TECHNICAL INFORMATION AND PRODUCT INFORMATION

LUKAS lamellar flap discs - from coarse cutting through to surface finishing

GENERAL

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

ERGONOMICS

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

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

APPLICATION

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

Application examples:

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



Using the flat version

Use this version for grinding edges and flat surfaces with a working angle of $0-15^{\circ}$



Using the angled version for spot grinding

e.g. a weld, with the ideal working angle of $15 - 25^{\circ}$



iQ SERIES FROM LUKAS

Developed for high-performance applications

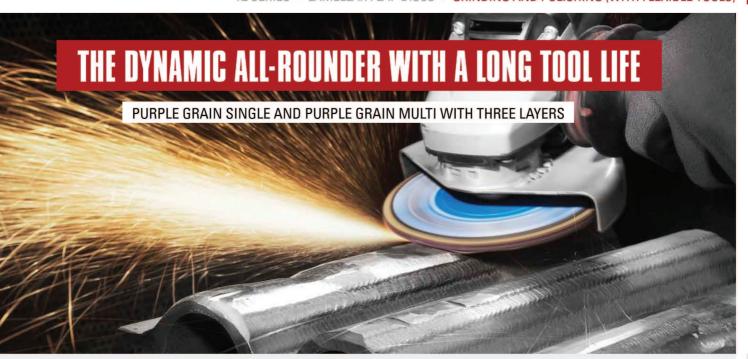
Our high-performance tools are grouped together in our iQ series. Among them are the lamellar flap discs, which have a patented flap shape and arrangement for ultimate grinding performance.



Purple Grain

Powerful tools for heavy-duty applications

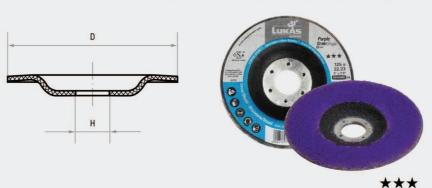






Even with a minimum effort, "Purple Grain Single" achieves stunning removal rates. The integrated backing pad made of eco-friendly recycled fibre assures high stability and durability. The innovative design provides for even wear without overheating, becoming brittle or shredding of the grain. The deep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

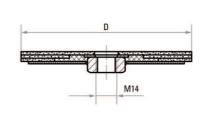
Purple Grain Single compact grinding disc



Product number	Description	Grit	D mm	H mm	n _{max} rpm	Pack contains
A27601150361547	Purple Grain Single 115	Ceramic 36	115	22.23	13,300	10
A27601250361547	Purple Grain Single 125	Ceramic 36	125	22.23	12,200	10
	Recommended for:	Inox/Steel Steel	Aluminium	Titanium	Cast	material

ho Serie

With its unique multi-layer design, the powerful "Purple Grain Multi" achieves a maximum tool life. Wearing of the three grinding layers is controlled from start to finish, which is reflected in the tangible cost savings compared to conventional tools. The integrated M14 threaded holder ensures ultra-fast tool changing with no annoying clamping nuts. With its flat tool geometry, the "Purple Grain Multi" creates very good surface finishes, thus avoiding the need for reworking.





Purple Grain Multi compact grinding disc

Product number	Description	Grit	D mm	Thread	n _{max} rpm	Pack contains
A27621150361547	Purple Grain Multi 115	Ceramic 36	115	M14	13,300	10
A27621250361547	Purple Grain Multi 125	Ceramic 36	125	M14	12,200	10
	Recommended for:	● Inox/Steel ● Steel ●	Aluminium	Titanium	① Cast n	naterial



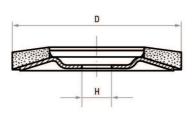
As a highly aggressive grinding tool, the V4 Purple Power is designed to be used on powerful angle grinders. On robots and automatic grinders, this grinding disc shows what it's capable of. It achieves unique performance values, combined with a long tool life for impressive efficiency.

The V4 Purple Power is equipped with a high-performance ceramic abrasive coating for outstanding results. In addition,

the flap shape is optimised for high stock removal. This lamellar flap disc effortlessly grinds steel, inox, cast material and titanium. The V4 Purple Power can convert up to 20 kg of structural steel into fine chips during grinding process. The chip removal rate is up to 250 % greater than conventional tools. With a tool life of approximately 3.5 hours, this grinding tool when used on robots also exceeds all expectations.

V4 Purple Power













- exceptional grinding performance in industrial applications
- ideal for use with robots, grinding machines and heavy duty machine tools
- exceptional removal rate
- removes more than 20 kg of structural steel when used with a robot
- fewer tool changes
- extremely ergonomic

Product number	Description		Grit	D mm	H mm	n _{max} rpm	Pack contains
A274812503600475	V4 Purple Power 125	Cer	ramic 36	125	22.23	12,200	5
	Recommended for:	Inox/Steel	Steel		Titanium	Cast	



HIGHLY AGGRESSIVE AND DURABLE FOR UNCOMPROMISING GRINDING

The V4 Master mounted on an angle grinder is used when high stock removal is required. This lamellar flap disc displays its enduring removal performance in rounding off sharp edges and finishing weld seams and thermal cuts. With its powerful cutting performance, it ensures this kind of challenging work can be performed quickly and effortlessly.

LUKAS has developed this grinding tool for various industries: steel and vessel construction, shipyards and offshore, machine and plant engineering, i.e. for any industry that removes a great deal of material from sheet metal and steel. The V4 Master is an excellent choice in this instance. The low force applied, the deep recess around the bore and the low noise and vibration levels when grinding makes for an easy application.

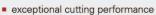




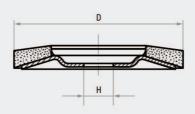








- high edge retention
- deep recess
- Iong tool life
- low noise and vibrations
- ergonomic handling requiring minimum force
- free of iron, sulphur and chlorine

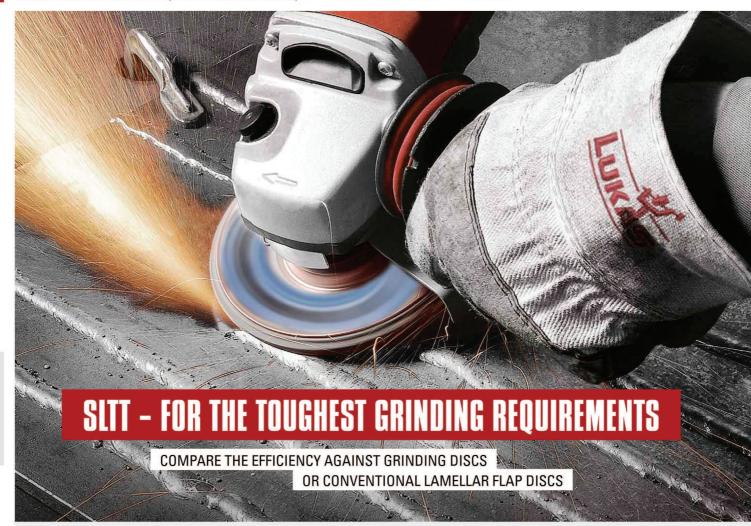


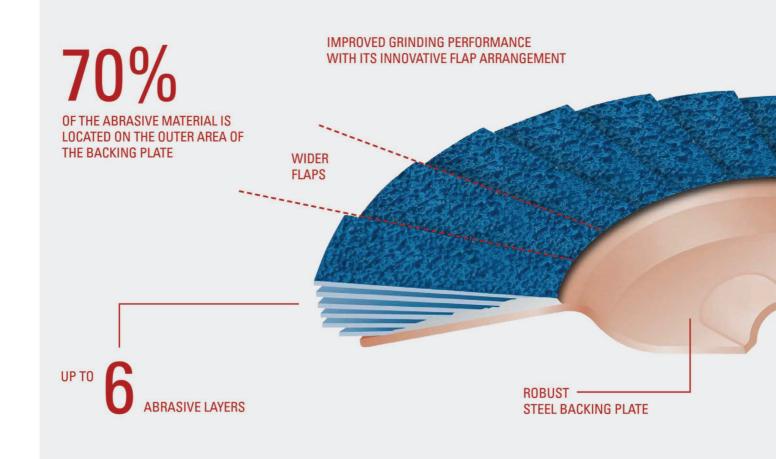




V4 Master

Product number	Description	Grit	D mm	H mm	n _{max} rpm	Pack contains
A27471150401465	V4 Master 115	ZK 40	115	22.23	13,300	10
A27471150601465	V4 Master 115	ZK 60	115	22.23	13,300	10
A27471250401465	V4 Master 125	ZK 40	125	22.23	12,200	10
A27471250601465	V4 Master 125	ZK 60	125	22.23	12,200	10
A27471780401465	V4 Master 178	ZK 40	178	22.23	8,500	10





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

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



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

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



PROPERTIES

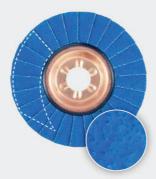
- outstanding cutting performance
- exceptional tool life
- robust steel back plate
- low noise and vibration levels

APPLICATION

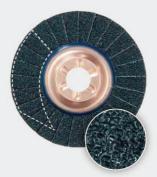
Ideal for machining welds, deburring, derusting, fettling and smoothening. Thanks to its 22.23 mm bore, it fits onto all commonly used angle grinders.

THE FOUR SLTT VERSIONS









Heavy Duty	Inox	HybridPerfection	Steel
Ceramic abrasive cloth	Z Power abrasive cloth	Ceramic4x abrasive cloth	ZK abrasive cloth
 developed for the most demanding and toughest grinding applications especially robust for edge grinding, quenched and tempered steels, scale surfaces or coated surfaces free of iron, sulphur and chlorine 	 innovative development for grinding stainless steel no glazing or heating of the flaps thanks to the active abrasive surface layer equally efficient for edge and surface applications free of irone, sulphur and chlorine 	 the professional tool for the toughest jobs involving steel, ship's steel plate, Hardox steel, nickel-based alloys and titanium achieves impressively high stock removal rates when crough grinding steel, edging and removal of welds with additional active abrasive layer for stainless steel 	 optimised for universal use on a wide variety of steels and aluminium exceptionally tough grain and resistant to high pressure

SLTT Heavy Duty lamellar flap discs

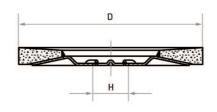












- developed for the most demanding and toughest grinding applications
- especially robust for edge grinding, quenched and tempered steels, scale surfaces or coated surfaces
- free of iron, sulphur and chlorine

Product number	Description	Grit	D mm	H mm	n _{max} rpm	Pack contains
A27201150400050	SLTT 115	Ceramic 40	115	22.23	13,300	10
A27201150600050	SLTT 115	Ceramic 60	115	22.23	13,300	10
A27201250400050A	SLTT 125	Ceramic 40	125	22.23	12,200	10
A27201250600050	SLTT 125	Ceramic 60	125	22.23	12,200	10
A27201500400050	SLTT 150	Ceramic 40	150	22.23	10,200	10
A27201780400050	SLTT 178	Ceramic 40	178	22.23	8,500	10
A27201780600050	SLTT 178	Ceramic 60	178	22.23	8,500	10
	Recommended for: Inox/Steel	Steel Titanium 🌓 Alumi	inium 🕕	Cast material	Plasti	

SLTT Inox lamellar flap discs

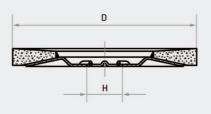












- turbo back plate for machining stainless steel
- no glazing or heating of the flaps
- equally efficient for edge and surface applications
- free of iron, sulphur and chlorine

Product number	Description	Grit	D mm	H mm	n _{max} rpm	Pack contain
A27201150400045	SLTT 115	Z-Power 40	115	22.23	13,300	10
A27201150600045	SLTT 115	Z-Power 60	115	22.23	13,300	10
A27201250400045A	SLTT 125	Z-Power 40	125	22.23	12,200	10
A27201250600045	SLTT 125	Z-Power 60	125	22.23	12,200	10
A27201500400045	SLTT 150	Z-Power 40	150	22.23	10,200	10
A27201780400045	SLTT 178	Z-Power 40	178	22.23	8,500	10
A27201780600045	SLTT 178	Z-Power 60	178	22.23	8,500	10





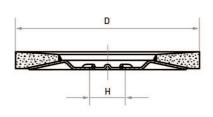




SLTT HybridPerfection^{Ceramic4x} lamellar flap discs **NEW**



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







Product number	Description	Grit	D mm	H mm	n _{max} rpm	Pack contains
A27201150400044	HybridPerfection 115	Ceramic4x 40	115	22.23	13,300	10
A27201150600044	HybridPerfection 115	Ceramic4x 60	115	22.23	13,300	10
A27201250400044	HybridPerfection 125	Ceramic4x 40	125	22.23	12,200	10
A27201250600044	HybridPerfection 125	Ceramic4x 60	125	22.23	12,200	10
A27201250600044	HybridPerfection 125 Recommended for: Inox/Steel		t ma	125 aterial	7-2	

UNBEATABLE ON STEEL: THE NEW LUKAS HYBRIDPERFECTION

Thanks to its innovative Ceramic4x abrasive cloth and patented flaps, this lamellar flap disc quickly achieves exceptionally high stock removal rates on steel.

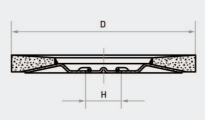
EXPERIENCE AT FIRST HAND THE IMPRESSIVE PERFORMANCE OF THE NEW HYBRID PERFECTION AND **TEST IT NOW FOR YOURSELF**.











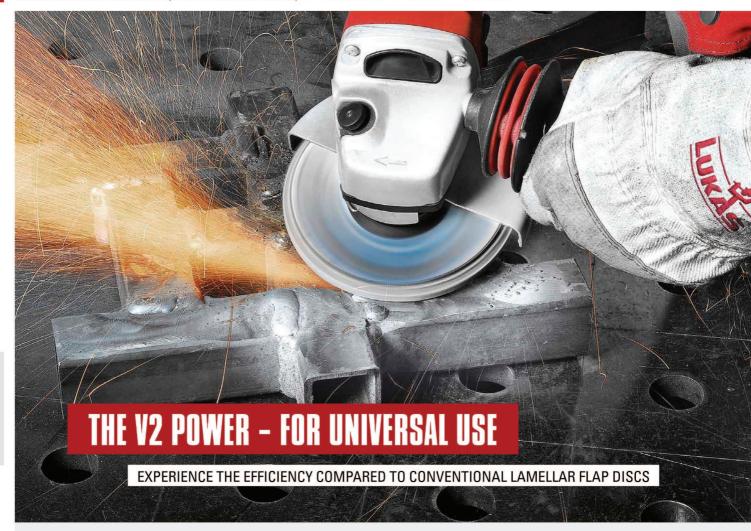
SLTT steel lamellar flap discs

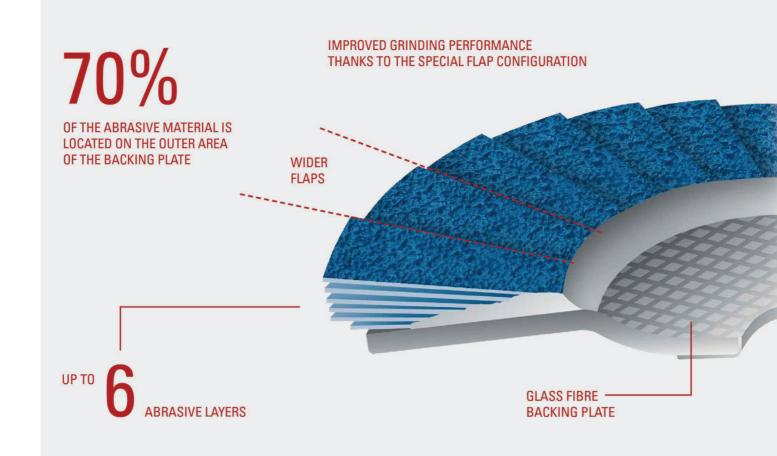


- optimised for steel
- exceptionally tough grain and resistant to high pressure

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Product number	Description	Grit	D mm	H mm	n _{max} rpm	Pack contains
A27201150400065	SLTT 115	ZK 40	115	22.23	13,300	10
A27201150600065	SLTT 115	ZK 60	115	22.23	13,300	10
A27201250400065A	SLTT 125	ZK 40	125	22.23	12,200	10
A27201250600065	SLTT 125	ZK 60	125	22.23	12,200	10
A27201500400065	SLTT 150	ZK 40	150	22.23	10,200	10
A27201500600065	SLTT 150	ZK 60	150	22.23	10,200	10
A27201780400065	SLTT 178	ZK 40	178	22.23	8,500	10
A27201780600065	SLTT 178	ZK 60	178	22.23	8,500	10





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

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

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

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



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

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

PROPERTIES

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

APPLICATION

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



THE FIVE V2 POWER VERSIONS











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



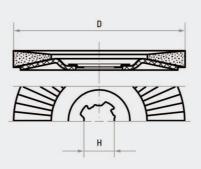
tool in just seconds. With the new X-LOCK system, you posi-

tion the flap disc on the mounting fixture and allow it to engage - and you're done. A "click" noise indicates that the disc is firmly mounted. The potential of losing clamping nuts and keys is implemented. As a result, the tool change is fast and easy.



NEW V2 Power X-LOCK lamellar flap disc







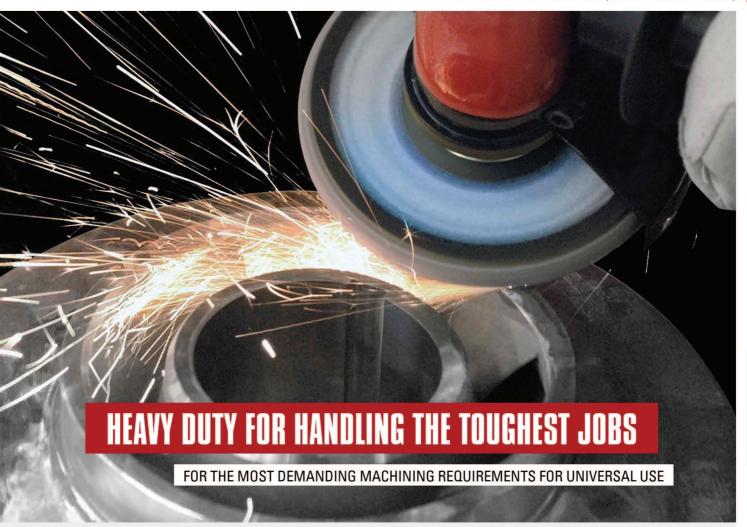






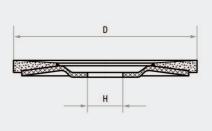
- the professional tool for the toughest jobs on steel, ship's steel plate, Hardox steel, nickel-based alloys and titanium
- achieves impressively high stock removal rates when rough grinding steel, edging and removing of welds
- keyless tool changing in no time at all
- all the benefits of the efficient LUKAS V2 Power lamellar flap disc coupled with the latest mounting system
- free of iron, sulphur and chlorine

Product number	Description	Grit	D mm	H mm	n _{max} rpm	Pack contains
A67441250401844	V2 Power 125	Ceramic4x 40	125	X-LOCK/22.23	12,200	10
A67441250601844	V2 Power 125	Ceramic4x 60	125	X-LOCK/22.23	12,200	10
	Recommended for: • Inox/Stee		Cast mat	erial Titanium	Plastic	c/Wood
A67441250401865	V2 Power 125	ZK 40	125	X-LOCK/22.23	12,200	10





V2 Power Heavy Duty lamellar flap disc





- especially robust for edge grinding, quenched and tempered steels, scale surfaces or coated surfaces
- free of iron, sulphur and chlorine

Product number	Description	Grit	D mm	H mm	n _{max} rpm	Pack contains
A27441150401450	V2 Power 115	Ceramic 40	115	22.23	13,300	10
A27441150601450	V2 Power 115	Ceramic 60	115	22.23	13,300	10
A27441250401450	V2 Power 125	Ceramic 40	125	22.23	12,200	10
A27441250601450	V2 Power 125	Ceramic 60	125	22.23	12,200	10
A27441780401450	V2 Power 178	Ceramic 40	178	22.23	8,500	10
A27441780601450	V2 Power 178	Ceramic 60	178	22.23	8,500	10
A27442300401428	V2 Power 230	Ceramic 40	230	22.23	6,600	10

V2 Power Inox lamellar flap disc

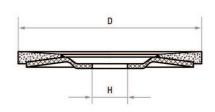












- optimised for grinding stainless steel
- no glazing or heating of the flaps
- equally efficient for edge and surface applications
- free of iron, sulphur and chlorine

duct number	Description	Grit	D mm	H mm	n _{max} rpm	Pack contains
41150401445	V2 Power 115	Z-Power 40	115	22.23	13,300	10
41150601445	V2 Power 115	Z-Power 60	115	22.23	13,300	10
41250401445	V2 Power 125	Z-Power 40	125	22.23	12,200	10
41250601445	V2 Power 125	Z-Power 60	125	22.23	12,200	10
41780401445	V2 Power 178	Z-Power 40	178	22.23	8,500	10
41780601445	V2 Power 178	Z-Power 60	178	22.23	8,500	10

V2 Power Steel lamellar flap disc

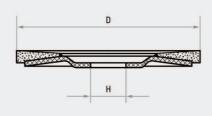






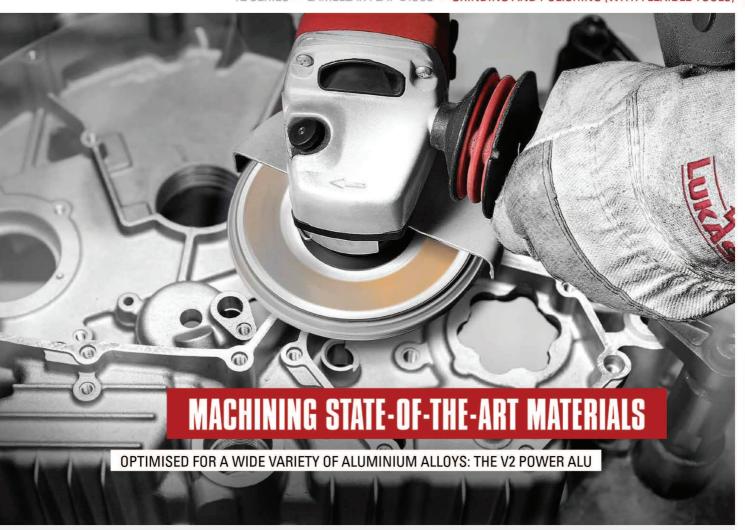






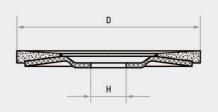
- ideally suited for universal use on steel
- exceptionally tough grain and resistant to high pressure

Product number	Description	Grit	D mm	H mm	n _{max} rpm	Pack contains
A27441000401465	V2 Power 100	ZK 40	100	16.00	15,300	10
A27441000601465	V2 Power 100	ZK 60	100	16.00	15,300	10
A27441150401465	V2 Power 115	ZK 40	115	22.23	13,300	10
A27441150601465	V2 Power 115	ZK 60	115	22.23	13,300	10
A27441250401465A	V2 Power 125	ZK 40	125	22.23	12,200	10
A27441250601465	V2 Power 125	ZK 60	125	22.23	12,200	10
A27441780401465	V2 Power 178	ZK 40	178	22.23	8,500	10
A27441780601465	V2 Power 178	ZK 60	178	22.23	8,500	10
A27442300401418	V2 Power 230	ZKS 40	230	22.23	6,600	5





- Silicon carbide (SIC) is ideally suited for the preparation and finishing of welds of various aluminium alloys.
- Silicon carbide (SIC) is also very suitable for machining modern materials such as CFRP and GFRP.



V2 Power Alu lamellar flap disc



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\mathbf{x}	X	X

Product number	Description	Grit	D mm	H mm	n _{max} rpm	Pack contain
A27441150401434	V2 Power 115	SIC 40	115	22.23	13,300	10
A27441250361434	V2 Power 125	SIC 36	125	22.23	12,200	10
A27441250401434	V2 Power 125	SIC 40	125	22.23	12,200	10
A27441780241434	V2 Power 178	SIC 24	178	22.23	8,500	10
A27441780361434	V2 Power 178	SIC 36	178	22.23	8,500	10



The flexible SLTflex flap discs from LUKAS for machining hard-to-reach areas are the improved alternative to grinding discs or conventional lamellar flap discs.

The small resin core of the backing plate and its practical M14 thread allows for a larger flap projection. This makes the disc flexible, it can adapt itself to uneven surfaces, and requires little effort in use. With its long tool life, it is ideally suitable for fillet weld grinding. There is no risk of the workpiece being damaged by the back plate.

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

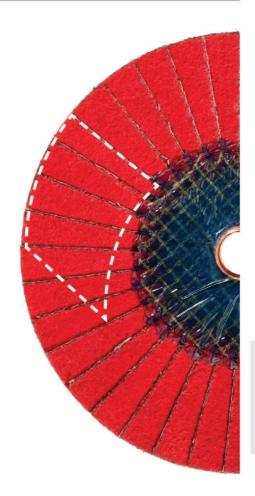
A particularly large concentration of abrasive grains on the outer perimeter results in an exceptionally high stock removal rate per minute. Thanks to the multi-layer abrasive coating, these lamellar flap discs remain sharp throughout the tool life. As the flaps wear, the fresh abrasive coating of the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

PROPERTIES

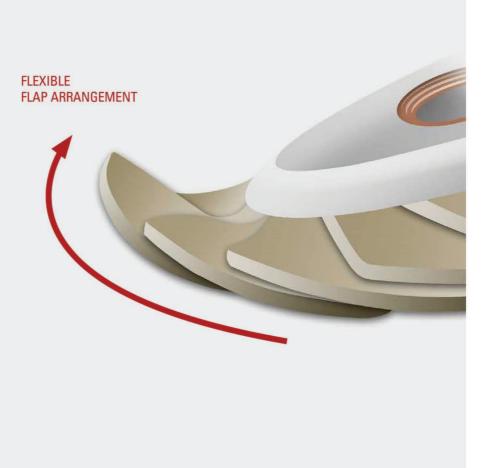
- high flexibility thanks to the wide flap projection
- exceptionally long tool life
- easy tool changing

APPLICATION

ideal for machining weld seams, deburring, derusting, fettling and smoothening



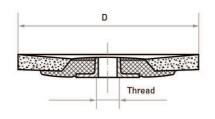




SLTflex Ceramic lamellar flap disc







- The efficient grinding tools for radii and fillet welds
- high flexibility thanks to the wide flap projection (no interference from backing plate)
- easy tool changing (backing pad and clamping nut are not required)
- exceptionally long tool life

Product number	Description	Grit	D mm	Thread	n _{max} rpm	Pack contains
A272711504070	SLTflex 115	Ceramic 40	115	M14	13,300	10
A272711506070	SLTflex 115	Ceramic 60	115	M14	13,300	10
A272712504070	SLTflex 125	Ceramic 40	125	M14	12,200	10
A272712506070	SLTflex 125	Ceramic 60	125	M14	12,200	10
	Recommended	d for: Inox/Steel Steel	Aluminium	Titanium	Cast	material

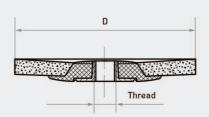
SLTsflex super flexible lamellar flap disc











- even greater flap projection
- even more flexibility
- M14 quick-clamping thread
- super-soft grinding action
- for perfect surface finishes
- fast tool change
- no backing pad and mounting nut required

Product number	Description	Grit	D mm	Thread	n _{max} rpm	Pack contains
A272910004018	SLTs-flex 100	ZKS 40	100	M10	12,100	10
A272910006018	SLTs-flex 100	ZKS 60	100	M10	12,100	10
A272910008018	SLTs-flex 100	ZKS 80	100	M10	12,100	10
A672911504018	SLTs-flex 115	ZKS 40	115	M14	13,300	10
A672911506018	SLTs-flex 115	ZKS 60	115	M14	13,300	10
A672911508018	SLTs-flex 115	ZKS 80	115	M14	13,300	10
A672912504018	SLTs-flex 125	ZKS 40	125	M14	12,200	10
A672912506018	SLTs-flex 125	ZKS 60	125	M14	12,200	10
A672912508018	SLTs-flex 125	ZKS 80	125	M14	12,200	10
A272917804018	SLTs-flex 178	ZKS 40	178	M14	8,500	10
A272917806018	SLTs-flex 178	ZKS 60	178	M14	8,500	10
A272917808018	SLTs-flex 178	ZKS 80	178	M14	8,500	10

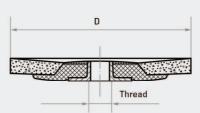








SLTflex lamellar flap disc





- for machining radii and fillet welds
- high flexibility thanks to the large flap projection (no interference from backing plate)
- easy tool changing (backing pad and clamping nut are not required)
- long tool life

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Product number	Description	Grit	D mm	Thread	n _{max} rpm	Pack contains
A272711504018	SLTflex 115	ZKS 40	115	M14	13,300	10
A272811504018	SLTflex 115	ZKS 40	115	5/8"	13,300	10
A272711506018	SLTflex 115	ZKS 60	115	M14	13,300	10
A272811506018	SLTflex 115	ZKS 60	115	5/8"	13,300	10
A272711508016	SLTflex 115	ZK 80	115	M14	13,300	10
A272811508018	SLTflex 115	ZK 80	115	5/8"	13,300	10
A272711512016	SLTflex 115	ZK 120	115	M14	13,300	10
A272811512018	SLTflex 115	ZK 120	115	5/8"	13,300	10
A272712504018	SLTflex 125	ZKS 40	125	M14	12,200	10
A272812504018	SLTflex 125	ZKS 40	125	5/8"	12,200	10
A272712506018	SLTflex 125	ZKS 60	125	M14	12,200	10
A272812506018	SLTflex 125	ZKS 60	125	5/8"	12,200	10
A272712508016	SLTflex 125	ZK 80	125	M14	12,200	10
A272812508018	SLTflex 125	ZK 80	125	5/8"	12,200	10
A272712512016	SLTflex 125	ZK 120	125	M14	12,200	10
A272812512018	SLTflex 125	ZK 120	125	5/8"	12,200	10