

TECHNICAL INFORMATION

The most important product information at a glance

GENERAL

Our flexible grinding and polishing tools are made of high quality abrasive cloth and abrasive fleece. They consist of a flexible backing coated with abrasive grain (see pages 131 to 132).

▪ Backings used:

cloth, polyester, fleece, fibre

▪ Grain types used:

regular aluminium oxide (NK), silicon carbide (SIC),
zirconia alumina (ZK), ceramic (Ceramic)

Our flexible grinding and polishing tools are available in many different shapes and dimensions. Applications range from high chip removal through to achieving an extremely fine surface finish.

SAFETY ADVICE

Please note our recommended operating speeds. Pay attention to the safety and accident prevention regulations, including the FEPA safety recommendations, when using and storing flexible grinding and polishing tools. The tools are marked with the appropriate pictograms for correct usage.

APPLICATION RECOMMENDATIONS

At high speed coarse grain produces a finer finish, while at low speed a fine grain produces a coarser finish.

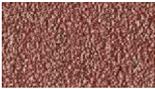
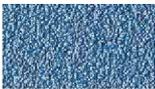
Do not apply too much pressure when using LUKAS grinding tools: excessive pressure does not improve the performance, and will instead result in premature wear. Even if the chip removal is unsatisfactory, you do not apply more pressure. Use a coarser grain instead to prevent unnecessary tool wear and effort. Using grinding additives can also improve efficiency.

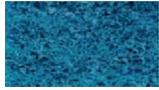
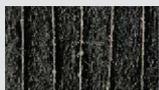
QUALITY AND APPLICATIONS

The right abrasive for every application

LUKAS offers you the right abrasive for every job – tailored to your requirements and the materials you want to machine. The high quality abrasives from LUKAS are ideal for many industries, areas and requirements, and therefore offer you a very wide choice.

The overview below lists all abrasives for use with flexible grinding and polishing tools. Read through the properties and application areas for various workpiece materials to establish the most suitable abrasive grain type and tools to meet your requirements.

Quality	Properties	Application areas/ machining	available as	Page
	NK Abrasive cloth Regular aluminium oxide	very tough abrasive, high resilience	forged steel, malleable iron, grey cast iron, carbon steel, deep-drawn steel, steel band, zinc die castings, non-ferrous metals, wood	Lamellar flap discs 156 161 Mounted flap wheels 165–170 172–174 Flap wheels 182/183 Flap rolls 190 Abrasive bands 198/199 201–204 207/208 Abrasive rolls 205 Abrasive sleeves 220 Abrasive discs 229 Fibre discs 231–233 238/239
	NKE Abrasive cloth Regular aluminium oxide with active abrasive surface layer	very tough abrasive, high resilience	chrome-nickel and other non-rusting steels, deep-drawn steel, titanium and titanium alloys, heat-resistant steel	Mounted flap wheels 170 Abrasive discs 221
	ZK Abrasive cloth Zirconia alumina	exceptionally resilient grain with high pressure resistance	forged steel, metals that are difficult to machine and with extremely hard surfaces (overlay welding), titanium and titanium alloys, heat-resistant steel	Lamellar flap discs 137, 141 144, 146 151/152 154/155 157/158 226 219, 224 237 Abrasive bands 197 Abrasive discs 219, 224 Fibre discs 237
	Z Power Abrasive cloth Zirconia alumina with active abrasive surface layer	excellent removal rate, with long tool life	stainless steel	Lamellar flap discs 140 146 Abrasive bands 196 Abrasive discs 219
	ZKS Abrasive cloth Zirconia alumina with active abrasive surface layer	with M-bonding on polyester backing for excellent removal rate with long tool life	forged steel, metals that are difficult to machine and with extremely hard surfaces (overlay welding), titanium and titanium alloys, heat-resistant steel	Lamellar flap discs 150–152 160
	NKS Abrasive cloth Regular aluminium oxide with active abrasive surface layer	excellent removal rate with long tool life	corrosion and heat-resistant steels, plastics, aluminium and non-ferrous metals	Abrasive caps 212/213
	SIC Abrasive cloth Silicon carbide	minimum heat generation, special quality for the aerospace industry	aluminium and alloys, titanium materials, glass, ceramic, heat-resistant steel, plastic	Lamellar flap discs 147 Mounted flap wheels 171 Abrasive discs 223, 228

Quality	Properties	Application areas/ machining	available as	Page
	Ceramic Abrasive cloth Ceramic grain	excellent removal rate without grain shredding, particularly stable thanks to reinforced backing, cool cutting	non-rusting steels, nickel alloys	Lamellar flap discs 140 145 150 164 Mounted flap wheel of abrasive cloth Abrasive bands Abrasive rolls Abrasive caps Abrasive discs Fibre discs 196 206 209 218 236
	Ceramic4x Abrasive cloth Ceramic grain	excellent removal rate without grain shredding, particularly stable thanks to reinforced backing, cool cutting	steel, rust- and acid-resistant steel	Lamellar flap discs 141 144 153
	PG Reinforced abrasive cloth with ceramic grain	maximum removal rate and tool life thanks to self-sharpening ceramic grain	inox, steel, hardened/coated surfaces	Compact grinding discs Lamellar flap discs 135 136
	NK Abrasive fleece Regular aluminium oxide	polishing effect with the fibre structure, consistent results thanks to continuous exposure of new abrasive particles	chrome-nickel alloys and other non-rusting steels, zinc die castings, non-ferrous metals, wood	Mounted flap wheels 176/177 179 Mounted flap wheels Flap rolls Flap rolls 184 – 187 188 191
	SIC Abrasive fleece Silicon carbide	polishing effect with the fibre structure, consistent results thanks to continuous exposure of new abrasive particles	titanium and titanium alloys, silver and silver plating, aluminium and aluminium alloys, plastics	Mounted flap wheels 177 Mounted flap wheels Flap rolls Semi-flexible grinding disc 161 184 – 186 193 240
	Z Abrasive fleece Zirconia alumina	polishing effect with the fibre structure, improved aggressiveness	chrome-nickel alloys and other stainless steels, zinc die castings, non-ferrous metals	Mounted flap wheels 175
	TF Abrasive fleece/cloth Regular aluminium oxide reinforced fleece	with the combination mounted flap wheels, the abrasive cloth and fleece flaps wear more evenly, improved removal rate	ideal for surface finishing of sheet metal products made from non-rusting steel such as stainless steel sinks and containers	Mounted flap wheels Flap rolls 178 192
	A Mounted flap wheels Flap rolls	the combination with abrasive cloth enhances the grinding effect	chrome-nickel alloys and other stainless steels, zinc die castings, non-ferrous metals, wood	Lamellar flap discs 161 Mounted flap wheels 179 Mounted flap wheels Flap rolls 187 192/193
	C Abrasive fleece/cloth Silicon carbide	the combination with abrasive cloth enhances the grinding effect	titanium and titanium alloys, silver and silver plating, aluminium and aluminium alloys, plastics	Lamellar flap discs 161 Mounted flap wheels 180 Mounted flap wheels 187
	AS Polyamide fleece	impregnated with aggressive abrasive grain	removal of paint and adhesives, cement and concrete resitankss, derusting, cleaning and polishing a wide variety of surfaces, graining and cleaning of wood	Flap disc Grinding wheel 227, 287 288