

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	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							
Structural steel																								
Stainless steel, titanium																							400	400
																							800	240
Hardened steel, tungsten carbide																							400	400
																							800	
																							1,200	
Glass																								
Rubber																								
Wood																								
Paint																								
Solder																								
Tin																								

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.

COMPACT GRAIN

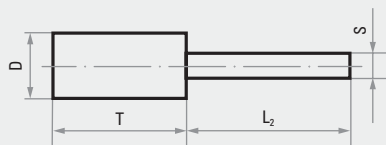
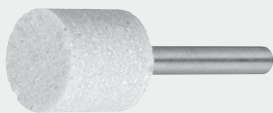
Many cutting edges combined in one grain



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

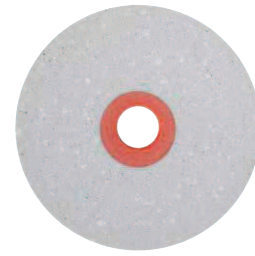
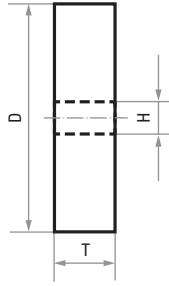
★★★

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



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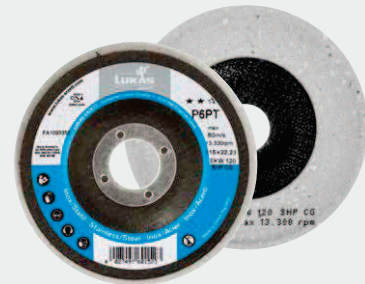
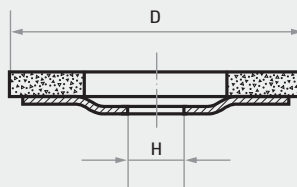
Product number	Description	Quality/grit size	Type/surface result	D mm	T mm	H mm	n _{max} rpm	Pack contains
A29100800060B39	P6SE1 08006 B.06	EKW 60 SHP CG	extra coarse	80	6	6	19,000	20
A29100800060B59	P6SE1 08006 B.06	EKW 120 SHP CG	coarse	80	6	6	19,000	20
A29101500100B39	P6SE1 15010 B.25	EKW 60 SHP CG	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 _{max} 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
- preparing 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 _{max} rpm	n _{recom} rpm	Contents 1 per pack	Pack contains
A6700023	P6PT 125 (flat) SET		P6PT	125	22.23	4,800	2,700	P150, 240, 400, 800	1
A6700024	P6PT 125 (dished) SET		P6PT	125	22.23	4,800	2,700	P150, 240, 400, 800	1

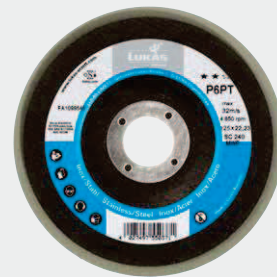
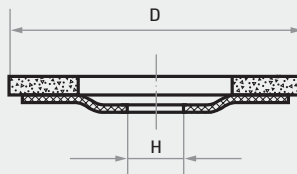
Recommended for: ● Inox/Steel ● Cast material ● Titanium ● Steel ● Aluminium

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

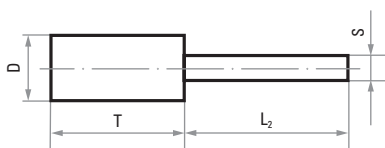


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Product number	Description	Shape overview	Quality	Type/ surface result	D mm	H mm	n _{max} rpm	n _{recom} rpm	Pack contains
A671612515014	P6PT 125 (flat)		SIC 150 MP	medium	125	22.23	4,800	2,700	5
A671612515014001	P6PT 125 (flat)		SIC 150 MWP	medium	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

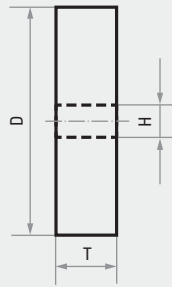
■ Application:

Bores, fillet welds, mould tools

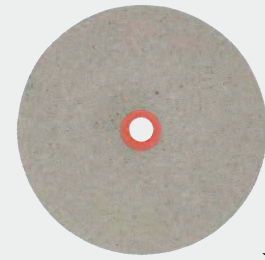
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Product number	Description	Quality/grit size	D mm	T mm	S mm	L ₂ mm	n _{max} rpm	Pack contains
A29300080103048	P6ZY 0810.03	SIC 80 HP	8	10	3	30	76,300	10
A29300080103068	P6ZY 0810.03	SIC 150 HP	8	10	3	30	76,300	10
A29300080103078	P6ZY 0810.03	SIC 240 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



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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.

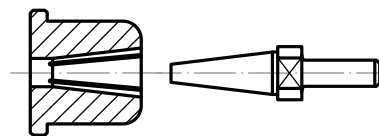
Product number	Description	Quality/grit size	D mm	T mm	H mm	n _{max} rpm	Pack contains
A29100600060041	P6SE1 06006 B.06	SIC 80 MWP	60	6	6	6,300	1
A29100600060061	P6SE1 06006 B.06	SIC 150 MWP	60	6	6	6,300	1
A29101000100041	P6SE1 10010 B.25	SIC 80 MWP	100	10	25	3,800	1
A29101000200021	P6SE1 10020 B.25	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.



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

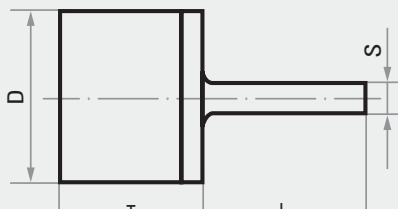
MARBLING MADE EASY

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.

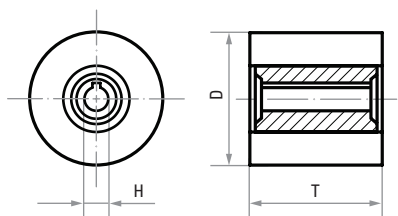
Product number	Description	Quality/grit size	D mm	T mm	S mm	L ₂ mm	n _{max} rpm	Pack contains
A29200200306021	P6MA ZY 2030.06	SIC 46 MWP	20	30	6	35	9,500	1
A29200300306021	P6MA ZY 3030.06	SIC 46 MWP	30	30	6	35	6,300	1
A29200400306046	P6MA ZY 4030.06	SIC 46 MWP	40	30	6	35	4,700	1
A29200500306046	P6MA 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 _{max} 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