

# **GRINDING AND POLISHING** (with bonded tools) 1-23



#### **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.

#### ABRASIVE **EKR**

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).



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NK Regular aluminium oxide

EKD - RUBY



**EKR - PINK** Pink aluminium oxide



EKW White aluminium oxide

Dark red aluminium oxide

ΗK



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Green silicon carbide

Mixture EKW/NK



EKbr Pink aluminium oxide, type brown





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and monocrystal aluminium oxide



HUK

Mixture of spherical aluminium oxide

SICgrn



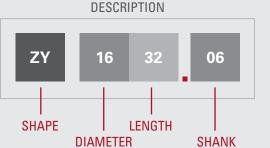
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## **DESIGNATION OF MOUNTED POINTS** All the important information in the product designation

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.



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#### **GRIT SIZES AS PER ISO 525**

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

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

#### HARDNESS AS PER ISO 525

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

extreme soft	very soft	soft	medium	hard	very hard	extreme hard
А	E	Н	L	Р	Т	х
В	F	L	М	Q	U	Y
С	G	J	N	R	V	Z
D	-	К	0	S	W	-



#### BOND

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

#### Vitrified bond:

V = vitrified bond

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

#### Organic bond:

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

#### **IMPREGNATION (OPTIONAL)**

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

- Lu = with resin
- W = with wax

# **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

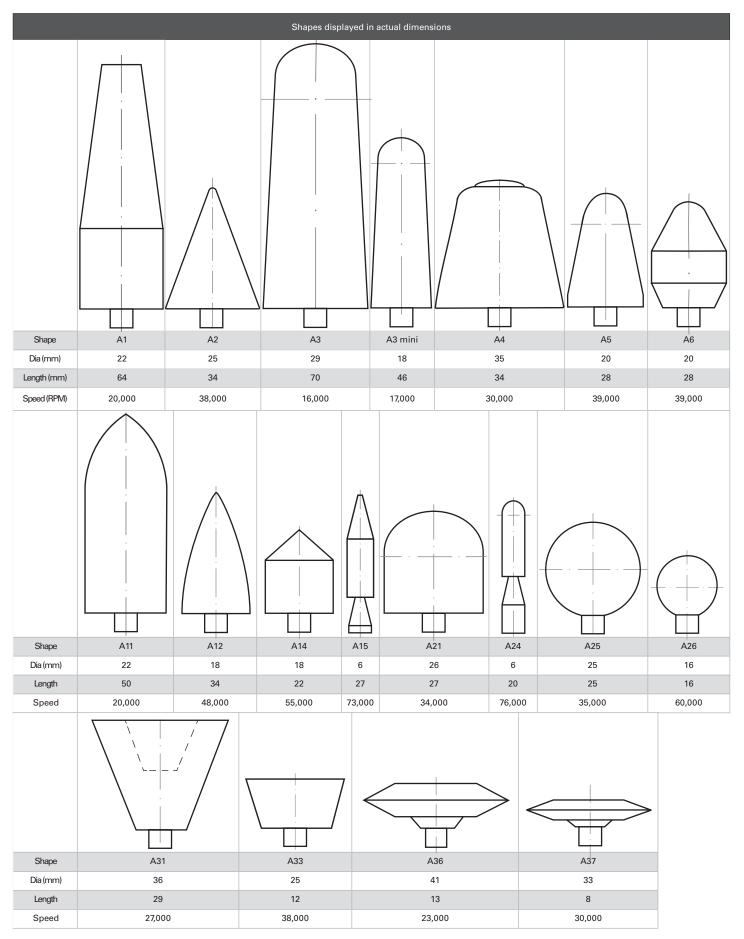
								Materials				
je		Reference/	in g د د ه		•				•		•	
Page		Qualities	Cutting speed v <sub>e</sub> m/s	Steel/ cast steel	Alloyed/ tempered steels	Tool steels	Rust-, acid- and heat-resistant steel and cast steel	Cast iron	Aluminium, magnesium and copper alloys	Titanium and nickel alloys	Plastic/ wood/ rubber	Glass/ ceramic/ carbides
13		EKR Pink aluminium oxide	approx. 20-35									
13/14	<b>-</b>	<b>EKWbr</b> White aluminium oxide type brown	approx. 25–40									
15-19	(1999)—	<b>EKD (Ruby)</b> Dark red aluminium oxide	approx. 30–50									
19		NK-BA soft Regular aluminium oxide iron- and sulphur-free	approx. 40–50									
20/21		<b>HK</b> White aluminium oxide and regular aluminium oxide	approx. 40–50									
9/10		<b>Ceramic</b> Ceramic grain and monocrystal aluminium oxide	approx. 30–50									
9/10	-	<b>EKW</b> White aluminium oxide	approx. 20–35									
9/10		<b>SICgrn</b> Green Silicon carbide	approx. 25–40									
11/12		SIC-ALU Green silicon carbide	approx. 25–40									
22		<b>HOK</b> Spherical aluminium oxide	approx. 5–20									

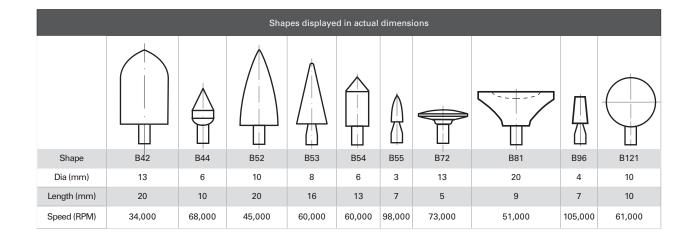
# **Speeds for grinding tools**



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

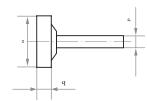
## SHAPE Summary of available shapes

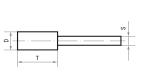




#### Speeds shown per RPM

- Refer to a shank overhang of 12mm max
- insert shank as deep as possible into
- the machine collet for safetyfor longer overhang the speed needs to be reduced
- A Shapes 6mm shaft
- B Shapes 3mm shaft





W SHAPES CYLINDRICAL

Shape	D mm	T mm	S mm	Speed (RPM)
W146	3	13	3	105,000
W162	6	10	3	60,000
W163	6	13	3	60,000
W164	3	20	3	46,000
W176	10	13	3	45,000
W183	13	6	3	51,000
W185	13	13	3	34,000
W187	13	25	6	41,000
W188	13	40	6	30,000
W198	16	32	6	40,000
W203	20	13	6	50,000
W204	20	20	6	43,000
W205	20	25	6	35,000
W207	20	40	6	24,000
W220	25	25	6	38,000
W221	25	40	6	19,000
W222	25	50	6	16,000
W225	35	6	6	30,000
W227	32	13	6	30,000
W229	32	25	6	20,000
W235	40	6	6	30,000
W236	40	10	6	25,000
W237	40	25	6	17,000
W238	40	40	6	16,000
W242	50	25	6	15,000

## safety advice Safe grinding

#### PERIPHERAL SPEEDS

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

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

The maximum peripheral speed is limited by the following criteria:

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

#### SAFETY

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

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

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

MULTILINGUAL PRODUCT DESIGNATION	Schleifkörper keramisch Brousicí tělíska keramická Mounted points - vitrified Muelas cerámicas Meules vitrifiées Sciernice spojone ceramicznie	<b>Luk</b>	GERMANY	PRODUCT LINE
PRODUCT NUMBER AND PRODUCT SPECIFICATION	– A200002032602 ZY 2032.06 EKR 36 N V4	Menge / VPE 20	EN 12413	SAFETY STANDARD
TECHNICAL INFORMATION	Lo(mm) max.rpm 10 40.600 15 34.500 20 29.700 Lo min. 10	FA1488310		SERIAL NUMBER
	LUKAS-ERZETT Vereinigte Schleif- und Fräswerkzeugfabriken GmbH & Co. KG Gebrüder-Lukas-Straße 1 - 51766 Engelskirchen Made in Germany	4 02749	7"013296	EAN CODE



## QUALITIES AND PROPERTIES Mounted points for machining tool steels



#### CERAMIC

Mixture of ceramic grain and monocrystal aluminium oxide



★★☆



White aluminium oxide

**EKW** 

SICgrn Green silicon carbide

#### 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

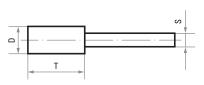
LUKAS mounted points for mould and die industry are extremely dimensionally stable and can cut even the hardest materials. Ceramic grain is extremely friable due to its microcrystal structure, making it self-sharpening. Materials that are difficult to cut (e.g. nickel-based alloys) can therefore be machined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



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### Ceramic mounted point





#### maximum sharpness and hardness with ceramic self-sharpening effect

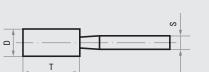
impressive tool life

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

 $\star\star\star$ 

# Product number Description Shape Quality D<br/>mm T<br/>mm S<br/>mm Pack<br/>contains 5PW198069024 W198 Ceramic Image: Ceramic 46 LV118 16 32 6 x 40 20 Recommended for: Image: Ima

## **EKW** mounted point

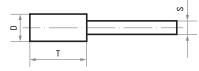


#### ★★☆

Product number	Description	Shape	Quality	D mm	T mm	S mm	Pack contains
5PA015065024	A15 EKW		EKW 60 L V1	6	27	6 x 40	20
5PA024065024	A24 EKW		EKW 60 L V1	6	20	6 x 40	20
				Recommende	ed for: ●	Steel 🔍 🤊	litanium

## SIC grn mounted point





#### $\star\star\star$

				and reinfo	rced weld s	eams	
Product number	Description	Shape	Quality	D mm	T mm	S mm	Pack contains
5PW220064024	W220 SIC grn		SICgrn 80 G	16	32	6 × 40	20
			Recommended for: 🌒 Inox/Steel	Steel	🔴 Cast ma	iteria 🔵 Ti	tanium



impressive tool life

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



## oualities and properties Mounted points for machining non-ferrous metals



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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

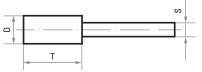
Our SIC-ALU mounted points were developed specifically for this application. A special structure ensures maximum tool life whilst preventing material from clogging the pores. The self-sharpening effect is aided by the use of a special impregnation. GRINDING AND POLISHING (with bonded tools)



## SIC-ALU mounted point







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special quality for grinding aluminium

Product number	Description	Shape	Quality	D mm	T mm	S mm	Pack contains
5PW204066024	W204 SIC Alu		SIC-ALU 80 V27 W	20	20	6 x 40	20
5PW207066524	W207 SIC Alu		SIC-ALU 80 V27 W	20	40	6 x 40	20
5PA003066524	A3 mini SIC Alu		SIC-ALU 80 V27 W	18	46	6 x 40	20
				Reco	ommended fo	or: 🔴 Alur	



## **QUALITIES AND PROPERTIES** Mounted points for machining steel and cast steel



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★★☆

#### EKR - PINK Pink aluminium oxide



White aluminium oxide,

#### MATERIAL PROPERTIES

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

#### **INDUSTRIES**

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

#### PROCESSING EXAMPLES

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

#### LUKAS GRINDING TOOLS

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

## **EKR - Pink mounted point**

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



★★☆

57A014062024 A14 EKR Pink	Product number	Description	Shape	Quality	D mm	T mm	S mm	Pack contains
	5PA001062424	A1 EKR Pink		EKR 60 P VZ1	22	64	6 × 40	20
5PA024062024 A24 EKR Pink EKR 60 N V4 6 20 6 x 40	5PA014062024	A14 EKR Pink		EKR 60 N V4	18	22	6 x 40	20
	5PA024062024	A24 EKR Pink		EKR 60 N V4	6	20	6 x 40	20
5PA025062024     A25 EKR Pink     EKR 36 N V4     25     25     6 x 40	5PA025062024	A25 EKR Pink		EKR 36 N V4	25	25	6 x 40	20

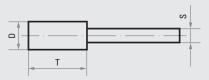
## WHITE ALUMINIUM OXIDE, TYPE BROWN

EFFICIENTLY GRIND STEEL, CAST STEEL AND TEMPERED STEELS

## **EKW**br 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

$\star$	$\star$	쑈

Product number	Description	Shape	Quality	D mm	T mm	S mm	Pack contains
5PA003062224	A3 mini EKWbr		EKWbr 60 O/P V7	18	46	6 x 40	20
5PA024062124	A24 EKWbr		EKWbr 60 0/P V7	6	20	6 x 40	20
					Recommen	ided for:	Steel



## **Mounted points for machining non-rusting steels**

#### LUKAS "RUBY"

The Lukas "Ruby" mounted points has long been entrenched into the South

Afrian engineering culture. Offering a wide range of sizes for use on many different applications. The tough "Ruby" grit ensure that there is superior life with very good material removal properties and can be used on steel, stainless steel and most other applications. It is a very good general purpose product as well as being used in foundries, machine shops, tool rooms, construction and heavy engineering. Sufficient quantities and a wide range of sizes are availible to suite your needs as well as special manufacture grit types for special applications.



★★☆



EKD - RUBY

oxide

Dark red aluminium

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

#### MATERIAL PROPERTIES

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

#### INDUSTRIES

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

#### **PROCESSING EXAMPLES**

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

#### LUKAS GRINDING TOOLS

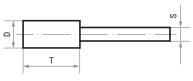
LUKAS has developed particularly highperformance tools for non-rusting steels that deliver exceptional stock removal, even under adverse conditions.

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

## EKD - RUBY mounted point

★★☆





- for non-rusting steels
- excellent removal rates, also under
- difficult conditions
- Suitable for almost any application

Product number	Description	Shape	Quality	D mm	T mm	S mm	Pack contains
5PA001061124	A1 Ruby		EKD 46 P V4	22	64	6 x 40	20
5PA002061024	A2 Ruby		EKD 36 OV 13	25	34	6 × 40	20
5PA003061024	A3 Ruby		EKD 36 OV 13	29	70	6 × 40	20
5PA003061524	A3 mini Ruby		EKD 36 OV 13	16	45	6 × 40	20
5PA004061024	A4 Ruby		EKD 36 OV 13	35	34	6 × 40	20
5PA005062028624	A5 Ruby		EKD 36 OV 13	20	28	6 × 40	20
5PA006061024	A6 Ruby		EKD 46 PV 4	20	28	6 × 40	20
5PA011061024	A11 Ruby		EKD 36 OV 13	22	50	6 × 40	20
5PA011062550624	A11 Jumbo Ruby		EKD 36 OV 13	25	50	6 x 40	20
5PA012061024	A12 Ruby		EKD 36 OV 13	18	34	6 x 40	20
5PA015061024	A15 Ruby		EKD 80 PV 4	6	27	6 x 40	20
			Rec	commended f	or: 🔵 Ind	ox/Steel	Steel

Product number	Description	Shape	Quality	D mm	T mm	S mm	Pack contains
5PA021061024	A21 Ruby		EKD 36 OV 13	26	27	6 x 40	20
5PA024061024	A24 Ruby		EKD 80 OV 13	6	20	6 × 40	20
5PA025061024	A25 Ruby		EKD 36 OV 13	25	25	6 × 40	20
5PA026061024	A26 Ruby		EKD 36 OV 13	16	16	6 x 40	20
5PA031061024	A31 Ruby		EKD 36 OV 13	36	29	6 x 40	20
5PA033061024	A33 Ruby		EKD 46 PV 4	25	12	6 x 40	20
5PA036061024	A36 Ruby		EKD 36 OV 13	41	13	6 x 40	20
5PA037061024	A37 Ruby		EKD 36 OV 13	33	8	6 x 40	20
5PB042031024	B42 Ruby		EKD 46 PV 4	13	20	3 x 30	20
5PB044031024	B44 Ruby		EKD 100 OV 13	6	10	3 x 30	20
5PB052031024	B52 Ruby		EKD 46 PV 4	10	20	3 x 30	20
5PB053031024	B53 Ruby		EKD 60 OV 13	8	16	3 x 30	20
5PB054031024	B54 Ruby		EKD 60 OV 13	6	13	3 x 30	20
5PB055031024	B55 Ruby		EKD 100 OV 13	3	7	3 x 30	20
			Re	commended	for: 🔵 In	ox/Steel	Steel

Product number	Description	Shape	Quality	D mm	T mm	S mm	Pack contains
5PB072031024	B72 Ruby		EKD 80 PV 4	13	5	3 x 30	20
5PB081031024	B81 Ruby		EKD 80 PV 4	20	9	3 x 30	20
5PB096031024	B96 Ruby		EKD 100 OV 13	4	7	3 x 30	20
5PB121031024	B121 Ruby		EKD 60 OV 13	10	10	3 x 30	20
5PW146031024	W146 Ruby		EKD 100 OV 13	3	13	3 x 30	20
5PW152031024	W152 Ruby		EKD 100 OV 13	5	6	3 x 30	20
5PW163031024	W163 Ruby		EKD 80 PV 4	6	13	3 x 30	20
5PW164031024	W164 Ruby		EKD 80 PV 4	3	20	3 x 30	20
5PW176031024	W176 Ruby		EKD 60 OV 13	10	13	3 x 30	20
5PW182031024	W182 Ruby		EKD 60 OV 13	13	3	3 x 30	20
5PW183031024	W183 Ruby		EKD 60 OV 13	13	6	3 x 30	20
5PW185031024	W185 Ruby		EKD 46 PV 4	13	13	3 x 30	20
5PW186061319624	W186 Ruby		EKD 60 OV 13	6	10	3 x 30	20
5PW187061024	W187 Ruby		EKD 46 PV 4	13	25	6 x 40	20
5PW188061024	W188 Ruby		EKD 46 PV 4	13	40	6 x 40	20
5PW203061024	W203 Ruby		EKD 46 PV 4	20	13	6 x 40	20
5PW204061024	W204 Ruby		EKD 36 OV 13	20	20	6 x 40	20
5PW205061024	W205 Ruby		EKD 36 OV 13	20	25	6 x 40	20
5PW207061024	W207 Ruby		EKD 36 OV 13	20	40	6 x 40	20
5PW208061024	W208 Ruby		EKD 36 OV 13	20	50	6 x 40	20
5PW218061024	W218 Ruby		EKD 46 PV 4	25	13	6 x 40	20
5PW220061024	W220 Ruby		EKD 36 OV 13	25	25	6 x 40	20
5PW221061024	W221 Ruby		EKD 36 OV 13	25	40	6 x 40	20
5PW222061024	W222 Ruby		EKD 36 OV 13	25	50	6 x 40	20
5PW225061024	W225 Ruby		EKD 60 OV 13	32	6	6 x 40	20
5PW227061024	W227 Ruby		EKD 36 OV 13	32	13	6 x 40	20
5PW229061024	W229 Ruby		EKD 36 OV 13	32	25	6 x 40	20
5PW235061024	W235 Ruby		EKD 60 OV 13	40	6	6 x 40	20
5PW236061024	W236 Ruby		EKD 46 PV 4	40	10	6 x 40	20
5PW237061024	W237 Ruby		EKD 46 PV 4	40	25	6 x 40	20
5PW238061024	W238 Ruby		EKD 24 PV 4	40	40	6 x 40	20
5PW242061024	W242 Ruby		EKD 36 OV 13	50	35	6 x 40	20
			Re	commended f	or: 🔵 In	ox/Steel	Steel

## **EKD - RUBY** mounted point assortment



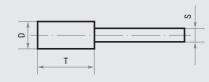


28 peice Ruby Assortment

★★☆

Product number	Description	Quality	Shank diameter mm	Content 1 per pack	Pack contains
5PWS0000024	Assortment Ruby	EKD Ruby	3/6	28 parts: A1, A3, A4, A6, A11, A12, A15 A21, A24, A25, A26, A32, A33 A37, B44, B42, B53, B72, B81 B121, W164, W187, W188, W203, W204, W205, W218	1





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
5PW188066124 W188 NK BA soft		NK 24 N BA soft	13	40	6 x 40	20
5PW207066124 W207 NK BA soft		NK 24 N BA soft	20	40	6 x 40	20
5PW235066024 W235 NK BA soft		NK 24 N BA soft	40	6	6 x 40	20
5PW236062024 W236 NK BA soft		NK 24 N BA soft	40	10	8 x 40	20
		Recommended for:	Inox/St	eel 🔍 Ste	el 🌓 Alu	minium



3.1

# **Mounted points for machining cast materials**



#### ΗК

Mixture of white aluminium oxide and regular aluminium oxide

**★★**☆

#### MATERIAL PROPERTIES

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

#### INDUSTRIES

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

#### PROCESSING EXAMPLES

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

#### LUKAS GRINDING TOOLS

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

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





## 

**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	
5PA011068024	A11 HK		HK 36/46 M V13	22	50	6 × 40	20	
Recommended for: 🛛 🔵 Cast material 🔹 Inox/Steel								



#### QUALITIES AND PROPERTIES

HOK

EKW

Spherical

aluminium oxide

White aluminium oxide

## Mounted points for grinding plastic and rubber





★★☆

#### 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

★★☆



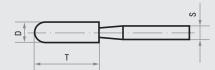


• specialist for machining rubber and plastic

Product number	Description	Shape	Quality	D mm	T mm	S mm	Pack contains
5PA011067024	А11 НОК		HOK 0-3 V9	22	50	6 x 40	20
Recommended for:						Plastic/	Rubber

## ∘∑∗ ♥

## EKW Mounted point

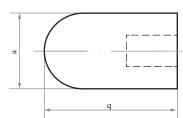


#### ★★☆

Product number	Description	Shape	Quality	D mm	T mm	S mm	Pack contains
5PA036065024	A36 EKW White	$\bigwedge =$	EKW 60 L (2) V13	4	13	6 x 40	20
5PA037065024	A37 EKW White		EKW 60 L (2) V13	33	8	6 X 40	20
5PA015065024	A15 EKW White		EKW 60 L V1	6	27	6 x 40	20
5PA024065024	A24 EKW White		EKW 60 L V1	6	20	6 x 40	20
Recommended for:							Rubber

## TB cones





Product number	Description	Shape	Quality	D mm	T mm	Thread	Pack contains
5TB401024	TB40x5/8" BSW RUBYTHREAD CONE		RKD 24 N V10 Ruby	40	70	5/8"	50
5TB401124	TB40×M14 RUBYTHREAD CONE		RKD 24 N V10 Ruby	40	70	M14	50
5TB4013024	TB45x5/8" NKTHREAD CONE		NK 24 0 V7	45	70	5/8"	50
5TB4013024S	TB45x5/8" NKTHREAD CONE		NK 24 0 V7	45	70	5/8"	50
5TT401024	TT40x5/8" BSW RUBYTHREAD CONE		RKD 24 N V10 Ruby	40	70	5/8"	50
5TB501124	TB50xM14 RUBYTHREAD CONE		RKD 24 N V10 Ruby	50	70	M14	50
5TB501024	TB50x5/8" BSW RUBYTHREAD CONE		RKD 24 N V10 Ruby	50	70	5/8"	50
			Re	commended	for: 🔵 In	ox/Steel	Steel

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