas.





### Ceramic mounted point

- 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
A200000205377	ZY 0205.03		Ceramic 80 LV118	2	5	3 x 30	20
A200000306377	ZY 0306.03		Ceramic 80 LV118	3	6	3 x 30	20
A200000408377	ZY 0408.03		Ceramic 80 LV118	4	8	3 x 30	20
A200000510377	ZY 0510.03		Ceramic 80 LV118	5	10	3 x 30	20
A200000613377	ZY 0613.03		Ceramic 80 LV118	6	13	3 x 30	20
A200001020677	ZY 1020.06		Ceramic 80 LV118	10	20	6 x 40	20
A200001325677	ZY 1325.06		Ceramic 46 LV118	13	25	6 x 40	20
A200001632677	ZY 1632.06		Ceramic 46 LV118	16	32	6 x 40	20
A200002032677	ZY 2032.06		Ceramic 46 LV118	20	32	6 x 40	20
A201301303377	ZY2 1303.03		Ceramic 80 LV118	13	3	3 x 30	20
A200200306377	SP 0306.03		Ceramic 80 LV118	3	6	3 x 30	20
A200200510377	SP 0510.03		Ceramic 80 LV118	5	10	3 x 30	20
A200200816377	SP 0816.03		Ceramic 80 LV118	8	16	3 x 30	20
A200201320677	SP 1320.06		Ceramic 80 LV118	13	20	6 x 40	20
A201100404377	KU 0404.03		Ceramic 80 LV118	4	4	3 x 30	20
A201100606377	KU 0606.03		Ceramic 80 LV118	6	6	3 x 30	20
A201101010677	KU 1010.06		Ceramic 46 LV118	10	10	6 x 40	20
A201101313677	KU 1313.06		Ceramic 46 LV118	13	13	6 x 40	20
A201501632677	KE 1632.06		Ceramic 46 LV118	16	32	6 x 40	20

Recommended for:  Inox/Steel  Steel  Titanium

GRINDING AND POLISHING (with bonded tools)



### Ceramic mounted point assortment

- maximum sharpness and hardness with ceramic self-sharpening effect
- 5 different shapes for fast tool changes, in specialist retail packaging
- impressive tool life
- high and fast removal rate, especially on hardened surfaces, scale, hard coatings and reinforced weld seams

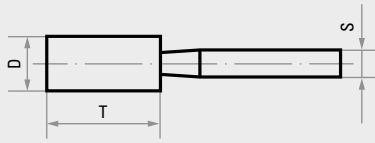


★★★

Product number	Description	Shank diameter mm	Quality	Content	Pack contains
A20480005677F1	Assortment Ceramic	6	Ceramic	5 parts: ZY 1020, ZY 1632, SP 1320, KU 1313, KE 1632	1

Recommended for:  Inox/Steel  Steel  Titanium

## NDW mounted point



- improved aluminium oxide mixture for hardened and unhardened tool steels
- high-quality combination of aluminium oxide types for efficiently grinding unhardened tool steels
- abrasive combination made from extremely tough and splittery grains for high removal and a good surface finish

★★★

Product number	Description	Shape	Quality	D mm	T mm	S mm	Pack contains			
A200000306353	ZY 0306.03		NDW 100 QU V115	3	6	3 x 50	20			
A2000003063530001	ZY 0306.03		NDW 100 QU V115	3	6	3 x 30	20			
A200000408353	ZY 0408.03		NDW 100 QU V115	4	8	3 x 50	20			
A2000004083530001	ZY 0408.03		NDW 100 QU V115	4	8	3 x 30	20			
A200000610353	ZY 0610.03			NDW 100 QU V115	6	10	3 x 50	20		
A2000006103530001	ZY 0610.03			NDW 100 QU V115	6	10	3 x 30	20		
A200000810353	ZY 0810.03			NDW 100 QU V115	8	10	3 x 50	20		
A2000008103530001	ZY 0810.03			NDW 100 QU V115	8	10	3 x 30	20		
A200001013353	ZY 1013.03				NDW 100 QU V115	10	13	3 x 50	20	
A2000010133530001	ZY 1013.03				NDW 100 QU V115	10	13	3 x 30	20	
A200200510353	SP 0510.03					NDW 100 QU V115	5	10	3 x 50	20
A2002005103530001	SP 0510.03					NDW 100 QU V115	5	10	3 x 30	20
A200200810353	SP 0810.03	NDW 100 QU V115				8	10	3 x 50	20	
A2002008103530001	SP 0810.03	NDW 100 QU V115				8	10	3 x 30	20	
A2014010133530001	WR 1013.03				NDW 100 QU V115	10	13	3 x 30	20	
A201401013353	WR 1013.03				NDW 100 QU V115	10	13	3 x 50	20	
A2011004043530001	KU 0404.03		NDW 100 QU V115		4	4	3 x 30	20		
A201100404353	KU 0404.03		NDW 100 QU V115		4	4	3 x 50	20		
A201100606353	KU 0606.03		NDW 100 QU V115		6	6	3 x 50	20		
A2011008083530001	KU 0808.03		NDW 100 QU V115		8	8	3 x 30	20		
A201100808353	KU 0808.03		NDW 100 QU V115	8	8	3 x 50	20			

Recommended for: ● Steel

GRINDING AND POLISHING (with bonded tools)

## NDW mounted point assortment



- Always the right tool at hand. The practical assortment of LUKAS tools means you always have exactly what you need.
- perfectly suited for testing different tools
- just as suitable for use in the industry, on site or in the hobby workshop
- improved aluminium oxide mixture for hardened and unhardened tool steels
- high-quality combination of aluminium oxide types for efficiently grinding unhardened tool steels

★★★

Product number	Description	Quality	Shank diameter mm	Content 1 per pack	Pack contains
A20100000353	Assortment 10	NDW	3 x 30	10 parts: ZY 0408 ZY 1013 KU 0404 WR 1013 ZY 0610 SP 0510 KU 0606 ZY 0810 SP 0810 KU 0808	1

Recommended for: ● Steel



## EKbr mounted point assortment



- Always the right tool at hand. The practical assortment of LUKAS tools means you always have exactly what you need.
- perfectly suited for testing different tools
- just as suitable for use in the industry, on site or in the hobby workshop

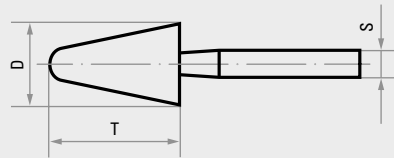
Product number	Description	Quality	Shank diameter mm	Content 1 per pack	Pack contains
A204800003611	Assortment 36	EKbr	3 x 30	36 parts: D1 D2 D3 D4 D5 D6 D7 D8 D9 D10 D11 D12 D13 D14 D15 D16 D17 D18 D19 D20 D21 D22 D23 D24 D25 D26 D27 D28 D29 D30 D31 D32 D33 D34 D35 D36	1

Recommended for: ● Steel

GRINDING AND POLISHING (with bonded tools)



## EKRbr mounted point



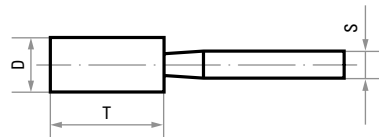
★★☆

Product number	Description	Quality	D mm	T mm	S mm	Pack contains
A201601025606	KE 1025.06	EKRbr 46/60 P V7	10	25	6 x 40	20
A201601645606	KE 1645.06	EKRbr 46/60 P V7	16	45	6 x 40	20

Recommended for: ● Steel



## EKW mounted point



★★☆

Product number	Description	Quality	D mm	T mm	S mm	Pack contains
A200000610608	ZY 0610.06	EKW 80 L V1	6	10	6 x 40	20
A200000810608	ZY 0810.06	EKW 80 L V1	8	10	6 x 40	20
A200001010608	ZY 1010.06	EKW 60 L V1	10	10	6 x 40	20
A200002020608	ZY 2020.06	EKW 60 L V1	20	20	6 x 40	20

Recommended for: ● Steel ● Titanium



## QUALITIES AND PROPERTIES

# 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.

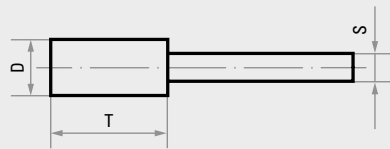


# THE SPECIALIST FOR ALUMINIUM

PROCESS EVEN THE SOFTEST MATERIALS WITHOUT SMEARING OR CLOGGING



## SIC-ALU mounted point



■ special quality for grinding aluminium

★★★

Product number	Description	Shape	Quality	D mm	T mm	S mm	Pack contains	
A20000408318A	ZY 0408.03		SIC-ALU 80 V27 W	4	8	3 x 30	20	
A200000510318A	ZY 0510.03		SIC-ALU 80 V27 W	5	10	3 x 30	20	
A200000610318A	ZY 0610.03		SIC-ALU 80 V27 W	6	10	3 x 30	20	
A200000810318A	ZY 0810.03		SIC-ALU 80 V27 W	8	10	3 x 30	20	
A200001010318A	ZY 1010.03		SIC-ALU 80 V27 W	10	10	3 x 30	20	
A200001013618A	ZY 1013.06		SIC-ALU 80 V27 W	10	13	6 x 40	20	
A200001020618A	ZY 1020.06		SIC-ALU 80 V27 W	10	20	6 x 40	20	
A200001313618A	ZY 1313.06			SIC-ALU 80 V27 W	13	13	6 x 40	20
A200001332618A	ZY 1332.06			SIC-ALU 80 V27 W	13	32	6 x 40	20
A200001616618A	ZY 1616.06			SIC-ALU 80 V27 W	16	16	6 x 40	20
A200001632618A	ZY 1632.06			SIC-ALU 80 V27 W	16	32	6 x 40	20
A200002020618A	ZY 2020.06			SIC-ALU 80 V27 W	20	20	6 x 40	20
A200002025618A	ZY 2025.06			SIC-ALU 80 V27 W	20	25	6 x 40	20
A200002040618A	ZY 2040.06			SIC-ALU 80 V27 W	20	40	6 x 40	20
A200003232618A	ZY 3232.06			SIC-ALU 80 V27 W	32	32	6 x 40	20
A200004020618A	ZY 4020.06			SIC-ALU 80 V27 W	40	20	6 x 40	20
A201501632618A	KE 1632.06				SIC-ALU 80 V27 W	16	32	6 x 40
A201502040618A	KE 2040.06	SIC-ALU 80 V27 W	20		40	6 x 40	20	

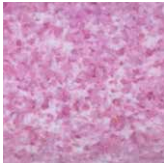
Recommended for: ● Aluminium



GRINDING AND POLISHING (with bonded tools)

QUALITIES AND PROPERTIES

# Mounted points for machining steel and cast steel



**EKR**  
Pink aluminium oxide

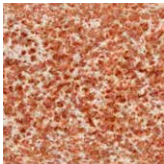
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**MATERIAL PROPERTIES**

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.

**PROCESSING EXAMPLES**

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



**EKWbr**  
White aluminium oxide, type brown

★★☆

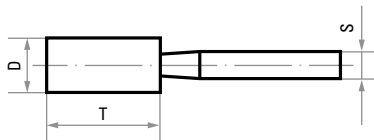
**INDUSTRIES**

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

**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

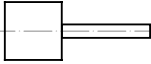
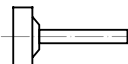


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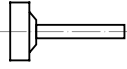
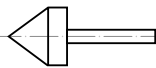
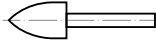

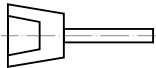
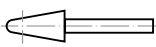
- perfect results on structural steel and for rough grinding with aluminium oxide
- extremely hard and sharp for a long tool life
- also cuts harder materials efficiently

Product number	Description	Shape	Quality	D mm	T mm	S mm	Pack contains
A200000104302	ZY 0104.03		EKR 150 NV4	1.5	4	3 x 30	20
A200000205302	ZY 0205.03		EKR 120 NV4	2	5	3 x 30	20
A2000002053020001	ZY 0305.03		EKR 120 NV4	2.5	5	3 x 30	20
A200000306302	ZY 0306.03		EKR 100 NV4	3	6	3 x 30	20
A2000003063020001	ZY 0306.03		EKR 120 QU V4	3	6	3 x 30	20
A200000306602	ZY 0306.06		EKR 100 NV4	3	6	6 x 40	20

Recommended for: ● Steel

Product number	Description	Shape	Quality	D mm	T mm	S mm	Pack contains
A200000408302	ZY 0408.03		EKR 80 NV4	4	8	3 x 30	20
A2000004083020001	ZY 0408.03		EKR 100 QU V4	4	8	3 x 30	20
A200000408602	ZY 0408.06		EKR 80 NV4	4	8	6 x 40	20
A200000510302	ZY 0510.03		EKR 80 NV4	5	10	3 x 30	20
A2000005103020001	ZY 0510.03		EKR 80/100 QU V4	5	10	3 x 30	20
A200000510602	ZY 0510.06		EKR 80 NV4	5	10	6 x 40	20
A200000610302	ZY 0610.03		EKR 60 NV4	6	10	3 x 30	20
A200000610602	ZY 0610.06		EKR 60 NV4	6	10	6 x 40	20
A200000810302	ZY 0810.03		EKR 60 NV4	8	10	3 x 30	20
A2000008103020001	ZY 0810.03		EKR 60/80 QU V4	8	10	3 x 30	20
A200000810602	ZY 0810.06		EKR 60 NV4	8	10	6 x 40	20
A200000816302	ZY 0816.03		EKR 60 NV4	8	16	3 x 30	20
A200000816602	ZY 0816.06		EKR 60 NV4	8	16	6 x 40	20
A200000820602	ZY 0820.06		EKR 60 NV4	8	20	6 x 40	20
A200001010302	ZY 1010.03		EKR 60 NV4	10	10	3 x 30	20
A200001010602	ZY 1010.06		EKR 60 NV4	10	10	6 x 40	20
A200001013302	ZY 1013.03		EKR 60 NV4	10	13	3 x 30	20
A200001013602	ZY 1013.06		EKR 60 NV4	10	13	6 x 40	20
A200001020602	ZY 1020.06		EKR 60 NV4	10	20	6 x 40	20
A2000010206020001	ZY 1020.06		EKR 46 QU V4	10	20	6 x 40	20
A200001032602	ZY 1032.06		EKR 60 NV4	10	32	6 x 40	20
A2000010326020001	ZY 1032.06		EKR 46 QU V4	10	32	6 x 40	20
A200001040602	ZY 1040.06		EKR 60 NV4	10	40	6 x 40	20
A200001313302	ZY 1313.03		EKR 46 NV4	13	13	3 x 30	20
A200001313602	ZY 1313.06		EKR 46 NV4	13	13	6 x 40	20
A200001320602	ZY 1320.06		EKR 46 NV4	13	20	6 x 40	20
A200001325602	ZY 1325.06		EKR 46 NV4	13	25	6 x 40	20
A200001332602	ZY 1332.06		EKR 46 NV4	13	32	6 x 40	20
A200001616602	ZY 1616.06		EKR 46 NV4	16	16	6 x 40	20
A200001620602	ZY 1620.06		EKR 46 NV4	16	20	6 x 40	20
A200001632602	ZY 1632.06		EKR 46 NV4	16	32	6 x 40	20
A200001640602	ZY 1640.06		EKR 46 NV4	16	40	6 x 40	20
A200002020602	ZY 2020.06		EKR 36 NV4	20	20	6 x 40	20
A200002025602	ZY 2025.06		EKR 36 NV4	20	25	6 x 40	20
A200002032602	ZY 2032.06		EKR 36 NV4	20	32	6 x 40	20
A200002040602	ZY 2040.06		EKR 36 NV4	20	40	6 x 40	20
A200002520602	ZY 2520.06		EKR 36 NV4	25	20	6 x 40	20
A200002525602	ZY 2525.06		EKR 36 NV4	25	25	6 x 40	20
A200002532602	ZY 2532.06		EKR 36 NV4	25	32	6 x 40	20
A200003220602	ZY 3220.06		EKR 30 NV4	32	20	6 x 40	20
A200003232602	ZY 3232.06	EKR 30 NV4	32	32	6 x 40	20	
A200003240602	ZY 3240.06	EKR 30 NV4	32	40	6 x 40	20	
A200004020602	ZY 4020.06	EKR 30 NV4	40	20	6 x 40	20	
A200004040602	ZY 4040.06	EKR 30 NV4	40	40	6 x 40	20	
A200005020602	ZY 5020.06	EKR 30 NV4	50	20	6 x 40	20	
A201301303302	ZY2 1303.03		EKR 80 NV4	13	3	3 x 30	20
A201301303602	ZY2 1303.06		EKR 80 NV4	13	3	6 x 40	20
A201301604302	ZY2 1604.03		EKR 60 NV4	16	4	3 x 30	20
A201301604602	ZY2 1604.06		EKR 60 NV4	16	4	6 x 40	20

Recommended for: ● Steel

Product number	Description	Shape	Quality	D mm	T mm	S mm	Pack contains	
A201302006302	ZY2 2006.03		EKR 60 NV4	20	6	3 x 30	20	
A201302006602	ZY2 2006.06		EKR 60 NV4	20	6	6 x 40	20	
A2013020066020001	ZY2 2006.06		EKR 46 QU V4	20	6	6 x 40	20	
A201302506602	ZY2 2506.06		EKR 60 NV4	25	6	6 x 40	20	
A201302510602	ZY2 2510.06		EKR 36 NV4	25	10	6 x 40	20	
A201303208602	ZY2 3208.06		EKR 46 NV4	32	8	6 x 40	20	
A201304010602	ZY2 4010.06		EKR 30 NV4	40	10	6 x 40	20	
A201305010602	ZY2 5010.06		EKR 30 NV4	50	10	6 x 40	20	
A200402025602	WKS 2025.06			EKR 60 NV4	20	25	6 x 40	20
A200200306302	SP 0306.03		EKR 100 NV4	3	6	3 x 30	20	
A200200510302	SP 0510.03		EKR 80 NV4	5	10	3 x 30	20	
A200200510602	SP 0510.06		EKR 80 NV4	5	10	6 x 40	20	
A200200816302	SP 0816.03		EKR 60 NV4	8	16	3 x 30	20	
A200200816602	SP 0816.06		EKR 60 NV4	8	16	6 x 40	20	
A200201020602	SP 1020.06		EKR 60 NV4	10	20	6 x 40	20	
A200201320602	SP 1320.06		EKR 46 NV4	13	20	6 x 40	20	
A200202032602	SP 2032.06		EKR 36 NV4	20	32	6 x 40	20	
A201100606302	KU 0606.03			EKR 60 NV4	6	6	3 x 30	20
A2011006063020001	KU 0606.03	EKR 80/100 QU V4		6	6	3 x 30	20	
A201100606602	KU 0606.06	EKR 60 NV4		6	6	6 x 40	20	
A201100808302	KU 0808.03	EKR 60 NV4		8	8	3 x 30	20	
A201100808602	KU 0808.06	EKR 60 NV4		8	8	6 x 40	20	
A201101010302	KU 1010.03	EKR 60 NV4		10	10	3 x 30	20	
A201101010602	KU 1010.06	EKR 60 NV4		10	10	6 x 40	20	
A201101313302	KU 1313.03	EKR 46 NV4		13	13	3 x 30	20	
A201101313602	KU 1313.06	EKR 46 NV4		13	13	6 x 40	20	
A201101616602	KU 1616.06	EKR 46 NV4		16	16	6 x 40	20	
A201102020602	KU 2020.06	EKR 36 NV4		20	20	6 x 40	20	
A2011020206020001	KU 2020.06	EKR 60 PV21		20	20	6 x 40	20	
A201102525602	KU 2525.06	EKR 36 NV4		25	25	6 x 40	20	
A201103232602	KU 3232.06	EKR 30 NV4		32	32	6 x 40	20	
A202002019602	TO 2020.06			EKR 60 NV4	20	20	6 x 40	20
A202002524602	TO 2524.06			EKR 60 NV4	25	24	6 x 40	20
A202003229602	TO 3229.06			EKR 60 NV4	32	29	6 x 40	20
A202004036602	TO 4036.06		EKR 60 NV4	40	36	6 x 40	20	
A201501632602	KE 1632.06		EKR 46 NV4	16	32	6 x 40	20	
A201501640602	KE 1640.06		EKR 46 NV4	16	40	6 x 40	20	
A201502032602	KE 2032.06		EKR 36 NV4	20	32	6 x 40	20	
A201502040602	KE 2040.06		EKR 36 NV4	20	40	6 x 40	20	
A201502570602	KE 2570.06		EKR 36 NV4	25	70	6 x 40	20	

Recommended for: ● Steel

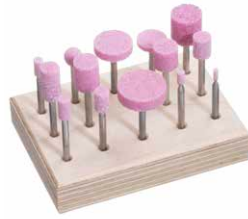




## EKR mounted point assortment



Assortment Steel



Assortment 14



Assortment 36



Assortment 45



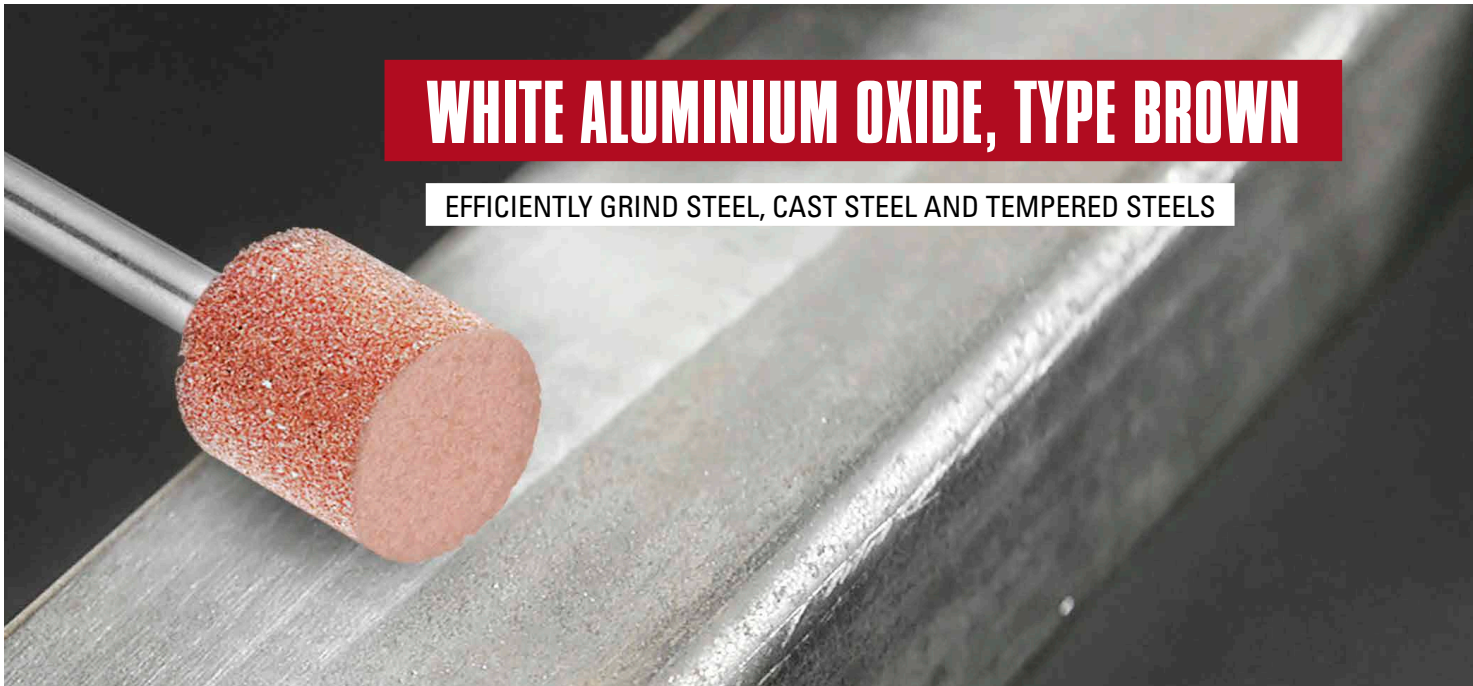
Product number	Description	Quality	Shank diameter mm	Content 1 per pack	Pack contains
A20480005602F1	Assortment Steel	EKR	6	5 parts: ZY 1632.06 EKR 46 N V4 ZY 2525.06 EKR 36 N V4 WKS 2025.06 EKR 60 N V4 KU 2525.06, EKR 36 N V4 KE 1632.06, EKR 46 N V4	1
A204700001402	Assortment 14	EKR	3 x 30	14 parts: ZY 0205                    ZY 0306                    ZY 0408 ZY 0510                    ZY 0610                    ZY 0810 ZY 0816                    ZY 1010                    ZY 1013 ZY 1313                    KU 0808                    ZY2 1303 ZY2 1604                    ZY2 2006	1
A204800003602	Assortment 36	EKR	3 x 30	36 parts: D1                            D2                            D3 D4                            D5                            D6 D7                            D8                            D9 D10                           D11                           D12 D13                           D14                           D15 D16                           D17                           D18 D19                           D20                           D21 D22                           D23                           D24 D25                           D26                           D27 D28                           D29                           D30 D31                           D32                           D33 D34                           D35                           D36	1
A204600000202	Assortment 45	EKR	6 x 40	45 parts: ZY 0306                    ZY 0510                    ZY 0408 ZY 0610                    ZY 0810                    ZY 0816 ZY 1010                    ZY 1020                    ZY 1032 ZY2 1303                    ZY 1313                    ZY 1320 ZY2 1604                    ZY 1616                    ZY 1620 ZY 1632                    ZY2 2006                    ZY 2020 ZY 2025                    ZY 2032                    ZY 2040 ZY2 2506                    ZY2 2510                    ZY 2520 ZY 2525                    ZY 2532                    ZY2 3208 ZY 3220                    ZY 3232                    ZY2 4010 ZY 4020                    SP 0816                    SP 1020 SP 1320                    SP 2032                    KE 1632 KE 1640                    KE 2032                    KE 2040 KU 1010                    KU 1313                    KU 1616 KU 2020                    KU 2525                    KU 3232	1

Recommended for: ● Steel

GRINDING AND POLISHING (with bonded tools)

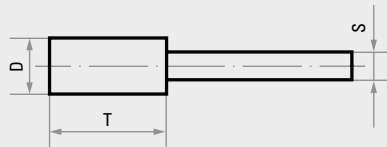
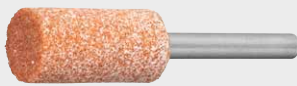
# WHITE ALUMINIUM OXIDE, TYPE BROWN

EFFICIENTLY GRIND STEEL, CAST STEEL AND TEMPERED STEELS



GRINDING AND POLISHING  
(with bonded tools)

## EKWbr mounted point



- perfect results on 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	
A200000205312	ZY 0205.03		EKWbr 120 O/P V7	2	5	3 x 30	20	
A200000306312	ZY 0306.03		EKWbr 100 O/P V7	3	6	3 x 30	20	
A200000408312	ZY 0408.03		EKWbr 80 O/P V7	4	8	3 x 30	20	
A200000510312	ZY 0510.03		EKWbr 80 O/P V7	5	10	3 x 30	20	
A200000610312	ZY 0610.03		EKWbr 60 O/P V7	6	10	3 x 30	20	
A200000810312	ZY 0810.03		EKWbr 60 O/P V7	8	10	3 x 30	20	
A200000816312	ZY 0816.03		EKWbr 60 O/P V7	8	16	3 x 30	20	
A200001010312	ZY 1010.03			EKWbr 60 O/P V7	10	10	3 x 30	20
A200001013312	ZY 1013.03			EKWbr 60 O/P V7	10	13	3 x 30	20
A200001020612	ZY 1020.06			EKWbr 60 O/P V7	10	20	6 x 40	20
A200001032612	ZY 1032.06			EKWbr 60 O/P V7	10	32	6 x 40	20
A200001313312	ZY 1313.03			EKWbr 60 O/P V7	13	13	3 x 30	20
A200001320612	ZY 1320.06			EKWbr 60 O/P V7	13	20	6 x 40	20
A200001632612	ZY 1632.06			EKWbr 46 O/P V7	16	32	6 x 40	20
A200002040612	ZY 2040.06			EKWbr 46 O/P V7	20	40	6 x 40	20
A201301604312	ZY2 1604.03			EKWbr 60 O/P V7	16	4	3 x 30	20
A201302006312	ZY2 2006.03	EKWbr 60 O/P V7		20	6	3 x 30	20	
A201100606312	KU 0606.03		EKWbr 60 O/P V7	6	6	3 x 30	20	
A201100808312	KU 0808.03		EKWbr 60 O/P V7	8	8	3 x 30	20	
A201101010312	KU 1010.03		EKWbr 60 O/P V7	10	10	3 x 30	20	
A201102020612	KU 2020.06		EKWbr 46 O/P V7	20	20	6 x 40	20	

Recommended for: ● Steel



## QUALITIES AND PROPERTIES

# Mounted points for machining non-rusting steels



### RKD

Mixture of dark red and pink aluminium oxide

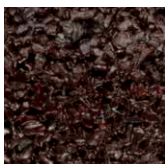
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### MATERIAL PROPERTIES

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.

### PROCESSING EXAMPLES

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



### NK-BA SOFT

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

★★☆

### INDUSTRIES

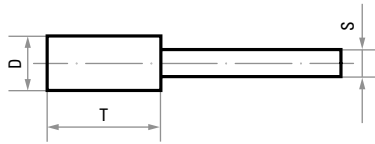
- Steel construction and fabrication (façades, handrails, sanitary equipment)
- Vessel manufacturing
- Casings and panelling
- Medical technology
- Shipyards
- Food industry
- and many more

### LUKAS GRINDING TOOLS

LUKAS has developed particularly high-performance 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.

## RKD mounted point



- for non-rusting steels
- excellent removal rates, also under difficult conditions

★★☆

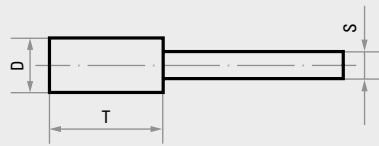
Product number	Description	Shape	Quality	D mm	T mm	S mm	Pack contains
A200000104347	ZY 0104.03		RKD 150 QU V21	1.5	4	3 x 30	20
A200000205347	ZY 0205.03		RKD 150 QU V21	2	5	3 x 30	20
A200000306347	ZY 0306.03		RKD 120 QU V21	3	6	3 x 30	20
A200000306647	ZY 0306.06		RKD 120 QU V21	3	6	6 x 40	20
A200000408347	ZY 0408.03		RKD 100 QU V21	4	8	3 x 30	20
A200000510347	ZY 0510.03		RKD 100 QU V21	5	10	3 x 30	20
A200000510647	ZY 0510.06		RKD 100 QU V21	5	10	6 x 40	20
A200000610347	ZY 0610.03		RKD 80 QU V21	6	10	3 x 30	20
A200000610647	ZY 0610.06		RKD 80 QU V21	6	10	6 x 40	20
A200000810347	ZY 0810.03		RKD 80 QU V21	8	10	3 x 30	20
A200000816347	ZY 0816.03		RKD 80 QU V21	8	16	3 x 30	20
A200000816647	ZY 0816.06		RKD 80 QU V21	8	16	6 x 40	20
A200001010347	ZY 1010.03		RKD 80 P V21	10	10	3 x 30	20
A200001313347	ZY 1313.03		RKD 60 P (6) V21	13	13	3 x 30	20
A200001313647	ZY 1313.06		RKD 60 P (6) V21	13	13	6 x 40	20
A200001325647	ZY 1325.06		RKD 60 QU V21	13	25	6 x 40	20
A200001616647	ZY 1616.06		RKD 36 O (6) V21	16	16	6 x 40	20
A200001632647	ZY 1632.06		RKD 36 O (6) V21	16	32	6 x 40	20
A200002020647	ZY 2020.06		RKD 36 O (6) V21	20	20	6 x 40	20
A200002032647	ZY 2032.06		RKD 36 O (6) V21	20	32	6 x 40	20
A200002040647	ZY 2040.06		RKD 36 O (6) V21	20	40	6 x 40	20
A200002525647	ZY 2525.06		RKD 30 O (6) V21	25	25	6 x 40	20
A200002532647	ZY 2532.06		RKD 30 O (6) V21	25	32	6 x 40	20
A200003232647	ZY 3232.06		RKD 30 O (6) V21	32	32	6 x 40	20
A200003240647	ZY 3240.06		RKD 30 O (6) V21	32	40	6 x 40	20
A200004020647	ZY 4020.06		RKD 24 O (6) V21	40	20	6 x 40	20
A200004040647	ZY 4040.06		RKD 24 O (6) V21	40	40	6 x 40	20
A200004040847	ZY 4040.08		RKD 24 O (6) V21	40	40	8 x 40	20
A201301303347	ZY2 1303.03		RKD 80 QU V21	13	3	3 x 30	20
A201303208647	ZY2 3208.06		RKD 36 O (6) V21	32	8	6 x 40	20
A201304010647	ZY2 4010.06		RKD 30 O (6) V21	40	10	6 x 40	20
A200200306347	SP 0306.03		RKD 120 QU V21	3	6	3 x 30	20
A200200510347	SP 0510.03		RKD 100 QU V21	5	10	3 x 30	20
A200200816347	SP 0816.03		RKD 80 QU V21	8	16	3 x 30	20
A201101010347	KU 1010.03		RKD 80 P V21	10	10	3 x 30	20
A201101616647	KU 1616.06		RKD 60 P (6) V21	16	16	6 x 40	20
A201102525647	KU 2525.06		RKD 30 QU V21	25	25	6 x 40	20
A201501025647	KE 1025.06		RKD 60 P (6) V21	10	25	6 x 40	20
A2015016456470002	KE 1645.06		RKD 46 O V13	16	45	6 x 40	20
A201502040647	KE 2040.06		RKD 36 O (6) V21	20	40	6 x 40	20
A201503250647	KE 3250.06		RKD 30 O (6) V21	32	50	6 x 40	20

Recommended for: Inox/Steel Steel





## 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	
A200001332627W	ZY 1332.06		NK 24 N BA soft	13	32	6 x 40	20	
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	
A200002040827W	ZY 2040.08		NK 24 N BA soft	20	40	8 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	
A201302506627	ZY2 2506.06			NK 24 N BA soft	25	6	6 x 40	20
A201304006627	ZY2 4006.06			NK 24 N BA soft	40	10	6 x 40	20
A201304010627W	ZY2 4010.06	NK 24 N BA soft		40	10	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	
A201306510827	ZY2 6510.08		NK 24 P BA soft	65	10	8 x 40	20	
A201102525627	KU 2525.06		NK 24 N BA soft	25	25	6 x 40	20	

Recommended for: ● Inox/Steel ● Steel ● Aluminium

GRINDING AND POLISHING (with bonded tools)



## NK BA mounted point assortment

- for non-rusting steels
- 4 different shapes for fast tool changes, in specialist retail packaging
- excellent removal rates, also under difficult conditions



★★☆

Product number	Description	Quality	Shank diameter mm	Content 1 per pack	Pack contains	
A20480004627WF1	Assortment Inox	NK BA	6	4 parts: ZY 1332.06 NK 24 N BA soft ZY 2040.06 NK 24 N BA soft ZY 4006.06 NK 24 N BA soft	ZY 2040.06 NK 24 N BA soft KU 2525.06 NKB/NK 24 R BA 98	1

Recommended for: ● Inox/Steel ● Steel ● Aluminium



## QUALITIES AND PROPERTIES

# Mounted points for machining cast materials



### NK-BA HARD

Regular aluminium oxide resin-bonded

★★☆



### HK

Mixture of white aluminium oxide and regular aluminium oxide

★★☆



### MK

Mixture of pink 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
- Fettleing
- Polishing
- Finish grinding of repair welds
- Removing holes and cracks

## LUKAS GRINDING TOOLS

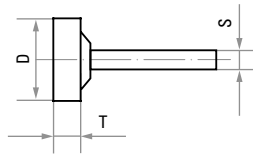
LUKAS mounted points for grinding cast materials contain special grain mixtures and tough bonding systems, delivering excellent performance in the applications mentioned above.

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.

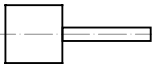
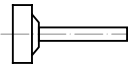


## NK hard mounted point

- perfect for grinding cast materials
- special grain mixture ideally suited to the material
- for ergonomical working with minimum force



★★☆

Product number	Description	Shape	Quality	D mm	T mm	S mm	Pack contains
A200001020627	ZY 1020.06		NK 46 QU BA hard	10	20	6 x 40	20
A200001032627	ZY 1032.06		NK 46 QU BA hard	10	32	6 x 40	20
A200001040627	ZY 1040.06		NK 46 QU BA hard	10	40	6 x 40	20
A200001320627	ZY 1320.06		NK 46 QU BA hard	13	20	6 x 40	20
A200001332627	ZY 1332.06		NK 46 QU BA hard	13	32	6 x 40	20
A200001620627	ZY 1620.06		NK 24 QU BA hard	16	20	6 x 40	20
A200001632627	ZY 1632.06		NK 24 QU BA hard	16	32	6 x 40	20
A200001640627	ZY 1640.06		NK 24 QU BA hard	16	40	6 x 40	20
A200002020627	ZY 2020.06		NK 24 QU BA hard	20	20	6 x 40	20
A200002032627	ZY 2032.06		NK 24 QU BA hard	20	32	6 x 40	20
A200002040627	ZY 2040.06		NK 24 QU BA hard	20	40	6 x 40	20
A200002040827	ZY 2040.08		NK 24 QU BA hard	20	40	8 x 40	20
A200002525627	ZY 2525.06		NK 24 QU BA hard	25	25	6 x 40	20
A200002532627	ZY 2532.06		NK 24 QU BA hard	25	32	6 x 40	20
A200003220627	ZY 3220.06	NK 24 QU BA hard	32	20	6 x 40	20	
A200003232627	ZY 3232.06	NK 24 QU BA hard	32	32	6 x 40	20	
A200003250827	ZY 3250.08	NK 24 O BA hard	32	50	8 x 40	20	
A200004020627	ZY 4020.06	NK 24 QU BA hard	40	20	6 x 40	20	
A200004020827	ZY 4020.08	NK 24 QU BA hard	40	20	8 x 40	20	
A200004040827	ZY 4040.08	NK 24 QU BA hard	40	40	8 x 40	20	
A200005013827	ZY 5013.08	NK 24 QU BA hard	50	13	8 x 40	20	
A200005020627	ZY 5020.06	NK 24 QU BA hard	50	20	6 x 40	20	
A200005020827	ZY 5020.08	NK 24 QU BA hard	50	20	8 x 40	20	
A200005025827	ZY 5025.08	NK 24 QU BA hard	50	25	8 x 40	20	
A201302510627	ZY2 2510.06		NK 24 QU BA hard	25	10	6 x 40	20
A201303208627	ZY2 3208.06		NK 24 QU BA hard	32	8	6 x 40	20
A201304010627	ZY2 4010.06		NK 24 QU BA hard	40	10	6 x 40	20
A201305004627	ZY2 5004.06		NK 24 QU BA hard	50	4	6 x 40	20
A201305006627	ZY2 5006.06		NK 24 QU BA hard	50	6	6 x 40	20
A201305010627	ZY2 5010.06		NK 24 QU BA hard	50	10	6 x 40	20
A201305010827	ZY2 5010.08		NK 24 QU BA hard	50	10	8 x 40	20
A6013060066270005	ZY2 6006.06		NK 24 QU BA hard	60	6	6 x 40	20
A201307510827	ZY2 7510.08		NK 24 QU BA hard	75	10	8 x 40	10

Recommended for: ● Steel ● Cast material

GRINDING AND POLISHING (with bonded tools)



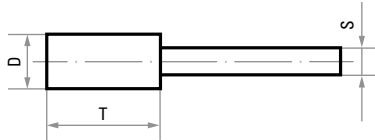
# REMOVE LARGE BURRS, SPRUES AND RISERS

SPECIAL GRAIN MIXTURES AND TOUGH BONDS TO GET THE JOB DONE



GRINDING AND POLISHING  
(with bonded tools)

## HK mounted point



- perfect for grinding cast materials
- special grain mixture ideally suited to the material
- for ergonomical working with minimum force

★★☆

Product number	Description	Shape	Quality	D mm	T mm	S mm	Pack contains
A200001632633	ZY 1632.06		HK 30 N V13	16	32	6 x 40	20
A200002032633	ZY 2032.06		HK 30 N V13	20	32	6 x 40	20
A200002040633	ZY 2040.06		HK 30 N V13	20	40	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
A200004025833	ZY 4025.08		HK 24/30 P V4	40	25	8 x 40	20
A201305010633	ZY2 5010.06		HK 30 N V13	50	10	6 x 40	20
A201503250833	KE 3250.08		HK 30 N V13	32	50	8 x 40	20

Recommended for: ● Cast material ● Inox/Steel

# ROUGH GRINDING THE ERGONOMIC WAY

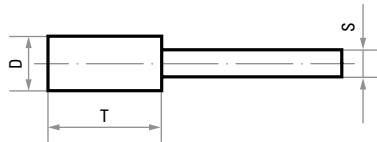
LUKAS MOUNTED POINTS FOR CAST MATERIAL RUN PARTICULARLY SMOOTHLY

GRINDING AND POLISHING  
(with bonded tools)



## MK mounted point

- perfect for grinding cast materials
- special grain mixture ideally suited to the material
- for ergonomical working with minimum force



Product number	Description	Shape	Quality	D mm	T mm	S mm	Pack contains	
A200001020616	ZY 1020.06		MK 46 N V10	10	20	6 x 40	20	
A200001632616	ZY 1632.06		MK 36 N V10	16	32	6 x 40	20	
A200001640616	ZY 1640.06		MK 36 N V10	16	40	6 x 40	20	
A200002020616	ZY 2020.06		MK 36 N V10	20	20	6 x 40	20	
A200002032616	ZY 2032.06		MK 36 N V10	20	32	6 x 40	20	
A200002040616	ZY 2040.06		MK 36 N V10	20	40	6 x 40	20	
A200002532616	ZY 2532.06			MK 36 N V10	25	32	6 x 40	20
A200003220616	ZY 3220.06			MK 36 N V10	32	20	6 x 40	20
A200003232616	ZY 3232.06			MK 36 N V10	32	32	6 x 40	20
A200003240616	ZY 3240.06			MK 36 N V10	32	40	6 x 40	20
A200004020616	ZY 4020.06			MK 36 N V10	40	20	6 x 40	20
A200004040816	ZY 4040.08			MK 36 N V10	40	40	8 x 40	20
A200005025616	ZY 5025.06			MK 30 N V10	50	25	6 x 40	20
A201304010616	ZY2 4010.06		MK 36 N V10	40	10	6 x 40	20	
A201501632616	KE 1632.06		MK 36 N V10	16	32	6 x 40	20	
A201502032616	KE 2032.06		MK 36 N V10	20	32	6 x 40	20	
A201502040616	KE 2040.06		MK 36 N V10	20	40	6 x 40	20	

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





QUALITIES AND PROPERTIES

# Mounted points for grinding plastic and rubber



**HOK**  
Spherical  
aluminium oxide

★★☆

**MATERIAL PROPERTIES**

Materials such as rubber or plastic are very elastic and have a very low melting point. They flex and generate heat, often resulting in a bad odour and smearing.

**INDUSTRIES**

- Rubber processing
- Plastic processing

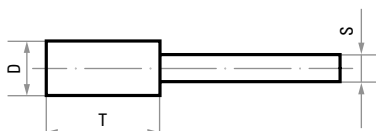
**PROCESSING EXAMPLES**

- Repairing and re-vulcanising tyres
- Repairing conveyor belts
- Preparation of various areas for adhesion
- Deburring rubber or plastic components

**LUKAS GRINDING TOOLS**

LUKAS grinding tools for machining rubber and plastic contain special spherical grains (HOK) in a very open ceramic structure. This abrasive creates permanent small razor-sharp cutting edges which pluck out the material from the surface. Consequently, these mounted points are ideally suited for the machining applications listed above.

## HOK mounted point



★★☆

■ specialist for machining rubber and plastic

Product number	Description	Shape	Quality	D mm	T mm	S mm	Pack contains
A202202025626	ZY 2025.06		HOK 0-3 V9	20	25	6 x 40	20
A202204020626	ZY 4020.06		HOK 0-3 V9	40	20	6 x 40	20
A201902525626	KU 2525.06		HOK 0-3 V9	25	25	6 x 40	20
A201903838626	KU 3838.06		HOK 0-3 V9	38	38	6 x 40	20

Recommended for: ● Plastic/Rubber

# ADAPTED TO AMERICAN DIMENSIONS

## MOUNTED POINTS IN PROVEN LUKAS QUALITY IN AMERICAN SHAPES



AMERICAN SHAPE A



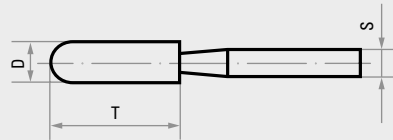
AMERICAN SHAPE B

We offer LUKAS mounted points in a wide range of shapes, sizes and qualities. American shapes are often required overseas. You can rest assured that we have the right products for your challenges in proven LUKAS quality.

GRINDING AND POLISHING  
(with bonded tools)



### Mounted point American shape A

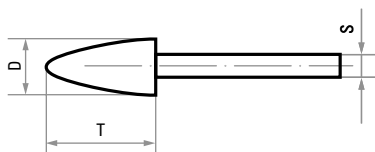
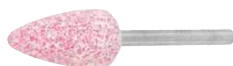


★★☆

Product number	Description	Shape	Quality	D inch	T inch	D mm	T mm	S mm	Pack contains
A206202263633	A1 2263.06		HK 36/46 M V13	7/8	2 1/2	22	63	6 x 40	20
A206201645633	AS-3 1645.06		HK 36/46 M V13	5/8	1 3/4	16	45	6 x 40	20
A2062025706020001	A3 2570.06		EKR 36 N V4	1	2 3/4	25	70	6 x 40	20
A206202570633	A3 2570.06		HK 36/46 M V13	1	2 3/4	25	70	6 x 40	20
A206402570833	A3 2570.08		HK 36/46 M V13	1	2 3/4	25	70	8 x 40	20
A206202250602	A11 2250.06		EKR 36 QU V4	7/8	2	22	50	6 x 40	20
A2062022506020001	A11 2250.06		EKR 36 N V4	7/8	2	22	50	6 x 40	20
A206202250633	A11 2250.06		HK 36/46 M V13	7/8	2	22	50	6 x 40	20
A206202250626	A11 2250.06		HOK 0-3 V9	7/8	2	22	50	6 x 40	20
A206200625602	A15 0625.06		EKR 80/100 QU V4	1/4	1	6	25	6 x 40	20
A206200625633	A15 0625.06		HK 46/60 N V13	1/4	1	6	25	6 x 40	20
A206200620602	A24 0620.06		EKR 60/80 QU V4	1/4	3/4	6	20	6 x 40	20
A206204010608	A36 4010.06		EKW 60 L (2) V13	1 5/8	3/8	40	10	6 x 40	20

Recommended for: ● Cast material (HK) ● Plastic/Rubber ● Titanium (EKW) ● Inox/Steel (HK) ● Steel (EKW)

## Mounted point American shape B



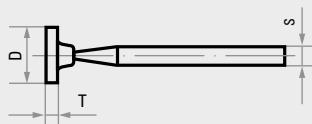
★★☆

Product number	Description	Shape	Quality	D inch	T inch	D mm	T mm	S mm	Pack contains
A206601616302	B41 1616.03		EKR 60/80 QU V4	5/8	5/8	16	16	3 x 30	20
A206601020302	B52 1020.03		EKR 46 QU V4	3/8	3/4	10	20	3 x 30	20
A206600816302	B53 0816.03		EKR 60/80 QU V4	5/16	5/8	8	16	3 x 30	20

Recommended for: ● Steel

GRINDING AND POLISHING  
(with bonded tools)

## Miniature mounted point



■ perfect mounted points for use in pattern making and 3D printing

★★☆

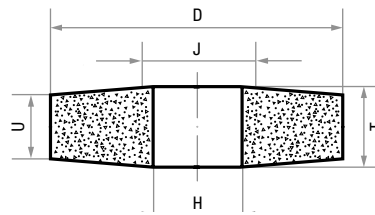
Product number	Description	Shape	Quality	D mm	T mm	S mm	Pack contains
A202900001302	D1		EKR 100 N V4	9	2	3 x 30	20
A202900001311	D1		EKbr 100 M V1/6	9	2	3 x 30	20
A202900002302	D2		EKR 80 N V4	9	3	3 x 30	20
A202900002311	D2		EKbr 80 M V1/6	9	3	3 x 30	20
A202900003302	D3		EKR 100 N V4	8	2	3 x 30	20
A202900003311	D3		EKbr 100 M V1/6	8	2	3 x 30	20
A202900004302	D4		EKR 100 N V4	4	1	3 x 30	20
A202900005302	D5		EKR 80 N V4	5	3	3 x 30	20
A202900005311	D5		EKbr 80 M V1/6	5	3	3 x 30	20
A202900006302	D6		EKR 80 N V4	7/4	6	3 x 30	20
A202900007302	D7		EKR 100 N V4	2.5/5	2.5	3 x 30	20
A202900008302	D8		EKR 100 N V4	2.5/6	3	3 x 30	20

Recommended for: ● Steel

Product number	Description	Shape	Quality	D mm	T mm	S mm	Pack contains
A202900009302	D9		EKR 80 N V4	3.5/8	4	3 x 30	20
A202900009311	D9		EKbr 80 M V1/6	3.5/8	4	3 x 30	20
A202900010302	D10		EKR 100 N V4	2/3.2	4	3 x 30	20
A202900011302	D11		EKR 80 N V4	5	5	3 x 30	20
A202900012302	D12		EKR 80 N V4	4/7	6	3 x 30	20
A202900012311	D12		EKbr 80 M V1/6	4/7	6	3 x 30	20
A202900013302	D13		EKR 100 N V4	3	3	3 x 30	20
A202900013311	D13		EKbr 100 M V1/6	3	3	3 x 30	20
A202900014302	D14		EKR 80 N V4	4	4	3 x 30	20
A202900014311	D14		EKbr 80 M V1/6	4	4	3 x 30	20
A202900015302	D15		EKR 80 N V4	5	5	3 x 30	20
A202900015311	D15		EKbr 80 M V1/6	5	5	3 x 30	20
A202900017302	D17		EKR 80 N V4	4	5	3 x 30	20
A202900018302	D18		EKR 80 N V4	7	8	3 x 30	20
A202900020302	D20		EKR 100 N V4	7	5	3 x 30	20
A202900021302	D21		EKR 100 N V4	8	1.6	3 x 30	20
A202900022302	D22		EKR 100 N V4	2.5	6	3 x 30	20
A202900022311	D22		EKbr 100 M V1/6	2.5	6	3 x 30	20
A202900023302	D23		EKR 80 N V4	5	6	3 x 30	20
A202900023311	D23		EKbr 80 M V1/6	5	6	3 x 30	20
A202900024302	D24		EKR 60 N V4	6	6	3 x 30	20
A202900024311	D24		EKbr 60 M V1/6	6	6	3 x 30	20
A202900025302	D25		EKR 100 N V4	5	1.5	3 x 30	20
A202900026302	D26		EKR 100 N V4	6	2.5	3 x 30	20
A202900026311	D26		EKbr 100 M V1/6	6	2.5	3 x 30	20
A202900028302	D28		EKR 80 N V4	3.5/ 5.5	11	3 x 30	20
A202900029302	D29		EKR 100 N V4	3	6.4	3 x 30	20
A202900029311	D29		EKbr 100 M V1/6	3	6.4	3 x 30	20
A202900030302	D30		EKR 100 N V4	4.4	10	3 x 30	20
A202900030311	D30		EKbr 100 M V1/6	4.4	10	3 x 30	20
A202900032302	D32		EKR 100 N V4	5	7	3 x 30	20
A202900032311	D32		EKbr 100 M V1/6	5	7	3 x 30	20
A202900033302	D33		EKR 80 N V4	6	8	3 x 30	20
A202900034302	D34		EKR 100 N V4	4.37	7	3 x 30	20
A202900034311	D34		EKbr 100 M V1/6	4.37	7	3 x 30	20
A202900035302	D35		EKR 80 N V4	6	10	3 x 30	20
A202900035311	D35		EKbr 80 M V1/6	6	10	3 x 30	20
A202900036302	D36		EKR 80 N V4	6	11	3 x 30	20
A202900036311	D36		EKbr 80 M V1/6	6	11	3 x 30	20

Recommended for: ● Steel

## Taper-sided grinding wheel



★★☆

■ grinding wheel as per ISO 603-12  
in SE4 shape

Product number	Description	Quality	D mm	T mm	U mm	H mm	J mm	Pack contains
A2039080200320001	SE4 08020.16	HK 24 M BA soft	80	20	16	16	25	10
A2039080200320002	SE4 08020.16	HK 16 P BA hard	80	20	16	16	25	10
A2039080200320003	SE4 08020.20	HK 24 M BA soft	80	20	16	20	25	10
A2039080200320004	SE4 08020.20	HK 16 P BA hard	80	20	16	20	25	10

Recommended for: ● Cast material ● Inox/Steel



### SAFETY ADVICE

This tool must be used with a flange as per DIN 69864.

## Sharpening stones



★★☆

RU 1–4 particularly suitable for:

- profiling
- sharpening
- dressing

of bonded grinding and polishing tools

Product number	Description	Quality	L mm	B mm	C mm	Pack contains
A204300000118	RU 1	SICGR 60 O V23/green = fine	50	25	15	5
A204300000122	RU 1	SICGR 24 O V23/dark = coarse	50	25	15	5
A204300000218	RU 2	SICGR 60 O V23/green = fine	100	30	15	5
A204300000222	RU 2	SICGR 24 O V23/dark = coarse	100	30	15	5
A204300000318	RU 3	SICGR 60 O V23/green = fine	100	50	25	5
A204300000322	RU 3	SICGR 24 O V23/dark = coarse	100	50	25	5
A204300000418	RU 4	SICGR 60 O V23/green = fine	150	50	25	5
A204300000422	RU 4	SICGR 24 O V23/dark = coarse	150	50	25	5

Recommended for: ● Stone/Construction material

A2043150251608	RU 5	EKW 100 E (9) V40	150	25	16.5	5
A2043200502508	RU 6	EKW 100 E (9) V40	200	50	25	5

Recommended for: ● Steel



# GET YOUR GRINDING AND POLISHING POINTS READY FOR WORK AGAIN QUICKLY

WE ARE FLEXIBLE AND CAN OFFER ALMOST ANY VARIANT

## SHARPENING STONES WITH SILICON CARBIDE

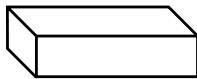

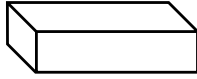
These sharpening stones feature an extremely sharp and rough abrasive grain, delivering perfect results in combination with a hard vitrified bond. This means you can get your grinding and polishing points back in working order in no time. The sharpening stone is ideal for profiling, sharpening, opening pores and removing material from bonded grinding and polishing tools. This silicon carbide tool grinds cool and generates few sparks, making it suitable for use in aerospace engineering. Even hard materials like stone, glass and high-alloy materials can be processed efficiently. The hard and sharp abrasive grain ensures a long service life. Regular tests guarantee high safety and proven quality.

## SHARPENING STONES WITH ALUMINIUM OXIDE

Made from white aluminium oxide, this sharpening stone is perfect for finely grinding workpieces by hand in the mould and die industry. The high hardness and sharp grain of the aluminium oxide ensure its long service life. It can also easily process hard materials. Regular tests guarantee high safety and proven quality.

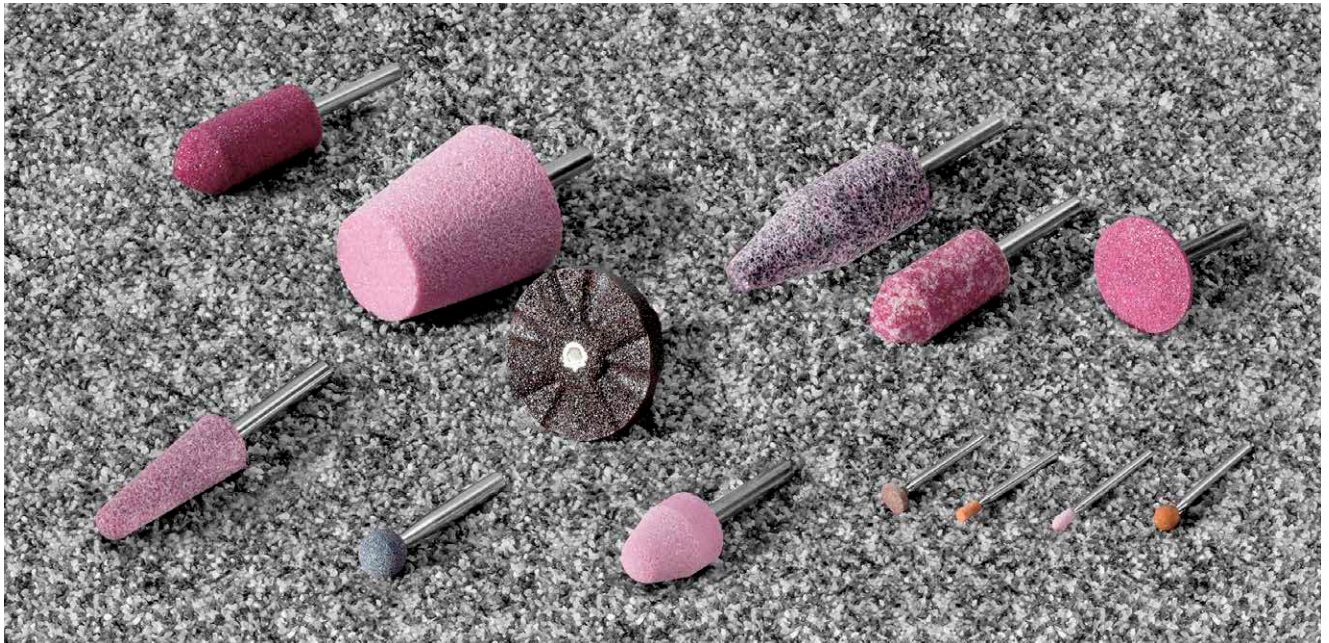
## POSSIBLE SHARPENING STONE DIMENSIONS

Here you can find various sharpening stone variants. Simply let us know which dimensions you need.

Shape	Length mm	Width mm	Height mm
	25	15	5–30
	44	35	18–30
	48	19	5–30
	50	25	10–35
	90	70	20–35
	100	30	10–35
	100	50	10–35
	120	10	5–35
	150	25	10–35
	150	50	10–35
 half-round	216	78	20–35
	150	13	5–35

## CUSTOMIZED PRODUCTION

# Grinding wheels specially developed for your application

**TAILOR-MADE GRINDING WHEELS**

We can also provide you with customised grinding wheels:

- Wheels in special qualities
- Wheels in special dimensions
- Wheels in special profiles
- Mounted points in imperial dimensions and/or with imperial shanks
- Mounted points with internal thread and matching mounting arbors
- Cup wheels
- Grinding wheels – plain and tapered
- Mounted points with extended shanks
- Mounted points with internal thread and matching shank extension
- Sharpening and dressing stones
- and many more

**YOUR CUSTOM PRODUCTION REQUEST**

Please provide us with all the relevant information about your processing problem when sending your request. This will help us react quicker. This information should include:

- Shape, dimensions, shank, bore size of the grinding wheel (a sketch or technical drawing would be of great assistance)
- Material to be ground
- Type of application (e.g. fettling, deburring...)
- Surface finish requirements
- Power tool speed (rpm)
- Anticipated order quantity
- Tool currently being used (type, quality...)

## 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
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 manufactured 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 used one after the other.
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.
P4	Polishing sticks are manufactured from polyurethane (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 reinforcement 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 bonding (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.
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.

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.

	Polishing tool hardness				
	hard	medium	soft		
Mirror finish	P6 Polyurethane	P2 Soft rubber	P4 Polyurethane	P3 Felt and paste	2,000
					1,200
Matt finish	P5 Rubber with fibre reinforcement	P1 Hard rubber		P7 Soft elastomer	800
					400
					280
Dash-dot matting					220
					150
Marbling					120
					80
Polishing					46
					24
					18

Grit sizes (to ISO 525)

GRINDING AND POLISHING  
(with bonded tools)



TECHNICAL INFORMATION

# Speeds for polishing tools

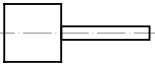
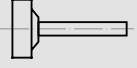
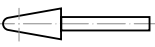


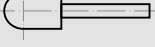
		Recommended cutting speed $v_c$ (m/s)									
		2	5	8	10	16	20	25	32	50	
Polishing group (Bonds)		P2/P4/P6WP/P7					P1				
		P3			P5						
		P6 MWP				P6 MP					
		P6 HP/P6 SHP					P6 SHP CG				
Tool diameter (mm)	4	9,500	23,800	38,100	47,700	76,300	95,400	119,300	152,700	238,700	
	6	6,300	15,900	25,400	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	
	20	1,900	4,700	7,600	9,500	15,200	19,000	23,800	30,500	47,700	
	25	1,500	3,800	6,100	7,600	12,200	15,200	19,000	24,400	38,100	
	32	1,100	2,900	4,700	5,900	9,500	11,900	14,900	19,000	29,800	
	40	900	2,300	3,800	4,700	7,600	9,500	11,900	15,200	23,800	
	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)									


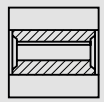
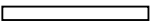
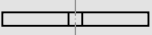
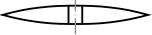

GRINDING AND POLISHING  
(with bonded tools)

**!** 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

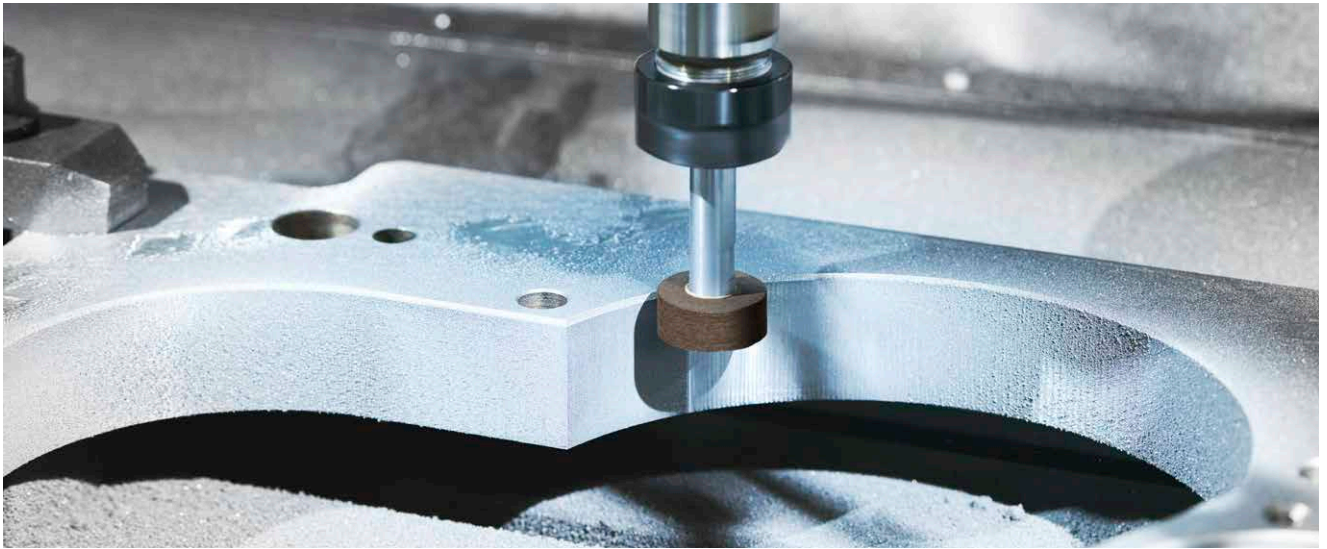
Shape	Available in following product groups
	Cylindrical, type 1 P1, P2, P3, P5, P6
	Cylindrical, type 2 P1, P2
	Conical P1, P2, P3
	Spherical P2, P2, P3, P5
	Arch pointed nose P2, P3, P5
	Cylindrical round nose P1, P2

Shape	Available in following product groups
	Wheel P3, P6
	Roll P6
	Stick P4
	Disc P7
	Lens P7
	Flap disc P6



## POLISHING GROUP P1

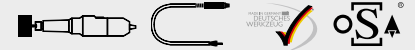
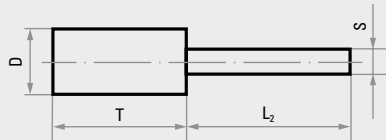
## Hard-rubber polishing points



These polishing points are available in one grit combination only. The surface finish is similar to a finish with grit size 100. The hard rubber bond makes these points particularly suitable

for finishing cast materials, hard and soft steels, as well as alloyed and unalloyed steel. They do not clog and have a long and efficient tool life when used with moderate pressure.

## P1 polishing point



- ideal for finishing cast materials, hardened and unhardened, alloyed and non-alloyed steel
- manufactured as per DIN 69170

★★☆

Product number	Description	Shape	D mm	T mm	S mm	L <sub>2</sub> mm	Pack contains
A2600004083	P1ZY 0408.03		4	8	3	30	20
A2600005103	P1ZY 0510.03		5	10	3	30	20
A2600006103	P1ZY 0610.03		6	10	3	30	20
A2600007103	P1ZY 0710.03		7	10	3	30	20
A2600008103	P1ZY 0810.03		8	10	3	30	20
A2600008166	P1ZY 0816.06		8	16	6	40	10
A2600008206	P1ZY 0820.06		8	20	6	40	10
A2600010103	P1ZY 1010.03		10	10	3	30	20
A2600010133	P1ZY 1013.03		10	13	3	30	20
A2600010163	P1ZY 1016.03		10	16	3	30	20
A2600010206	P1ZY 1020.06		10	20	6	40	10
A2600013133	P1ZY 1313.03		13	13	3	30	20
A2600013163	P1ZY 1316.03		13	16	3	30	20
A2600013206	P1ZY 1320.06	13	20	6	40	10	

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

Product number	Description	Shape	D mm	T mm	S mm	L <sub>2</sub> mm	Pack contains
A2600016163	P1ZY 1616.03		16	16	3	30	20
A2600016206	P1ZY 1620.06		16	20	6	40	10
A2600016326	P1ZY 1632.06		16	32	6	40	10
A2600020206	P1ZY 2020.06		20	20	6	40	10
A2600020326	P1ZY 2032.06		20	32	6	40	10
A2600040206	P1ZY 4020.06		40	20	6	40	10
A2607013033	P1ZY 1303.03		13	3	3	30	20
A2607016043	P1ZY 1604.03		16	4	3	30	20
A2607020063	P1ZY 2006.03		20	6	3	30	20
A2607032106	P1ZY 3210.06		32	10	6	40	10
A2602016326	P1KS 1632.06		16	32	6	40	10
A2605008083	P1KU 0808.03		8	8	3	30	20
A2605016166	P1KU 1616.06		16	16	6	39	10
A2609020326	P1KE 2032.06		20	32	6	40	10

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

GRINDING AND POLISHING (with bonded tools)



## P1 polishing points assortment



- ideal for finishing cast materials, hardened and unhardened, alloyed and non-alloyed steel
- manufactured as per DIN 69170
- ready for any polishing challenge
- 14 different shapes for fast tool changes

★★☆

Product number	Description	Content 1 per pack					Pack contains
A2600114	Assortment 114	14 parts: P1ZY 0408.03 P1ZY 1010.03 P1ZY 1316.03	P1ZY 0510.03 P1ZY 1013.03 P1ZY 1604.03	P1ZY 0610.03 P1ZY 1016.03 P1ZY 1616.03	P1ZY 0710.03 P1ZY 1303.03 P1ZY 2006.03	P1ZY 0810.03 P1ZY 1313.03	1

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

## 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.

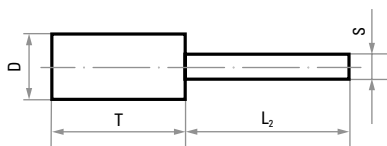


Product image				
Colour	black	pale grey	red	brown
Grit size	46	80	120	220

Product image			
Colour	green	white	orange
Grit size	280	400	600



## P2 polishing point (as per DIN 69170)





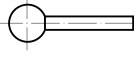
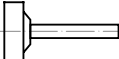
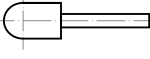

■ manufactured as per DIN 69170

★★★

Product number	Description	Shape	Grit size	D mm	T mm	S mm	L <sub>2</sub> mm	Pack contains
A2610004083080	P2ZY 0408.03		80	4	8	3	30	20
A2610004083120	P2ZY 0408.03		120	4	8	3	30	20
A2610004083220	P2ZY 0408.03		220	4	8	3	30	20
A2610004083280	P2ZY 0408.03		280	4	8	3	30	20
A2610004083400	P2ZY 0408.03		400	4	8	3	30	20 <b>NEW</b>
A2610004083600	P2ZY 0408.03		600	4	8	3	30	20 <b>NEW</b>
A2610005103080	P2ZY 0510.03		80	5	10	3	30	20
A2610005103120	P2ZY 0510.03		120	5	10	3	30	20
A2610005103220	P2ZY 0510.03		220	5	10	3	30	20
A2610005103280	P2ZY 0510.03		280	5	10	3	30	20
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
A2610006103400	P2ZY 0610.03		400	6	10	3	30	20 <b>NEW</b>
A2610006103600	P2ZY 0610.03		600	6	10	3	30	20 <b>NEW</b>
A2610008103046	P2ZY 0810.03		46	8	10	3	30	20
A2610008103080	P2ZY 0810.03		80	8	10	3	30	20
A2610008103120	P2ZY 0810.03		120	8	10	3	30	20
A2610008103220	P2ZY 0810.03		220	8	10	3	30	20
A2610008103280	P2ZY 0810.03	280	8	10	3	30	20	
A2610008103400	P2ZY 0810.03	400	8	10	3	30	20 <b>NEW</b>	
A2610008103600	P2ZY 0810.03	600	8	10	3	30	20 <b>NEW</b>	
A2610008166080	P2ZY 0816.06	80	8	16	6	30	10	
A2610008166120	P2ZY 0816.06	120	8	16	6	30	10	
A2610008166220	P2ZY 0816.06	220	8	16	6	30	10	
A2610008166280	P2ZY 0816.06	280	8	16	6	30	10	
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	
A2610010206080	P2ZY 1020.06	80	10	20	6	40	10	
A2610010206120	P2ZY 1020.06	120	10	20	6	40	10	
A2610010206220	P2ZY 1020.06	220	10	20	6	40	10	
A2610010206280	P2ZY 1020.06	280	10	20	6	40	10	
A2610013133080	P2ZY 1313.03	80	13	13	3	40	20	
A2610013133120	P2ZY 1313.03	120	13	13	3	40	20	
A2610013133220	P2ZY 1313.03	220	13	13	3	40	20	
A2610013133280	P2ZY 1313.03	280	13	13	3	40	20	
A2610013163120	P2ZY 1316.03	120	13	16	3	40	20	

GRINDING AND POLISHING (with bonded tools)

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

Product number	Description	Shape	Grit size	D mm	T mm	S mm	L <sub>2</sub> mm	Pack contains
A2610013206080	P2ZY 1320.06		80	13	20	6	40	10
A2610013206120	P2ZY 1320.06		120	13	20	6	40	10
A2610013206220	P2ZY 1320.06		220	13	20	6	40	10
A2610013206280	P2ZY 1320.06		280	13	20	6	40	10
A2610016163120	P2ZY 1616.03		120	16	16	3	40	20
A2610016206080	P2ZY 1620.06		80	16	20	6	40	10
A2610016206120	P2ZY 1620.06		120	16	20	6	40	10
A2610016206220	P2ZY 1620.06		220	16	20	6	40	10
A2610016206280	P2ZY 1620.06		280	16	20	6	40	10
<b>NEW</b> A2610016206400	P2ZY 1620.06		400	16	20	6	40	10
<b>NEW</b> 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
A2610020206046	P2ZY 2020.06		46	20	20	6	40	10
A2610020206080	P2ZY 2020.06		80	20	20	6	40	10
A2610020206120	P2ZY 2020.06		120	20	20	6	40	10
A2610020206220	P2ZY 2020.06		220	20	20	6	40	10
A2610020206280	P2ZY 2020.06		280	20	20	6	40	10
A2610020326120	P2ZY 2032.06		120	20	32	6	40	10
A2610020326220	P2ZY 2032.06	220	20	32	6	40	10	
A2610020326280	P2ZY 2032.06	280	20	32	6	40	10	
A2610032206120	P2ZY 3220.06	120	32	20	6	40	10	
A2610032326120	P2ZY 3232.06	120	32	32	6	40	10	
A2610032326280	P2ZY 3232.06	280	32	32	6	40	10	
A2610040206120	P2ZY 4020.06	120	40	20	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		120	8	8	3	30	20
<b>NEW</b> A2615008083400	P2KU 0808.03		400	8	8	3	30	20
<b>NEW</b> A2615008083600	P2KU 0808.03		600	8	8	3	30	20
A2615010103120	P2KU 1010.03		120	10	10	3	30	20
A2615016166120	P2KU 1616.06		120	16	16	6	40	10
A2615016166220	P2KU 1616.06		220	16	16	6	40	10
A2617025106120	P2ZY 2510.06		120	25	10	6	40	10
A2617032106120	P2ZY 3210.06		120	32	10	6	40	10
A2617032106220	P2ZY 3210.06		220	32	10	6	40	10
A2617040106120	P2ZY 4010.06		120	40	10	6	40	10
A2618016326120	P2WR 1632.06		120	16	32	6	40	10
A2619010206080	P2KE 1020.06			80	10	20	6	40
A2619010206120	P2KE 1020.06	120		10	20	6	40	10

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



## POLISHING GROUP P3

## Excellent results all the way to a mirror finish



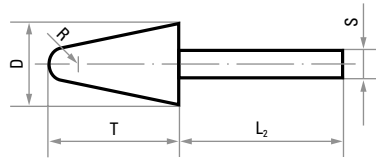
LUKAS felt polishing points are available in two qualities:

- H3 as per DIN 61200
- H3-S super hard and particularly effective when used in combination with diamond paste

**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



★★☆

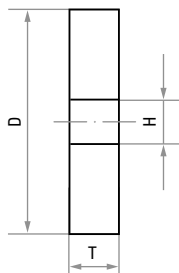
- perfect for polishing highly complex shapes
- manufactured as per DIN 69170

Product number	Description	Shape	Quality	D mm	T mm	S mm	L <sub>2</sub> mm	R mm	Pack contains	
A3700006103	P3ZY 0610.03		H3	6	10	3	40	–	20	
A3700008103	P3ZY 0810.03		H3	8	10	3	40	–	20	
A3700010123	P3ZY 1012.03		H3	10	12	3	38	–	20	
A3700010156	P3ZY 1015.06		H3	10	15	6	40	–	10	
A3700012153	P3ZY 1215.03		H3	12	15	3	40	–	20	
A3700012206	P3ZY 1220.06		H3	12	20	6	40	–	10	
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
A3701008103	P3SP 0810.03			H3	8	10	3	40	–	20
A3701010123	P3SP 1012.03	H3		10	12	3	40	–	20	
A3701010156	P3SP 1015.06	H3		10	15	6	40	–	10	
A3701012206	P3SP 1220.06	H3		12	20	6	40	–	10	
A3701020256	P3SP 2025.06	H3		20	25	6	40	–	10	
A3701025306	P3SP 2530.06	H3		25	30	6	40	–	10	
A3701030406	P3SP 3040.06	H3		30	40	6	40	–	10	
A3703006063	P3KU 0605.03		H3	6	5.5	3	39.5	–	20	
A3703008083	P3KU 0807.03		H3	8	7.5	3	42.5	–	20	
A3703010103	P3KU 1009.03		H3	10	9	3	41	–	20	
A3703010106	P3KU 1009.06		H3	10	9	6	41	–	10	
A3703012126	P3KU 1211.06		H3	12	11	6	39	–	10	
A3703020206	P3KU 2019.06		H3	20	19	6	41	–	10	
A3705010123	P3KE 1012.03		H3	10	12	3	38	2.5	20	
A3705010156	P3KE 1015.06		H3	10	15	6	40	2.5	10	
A3705020256	P3KE 2025.06		H3	20	25	6	40	3.5	10	
A3705025306	P3KE 2530.06		H3	25	30	6	40	4.5	10	
A3705030406	P3KE 3040.06		H3	30	40	6	40	6.5	10	
A37000061030001	P3ZY 0610.03		H3-S	6	10	3	40	–	20	
A37000081030001	P3ZY 0810.03		H3-S	8	10	3	40	–	20	
A37000101230001	P3ZY 1012.03		H3-S	10	12	3	38	–	20	
A37000101560001	P3ZY 1015.06		H3-S	10	15	6	40	–	10	
A37000121530001	P3ZY 1215.03		H3-S	12	15	3	40	–	20	
A37000122060001	P3ZY 1220.06		H3-S	12	20	6	40	–	10	
A37000202560001	P3ZY 2025.06		H3-S	20	25	6	40	–	10	

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



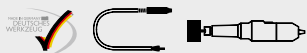
## Felt polishing wheel, shape S1



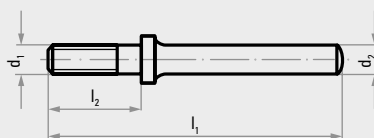
★★☆

Product number	Description	Quality	D mm	T mm	H mm	Pack contains
A3750040106	P3S1 4010.06	H3	40	10	6	10
A3750050106	P3S1 5010.06	H3	50	10	6	10
A3750050206	P3S1 5020.06	H3	50	20	6	10
A3750060106	P3S1 6010.06	H3	60	10	6	10
A3750060206	P3S1 6020.06	H3	60	20	6	10

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

GRINDING AND POLISHING  
(with bonded tools)

## 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	d <sub>1</sub> mm	l <sub>2</sub> mm	d <sub>2</sub> mm	l <sub>1</sub> mm	n <sub>max</sub> rpm	Pack contains
A1630780	ASB 780	M6	20	6	63	7,000	5
A1630781	ASB 781	M6	30	6	73	7,000	5

## Grinding pastes



- new and improved formula
- silicon carbide paste, oil-soluble, can be used with thinners, cleaned with oil, spirit or petrol
- for polishing pre-ground surfaces, particularly suited for hard metallic surfaces such as steel, iron, cast iron, bronze, brass and copper

★★☆

Product number	Description	Quality	Grit size	Grain size in $\mu\text{m}$	Content ml	Pack contains
A3760120	SP-1	medium	SIC 120	88–125	250	1
A3760180	SP-2	fine	SIC 180	55–88	250	1
A3760320	SP-3	very fine	SIC 320	20–40	250	1

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

## FINE POLISH FOR HARD METALS

COUNTLESS CUTTING EDGES FOR A GREAT GLOSS FAST

### MORE CUTTING EDGES IN DIAMOND PASTES

The diamonds in the polycrystalline diamond pastes deliver a fast high-gloss polish. The reason for this lies in the manufacturing process of the polycrystalline diamonds, which creates a large number of predetermined breaking points. Under load the diamonds break at these points. This then constantly results in new cutting edges in the polycrystalline diamond paste during use for outstanding surface results with less paste consumption.

### FOR MACHINES AND ROBOTS

Polycrystalline pastes are used for steels and titanium with a hardness greater than 60 HRC. The high yield and the extremely high process reliability make the polycrystalline diamond pastes from LUKAS perfect for use on NC machines and robots. Thanks to their high temperature resistance of 130 °C and solubility in water, oil and alcohol, the polycrystalline paste can be used in a variety of ways in industrial processes. Polycrystalline diamond paste is also suitable for manual application.

## NEW Polycrystalline diamond pastes



★★★

- for steel and titanium
- resists temperatures of up to 130 °C

Product number	Description	Quality	Grain size in $\mu\text{m}$	Colour	Content in g	Pack contains
A3410129110	EP-091	Super-EP	1	blue	10	1
A3410129210	EP-092	Super-EP	3	green	10	1
A3410129310	EP-093	Super-EP	6	yellow	10	1
A3410129410	EP-094	Super-EP	9	red	10	1
A3410129510	EP-095	Super-EP	15	light brown	10	1

Recommended for: ● Steel ● Cast material ● Titanium

# 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



GRINDING AND POLISHING  
(with bonded tools)

## 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 ● Titanium





## POLISHING GROUP P4

# LUKAS exclusive: flexible polishing sticks

The tools in this group are bonded with polyurethane (PU) and are manufactured in various hardnesses. They contain a mixture of abrasive grains (aluminium

oxide, silicon carbide) and fillers. The tools are colour-coded to visually differentiate between the different qualities. Products in this group have a relatively dense

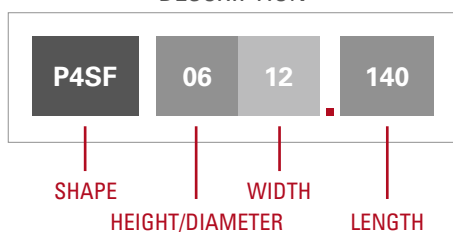
structure. They are available in several qualities from soft to hard and with various profiles. These polishing sticks are mainly used manually for mould-making.

## GET YOUR CUSTOM-MADE POLISHING STICK IN JUST TWO STEPS

### STEP 1

Select the required shape and size (see product tables)

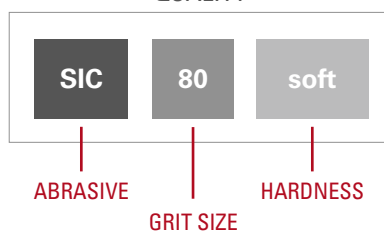
#### DESCRIPTION



### STEP 2

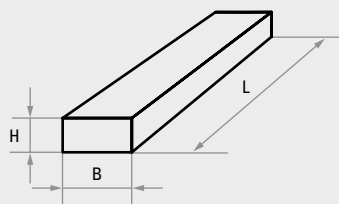
Choose the required quality

#### QUALITY



Colour	Quality
pale grey	SIC 80 soft
grey	SIC 80 hard
pale blue	SIC 150 soft
blue	SIC 150 hard
pale green	SIC 240 soft
green	SIC 240 hard
beige	EKW 80 soft
dark beige	EKW 80 hard
pale red	EKW 150 soft
red	EKW 150 hard
light brown	EKW 240 soft
brown	EKW 240 hard

## Polishing sticks, flat



★★☆

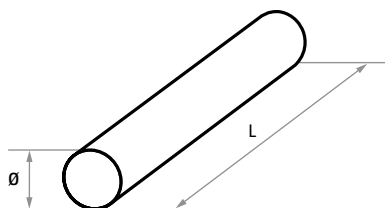
- perfect for manual polishing
- further sizes available on request

Description	H mm	B mm	L mm	Pack contains
P4SF 0612.070	6	12	70	10
P4SF 0612.140	6	12	140	10
P4SF 0816.070	8	16	70	10
P4SF 0816.140	8	16	140	10
P4SF 0816.210	8	16	210	10
P4SF 1020.070	10	20	70	10
P4SF 1020.140	10	20	140	10
P4SF 1020.210	10	20	210	10
P4SF 1020.280	10	20	280	10

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



## Polishing sticks, round



- perfect for manual polishing
- further sizes available on request

★★☆

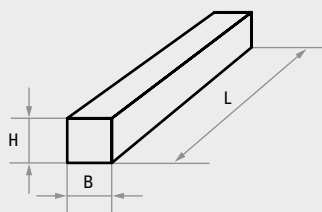
Description	Diameter mm	L mm	Pack contains
P4SR 0006.070	6	70	10
P4SR 0006.140	6	140	10
P4SR 0010.070	10	70	10
P4SR 0010.140	10	140	10
P4SR 0010.210	10	210	10
P4SR 0012.070	12	70	10
P4SR 0012.140	12	140	10
P4SR 0012.210	12	210	10
P4SR 0012.280	12	280	10
P4SR 0015.070	15	70	10
P4SR 0015.140	15	140	10
P4SR 0015.210	15	210	10
P4SR 0015.280	15	280	10

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

GRINDING AND POLISHING (with bonded tools)



## Polishing sticks, square



- perfect for manual polishing
- further sizes available on request

★★☆

Description	H mm	B mm	L mm	Pack contains
P4SV 0606.070	6	6	70	10
P4SV 0606.140	6	6	140	10
P4SV 1010.070	10	10	70	10
P4SV 1010.140	10	10	140	10
P4SV 1010.210	10	10	210	10
P4SV 1212.140	12	12	140	10
P4SV 1212.210	12	12	210	10
P4SV 1515.070	15	15	70	10
P4SV 1515.140	15	15	140	10
P4SV 1515.210	15	15	210	10
P4SV 1515.280	15	15	280	10

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

## POLISHING GROUP P5

**Fibre reinforced for wear resistance**

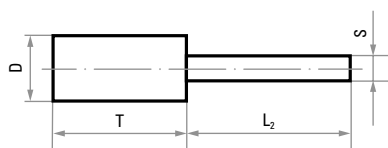
The polishing points in this group are characterised by their special fibre-reinforced structure and bonding. This makes them ideally suited for the fine finishing of aluminium and associated alloys, non-ferrous metals and low and high-alloyed steels. The

fibre reinforcement gives these tools exceptional edge-fray resistance and stability. Polishing points in group P5 are available in the grit sizes shown below, and are identified with a red marking on the shank.

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



## P5 polishing points



- ideally suited for the fine finishing of non-ferrous metals and low- and high-alloyed steels



Product number	Description	Shape	Grit size	D mm	T mm	S mm	L <sub>2</sub> mm	Pack contains	
A2620004083080	P5ZY 0408.03		80	4	8	3	30	20	
A2620004083120	P5ZY 0408.03		120	4	8	3	30	20	
A2620005103080	P5ZY 0510.03		80	5	10	3	30	20	
A2620005103120	P5ZY 0510.03		120	5	10	3	30	20	
A2620006103080	P5ZY 0610.03		80	6	10	3	30	20	
A2620006103120	P5ZY 0610.03		120	6	10	3	30	20	
A2620008103080	P5ZY 0810.03		80	8	10	3	30	20	
A2620008103120	P5ZY 0810.03		120	8	10	3	30	20	
A2620008166046	P5ZY 0816.06		46	8	16	6	30	10	
A2620008166080	P5ZY 0816.06		80	8	16	6	30	10	
A2620008166120	P5ZY 0816.06		120	8	16	6	40	10	
A2620010103080	P5ZY 1010.03			80	10	10	3	30	20
A2620010103120	P5ZY 1010.03			120	10	10	3	30	20
A2620010206046	P5ZY 1020.06			46	10	20	6	40	10
A2620010206080	P5ZY 1020.06			80	10	20	6	40	10
A2620010206120	P5ZY 1020.06			120	10	20	6	40	10
A2620013133120	P5ZY 1313.03			120	13	13	3	30	20
A2620013163080	P5ZY 1316.03			80	13	16	3	30	20
A2620013206080	P5ZY 1320.06			80	13	20	6	40	10
A2620013206120	P5ZY 1320.06			120	13	20	6	40	10
A2620016206080	P5ZY 1620.06	80		16	20	6	40	10	
A2620016206120	P5ZY 1620.06	120	16	20	6	40	10		
A2620016326046	P5ZY 1632.06	46	16	32	6	40	10		
A2620016326080	P5ZY 1632.06	80	16	32	6	40	10		
A2620032326080	P5ZY 3232.06	80	32	32	6	40	10		
A2621020326080	P5SP 2032.06		80	20	32	6	40	10	
A2625008083080	P5KU 0808.03		80	8	8	3	30	20	

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

GRINDING AND POLISHING (with bonded tools)

## 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 tend to clog
- 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. The spectrum ranges from polishing and marbling points to rolls for satin finishes and polishing wheels measuring 60 to 300 mm in diameter. They can be used for dry and wet grinding. Only use ph-neutral coolant for wet grinding. Use handstones (**page 94**) or diamond dressing tools for dressing.

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.



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.

	Removing rust, cleaning, tarnish removal			Cylindrical and surface grinding			Sharpening, dressing		Marbling, dash-dot matting		Deburring, fettling, rounding off				Fine grinding				Pre-finishing				Polishing	
	MWP	MP	SHP CG	SHP	SHP CG	SHP+	SHP	SHP+	WP	MWP	MP	HP	WP	MWP	MP	HP	WP	MWP	MP	HP	WP	MWP		
Gold, silver, nickel, aluminium, brass												410											400	400
																		240	240				800	
															150			150					1,200	
															120	120								
											80		80	80	80			80						
Structural steel		150	120		120	36																		
	46		60		60	30																		
Stainless steel, titanium									400														400	400
									240														240	240
		150														150			150				150	150
			120		120		120				80		80	80	80			80	80	80			120	
			60								36		46		46			46	46	46	46			
											30	24					24							
Hardened steel, tungsten carbide				240																		240	400	
				150																			800	
				120	120																			1,200
				80	60	36		36					80											
Glass																								
																						400		
																						100	240	
Rubber			60																					
Wood																								
Paint	46	150																						
Solder	240				120																			
Tin																								
																							80	
																							46	

Grit sizes

The following grades are available:

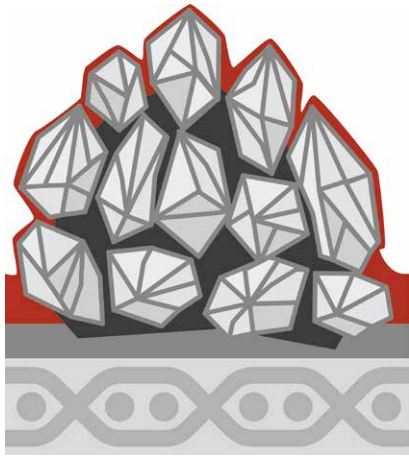
- WP** = soft, very flexible
- MWP** = medium to soft
- MP** = medium for general application
- HP** = hard and resilient, mainly for flat surfaces
- SHP** = super hard, for stationary applications
- SHP CG** = super hard, with compact grain
- SHP+** = super hard, for manual applications

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.

GRINDING AND POLISHING (with bonded tools)

## COMPACT GRAIN

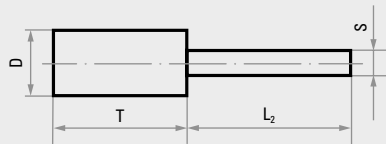
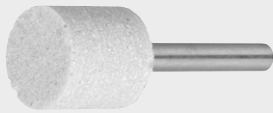
## Many cutting edges combined in one grain



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.

## P6 CG polishing points



- cylindrical polishing point
- creates perfect surfaces on all metals
- long service life and excellent grain usage
- This polishing point is ideally suited to processing difficult-to-access areas on metal parts.
- the perfect addition to the polishing wheel

★★★

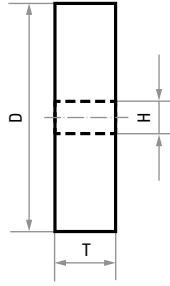
Product number	Description	Quality/grit size	Type/surface result	D mm	T mm	H mm	$n_{max}$ rpm	Pack contains
A29300130203B39	P6ZY 1320.03	EKW 60 SHP CG	extra coarse	13	20	3	117,500	10
A29300130203B59	P6ZY 1320.03	EKW 120 SHP CG	coarse	13	20	3	117,500	10
A29300160206B39	P6ZY 1620.06	EKW 60 SHP CG	extra coarse	16	20	6	95,400	10
A69300160206B59	P6ZY 1620.06	EKW 120 SHP CG	coarse	16	20	6	95,400	10
A69300200206B39	P6ZY 2020.06	EKW 60 SHP CG	extra coarse	20	20	6	76,300	10
A29300200206B59	P6ZY 2020.06	EKW 120 SHP CG	coarse	20	20	6	76,300	10
A29300300306B39	P6ZY 3030.06	EKW 60 SHP CG	extra coarse	30	30	6	50,900	10
A69300300306B59	P6ZY 3030.06	EKW 120 SHP CG	coarse	30	30	6	50,900	10

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





## Polishing wheel, shape SE1 CG



★★★

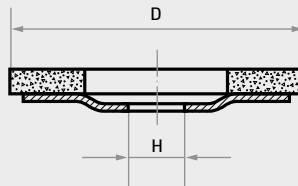
Product number	Description	Quality/grit size	Type/surface result	D mm	T mm	H mm	n <sub>max</sub> rpm	Pack contains
A29100800060B39	P6SE1 08006 B.06	EKW 60 SHP CG	extra coarse	80	6	6	19,000	20
A29100800060B59	P6SE1 08006 B.06	EKW 120 SHP CG	coarse	80	6	6	19,000	20
A29101500100B39	P6SE1 15010 B.25	EKW 60 SHP CG	extra coarse	150	10	25	10,100	10
A29101500100B59	P6SE1 15010 B.25	EKW 120 SHP CG	coarse	150	10	25	10,100	10
A29102000200B39	P6SE1 20020 B.25	EKW 60 SHP CG	extra coarse	200	20	25	7,600	10
A29102000200B59	P6SE1 20020 B.25	EKW 120 SHP CG	coarse	200	20	25	7,600	10

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

GRINDING AND POLISHING (with bonded tools)



## 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
- produces good surfaces
- incredible tool life

★★★

Product number	Description	Quality/grit size	Type/surface result	D mm	H mm	n <sub>max</sub> rpm	Pack contains
A671611506014	P6PT 115 (flat)	EKW 60 SHP CG	extra coarse	115	22.23	13,300	5
A671611512014	P6PT 115 (flat)	EKW 120 SHP CG	coarse	115	22.23	13,300	5
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 ● Aluminium ● Cast material ● Titanium

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
- repairing surfaces for polishing



## 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 <sub>max</sub> rpm	n <sub>recom</sub> 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
A6700024	P6PT 125 (dished) SET		P6PT	125	22.23	4,800	2,700	P150, 240, 400, 800	1

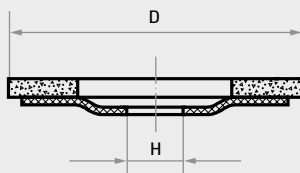
Recommended for: ● Inox/Steel ● Cast material ● Titanium ● Steel ● Aluminium

GRINDING AND POLISHING (with bonded tools)



## 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



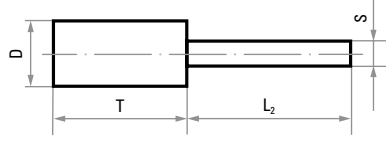
★★☆

Product number	Description	Shape overview	Quality	Type/ surface result	D mm	H mm	n <sub>max</sub> rpm	n <sub>recom</sub> rpm	Pack contains
A671612515014	P6PT 125 (flat)		SIC 150 MP	medium	125	22.23	4,800	2,700	5
A671612515014001	P6PT 125 (flat)		SIC 150 MWP	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
A671712515014	P6PT 125 (dished)		SIC 150 MP	medium	125	22.23	4,800	2,700	5
A671712524014	P6PT 125 (dished)		SIC 240 MWP	fine	125	22.23	4,800	2,700	5
A671712540014	P6PT 125 (dished)		SIC 400 WP	very fine	125	22.23	4,800	2,700	5
A671712580014	P6PT 125 (dished)		SIC 800 WP	ultra-fine	125	22.23	4,800	2,700	5
A6717125120014	P6PT 125 (dished)		SIC 1200 WP	ultra-fine	125	22.23	4,800	2,700	5

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



## P6 polishing point



- cylindrical polishing point
- This polishing point is ideally suited to processing difficult-to-access areas on metal parts.
- perfect addition to the polishing wheel

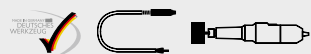
### ■ Application:

Bores, fillet welds, mould tools

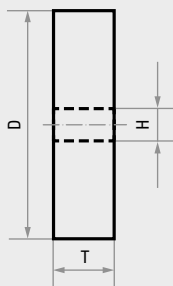
★★☆

Product number	Description	Quality/grit size	D mm	T mm	S mm	L <sub>2</sub> mm	n <sub>max</sub> rpm	Pack contains
A29300080103048	P6ZY 0810.03	SIC 80 HP	8	10	3	30	76,300	10
A29300080103068	P6ZY 0810.03	SIC 150 HP	8	10	3	30	76,300	10
A29300080103078	P6ZY 0810.03	SIC 240 HP	8	10	3	30	76,300	10
A29300080163048	P6ZY 0816.03	SIC 80 HP	8	16	3	30	76,300	10
A29300080163068	P6ZY 0816.03	SIC 150 HP	8	16	3	30	76,300	10
A29300080163078	P6ZY 0816.03	SIC 240 HP	8	16	3	30	76,300	10
A29300100103048	P6ZY 1010.03	SIC 80 HP	10	10	3	30	61,100	10
A29300100103068	P6ZY 1010.03	SIC 150 HP	10	10	3	30	61,100	10
A29300100103078	P6ZY 1010.03	SIC 240 HP	10	10	3	30	61,100	10
A29300100203048	P6ZY 1020.03	SIC 80 HP	10	20	3	30	61,100	10
A29300100203068	P6ZY 1020.03	SIC 150 HP	10	20	3	30	61,100	10
A29300100203078	P6ZY 1020.03	SIC 240 HP	10	20	3	30	61,100	10
A29300130203048	P6ZY 1320.03	SIC 80 HP	13	20	3	30	47,000	10
A29300160203028	P6ZY 1620.03	SIC 46 HP	16	20	3	30	38,100	10
A29300160203048	P6ZY 1620.03	SIC 80 HP	16	20	3	30	38,100	10
A29300160203068	P6ZY 1620.03	SIC 150 HP	16	20	3	30	38,100	10
A29300160203078	P6ZY 1620.03	SIC 240 HP	16	20	3	40	38,100	10
A69300160203094	P6ZY 1620.03	SIC 400 MP	16	20	3	40	29,800	10
A693001602030H0	P6ZY 1620.03	SIC 800 WP	16	20	3	40	19,000	10
A29300200206028	P6ZY 2020.06	SIC 46 HP	20	20	6	40	30,500	10
A29300200206068	P6ZY 2020.06	SIC 150 HP	20	20	6	40	30,500	10
A69300200306044	P6ZY 2030.06	SIC 80 MP	20	30	6	40	23,800	10
A29300250206048	P6ZY 2520.06	SIC 80 HP	25	20	6	40	24,400	10
A29300300306028	P6ZY 3030.06	SIC 46 HP	30	30	6	40	20,300	10
A29300300306068	P6ZY 3030.06	SIC 150 HP	30	30	6	40	20,300	10
A29300300306078	P6ZY 3030.06	SIC 240 HP	30	30	6	40	20,300	10
A69300400306078	P6ZY 4030.06	SIC 240 HP	40	30	6	40	15,200	10
A29300400406028	P6ZY 4040.06	SIC 46 HP	40	40	6	40	15,200	10
A69300400406048	P6ZY 4040.06	SIC 80 HP	40	40	6	40	15,200	10
A69300400406064	P6ZY 4040.06	SIC 150 MP	40	40	6	40	11,900	10
A29300400406068	P6ZY 4040.06	SIC 150 HP	40	40	6	40	15,200	10
A69300400406091	P6ZY 4040.06	SIC 400 MWP	40	40	6	40	9,500	10
A29300500406028	P6ZY 5040.06	SIC 46 HP	50	40	6	40	12,200	10
A29300500406068	P6ZY 5040.06	SIC 150 HP	50	40	6	40	12,200	10
A29300600406028	P6ZY 6040.06	SIC 46 HP	60	40	6	40	10,100	10
A29300600406068	P6ZY 6040.06	SIC 150 HP	60	40	6	40	10,100	10

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



### Polishing wheel, shape SE1



★★☆

These polishing wheels are available from stock with a soft to very hard bonding in grit sizes 46 to 400. Further qualities in grit sizes 8 to 1,200 are available as special tools.

Product number	Description	Quality/grit size	D mm	T mm	H mm	n <sub>max</sub> rpm	Pack contains
A29100600060041	P6SE1 06006 B.06	SIC 80 MWP	60	6	6	6,300	1
A29100600060061	P6SE1 06006 B.06	SIC 150 MWP	60	6	6	6,300	1
A29101000100041	P6SE1 10010 B.25	SIC 80 MWP	100	10	25	3,800	1
A29101000200021	P6SE1 10020 B.25	SIC 46 MWP	100	20	25	3,800	1
A29101000200041	P6SE1 10020 B.25	SIC 80 MWP	100	20	25	3,800	1
A29101000200061	P6SE1 10020 B.25	SIC 150 MWP	100	20	25	3,800	1
A29101000200091	P6SE1 10020 B.25	SIC 400 MWP	100	20	25	3,800	1
A29101250100041	P6SE1 12510 B.25	SIC 80 MWP	125	10	25	3,000	1
A29101250100061	P6SE1 12510 B.25	SIC 150 MWP	125	10	25	3,000	1
A29101250200041	P6SE1 12520 B.25	SIC 80 MWP	125	20	25	3,000	1
A29101250200061	P6SE1 12520 B.25	SIC 150 MWP	125	20	25	3,000	1
A29101500100061	P6SE1 15010 B.25	SIC 150 MWP	150	10	25	2,500	1
A29101500100069	P6SE1 15010 B.25	SIC 150 SHP	150	10	25	4,000	1
A29101500150059	P6SE1 15015 B.20	SIC 120 SHP	150	15	20	4,000	1
A29101500200040	P6SE1 15020 B.25	SIC 80 WP	150	20	25	2,000	1
A29101500200041	P6SE1 15020 B.25	SIC 80 MWP	150	20	25	2,500	1
A29101500200061	P6SE1 15020 B.25	SIC 150 MWP	150	20	25	2,500	1
A29101500250021	P6SE1 15025 B.20	SIC 46 MWP	150	25	20	2,500	1
A29101500250040	P6SE1 15025 B.25	SIC 80 WP	150	25	25	2,000	1
A29101500250061	P6SE1 15025 B.25	SIC 150 MWP	150	25	25	2,500	1
A29101500250074	P6SE1 15025 B.20	SC 240 MP	150	25	20	3,100	1
A29102000250041	P6SE1 20025 B.25	SIC 80 MWP	200	25	25	1,900	1
A29102000250061	P6SE1 20025 B.25	SIC 150 MWP	200	25	25	1,900	1

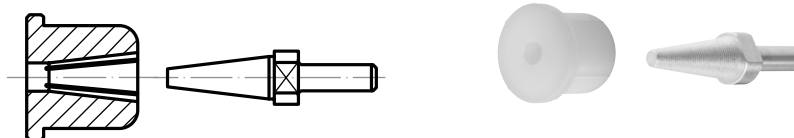
Recommended for: ● Inox/Steel ● Cast material ● Titanium ● Steel ● Aluminium

GRINDING AND POLISHING  
(with bonded tools)



### Mounting system for polishing wheels

The mounting system for SE1 polishing wheels is suitable for the sizes 10010 B.25 and 10020 B.25 only. Do not use this system to mount larger polishing wheels. The maximum cutting speed for this mounting system is 10 m/s. This corresponds to a maximum speed of 1,900 rpm for a wheel diameter of 100 mm.



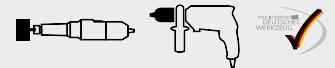
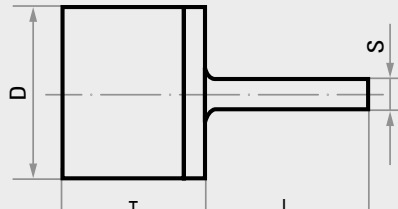
★★☆

Product number	Description	Content	Pack contains
A6981008000	Mounting system MCA + K25	Plastic sleeve (MCA) and mounting mandrel with 8 mm shank (K25)	1

# MARBLING MADE EASY

CONSISTENTLY HIGH PERFORMANCE FROM START TO FINISH

## Marbling point



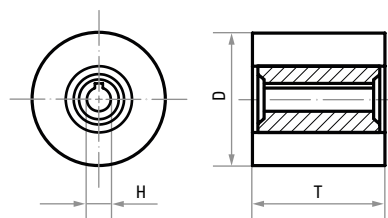
- cylindrical marbling point
- LUKAS marbling points let you marble non-rusting steels, aluminium and non-ferrous metal (peacock eye, clouds). The marbling points do not clog with abrasive dust and their abrasive capability is retained all the way to the plastic cap.

★★☆

Product number	Description	Quality/grit size	D mm	T mm	S mm	L <sub>2</sub> mm	n <sub>max</sub> rpm	Pack contains
A29200200306021	P6MA ZY 2030.06	SIC 46 MWP	20	30	6	35	9,500	1
A29200300306021	P6MA ZY 3030.06	SIC 46 MWP	30	30	6	35	6,300	1
A29200400306046	P6MA ZY 4030.06	SIC 46 MWP	40	30	6	35	4,700	1
A29200500306046	P6MA ZY 5030.06	SIC 46 MWP	50	30	6	35	3,800	1
A29200500306034	P6MA ZY 5030.06	SIC 60 MP	50	30	6	35	3,800	1
A29200600306046	P6MA ZY 6030.06	SIC 46 MWP	60	30	6	35	3,100	1

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

## P6PW polishing roll



- P6PW polishing roll for the conditioning machine.
- for perfectly brushed or dash-dot matted surfaces
- ▶ You can find the right power tool (conditioning machine) on [page 312](#).

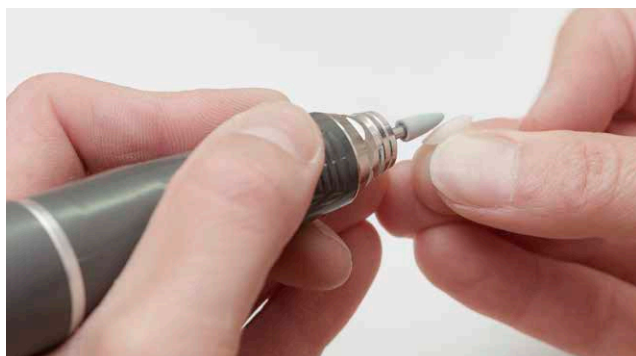
★★☆

Product number	Description	Quality/grit size	D mm	T mm	H mm	n <sub>max</sub> rpm	Pack contains
A29401000500041	P6PW 100050	SIC 80 MWP	100	50	19	3,000	1
A29401001000011	P6PW 100100	SIC 24 MWP	100	100	19	3,000	1
A29401001000020	P6PW 100100	SIC 46 WP	100	100	19	3,000	1
A29401001000021	P6PW 100100	SIC 46 MWP	100	100	19	3,000	1
A29401001000040	P6PW 100100	SIC 80 WP	100	100	19	3,000	1
A29401001000041	P6PW 100100	SIC 80 MWP	100	100	19	3,000	1

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

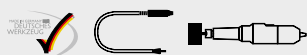
POLISHING GROUP P7

# Fine processing with no compromises

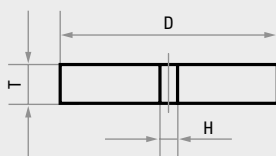


LUKAS polishing points, wheels and lenses are specially designed for fine mechanics and laboratory work. But with their soft elastomer bonding, these tools are also a valuable aid in other areas such as pattern construction or jewellery. Available in tiny sizes and a wide range of shapes, they make it possible to machine even the finest workpieces and textures.

GRINDING AND POLISHING  
(with bonded tools)



## Polishing wheel and lens made from soft elastomer



★★☆

Product number	Description	Quality	Shape	D mm	T mm	H mm	Pack contains
A2950000101007	P7- R22	SICGR 240		22	3.5	1.8	100
A2950000105007	P7- L22	SICGR 240		22	3.4	1.8	100

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



## Assortment of small soft elastomer polishing points



■ The small polishing points have a shank diameter of 2.35 mm.

★★☆

Product number	Description	Quality	Content	Shank mm	Pack contains
A29551301582077	P7Sort. 130-15	SICGR 240	12 parts	2.35	1
A29551301582071	P7Sort. 130-15	SICGR 400	12 parts	2.35	1

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

## CBN/DIAMOND TOOLS

# Let LUKAS experts develop your perfect precision tool

## GENERAL

Diamond is the hardest and cubic boron nitride (CBN) is among the hardest materials known to man. Their excellent hardness makes them highly effective abrasives that have become an essential part of modern precision machining. Diamond grains "D" are available as both natural and synthetic products, while grains made from CBN "B" are entirely synthetic.

Due to the complex syntheses and natural scarcity, diamond and CBN grains are much more expensive than conventional abrasives. But their incredible hardness makes them far superior and essential for many applications. Super-abrasive tools are particularly economical when used in large-scale series production and for the manufacture of premium individual workpieces. The diagram below shows a comparison of the micro-hardnesses of various abrasives.

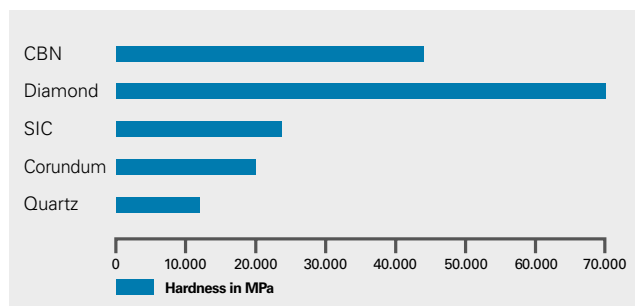
Diamond tools are suitable for processing a wide range of materials, including hard substances like carbides, ceramic, glass, carbon and glass-fibre-reinforced plastics (CFRP and GFRP), and even diamond itself. They can also be used to economically process several plastics and even rubber. CBN is used to process hardened steels. Our expert team will be happy to help find the abrasive that's right for you.

## HARDNESS

These ultra-hard abrasives are much more expensive than conventional products, but offer much greater performance in optimised production processes due to their extreme hardness. This helps to significantly reduce costs.

### Micro-hardness

The diagram below clearly shows the extreme differences in micro-hardness.



## BOND

We offer our customers ultra-hard grinding wheels in a range of bonds. We will be happy to help find the right bond for you.

### Vitrified bond

The abrasive grains in these tools are bonded using a ceramic matrix. These high-performance tools are ideal for achieving the best surface qualities. Their very low dressing rates and consistent abrasive coating give them a very long tool life, helping to keep production costs down. We produce these grinding wheels in a variety of sizes and structures, so that we can offer the right tool to every customer (more information on [page 125](#)).

### Electro-plated

On electro-plated tools, the abrasive grains are galvanically nickel plated to bind them to the surface of a metallic body. Tools produced in this way usually cost less and can be produced in a variety of special shapes and profiles. As both the body and bond are made from metal, they offer outstanding heat conductivity in grinding processes. Electro-plating is also possible with very coarse grains. These tools are suitable for manual use and dry grinding. We recommend using cutting fluids to extend the tool life, however. To help keep costs down, we can recoat worn tools for our customers. This is a particularly economical option when using large or complex tool bodies (suitable tools can be found on [pages 126–128](#)).

## VACUUM-BRAZED TOOLS

Alongside vacuum-brazed cutting discs, we offer our customers a wide range of special solutions and shapes on request to help them meet their specific requirements. This ultra-hard coating delivers extreme profile retention and long tool life.



## GRAIN

As well as physical and chemical properties, the design of the individual grain determines the type of grain to be used. Our expert team can choose the right abrasive grains to develop the right tool for your needs.

Unlike conventional abrasive particles, the grain size for diamond and CBN is indicated in micrometres rather than US Standard Mesh, as per ISO 6106 and FEPA.

Therefore, always remember: **the smaller the number, the finer the grain size – the larger the number, the coarser the grain size.**

The adjacent table shows a comparison of the various sizes measurements.

When selecting the grain size, always bear in mind that ultra-hard abrasives always achieve a higher surface roughness than conventional abrasives due to their extremely low grain wear.

Grain size ranges as per ISO 6106/  
FEPA and US standard

CBN	Diamond	Grain size µm	US Standard Mesh
B 46	D 46	38–45	325/400
B 54	D 54	45–53	270/325
B 64	D 64	53–63	230/270
B 76	D 76	63–75	200/230
B 91	D 91	75–90	170/200
B 107	D 107	90–106	140/170
B 126	D 126	106–125	120/140
B 151	D 151	125–150	100/120
B 181	D 181	150–180	80/100
B 213	D 213	180–212	70/80
B 251	D 251	212–250	60/70

## VITRIFIED-BONDED CBN/DIAMOND TOOLS

# Reliable tool solutions

## QUALITIES

Vitrified-bonded tools are perfect for use in machine-aided large series production processes. They can achieve good and reproducible surface qualities reliably. Thanks to their extreme tool life and low dressing rates, these tools allow users to extend service intervals and save production costs. Our vitrified-bonded diamond and CBN precision tools are defined through a range of parameters, including the choice of abrasive particle, the vitrified bond and its porosity, as well as the suitable shanks. Our expert team will be happy to advise you and help develop the perfect solution for your needs, making use of our years of experience in developing abrasives and in supporting large series production processes.

## SHANKS

We recommend carbide shanks for our range of diamond and CBN mounted points with vitrified bond, as the elasticity module (E-module) of carbide is three times higher than that of steel. This elasticity module determines how much a body deforms under force. As the carbide shank has a higher E-module value, the tool deformation is kept to a minimum when it is exposed to grinding forces.



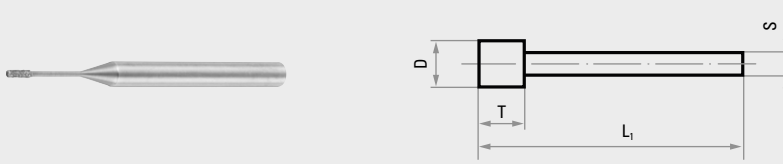
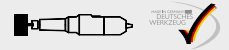
## QUALITY SELECTION

All vitrified-bonded diamond tools have a LUKAS quality code that determines the entire composition. Only after analysing the application data can our specialists recommend the correct tool.

The choice of quality is the decisive step to achieving the perfect result. Varying the quality allows users to influence the hardness and porosity of the grinding wheel. This has a direct impact on process parameters such as removal speed, tool life and surface quality.

**We will be happy to advise you to help you find the right quality.**

## Diamond mounted point, electro-plated

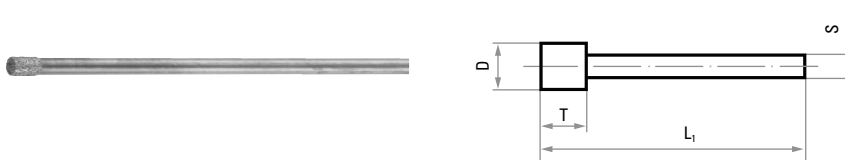


★★☆

Product number	Description	Shapes	Grain size	D mm	T mm	S mm	L <sub>1</sub> mm	Pack contains
A34013050126	DS 01003		D 126	1	3	3	40	1
A34013051126	DS 01503		D 126	1.5	3	3	40	1
A34013052126	DS 02005		D 126	2	5	3	40	1
A34013053126	DS 02505		D 126	2.5	5	3	40	1
A34013054126	DS 03005		D 126	3	5	3	40	1
A3401305412601	DS 03505		D 126	3.5	5	3	40	1
A34013055126	DS 04005		D 126	4	5	3	40	1
A3401305512601	DS 04505		D 126	4.5	5	3	40	1
A34013056126	DS 05006		D 126	5	6	3	40	1
A34013057126	DS 06007		D 126	6	7	3	40	1
A34013058126	DS 08010		D 126	8	10	6	60	1
A34013059126	DS 10010		D 126	10	10	6	60	1
A34013060126	DS 12015		D 126	12	15	6	60	1
A34013090126	DSK 02020			D 126	2	–	3	40
A34013091126	DSK 03030	D 126		3	–	3	40	1
A34013092126	DSK 04040	D 126		4	–	3	40	1
A34013093126	DSK 05050	D 126		5	–	3	40	1
A34013094126	DSK 06060	D 126		6	–	3	40	1
A34013095126	DSK 08080	D 126		8	–	6	60	1

Recommended for: ● Stone/Construction material ● Cast material ● Plastic/Wood ● Inox/Steel ● Titanium

## Full-carbide diamond mounted point, electro-plated



★★☆

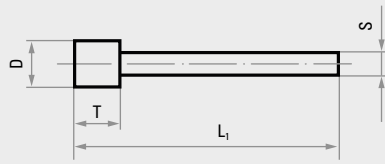
■ Cylindrical diamond mounted point

Product number	Description	Grain size	D mm	T mm	S mm	L <sub>1</sub> mm	Pack contains
A340202305126	DSH 02303	D 126	2.3	3	2	75	1
A340203303126	DSH 03304	D 126	3.3	4	3	75	1
A340204305126	DSH 04305	D 126	4.3	5	4	75	1
A340206307126	DSH 06307	D 126	6.3	7	6	75	1
A340208310126	DSH 08310	D 126	8.3	10	8	75	1
A340210310126	DSH 10310	D 126	10.3	10	10	75	1

Recommended for: ● Stone/Construction material ● Cast material ● Plastic/Wood ● Inox/Steel ● Titanium



### CBN mounted point, electro-plated



★★☆

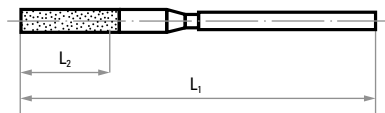
Product number	Description	Shape	Grain size	D mm	T mm	S mm	L <sub>1</sub> mm	Pack contains
A34033050126	CS 01003		B 126	1	3	3	40	1
A34033051126	CS 01503		B 126	1.5	3	3	40	1
A34033052126	CS 02005		B 126	2	5	3	40	1
A34033053126	CS 02505		B 126	2.5	5	3	40	1
A34033054126	CS 03005		B 126	3	5	3	40	1
A3403305412601	CS 03505		B 126	3.5	5	3	40	1
A34033055126	CS 04005		B 126	4	5	3	40	1
A3403305512601	CS 04505		B 126	4.5	5	3	40	1
A34033056126	CS 05006		B 126	5	6	3	40	1
A34033057126	CS 06007		B 126	6	7	3	40	1
A34033058126	CS 08010		B 126	8	10	6	60	1
A34033059126	CS 10010		B 126	10	10	6	60	1
A34033060126	CS 12015		B 126	12	15	6	60	1
A34033090126	CSK 0202			B 126	2	–	3	40
A34033091126	CSK 0303	B 126		3	–	3	40	1
A34033092126	CSK 0404	B 126		4	–	3	40	1
A34033093126	CSK 0505	B 126		5	–	3	40	1
A34033094126	CSK 0606	B 126		6	–	3	40	1
A34033095126	CSK 0808	B 126		8	–	6	60	1

Recommended for: ● Steel ● Inox/Steel ● Plastic/Wood

GRINDING AND POLISHING (with bonded tools)



### Diamond file for manual filing machines, electro-plated



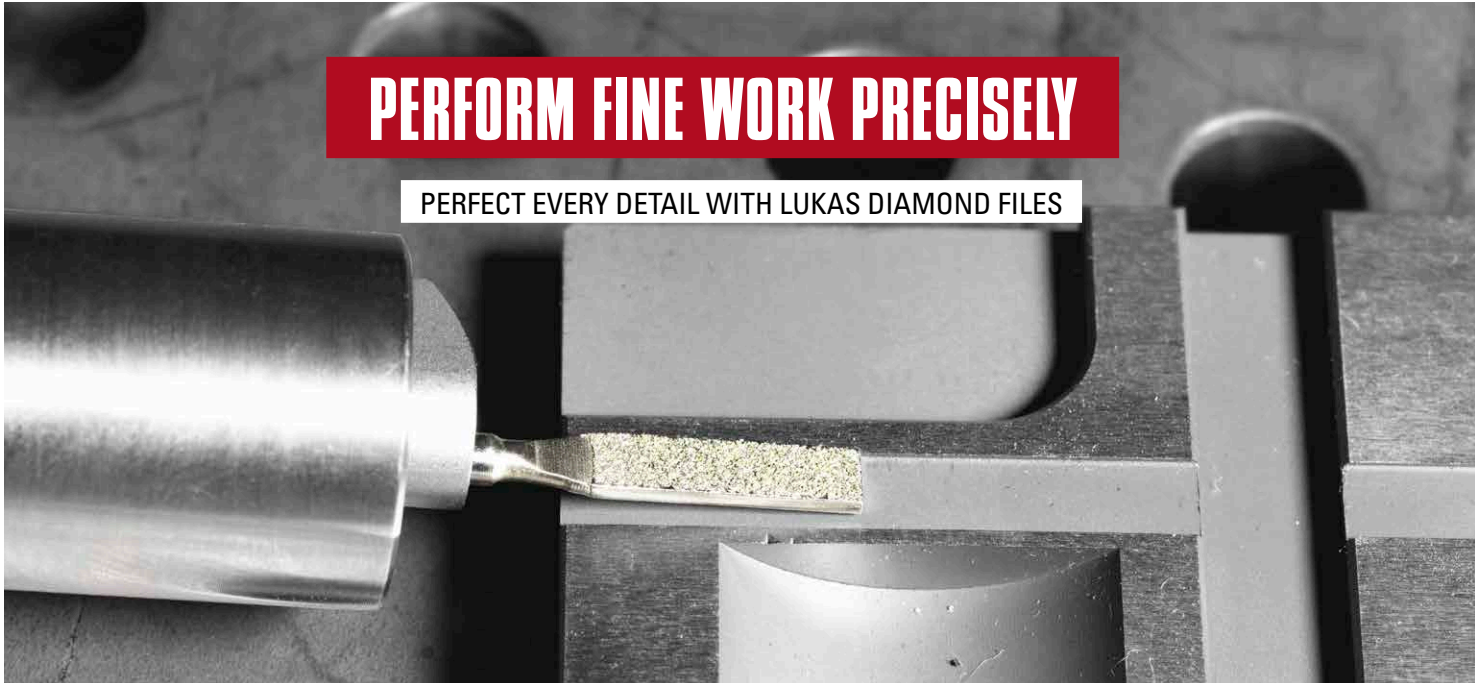
★★☆

Product number	Description	Shapes	Shape	Grain size	Cross section mm	L <sub>2</sub> mm	L <sub>1</sub> mm	Pack contains
A34003122126	DF 3122		flat	D 126	4 x 1	15	50	1
A34003130126	DF 3130		round	D 126	4	15	50	1

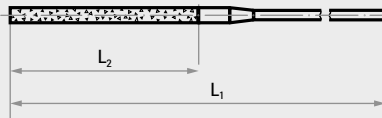
Recommended for: ● Stone/Construction material ● Plastic/Wood ● Titanium ● Inox/Steel ● Cast material

# PERFORM FINE WORK PRECISELY

## PERFECT EVERY DETAIL WITH LUKAS DIAMOND FILES



### Diamond needle file, electro-plated



★★☆

Product number	Description	Shapes	Shape	Grain size	Cross section mm	L <sub>2</sub> mm	L <sub>1</sub> mm	Pack contains
A34003140091	DF 3140		flat	D 91	5.0 x 1.4	70	140	1
A34003140126	DF 3140		flat	D 126	5.0 x 1.4	70	140	1
A34003142091	DF 3142		triangular	D 91	3.5 x 3.5	70	140	1
A34003142126	DF 3142		triangular	D 126	3.5 x 3.5	70	140	1
A34003143126	DF 3143		square	D 126	2.5 x 2.5	70	140	1
A34003144126	DF 3144		half-round	D 126	5.2 x 1.9	70	140	1
A34003145126	DF 3145		round	D 126	3	70	140	1
A34003146126	DF 3146		knife	D 126	5.0 x 1.4	70	140	1

Recommended for: ● Stone/Construction material ● Plastic/Wood ● Inox/Steel ● Cast material ● Titanium