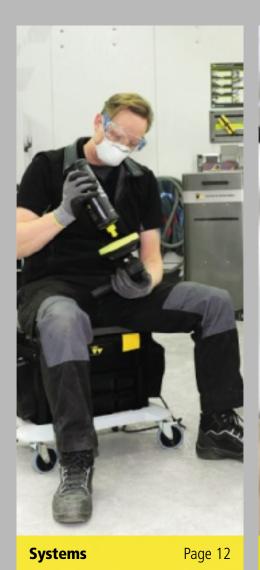


sia Abrasives – Your key to a perfect surface

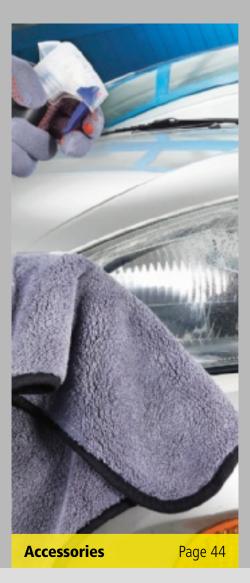
Vehicles are surfaces. Functionality meets expression and passion. The sanding of body parts is characterised by a sequence of process steps involving different requirements. The right technology and matching products are combined to form a system that meets these requirements and ensures a perfect surface finish.

Simply brilliant – the perfect surface finish.

www.sia-abrasives.com







Perfect Surface

InnovationsPage8The sanding process from A to ZPage10Product overviewPage30



We are a Swiss company

sia Abrasives, with its headquarters in Frauenfeld, Switzerland, is one of the world's leading suppliers of innovative abrasives. The company develops, manufactures and markets complete abrasive systems, tailored to specific requirements and applications, for the surface treatment of every type of surface. These products turn sanding and grinding into urface technology. sia Abrasives employs around 1310 people worldwide and is represented with partners in over 80 countries.

Technology leader

Our careful choice of premium materials, the latest production and manufacturing equipment and sophisticated production technologies enable us to provide sanding products at the highest level in constant quality.

Innovative solutions

In close collaboration with the leading varnish and paint manufacturers of the furniture and automotive industries, new abrasive standards are set by their own research and development trials. Trendsetting abrasives and genuine product innovations with trendsetting processes result in sanding surface technology.





Production expertise

The flexible abrasives by sia Abrasives in Switzerland are developed according to the ever changing user requirements and explicit material analysis. They represent high-quality Swiss precision and workmanship with one goal: to be the best abrasives with the greatest possible efficiency to achieve a perfect surface.



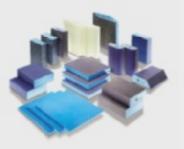
Coated abrasives

Classic coated abrasives and abrasive systems for advanced surface treatment of all types of material.



Fleece abrasives

Fleece products for preparation and cleaning tasks and for structuring, especially on metal.



Foam abrasives

Foam sanding pads in the widest possible range of shapes and grades for precision sanding on wood, fillers, paints and lacquers.



Bonded abrasives

Precision cutting discs for optimum cutting performance and efficient grinding discs for a wide variety of metalworking applications.





Coatings and Composites

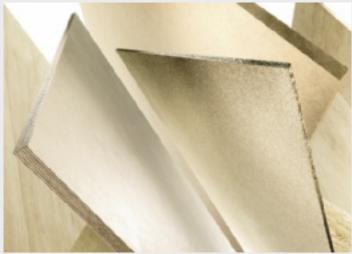
The Coatings and Composites application area specialises in process-optimised surface solutions for processing and treating automotive body parts and fibre-reinforced plastics (such as carbon- or glass-reinforced plastics) and offers a complete system comprising abrasives, machinery and accessories.

Our application-specific solutions have been developed for the marine, aviation, transport, automotive and wind energy sectors as well as for bodywork specialists and automobile painters.

Wood

The Wood application area covers the entire range of surface treatment for the group of customers in sectors such as furniture, interior finishing work, kitchen and shop fitting, boat-building, restoration, renovation and painting. A wide range of the different types of product provides an optimum surface finish on solid wood, wood-based materials, mineral materials, paints and lacquers.





Metal

The Metal application area focuses on surface treatment for all metals ranging from rough grinding to material removal through to structuring for finishing purposes. The market is split into five segments: metalware, container building and toolmaking; foundries and forges; rolling mills and drawing works; fixtures and fittings industry; and precision engineering and watch industry. This structure requires a broad range of products to achieve the perfect surface as demanded by the user.

Panels

The Panels application area covers industrial manufacturers' requirements for wood based, plywood, solid wood and mineral panels with perfect surfaces. siapan wide belts meet users' demanding requirements with regard to consistency of quality, surface quality, lifetime and mechanical stability under load. The siaslide pad system means that the sanding process can be optimised further thanks to improved precision and time-saving as a result of shorter downtimes.



FiboTec



New multi-hole

Proven in nature. Tried and tested. As with all our innovations, FiboTec underwent stringent robot-aided testing. Conducted under laboratory conditions, these tests produced the following result: FiboTec is much more efficient than standard hole patterns. A real innovation!

More information starting on page 41



siaspeed Upgrade



Triple lifetime and superior quality

sia Abrasives has revised its fine grit range, greatly improving the performance of the abrasive while reducing its clogging tendency.

More information starting on page 33



siaflex



Flexibility for any application

The highly flexible paper backing is noted for its conformability and is ideal for finishing challenging surfaces in hard to reach areas. It achieves outstanding results in both dry and wet sanding applications.

More information starting on page 34



Clever abrasive

Color Foams



Maximum process reliability

With the introduction of the new colour foam, sia Abrasives has improved the reliability of application through a standardised colour system. Each foam colour stands for a grit range – simple, high impact, straightforward. Maximum process reliability – your key to a perfect surface finish.

More information starting on page 38

siachrome



New polishing system

Fast, easy, brilliant: with the siachrome polishing system, sia Abrasives offers an efficient range of products that can be used to reliably carry out all stages of top coat preparation.

More information starting on page 39

Accessories



Everything is from a single source

We complement our wide range of abrasive products with specially co-ordinated and selected accessories. To round off our range of sanding products, we are constantly adding new accessories. This way we ensure that you achieve process reliability.

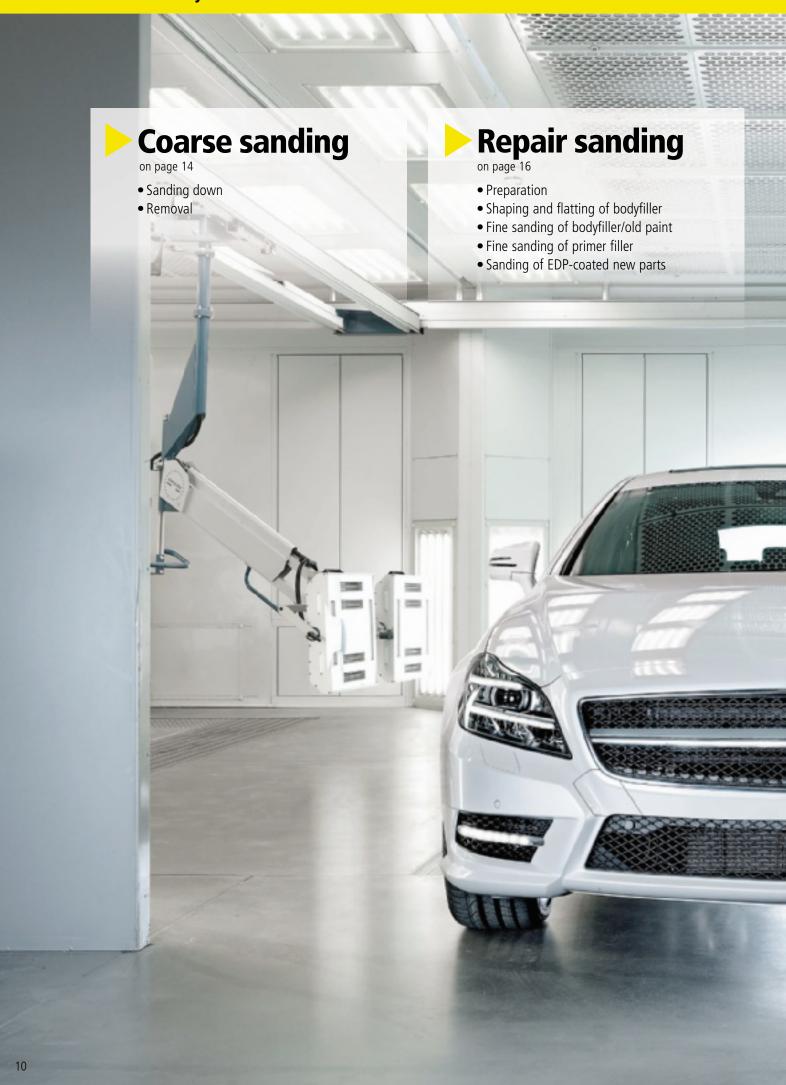
More information starting on page 46





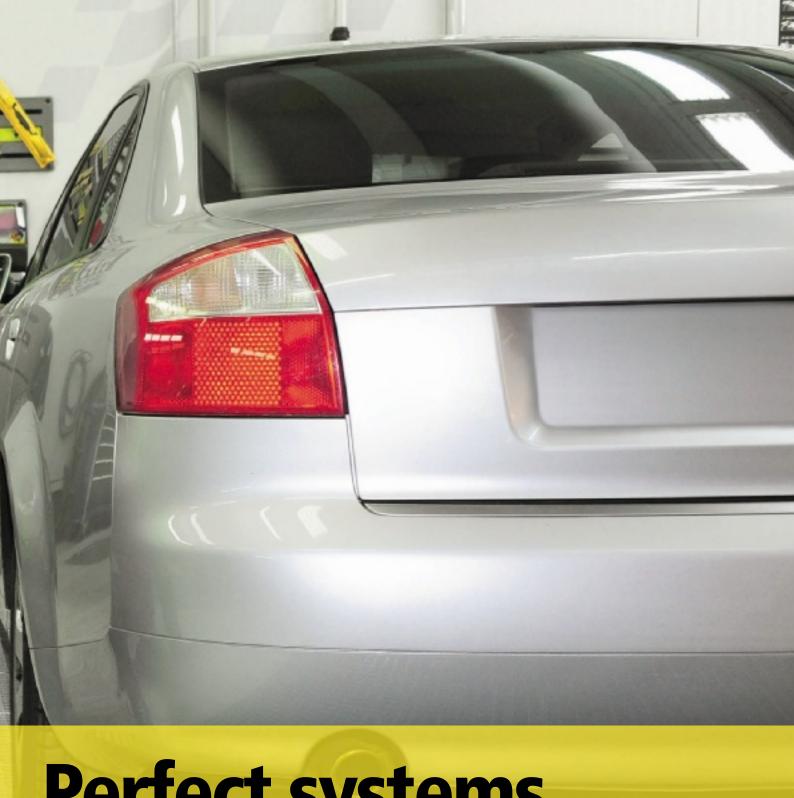












Perfect systems

Coarse sanding Repair sanding Lacquer sanding Polishing

Page 14 Page Page Page 16 20 22

Coarse sanding

Coarse sanding can be used for basic finishing of coarse surfaces, after joining components or as preparation for welding work.



> Sanding down

9		
Work step	Product recommendation	Accessories
► Cutting vehicle body parts	8011 siacut, cutting disc Ø 75 mm Ideal speed: 20.000 RPM	Mandrel with shaft Product page 51
► Sanding down weld seams and burrs	4924 siamet Ø 115 mm Ideal speed: 10.000 RPM Grit range: P36-P60	Backing pad for angle grinder Ø 115 mm Type: hard Product page 50
► Treatment of small and hard to reach areas ► Treatment of welding seams	2820 siamet, siafix Ø 50 mm + 75 mm Ideal speed: 18.000 – 20.000 RPM Grit range: P36 + P60	Backing pad with shaft Ø 50 mm + 75 mm Type: flexible Product page 50
 ▶ Removal of old lacquer and rust from hard to reach areas ▶ Sanding of fine weld seams 	2824 Flapfix, siafix Ø 50 mm Ideal speed: 20.000 RPM Grit range: P40-P80	Backing pad with shaft Ø 50 mm Type: flexible Product page 50

Product recommendation Accessories Work step 6250 siamet scm, siafix Backing pad with shaft Ø 50 mm + 75 mm \emptyset 50 mm + 75 mm Type: flexible Ideal speed: 13.000-15.000 RPM ► Sanding down small and hard to reach Grit range: coarse, medium, fine Product page 50 Backing pad for scm 6260 siamet ud, scm Ø 115 mm Ø 115 mm Type: flexible Ideal speed: 6.000 RPM ► Sanding down body parts, lacquer, stone Grit range: chip protection, etc. coarse, medium, fine Product page 50 6300 siastrip Mandrel fitted from the front Ø 100 mm Ideal speed: 3.500 RPM ► Sanding down old lacquer and stone chip protection Grit range: ► Sanding down weld beads, edges and hard to K40 Product page 51 reach areas 6300 sia Powerstrip Ø 115 mm Ideal speed: 6.000 RPM ► Sanding down old lacquer and stone chip Grit range: protection K40 6914 siafleece sd Mandrel Ø 100 mm fitted from the front Ideal speed: 3.500 RPM ► Sanding down old lacguer and stone chip protection Grit range: ► Sanding down weld beads, edges and hard to reach coarse areas (very flexible) Product page 51

Removal

Work step	Product recommendation	Accessories
	siarad strip eraser Ø 88 mm	
► Removal of masking film and adhesiv	Ideal speed: 2'000 RPM	
residues	Product page 51	

Repair

The repair process involves rebuilding the various layer thicknesses using the appropriate bodyfilling and sanding methods.



Preparation





► Paint stripping



► Sanding out scratches or dents

Product recommendation

Eccentric stroke: 5-10 mm

1950 siaspeed

Grit range: K40-P120



Accessories

Backing pad Type: hard or soft



Product page 48

Eccentric stroke:

1950 siaspeed

5-10 mm

Grit range: P180-P320



Backing pad Type: hard or soft



Product page 48

Shaping and flatting of bodyfiller



► Sanding into shape

Product recommendation

1950 siaspeed

Grit range: K80-P120



Accessories

Hand sanding blocks



Products page 47-48



Fine sanding of bodyfiller/old paint

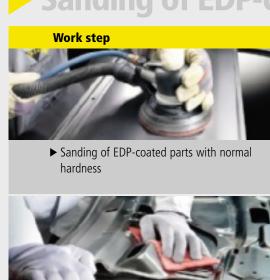


Fine sanding of primer filler

Work step	Product recommendation	Accessories
► Flatting (manual sanding)	1950 siaspeed Grit range: P280—P360	Hand sanding blocks Products page 47–48
► Flatting (machine sanding)	1950 siaspeed Eccentric stroke: 2.5 – 5 mm Grit range: P280 – P360	Pad Type: soft or extra soft Product page 48
► Fine sanding of edges and curves	1950 siaspeed, siasoft Grit range: P600, P800 (for critical shades, such as silver)	
► Flatting and fine sanding of surfaces	1950 siaspeed Eccentric stroke: 2.5 – 5 mm Grit range: P400 – P500	Pad Type: soft or extra soft Product page 48
► De-nibbing or refinement of surfaces	6120 siavlies speed Eccentric stroke: 2.5–5 mm Grit range: ultra fine, grey	Pad Type: soft or extra soft

Product page 48

Sanding of EDP-coated new parts







Backing pad Type: hard or soft

Accessories





► Sanding inner surfaces of EDP-coated new parts

6120 siavlies speed

P320-P500

Eccentric stroke: 5-10 mm

Grit range: very fine, red



Backing pad Type: hard or soft

Product page 48





► Sanding of ultra hard factory primers

7241 siacarbon

Eccentric stroke: 5 mm

Grit range: P320-P500



Backing pad Type: hard or soft

Product page 48



Product page 48

Hints and tips







Replacement cartridges

Accessories



► Making the texture visible



▶ De-nibbing and refining surfaces



► Protection against moisture



► For curves, contours and ultra fine grits



6120 siavlies speed Eccentric stroke: 2.5 - 5 mmGrit range: ultra fine, grey

Protective disc (For wet sanding with 7940 siaair and 7240 siacarat)

Product page 50



Type: soft or extra soft

Product page 51





Pad Type: soft or extra soft



Product page 48

Lacquer sanding

For the professional preparation of clear varnishes, use is made of precisely co-ordinated sanding or polishing processes.



Scuffing



Dust inclusions



Work step Product recommendation 7940 siaair Eccentric stroke: 2.5−3 mm Grit range: K2000−K3000 Products page 48, 50 Accessories Backing pad Type: extra soft Protective disc Products page 48, 50

Paint runs



Orange-peel effect



Polishing

Professional polishing involves preparing the surface layer by layer to produce a perfect weatherproofed and UV-resistant high gloss finish.



Colour system

Polish, pads and cleaning cloths are technically matched to each other and are colour-coded for greater process reliability and efficiency.

• Yellow: removal of polishing scratches

• Black: removal of holograms

• White: sealing

Polishing instructions

- For best results, use the recommended pad and polish combinations.
- Hold the pad at a slight angle to the surface to be polished (this reduces hologram effect).
- Reduce the application pressure during polishing.

- To avoid spatter, start at a low speed. Then increase the speed gradually to max. 2.000 rpm.
- Keep the pads clean, because dirty pads cause swirl marks. Clean the pads with water after use. This will also extend the lifetime of the polishing pads.

Removal of polishing scratches

Work step	Product recommendation		Accessories	
	siachrome cut Highly effective scratch remover 1 kg / 250 ml	Î	Polishing disc, yellow	
 Buffing up fresh conventional lacquers with the yellow polishing disc. Buffing up scratch-resistant and weathered lacquers with lambskin 	Ideal speed: 2.000 RPM		Lambskin Product page 46	
► Cleaning	siachrome magic Heavy-duty cleaner 0.5 l	- ASSE	Microfibre cloth	
			Product page 46	

Removal of holograms

Work step	Product recommendation	Accessories
	siachrome finish Microfine finishing paste	Polishing disc, black
	1 kg / 250 ml	
► Removal of micro scratches	Ideal speed: 2.000 RPM	
		Product page 46
► Intermediate cleaning	siachrome magic Heavy-duty cleaner 0.5 l	Premium cloth
		Product page 46

Sealing instructions

- siachrome pearl and platinum are suitable for the durable glazing of all automotive lacquers and provide a unique deep-gloss finish.
- They protect the lacquer reliably against washing scratches, tar, bird droppings, acid rain and UV rays.
- Prior to application, the top coat must be free of old wax residues, acid rain build-up, tar, insect remains and other impurities.
- siachrome magic is excellent for cleaning.

Glazing

9		
Work step	Product recommendation	Accessories
► Sealing with glaze paste	siachrome pearl Paint glaze 1 I / 250 ml	Application puck Product page 46
► Sealing with carnauba wax	siachrome platinum Premium paint wax 0.2 l Ideal speed: 2.000 RPM	Polishing disc, black
		Product page 46
	Premium cloth	
► Final cleaning	Product page 46	

Headlight glass refinishing

Glass identification

Acrylic



- A naturally UV resistant material
- Polishable

Acrylic glass (Plexiglass): Without transition / shadow

Polycarbonate



- Not UV-resistant
- Shadowing occurs when sanded
- Remove old protective film completely
- Must be sealed with UV resistant lacquer

Polycarbonate: With transition / shadow

Faults

during polishing

- Too much polishing paste
- Contaminated polishing pads and cloths
- Polishing time too short
- RPM too high (overheating)

during sanding

- Sanding of unevenness
- Swirls (create scratches)
- Dry dust removal

Preparation



Refinishing acrylic glass (Plexiglass)



► Sealing with application puck

Product page 46

Refinishing polycarbonate



Comparison acrylic glass and polycarbonate



Backing pad type		Grit		Type of work	
			40 60	Mechanical lacquer removal	
		/	80		
			100	Sanding out, flatting of body filler	
	Hard 10.0-5.0 orbit	:	120		
C-44		grit sizes	150	Sanding out, flatting of body filler	
Soft 5.0 orbit		o grit	180		
		n two	220	Fine sanding of repair area	
		e tha	240	Fine sanding of body filler	. Variant
		m Or	280	(prior to applying primer filler)Flatting of primer filler	 Keying of factory primers
		skip	320		, , , , , , , , , , , , , , , , , , ,
		o not	360	Tracting or primer finer	
		Important: do not skip more than two	400	Fine sanding of primer filler (two-com	ponent lacquers)
	Extra soft	porta	500	• Fine sanding of primer filler (two-layer	r lacquers)
	5.0-2.5 orbit	国	600	Refining and de-nibbing surfaces using	g siavlies ultra fine
Intermediate pad		(800	Keying of old lacquer and subsequent	clear coating
intermediate pad			1000	Scuffing/keying for blending	
			1200	Retouching of new lacquer	
			1500	(orange-peel effect, dust inclusions)	

Machine sanding			Hand sanding		
5550 siaprime siafast Type of sanding: dry	1950 siaspeed siafast Type of sanding: dry	1948 siaflex siafast Type of sanding: dry	1950 siaspeed siasoft Type of sanding: dry	7972 siasponge soft Type of sanding: dry	1913 siawat 1926 siawet Type of sanding: wet
	P1500				P2500
	P1200		P1500	o o	P2000-P2500
	P1000	P800	P1200	microfine	P1500-P2000
	P800	P600	P1000		P1200-P1500
	P600	P500	P800	ultrafine	P1000-P1200
	P500	P500	P600	ult	P800-P1000
	P400	P400	P500	35	P600-P800
	P320	P320	P400	line	P500-P600
	P280	P280	P320		P400-P500
	P240	P240	P280	_	P320-P400
	P220	P220	P240	medium	P240-P280
K180	P180	P180	P220		P220-P240
K150	P150	P150	P180		P150-P180
K120	P120	P120	P150		P120-P150
K100	P100	P100			P100-P120
K080	K080	P080			
K060	K060	P060			
K040	K040	P040			





Perfect products

Open coatingPage40FiboTecPage41siafastPage42siasoftPage43

Coatings and Composites



	M	ater	ials								Conversion forms					Application steps									
	Colours	Primer filler	Gelcoats	Primer coat	Acrylic glass (Plexiglass)	Plastics	Lacquer	Metals	Bodyfiller	Composite	Rolls	Sheets	Strips	Delta and polygons	Discs	Cutting	Sanding down	Sanding out	Flatting	Fine sanding	Keying	Scuffing	Varnish retouching	Polishing	
1727 siawat					4			0				O 1					O 1				×	0,			
1913 siawat	•	•		•		0	•		•																
1926 siawet	•	•		•			•		•																
1948 siaflex	•	•	•	•	•	•	•	•	•	•															
1950 siaspeed	•	•	•	•	•	•	•	•		•															
1950 siaspeed finest grit	•		•		•	•	•																		
5550 siaprime	•			•			•	•																	
6120 siavlies speed	•		•	•		•	•	•																	
6711 siafleece Flex	•			•		•	•	•																	
7240 siacarat					•	•				•															
7241 siacarbon			0			0																			
7940 siaair	•	0	•		•					0															
7970 siasponge soft	•				•	•	•																		
7972 siasponge soft		•		•	•																				
2820 siamet																									
2824 siaflap, Flapfix							•	•																	
4924 siamet																									
6250 siamet scm							•																		
6260 siamet ud scm																									
6300 siastrip / Powerstrip							•																		
6914 siafleece sd																									
8011 siacut, cutting disc																									



Ap	р	Ba	ckir	ıg													
Portable machine sanding	Hand sanding	Cloth	re	F	Paper	Foam	Special	Fleece	L	Wet sanding	Dry application	self-adhesive	siafast	siafix	siasoft		
Po	Ha	J	Fibre	Film	Pa	Ğ	Sp	Fle	SCM	Š	٥	sel	sia	Sia	Sia	Available in grit ranges:	Page:
																80-320; 400-1200	32
																60-2500	32
																80-320; 400-1200	32
																40; 60-1500	34
																40; 60-600	33
																800-1500	34
																40; 60-180	34
																very fine; ultra fine; micro fine	35
																very fine; ultra fine	35
																500; 1000; 2000; 3000	36
																80; 120; 180; 240; 320; 500	36
																240; 360; 500-1000; 1500-2000; 3000-4000	37
																medium; fine; super fine; ultra fine; micro fine	38
																medium; fine; super fine; ultra fine; micro fine	38
																36-320; 400	-
																36-80; 120-150	-
																16; 24; 36-120	-
																extra coarse; coarse; heavy med.; medium; fine; very fine	-
																extra coarse; coarse; medium; fine; very fine	-
																extra coarse	-
																coarse; medium; very fine	-
																A 60 BFM	-

1727 siawat



Product profile

Grit type: Silicon carbide
Grit range: 100-320; 400-1200

Backing: c-wt paper Coating: Closed

Bonding: Resin over resin



Advantages

- Can be used wet or dry
- Excellent surface quality
- Cutting product, good finish
- Can be folded and cut to any desired format

Application

- Keying of hard primer fillers, paints, lacquers and plastics
- Finishing of ferrous and non ferrous metals
- Keying of high-quality surfaces
- Fine sanding of paints, lacquers and filler
- Scuffing of old and new lacquers for blending
- Flatting of bodyfiller, primer filler and lacquers

1913 siawat – for quality wet sanding



Product profile

Grit type: Semi-friable P060 – P1200

aluminium oxide

Silicon carbide P1500 – P2500

Grit range: 60 – 2500

Backing: c-wt paper

Coating: Closed

Bonding: Resin over resin



Advantages

- Very even sanding pattern
- Highly water resistant
- Highly adaptable to contours and shapes
- High stock removal with good finish
- The market-leading wet abrasive for years
- Can be used wet or dry

Application

- Flatting of bodyfiller, primer filler and lacquers
- Scuffing of old and new lacquers for blending
- Removing paint runs
- Removal of orange-peel effect and dust inclusions
- Fine sanding of paints, lacquers and filler
- Intermediate sanding
- Keying

► Sanding systems Page 20-21

1926 siawet



Product profile

Grit type: Brown aluminium P080 – P220

oxide

Semi-friable P240 – P1200

aluminium oxide 80-320; 400-1200

Grit range: 80 – 320; 400 – 1200 Backing: b-wt paper, waterproof

Coating: Electrostatic
Bonding: Resin over resin

Application

- Removing paint runs
- Removal of orange-peel effect and dust inclusions
- Flatting of bodyfiller, primer filler and lacquers
- Scuffing of old and new lacquers for blending
- Keyinc
- Fine sanding of paints, lacquers and filler

Advantages

- Highly flexible
 Minimal surling
- Minimal curling
- No disruption to coating
- No grit breakage
- A versatile all-round product
- Good removal

1950 siaspeed – at full speed to a perfect surface



Product profile

Grit type: Mixed grit types K040-K080

Semi-friable P100-P600

aluminium oxide

40; 60 – 1500 Grit range:

Backing: Paper

Coating: Electrostatic open P220-P600

electrostatic

Resin over resin from K080 Stearate



Advantages

- High-performance abrasives
- High removal rate
- Longest lifetime
- A versatile all-round product
- Less clogging thanks to stearate coating
- Lower abrasive consumption
- Homogeneous sanding finish

Application

Bonding:

Coating:

- Keying of polyesters and composites
- Sanding out of feather edges, flash rust and stone chips
 Shaping of bodyfillers and primer fillers
 Keying of new components and factory primers

- Sanding down of old lacquer
- Scuffing of old and new lacquers for blending
- Flatting of bodyfiller, primer filler and lacquers

Product show



For more information about products, applications and much more, please visit www.sia-abrasives.com

K040-P180



► Sanding systems Page 16-19, 24

1948 siaflex – flexibility for any application



Product profile

Grit type: Semi-friable aluminium

oxide / blue-fired

Backing: Paper

Coating: electrostatic P040 – P180

electrostatic Open P220 — P600

electrostatic P800 - P1500

Bonding: Resin over resin

Coating: Stearate

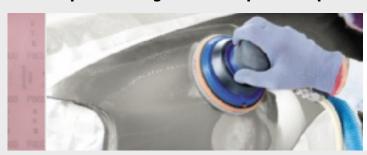
Advantages

- High stock removal with good finish
- Highly flexible and adaptable to contours
- Minimal clogging thanks to open coating in 220 600 grit range
- Long lifetime
- Suitable for general use in dry and wet sanding applications
- Versatile all-round product with an attractive range of options

Application

- Sanding down of coatings and impurities
- Sanding out of unevenness at the edges of repaired surfaces
- Flatting of body filler and primer filler
- Fine sanding of primer filler
- Keying old and new paints
- Removal of orange-peel effect and dust inclusions

1950 siaspeed finest grit – at full speed to a perfect surface



Product profile

Grit type: Aluminium oxide P800 – P1500

Grit range: 800 – 1500 Backing: Film

Coating: Special process
Bonding: Resin over resin

Coating: Stearate

Applications

- Scuffing of old and new lacquers for blending
- Removal of dust inclusions and orange-peel effect
- Keying of paints and lacquers
- Finishing to prepare for polishing on high-gloss surfaces

Advantages

- Homogeneous sanding finish
- Longest lifetime
- Uniform abrasive structure on film
- Perfect surfaces, no random scratches
- Can be used wet or dry

► Sanding systems Page 21

5550 siaprime – setting new standards



Advantages

- · Best edge stability thanks to film backing
- High removal rate thanks to ceramic grit
- Minimum clogging thanks to special coating
- No disruption to coating
- High tearing resistance
- High level of flexibility guarantees trouble-free sanding at corners and edges
- Very efficient and productive
- Good planarity thanks to high resistance to climatic conditions

Product profile

Grit type: Grit mixture (with ceramic)

Grit range: 40; 60 – 180

Backing: Polyester foil

Coating: Electrostatic open
Bonding: Resin over resin

Application

- Flatting of body filler, gelcoat and composites
- Keying of paints, lacquers, steel, aluminium, plastics, hardwood, softwood, mineral materials, etc.
- Sanding of paints, old lacquer and filler



6120 siavlies speed



Product profile

Grit type: Aluminium oxide, silicon carbide Grade: very fine, ultra fine, micro fine Backing: Fleece

Coating: Mechanical
Bonding: Resin over resin





Advantages

- Highly flexible, ideal for hard to reach areas
- Minimal risk of sanding through on edges
- Long lifetime thanks to dense grit coating
- Can be used wet or dry
- For manual or machine use
- High tearing resistance
- Low clogging
- ► Sanding systems Page 18-19

Application

- Fine sanding of primer filler (with dual action sander)
- Scuffing of lacquers
- Producing a matt finish for blending
- Scuffing of new components and factory primers

6711 siafleece Flex HP – the flexible one, for even finishing applications



Product profile

Grit type: Aluminium oxide very fine Silicon carbide ultra fine

Grade: Very fine; ultra fine

Backing: Fleece
Coating: Mechanical
Bonding: Resin over resin



Advantages

- Highly flexible and adaptable to contours
- Consistent scratch pattern due to improved grain consistency
- Long lifetime
- Can be used wet or dry
- Low clogging
- Minimised grit break-out

Application

- Scuffing of new components and factory primers
- Scuffing in hard-to-reach areas
- Scuffing of lacquers prior to final lacquering

7240 siacarat – for sanding of scratch-resistant surfaces



Product profile

Grit type: Diamond

500; 1000; 2000; 3000 Grit range:

Knitted fabric with foam backing Backing: Special process Coating:

Bonding: Resin over resin



Advantages

- Very good lifetime and stock removal thanks to state-of-the-art diamond technology
- Lasts up to 40 times longer than conventional abrasives
 Waterproof and washable
- Highly adaptable to contours, curves and profiles
- Low scratch depth with high stock removal
- No risk of sanding through thanks to pressure-equalising foam
- Can be used many times
- ► Sanding systems Page 20, 25 26

Application

- Scuffing and refining of very hard surfaces
- Keying of scratch-resistant lacquers
- Fine sanding of mineral materials
- Sanding of epoxy-based materials

7241 siacarbon – the harder, the more efficient



Product profile

Diamond Grit type:

Grit range: 80; 120; 180; 240; 320; 500

Cloth Backing:

Special process Coating: Bonding: Resin over resin

Advantages

- Excellent performance on hard materials
- Very good lifetime and stock removal thanks to state-of-the-art diamond technology
- Increased efficiency due to measurable time-saving
- Full-surface dust extraction
- No dependence on hole system
- Constant removal rates
- Pleasant sanding feel
- Minimal risk of sanding through on edges
- Can be used moist or dry
- ► Sanding systems Page 19

Application

- Keying of scratch-resistant lacquers
- Keying of new components and factory primers
- Fine sanding of mineral materials
- Keying of aluminium

7940 siaair – the perfect Swiss finish



Product profile

Grit type: Aluminium oxide

Grit range: 240; 360; 500-1000; 1500-2000; 3000-4000

Backing: Knitted fabric with foam backing

Special process Coating: Bonding: Resin over resin

Advantages

- Very long lifetime
- Low scratch depth
- Pressure-equalising foam gives perfect surface finish
- Waterproof and washable
- Low clogging
- Can be used many times
- Absorbs water
- Resistant to silicon remover
- Permeable to air and water

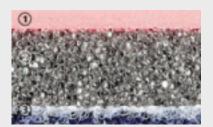
Application

- Final sanding of primer filler in hard-to-reach areas
- Scuffing of lacquers
- Fine sanding of flattened surfaces before polishing
 Fine sanding of paints, lacquers and filler
- Finishing to prepare for polishing on high-gloss surfaces
- Keying of high-quality surfaces

Product show



For more information about products, applications and much more, please visit www.sia-abrasives.com



- 1 Net backed abrasive
- **2** Foam cushioning
- **3** siafast fastening system



7970 siasponge soft – full of colour, free of solvent



Product profile

Grit type: Aluminium oxide
Dimension: 115 x 140 x 5 mm
Scrim backing/ PU (polyurethane)
backing: Open foam structure

Binder resin: Flexible Coating: One-sided



Advantages

- Can be used wet or dry
- Ease to handle thanks to straightforward colour concept
- Highly flexible
- No discolouration of the grit side
- No bulging of the pad corners due to solvent
- No acrid solvent odour
- No folds, no bends
- Even sanding pattern

Applications

- Dry or wet sanding
- Sanding of plastics before applying primer coat
- Keying of primer coats before applying primer filler
- Fine sanding of primer filler
- Keying without changing shape of surface
- Scuffing of lacquers
- Intermediate varnish sanding

7972 siasponge soft – full of colour, free of solvent



Product profile

Grit type: Aluminium oxide
Dimension: 115 x 140 x 5 mm
Scrim backing/ EVA (Ethyl Vinyl Acetate)
backing: Closed foam structure
Binder resin: Flexible

Coating: Flexible One-sided



Advantages

- Ease to handle thanks to straightforward colour concept
- Highly flexible
- No discolouration of the grit side
- No bulging of the pad corners due to solvent
- No acrid solvent odour
- No folds, no bends
- Even sanding pattern

Application

- Dry sanding
- Sanding of plastics before applying primer coat
- Keying of primer coats before applying primer filler
- Fine sanding of primer filler
- Keying without changing shape of surface
- Scuffing of lacquers
- Intermediate varnish sanding

siachrome - the polishing system, fast, simple, brilliant



Product profile

With the siachrome polishing system, sia Abrasives offers an efficient range of products that can be used to reliably carry out all stages of top coat preparation.

Advantages

- Efficient and process-reliable polishing due to colour concept
- Excellent for use on standard and ceramic paints
- Suitable for soft or hard lacquers
- Usable on all polishable surfaces
- Silicone and solvent free, water-based
- Can be used without coolant
- No discolouration of plastic parts
- ► Sanding systems Page 22-25

Application

- Removal of polishing scratches
- Removal of sanding defects from hard lacquers
- Removal of holograms

Standard hand sanding blocks



Product profile

Compatible, fully integrated system including files, blocks with suction hose and fasteners. The complete range of hand sanding blocks is noted for its low weight combined with anatomically shaped handles for comfortable sanding. Direct and even transfer of pressure to the workpiece at all times.

Advantages

- Suitable for standard, multi-hole and net-type abrasives
- Multi-hole air chamber backing provides full surface dust extraction and ensures a dust-free working environment
- For ergonomic manual work
- Exclusively available from sia Abrasives

Application

- Flatting of body filler
- Flatting of primer filler
- Flatting of body filler
- Fine sanding of primer filler

► Sanding systems Page 16 – 18

Flexible hand sanding blocks – The solution for shaping



Product profile

Compatible, fully integrated system including files, blocks with suction hose and fasteners. The complete range of hand sanding blocks is noted for its low weight combined with anatomically shaped handles for comfortable sanding. Direct and even transfer of pressure to the workpiece at all times.

Advantages

- Adapts flexibly to surface contours
- Concave / convex shape is finely adjustable via an adjusting wheel
- Multi-hole air chamber backing provides full surface dust extraction and ensures a dust-free working environment
- For ergonomic manual work
- Suitable for standard, multi-hole and net-type abrasives
- Exclusively available from sia Abrasives

Application

• Fine sanding of convex and concave contours on a variety of materials

Open coating

Over 20 % higher removal rate with minimal clogging

The new generation of coating technology uses open coating and provides improved positioning of the abrasive grains and an optimised stearate composition (zinc-free). This process delivers over 20 % better removal rate with minimal clogging and the longest lifetime.

Conventional coating technology: electrostatic



The conventional coating technology uses an electrostatic method. The new coating technology improves the positioning of the abrasive grits by using an open grit coating. This results in a better finish while keeping clogging to a minimum.

New coating technology: open





- Minimal clogging due to open coating technology and optimised stearate composition (zinc-free)
- Maximum removal rate
- Longest lifetime
- Lower abrasive consumption
- Higher efficiency
- Lower costs

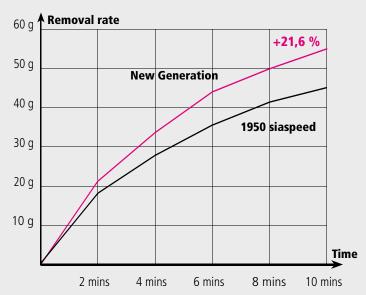
Performance comparison

Abrasive:

1950 siaspeed, P240, 150 mm diameter, 15-hole

Orbital sanding:

5 mm stroke, soft Backing pad, surface: bodyfiller, Unipol polyester bodyfiller, robotised machine under laboratory conditions





FiboTec

An idea borrowed from nature. The innovation by sia Abrasives.

The new FiboTec multi-hole is based on a string of numbers known as the Fibonacci Sequence. As a hole pattern, this spiral structure, which crops up time and time again in nature, provides superior dust extraction, significantly reduced clogging and therefore a longer life of the abrasive.

Standard hole pattern The standard hole pattern hole pattern The standard hole pattern hole pattern The standard hole pattern hole patte

Stringent, robot-aided testing in laboratory conditions produced astounding performance results:

Depending on material and application, FiboTec works four times longer than standard abrasive discs.



- Works up to 50 % faster due to better dust extraction and less clogging
- Higher productivity
- Higher process stability
- Better occupational health and safety

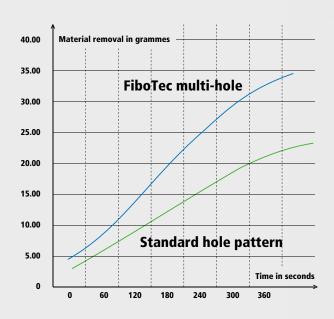
Performance comparison

Abrasive:

1950 siaspeed, 150 mm diameter, 119-hole, Grit: 400, Material: soft bodyfiller

Machine:

eccentric, 150 mm, 5 mm stroke, 15-hole, Backing pad: 103-hole, soft Robotised machine under laboratory conditions





siafast

The fast and time-saving fastening system

sia Abrasives launched the fast and time-saving fastening system in 1983. The back of the abrasive is equipped with loops that can be very easily fastened to the Backing pad or hand sanding block which is equipped with hooks.

A perfectly co-ordinated fastening system



The hook and loop system enables up to 10.000 quick and easy abrasive changes.

Optimum co-ordination between the loop length and the hook enables precisely the right strength to be ensured for all applications and customer needs



- Cool sanding
- Less clogging thanks to special ventilation effect
- Increased safety during the finishing of surfaces and contours due to the cushioning spring effect between the hook-and-loop surfaces
- Little dust, little moisture and few temperature fluctuations

Loops



Hook type



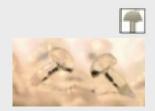
J hook



Double hook



Palm hook



Mushroom head



Hexagonal mushroom (micro hook and loop)



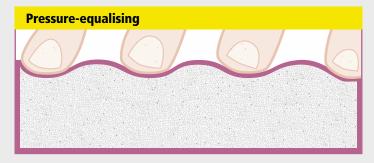
Pushbutton mushroom



siasoft

The coated abrasive for gentle use

siasoft is a foam-backed abrasive which ensures very gentle and consistent abrasive use. It prevents unwanted sanding-through and helps to achieve perfect surface quality with minimal scratch depth.



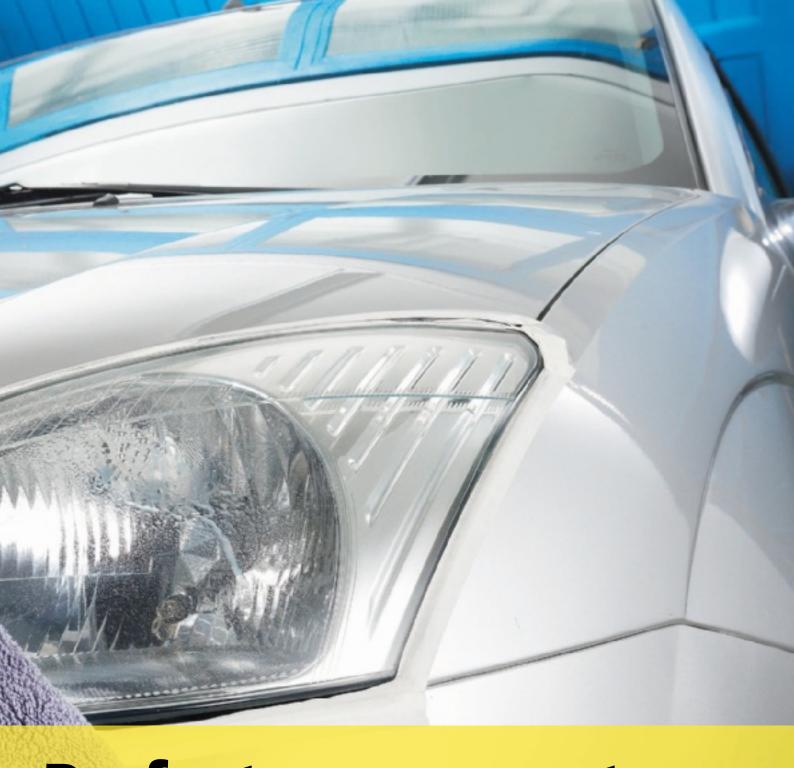
- Adaptable to contours
- The foam hardness is matched to the application, enabling siasoft to deliver optimum pressure distribution for a consistent sanding pattern.
- No sanding-through. The soft backing material prevents pressure points caused by fingers. siasoft is therefore especially suitable for fine and intermediate varnish sanding on surfaces or curves.
- The abrasive is very adaptable to contours due to the foam-laminated back. It is especially suitable for hard-to-reach and profiled surfaces.
- With siasoft there is no formation of folds or buckling. This enables a consistent sanding pattern without scratches.



- **1** Abrasives
- 2 Foam backing







Perfect components

Polishing system Hand sanding blocks Backing pads Page 46 Page 47

Page 48





Polishing material

rousining material		
siachrome	Dimension	Part number
	siachrome cut 1 kg Highly effective scratch remover	0020.6663
	siachrome cut 250 ml Highly effective scratch remover	0020.7047
(1		
	siachrome finish 1 kg Microfine finishing paste	0020.6664
HEAV		
	siachrome finish 250 ml Microfine finishing paste	0020.7048
Û	Microfine finishing paste	

Glaze

siachrome	Dimension	Part number
PERK	siachrome pearl 1 litre Glaze	0020.6667
Û	siachrome pearl 250 ml Glaze	0020.7049
	siachrome platinum 0.2 litres Premium paint wax	0020.6665

Cleaner

siachrome	Dimension	Part number
ä	siachrome magic 0.5 litres Heavy-duty cleaner	0020.6666

Polishing accessories

Polishing accessories			
siachrome	Dimension	Part number	
	Lambskin ø 135 mm Type: siafast Lambskin for polishing paints and buffing up old paints	0020.6674	
9	Lambskin ø 85 mm Type: siafast Lambskin for polishing paints and buffing up old paints	0020.6673	
	Polishing disc, yellow ø 145 mm Type: siafast Polishing disc for polishing paints and buffing up old paints	0020.6671	
	Polishing disc, yellow ø 85 mm Type: siafast Polishing disc for polishing paints and buffing up old paints	0020.6672	
	Polishing disc, black ø 145 mm Type: siafast Polishing disc for removing holograms or sealing applications	0020.6676	
	Polishing disc, black ø 85 mm Type: siafast Polishing disc for removing holograms or sealing applications	0020.6675	
	Application puck ø 130 mm The anatomically shaped application puck fits well in the palm of the hand during polishing	0020.6668	
	Microfibre cloth Microfibre cloth for cleaning surfaces	0020.3185	
	Premium cloth Premium cloth for ultra-gentle cleaning of paint finishes	0020.6670	
	Polish-bottle stand 315 x 104 x 130 mm for 1 kg / 1 l siachrome bottle	0020.7431	

Backing pad for polishing

31	, , , , , , , , , , , , , , , , , , ,	
	Dimension	Part number
	ø 75 mm Type: soft	0020.4899
•	Backing pad for polishing and lambskin pads siafast hook and loop system M14	
	ø 125 mm Type: soft	0020.6669
	Backing pad for polishing and lambskin pads siafast hook and loop system M14	
	ø 125 mm Type: soft	0020.6741
	Backing pad for polishing and lambskin pads siafast hook and loop system M 5/8"	

Hand sanding blocks

Dimension	Part number
Cork hand sanding block 70 x 125 x 40 mm Type: hard siafast hook and loop system Dry application	0020.0095
Hand sanding block 70 x 125 x 30 mm Type: hard siafast hook and loop system Dry and wet sanding	0020.0389
Hand sanding block 70 x 125 x 38 mm Type: double-sided (medium hard-blue / extra soft-white) siafast hook and loop system Dry application	0020.0342

Hand sanding blocks

ilalia salialilg k		
	Dimension	Part number
3	Finiblock for self-adhesive discs ø 30 mm Type: double-sided (soft / hard) self-adhesive	0020.3286
3	Finiblock for siafast discs ø 30 mm Type: double-sided (soft / hard) siafast hook and loop system	0020.3285
	Hand sanding block with centre hole Ø 73 mm Type: soft siafast hook and loop system 22 mm centre hole	0020.7388
	Hand sanding pad round ø 150 mm Type: soft siafast hook and loop system	0020.0364
	Hand sanding block 60 x 128 x 16 mm Type: double-sided (extra soft-orange / soft-black) Wet sanding	0020.3713
	Hand sanding block 67 x 122 x 35 mm Type: double-sided (soft / hard) siafast hook and loop system Wet sanding	0020.0343

Hand sanding blocks

Standard	Dimension	Part number
	70 x 125 mm 29-hole	0020.6514
e.		
	70 x 198 mm 41-hole	0020.6515
6		
	70 x 400 mm 68-hole	0020.6516
300		
-	115 x 230 mm 49-hole	0020.6517
5		





Hand sanding blocks

Flexible	Dimension	Part number
	70 x 198 mm 41-hole	0020.6695
C.		
Ja	70 x 400 mm 68-hole	0020.7045
4		
	115 x 230 mm 49-hole	0020.6518
The		

Hand sanding blocks

Accessories	Dimension	Part number
	Extraction hose 4000 mm, ø 25 mm diameter of small end: 21 mm Dust extraction hose for hand sanding blocks	0020.3925
	Carbon-look block board 895 x 305 x 12 mm The hand sanding blocks can be stored tidily on the Carbon Look Block Board.	0020.7297
000	Carbon-look disc board 895 x 368 x 160 mm The Carbon Board Disc Look offers enough space to tidily store abrasive discs of the five main grits ranges.	0020.7298
	Intermediate pad 70 x 198 mm, 41-hole Thickness: 10 mm Type: dry sanding Pressure-equalising foam intermediate pad for multi-hole and mesh-like abrasive discs.	0020.6524

Backing pad for random orbital sanders

	Dimension	Part number
	Ø 150 mm 103-hole Type: extra soft, siafast hook and loop system Pad: 5/16; M8 Backing pad for multi-hole and mesh-like siafast abrasive discs	0020.5742
	Ø 150 mm 103-hole Type: soft, siafast hook and loop system Pad: 5/16; M8 Backing pad for multi-hole and mesh-like siafast abrasive discs	0020.5740
	ø 150 mm 103-hole Type: hard, siafast hook and loop system Pad: 5/16; M8 Backing pad for multi-hole and mesh-like siafast abrasive discs	0020.5741
	ø 30 mm without holes Type: soft, self-adhesive Pad: 1/4 Backing pad for self-adhesive daisy discs	0020.4689
	ø 32 mm without holes Type: soft, siafast hook and loop system Pad: 5/16 Backing pad for self-adhesive daisy discs	0020.1839
9	ø 77 mm without holes Type: soft, siafast hook and loop system Pad: 5/16 Backing pad for siafast discs	0020.1988
	ø 125 mm without holes Type: soft, siafast hook and loop system Pad: 5/16 backing pad for siafast discs	0020.6730
	ø 125 mm without holes Type: hard, siafast hook and loop system Pad: 5/16 Backing pad for siafast discs	0020.6731
	Ø 125 mm 8-hole Type: extra soft, siafast hook and loop system Pad: 5/16 Backing pad for siafast discs	0020.0540

Backing pad for random orbital sanders

J 1		
	Dimension	Part number
②	ø 125 mm 8-hole Type: hard, siafast hook and loop system Pad: 5/16 Backing pad for siafast discs	0020.0539
	Ø 125 mm 54-hole Type: soft, siafast hook and loop system Pad: 5/16 Backing pad for siafast discs	0020.6728
	ø 125 mm 54-hole Type: hard, siafast hook and loop system Dry application Pad: 5/16 Backing pad for siafast discs	0020.6729
0.	ø 150 mm without holes Type: soft, siafast hook and loop system Pad: 5/16 Backing pad for siafast discs	0020.0346
	ø 150 mm without holes Type: soft, siafast hook and loop system Pad: 5/16 Backing pad for siafast discs	0020.6736
0.	ø 150 mm without holes Type: hard, siafast hook and loop system Pad: 5/16 Backing pad for siafast discs	0020.0345
	ø 150 mm without holes Type: hard, siafast hook and loop system Pad: 5/16 Backing pad for siafast discs	0020.6737
	ø 150 mm 15-hole Type: soft, siafast hook and loop system Pad: 5/16 Backing pad for siafast discs	0020.4740
	Ø 150 mm 54-hole Type: soft, siafast hook and loop system Pad: 5/16 Backing pad for siafast discs	0020.6734

Backing pad for random orbital sanders

	Dimension	Part number
•	Ø 150 mm 54-hole Type: hard, siafast hook and loop system Pad: 5/16 Backing pad for siafast discs	0020.6735
	Ø 200 mm 9-hole/multi-hole Type: soft, siafast hook and loop system Backing pad for siafast discs	0020.4647





Backing pad for rotary sanders

	Dimension	Part number
(2)	Ø 115 mm Type: hard Pad: M14 Backing pad for fibre discs	0020.0348
P	ø 125 mm Type: hard Pad: 5/8 Backing pad for fibre discs	0020.0431
(0)	ø 125 mm Type: hard Pad: M14 Backing pad for fibre discs	0020.0350
€	ø 50 mm Type: hard, siafix quick change system Pad: 1/4", 6 mm Backing pad for siafix discs and mini angle grinder	0020.0132
	Ø 75 mm Type: hard, siafix quick change system Pad: 1/4", 6 mm Backing pad for siafix discs and mini angle grinder	0020.0133
	ø 115 mm Type: hard Pad: M14 Backing pad for scm discs	0020.0396
(2)	Ø 115 mm Type: soft, siafast hook and loop system Pad: 5/8 Backing pad for siafast discs	0020.2325
(9)	Ø 115 mm Type: soft, siafast hook and loop system Pad: M14 Backing pad for siafast discs	0020.0172

Intermediate and protective discs		
	Dimension	Part number
	Intermediate pad ø 77 mm, without hole Type: dry sanding Thickness: 12 mm	0020.0269
	Pressure-equalising foam intermediate pad	
9	Intermediate pad ø 125 mm, 54-hole	0020.7234
	Type: dry sanding Thickness: 10 mm Pressure-equalising foam intermediate pad for multi-hole and mesh-like abrasive discs	
	Intermediate pad ø 125 mm, 54-hole Type: dry sanding Thickness: 5 mm	0020.7429
	Pressure-equalising foam intermediate pad for multi-hole and mesh-like abrasive discs	
	Intermediate pad ø 150 mm, 15-hole Type: dry sanding	0020.4546
	Thickness: 12 mm Pressure-equalising foam intermediate pad	
	Intermediate pad ø 150 mm, 103-hole Type: dry sanding	0020.5886
	Thickness: 10 mm Pressure-equalising foam intermediate pad for multi-hole and mesh-like abrasive discs	
	Intermediate pad ø 150 mm, 103-hole Type: dry sanding Thickness: 5 mm	0020.7430
	Pressure-equalising foam intermediate pad for multi-hole and mesh-like abrasive discs	
9089 siaklett	Dimension	Part number
	Protective disc ø 145 mm, without holes Thickness: 1 mm	0020.3453
	siafast for siaair and siacarat Discs with Ø 150 mm	
	Intermediate pad ø 147 mm, 33-hole Thickness: 1 mm	0020.7428
	Ensures optimal extraction by FiboTec multihole disc on Mikroklett backing pad	

Various

various		
	Dimension	Part number
	Strip eraser Thickness: 15 mm ø 88 mm Scope of supply: 3 strip erasers 5/16 inches + 1 adaptor with 6 mm shaft The strip eraser is ideal for removing bonded	0020.3983
	film, profile strips, glue marks, adhesive labels and double-sided adhesive tape without making a hole	
وي ا	Guide control black powder set Scope of supply: guide coat hand sanding block including foam sponge 2 cartridges 30 g each	0020.2302
	Sanding down the black powder guide coat ensures that the surface is evenly sanded	
	Guide control black powder Scope of supply: 6 cartridges, 30 g each	0020.2301
	Cartridges for refilling black powder guide coat set	
<u>.</u>	siamat cleaning and abrasive paste Scope of supply: 500 ml	0020.4174
	Cleaning and abrasive paste for scuffing	
A	fixing shaft ø 6 mm Shaft diameter: 12 mm	0029.0255
<u></u>	Fixing pin for use in combination with siafleece SD discs	
A	Mandrel for front loading strip ø 6 mm	0029.0287
.	Shaft diameter: 6 mm Expansion mandrel for siastrip discs	
	Expansion mandrel connecting shaft 1/4 52 mm ø 19 mm	0020.1086
	Expansion mandrel for Ø 75 mm cutting discs	
	Expansion mandrel 6 mm connecting shaft 52 mm ø 19 mm	0020.0113
	Expansion mandrel for Ø 75 mm cutting discs	
	Dust cloth 320 x 400 mm	0020.0016
	Dust binder cloth specially designed for cleaning work	

Various



Sales stands

	Dimension	Part number
	Carbon-look workstation 1150 x 750 x 540 mm	0020.7401
M.	Packaging bracket For packaging 150 mm discs	0020.7432
	(165 x 165 mm)	
	The bracket can be attached to a perforated plate using a hole-to-hole distance of 45 mm.	



