

Flexible Grinding and Polishing Tools

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Product line marking

The product lines are illustrated by star symbols at the top of the table; please refer to page 14 and 15.





Qualities and Applications

Quality		Characteristics	Applications/Grinding	Available as	Page
NK	Abrasive cloth reg. Aluminium Oxide	tough grain	Forged steel, malleable iron, grey cast iron, carbon steel, deep-drawn steels, steel band, zinc die castings, nonferrous metals, wood	mounted flap wheels flap wheels flap rolls flap rolls bands abrasive rolls caps abrasive sleeves discs fibre discs Economy rolls sheets of abrasive cloth	221-223 225 236-239 261-262 271 282-284 286-289 293-295 299-308 307 314 322-324 332-334 337 338
NKE	Abrasive cloth using reg. Aluminium Oxide with special coating containing active grinding additives	tough grain	Chrome-nickel and other alloyed steels, deep drawn steels, titanium and titanium alloyed steels, heat resistant steels	mounted flap wheels discs	247 315
ZK	Abrasive cloth with Zirconia Alum. Oxide	very tough and resilient grain	Forged steels, metals difficult to machine and with extreme hard surfaces i.e. welds, titanium and titanium alloys, heat resistant steels	Lamellar Flap Discs abrasive belts discs fibre discs	207, 211, 215, 218–227, 320 281, 289 313, 319 332
Z POWER	Abrasive cloth using Zirconia Alum. Oxide with special coating containing active grinding additives	optimum stock removal rate, excellent tool life	all alloyed steels	Lamellar Flap Discs abrasive bands abrasive discs	206, 210 280 312–313
ZKS	Abrasive cloth using Zirconia Alum. Oxide with special coating containing active grinding additives	M-Bonding with polyester fibre excellent stock removal rate with very good tool life	Forged steels, metals difficult to machine and with extreme hard surfaces i.e. welds, titanium and titanium alloys, heat resistant steels	Lamellar Flap Discs	211 218–220 227
NKS	Abrasive cloth using reg. Alu minium Oxide with special coating containing active grinding additives	optimum stock removal ra- te,excellent tool life	corrosion and heat resistant steel	abrasive caps	299 301 303 305
SIC	Abrasive cloth with Silicon carbide	cool cutting; special quality for the aircraft industry	Aluminium and aluminium alloys, brittle materi- al, glass ceramics, titanium and titanium alloys, heat resistant steels, plastics	flap discs mounted flap wheels discs	211 248 315–316 322
CERAMIC	Abrasive cloth ceramic grain	optimum stock removal rate without shredding of grain. Very stable due to reinforced backing, cool cutting.	stainlees steel, nickel alloys	Lamellar Flap Discs mounted flap wheels abrasive belts discs fibre discs	206, 210, 217, 220 237 279 312 331



Qualities and Applications

Quality		Characteristics	Applications/Grinding	Available as	Page
PG	reinforced ceramic-grain abrasive cloth	maximum removal rate and service life thanks to self- sharpening ceramic grain	Steel, stainless steel, hardened/coated surfaces	Compact grinding discs	202 212
A	Abrasive fleece reg. Aluminium Oxide	polishing effect through fibre structure, consistent results due to continuous exposure of new grit particles	Chrome-nickel alloys and other stainless steels, zinc die castings, non-ferrous metals, wood	mounted flap wheels flap wheels fleece mops flap rolls fleece pads/ fleece rolls	253–254 263–265 267 272, 274 339
c	Abrasive fleece silicon carbide	polishing effect through fibre structure, consistent results due to continuous exposure of new grit particles	Titanium and titanium alloys, silver and silverplated, aluminium and aluminium alloys, plastics	mounted flap wheels flap wheels flap rolls Semi-flexible grinding disc fleece pads/ fleece rolls	255 263–265 274 335 339
TF	Abrasive fleece/cloth reg. Aluminium Oxide reinforced fleece Abrasi- ve fleece	Abrasive cloth lamellars and abrasive fleece lamellars of our combined mounted flap wheels wear off more equal. Higher stock removal efficiency.	Ideal for surface finnishing of metalsheet components such as stainless steel sinks and containers	mounted flap wheels flap rolls	256 269
A	Abrasive fleece/ abrasive cloth combined AlOxide	intensified grinding action through combination of fleece and abrasive cloth	Chrome-nickel alloys and other stainless steels, zinc die castings, non-ferrous metals, wood	Lamellar Flap Discs mounted flap wheels flap wheels flap rolls	228 257 266 273–274
c	Abrasive fleece/ abrasive cloth combined SilCar- bide	intensified grinding action through combination of fleece and abrasive cloth	Titanium and titanium alloys, silver and silverplated, aluminium and aluminium alloys, plastics	Lamellar Flap Discs mounted flap wheels flap wheels	228 258 266
AS	Polyamid-Fleece	impregnated with aggressive abrasive grit	removal of paint and adhesives, cement and concrete residues, derusting, restoring and polishing of a wide variety of surfaces.	AS-Tools	367
Z	Abrasive fleece zirconia aluminium oxide	Polishing effect through fibre structure, more aggressive	Cr-Ni and other stainless steels, zinc injection mouldings, non-ferrous metals	mounted flap wheels	253

Information

General

Our flexible grinding and polishing tools are manufactured from high quality abrasive cloth and abrasive fleece. They consist of a flexible backing coated with abrasive grain (please refer to page 196 and 197).

Backings used: Toile, polyester, scotch-brite, fibre

Grain types used: aluminium oxide (NK), silicon carbide (SIC), zirconia aluminium oxide (ZK), ceramic (ceramic)

Our flexible grinding and polishing tools are available in several different shapes and dimensions; they cover a wide spectrum of application i.e. from high stock removal to achieving an extremely fine surface finish.

Operating recommendation

An increase in speed makes the abrasive grit act finer; a reduction in speed makes the abrasive grit act coarser. Do not apply high pressure. Performance will not increase and tool life will be reduced. If stock removal is insufficient select a coarser grit size, do not increase pressure. The use of grinding additives can improve the efficiency.

Safety instructions

Please note our recommended operating speeds. When using and storing flexible grinding and polishing tools, please take note of the safety regulations and regulations for prevention of accidents, including the FEPA-safety recommendations. The tools are marked with pictograms according to FEPA recommendations for the use of coated abrasives.





Lamellar Flap Discs

- Quality and Applications 196 200 Generel Information 202 Purple Grain – iQ-Series 204 SLTT - iQ-Series 208 V2 Power – iQ-Series 212 V4 Purple Power – iQ-Series 214 V4 Master – iQ-Serie 216 SLTflex - iQ-Series 218 SLTsflex - iQ-Series 220 SLTR Control 220 SLTZ 233 GTR
- 221 SLTO/SLTR Ceramic
 - 221 SLTO/SLTR
 - 225 SLTB
 - 226 SLTK
 - 227 SLTC, NAWAROFLEX®
 - 228 SLTM, NAWAROFLEX®
 - 228 SLTV, NAWAROFLEX®
 - 229 SLTP
 - 229 P6PT
 - 232 SLTG



Product line marking

The product lines are illustrated by star symbols at the top of the table; please refer to page 14 and 15.





Information

General

LUKAS offers a flap disc for almost every application. These ab rasive tools are produced with a wide selection of backing materials (e.g. glass fibre, resin, metal and even with a bio-degradable raw material) to suit every application. The large choice of grit sizes cover high stock removal applications (from grit size 36) to the finish machining application (grit size 240)

Ergonomics

Where lamellar flap discs are used, you can achieve clear ergonomic advantages compared to conventional grinding discs. For example, the noise level perceived is cut in half during grinding, and vibration can also be reduced considerably. In addition, the tools are generally lighter and can be used with less pressure. These advantages mean that they create a positive working climate and lead to fatigue-free working without impairing your health.

The flap discs are available in 100 mm diameter (with 16 mm bore) and in diameters 115 mm, 125 mm, 150 mm and 178 mm (22.23 mm bore); They fit all commonly used angle grinders.

You can choose between the flat or angled versions depending on application.

Examples of application::

- deburring
- fettling
- derusting
- finishing
- Machining of Welds



The flat shape is designed to grind edges and flat surfaces with a working angle of 0° to 15° degrees.



The angled shape is designed for spot grinding e.g. a weld seam with an ideal working angle of 15° to 25° degrees.