



Solid surfaces

Sanding and polishing solid surface materials



Our customers stick with us.

410 Pike Road | Huntingdon Valley, PA 19006 | 800.220.1966

www.chemical-concepts

Your key to a perfect surface

Many materials hide a secret. They keep their real beauty hidden. Only a professional finish can reveal what is inside. sia Abrasives has devoted itself to achieving perfectly finished surfaces for more than 135 years.

“Finished by sia Abrasives” – the final touch makes all the difference to a wide variety of materials: wood acquires its expressive colour, striking colour contrasts with astounding grain, leather captivates with its subtle nuances, contact lenses ensure the very best

acuity of vision, metal glows at the peak of its perfection, marble develops its variety of effects, both robust and filigree, and plastics or the most sophisticated of coatings become the embodiment of functionality and aesthetic appeal.

With our tried and tested surface solutions using top-quality sia products, we would be pleased to help with your specific applications.

Solid surfaces in the carpentry trade

Working with polymer-bonded mineral materials (also known as “solid surfaces”) is widespread in the carpentry trade and has become increasingly popular especially in recent years. The variety of materials has also increased as a result of new suppliers, a broader range of colours and innovative new technical features. Thanks to the fact that they have a pore-free surface, are insensitive to moisture and are also food safe, polymers are mainly used in bathroom, kitchen, office, clinic and shop fittings, and they create the appearance of marble or granite.

Depending on their workability (hardness), the condition they are delivered in and the customer's requirements in terms of the finished product (surface gloss), these materials can however cause the worker major problems.

sia Abrasives offers the perfect system for working on solid surface materials of all kinds and all hardness ratings.



Classical solid surfaces

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Very hard solid surfaces

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Perfect surfaces

sia Abrasives
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Our commitment



Company

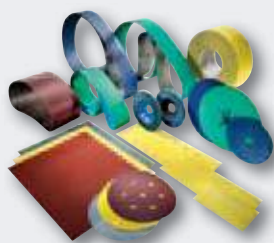
The sia Group is based in Frauenfeld, Switzerland, and is one of the world's top three suppliers of innovative abrasives. It develops, manufactures and markets complete abrasive systems, customised to specific requirements and applications, for the treatment of every type of surface. Sanding has become a surface treatment technology.

sia Abrasives employs about 1,250 people worldwide and is represented through local partners in more than 80 countries.

Top-quality products from Switzerland

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. Abrasive materials from sia undergo continuous development based on demanding customer requirements and our detailed analysis of production materials. They represent top-quality Swiss precision and quality workmanship with the aim of a commitment to the perfect surface.

Innovative abrasives



Coated abrasives

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



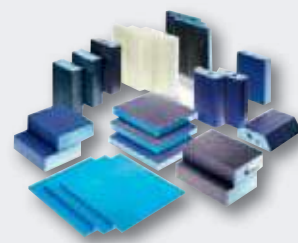
Nonwoven abrasives

Nonwoven products for preparation, cleaning, finishing and regaining, especially on metal.



Bonded abrasives

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



Foam abrasives

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

Environment



Environmental-friendly production, competent and ethical waste disposal

For many years we have concerned ourselves with the efficient use of energy and committed ourselves to protecting the environment. We have implemented many measures within our production processes to protect the air, land and water. We use our energy and raw-material resources efficiently and carefully.

We care

By joining the "EnAW" (Energy Agency for Industry) programme, we have voluntarily made a commitment to improve energy efficiency and limit our CO₂ emissions as part of our day-to-day operations.

We take responsibility

As a "dry factory", we protect nature by not putting untreated industrial wastewater back into the water system (i.e. public drains). Weekly analyses of additional industrial wastewater to ensure they meet prescribed values confirm the cleanliness of our wastewater.

Quality



Monitoring raw materials, setting quality standards

We manufacture top-quality products by thorough monitoring during the production process. The superior properties of sia products represent excellent value for our customers.

We verify

We select our raw materials and their suppliers carefully and according to strict criteria. Long-standing partnerships and continuous testing of raw materials ensure good-quality, reliable and fault-free materials.

We continually optimise

Our internal process management system (PMS) records and improves important procedures and allows direct intervention in the production process where necessary. In this we can operate an active, committed opportunity-management programme.

People



A safe, healthy workplace

We set the standard for an accident- and hazard-free workplace. The well-being of people is an integral part of our culture.

We are clean

We develop products that also effectively help our customers remain healthy. We have had our finishing products tested for dust formation by the Swiss Accident Insurance Fund (SUVA). The results are impressive: the lowest dust emissions compared with our competitors' products.

We set an example

We comply strictly with the recommendations of the FEPA safety standards and publish this, together with other safety information, at www.sia-abrasives.com



"REACH"

Regulation for chemicals – a priority project

REACH (Registration, Evaluation and Authorisation of Chemicals) is a European Community regulation dealing with chemicals and has been in force since June 2007. Its purpose is to gather all necessary information regarding the properties of chemical substances and to examine their use and the associated risks to humans and the environment. We ensure compliance with REACH by keeping up-to-date records of all chemical materials and substances and by taking all necessary steps to meet our REACH obligations.

Application recommendations for classical solid surface materials such as Corian®, Varicor®, Kerrock®, Avonite®, Creanit®, Hi-Macs®, Staron® and Marlan®

1. Preparation: Dressing/Pre-sanding

Flattening of scratches, damage, glue residues, sawing and routing marks

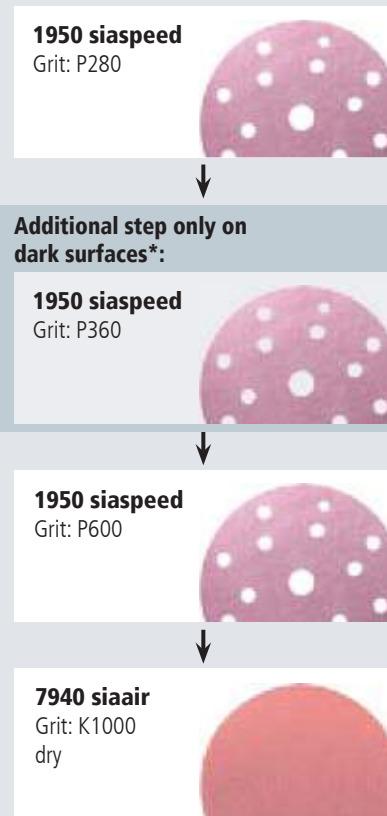


2.1 Matt:



Your perfect gloss level: matt

2.2 Semi-matt:



Your perfect gloss level: semi-matt

2.3 Satin-gloss:



Your perfect gloss level: satin-gloss

2.4 High-gloss:

1950 siaspeed
Grit: P280



Additional step only on dark surfaces*:

1950 siaspeed
Grit: P360



1950 siaspeed
Grit: P600



Damp sanding:

7940 siaair
K2000 +
siachrome magic



Polish:

Lambskin disc +
siachrome cut



Optional polish:

Polishing disc, black
+ siachrome finish



Your perfect gloss level: high-gloss



Damp sanding with siaair, siacarat

Damp sanding achieves a more aggressive cut. Compared to dry sanding, this therefore enables the desired surface to be achieved with less sanding steps. Moreover, the siaair and siacarat products achieve a longer lifetime with damp sanding rather than with dry sanding. Important: Do not use dust extraction when damp sanding. It is advisable to also use the Protection Disc to protect the sander (see page 15).

*** Additional sanding step on dark surfaces**

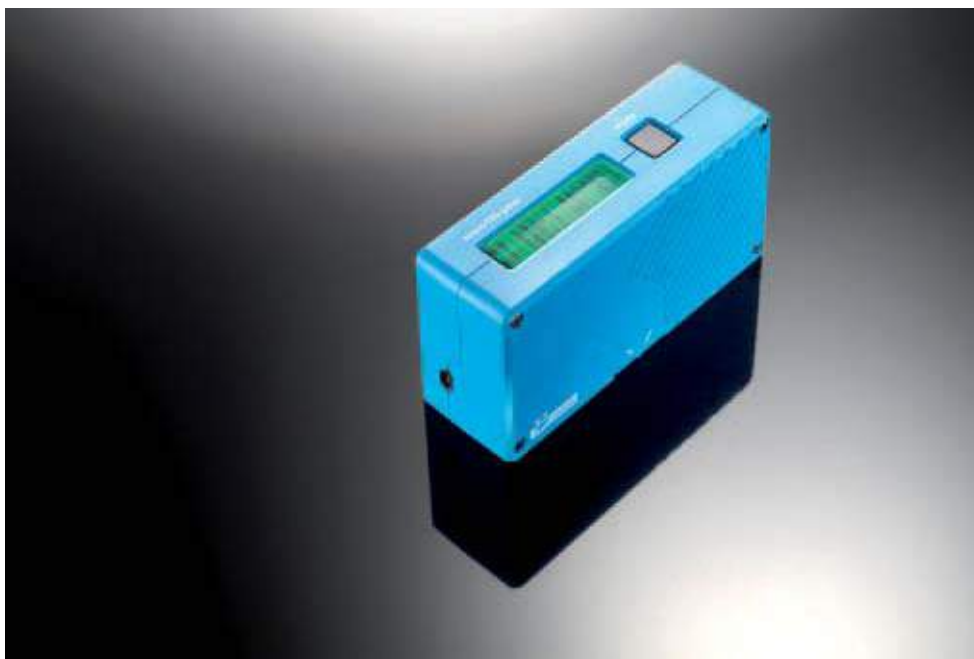
As everybody knows, scratches or sanding marks are more visible on dark or bold colours than on light workpieces. Additional

sanding steps are required to prevent sanding marks caused by previous sanding work from being visible.

Gloss levels

At a measuring angle of 60°, we classify the gloss levels in these groups:

matt	Gloss level < 10%
semi-matt	Gloss level < 30%
satin-gloss	Gloss level < 50%
gloss/high-gloss	Gloss level < 90%



Surface finishing for very hard solid surface materials such as Askilan® or Silestone® – through to marble and granite

Due to their technical features, some new, extremely hard polymer materials are hardly distinguishable from natural stone, and so they have to be processed in a similar way. Conventional abrasives that have aluminium oxide or silicon carbide grit are not suitable for this.

Thanks to the ceramic grit in 1950 siaspeed's coarse grit range and thanks to the diamond grit in 7241 siacarbon and 7240 siacarat, sia Abrasives is probably the only manufacturer to also offer a perfectly suitable system for these applications.

1. Matt:

7241 siacarbon
Grit: K240



Optional:

7241 siacarbon
Grit: K320



2. Semi-matt:

7241 siacarbon
Grit: K240



7241 siacarbon
Grit: K500



7240 siacarat
Grit: K500



3. Satin-gloss:

7241 siacarbon
Grit: K240



7241 siacarbon
Grit: K500



Damp sanding:

7240 siacarat
Grit: K1000 +
siachrome magic



Your perfect gloss level: matt



Your perfect gloss level: semi-matt



Your perfect gloss level: satin-gloss

4. High-gloss:

7241 siacarbon
Grit: K240



7241 siacarbon
Grit: K500



Damp sanding:

7240 siacarat
Grit: K1000 +
siachrome magic



Damp sanding:

7240 siacarat
Grit: K3000 +
siachrome magic



Polish:
Lambskin disc +
siachrome cut



Optional:

Polishing disc, black
+ siachrome finish



Your perfect gloss level: high-gloss



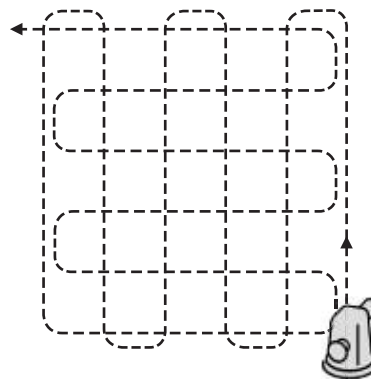
Tip: Cleaning after every sanding operation

To achieve high-quality surfaces, the workpiece surface has to be cleaned after every sanding operation. Otherwise the sanding dust can have an abrasive effect that makes it impossible to achieve a high-gloss surface. We therefore recommend that you clean the workpieces after every sanding operation using a microfibre cloth dry or damp together with siachrome magic.



Tip: Guide control black powder

Applying guide control black powder is recommended because sanding marks are less visible on light workpieces than on dark workpieces. Sanding off this powder ensures that the surface is evenly sanded.



Tip: Consistent sanding pattern

A consistent sanding pattern is achieved by systematically sanding in a "grid pattern". As a result, every point on the surface is sanded in equal measure. To prevent scratches on the workpiece surface, do not start the machine until it is resting on the surface.







Products

1950 siaspeed – at full speed to a perfect surface



Product profile

Grit:	Mixed grit types, semi-friable aluminium oxide, aluminium oxide	
Coating:	Electrostatic (K040 – P600) Special process (P800 – P1500)	
Bonding:	Synthetic resin	
Additional coating:	Stearate	
Backing:	Paper (K40 – P600)	Film (P800 – P1500)
Grit range:	K40 – P1500	

Advantages

- One product for the entire grit range of K40 – P1500 including siasoft
- High-performance abrasive
- Homogeneous sanding pattern
- Longest lifetime

Applications

- Sanding solid surfaces
- Sanding down and fine sanding solid wood
- Keying thick layers of varnish
- Sanding down painted surfaces, primers and fillers

Product	Dimensions	Grit range	Article ID
siafast discs	Ø 150 mm 15-hole	K40 – P1500	7546.2948
	Ø 150 mm 17-hole *		1866.3684
	Ø 125 mm 8-hole		8286.8318
	Ø 125 mm 9-hole		3560.7130
	Ø 80 mm no holes		5816.8425
siasoft perforated rolls	115/125 mm × 25 m	P150 – P600	2237.4334
	110/125 mm × 25 m	P800 + P1000	7621.1023
siasoft sheet	115 × 140 mm	P150 – P600	4564.0566
	110 × 140 mm	P800 + P1000	9947.7255

* for Festool Multi-Jetstream

7940 siaair – the perfect Swiss finish



Product profile

Grit:	White aluminium oxide
Coating:	Special process
Bonding:	Synthetic resin
Backing:	Knitted fabric with foam backing
Grit range:	K240 – K4000

Advantages

- Low scratch depth with high stock removal
- Very long lifetime
- Highly adaptable to edges and contours
- Waterproof and washable

Applications

- Ultrafine sanding of solid surfaces and paint
- Polishing preparation for high-gloss surfaces
- Sanding of UP and PUR varnishes prior to polishing

Product	Dimensions	Grit range	Article ID
siafast discs	Ø 80 mm no holes	K1000, K2000, K3000, K4000	3647.2462
	Ø 150 mm no holes	K240, K360, K500, K600, K800, K1000, K1500, K2000, K3000, K4000	5163.3687
siafast strips	115 x 140 mm	K600, K800, K1000, K1500, K2000	6329.7598

7241 siacarbon – the harder, the more efficient



Product profile

Grit:	Diamond
Coating:	Special process
Bonding:	Synthetic resin
Backing:	Cloth
Grit range:	K80, K120, K180, K240, K320, K500

Advantages

- Very good lifetime and removal rate thanks to state-of-the-art diamond technology
- Excellent performance on hard materials
- Sensational sanding finish
- Full-surface dust extraction
- Can be used moist or dry

Applications

- Scratch-resistant lacquers
- Gelcoat (polyester and epoxy)
- Primers (epoxy)
- Hard solid surfaces
- Aluminium
- Primer and melamine films

Product	Dimensions		Grit range	Article ID
siafast discs	Ø 80 mm	no holes	K80, K120, K180, K240, K320, K500	8486.4459
	Ø 125 mm	no holes		9453.3739
	Ø 150 mm	no holes		9980.9463

7240 siacarat – for sanding scratch-resistant surfaces



Product profile

Grit:	Diamond
Coating:	Special process
Bonding:	Synthetic resin
Backing:	Knitted fabric with foam backing
Grit range:	K500, K1000, K2000, K3000

Advantages

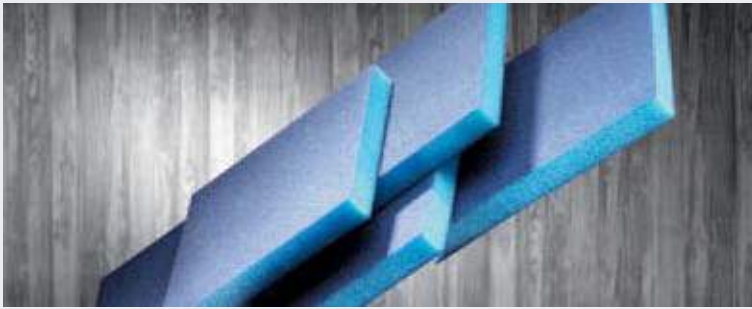
- High-performance diamond grit minerals last up to 40 times longer than conventional abrasives
- Low scratch depth with high stock removal
- Waterproof and washable

Applications

- Sanding scratch-resistant lacquer systems
- Ultrafine sanding of solid surfaces
- Sanding epoxy-based materials
- Matt finishing and refining very hard surfaces

Product	Dimensions		Grit range	Article ID
siafast discs	Ø 80 mm	no holes	K500, K1000, K2000, K3000	8451.8686
	Ø 150 mm	no holes		9967.9911

Standard pad



Product profile:

Grit:	Brown aluminium oxide
Coating:	Two-sided
Backing material:	Foam PUR, solvent-free
Foam density:	Extra-soft, for maximum adaptability
Grit range:	Coarse, medium, medium fine, fine, super fine, super fine white

Advantages

- Pressure-equalising foam gives perfect surface finish
- Adapts perfectly to the workpiece
- Can be used wet or dry
- Low clogging

Applications

- Intermediate varnish sanding on curves, flats and profile rods
- Fine sanding routed profiles such as core boxes and curves
- Fine sanding sinks and curved parts

Product	Dimensions	Fineness	Article ID
Standard pad	97 x 120 x 12 mm	coarse	0020.4160.01
	97 x 120 x 12 mm	medium	0020.4161.01
	97 x 120 x 12 mm	medium fine	0020.4162.01
	97 x 120 x 12 mm	fine	0020.4163.01
	97 x 120 x 12 mm	super fine	0020.4164.01
	97 x 120 x 12 mm	super fine white	0020.4165.01

6120 siavlies speed – for fast and consistent finishing



Product profile

Grit:	Aluminium oxide, silicone carbide
Structure:	Open, nylon fleece
Bonding:	Synthetic resin
Backing:	siafast
Grade:	Very fine, ultra fine, micro fine

Advantages

- Consistent sanding pattern
- Highly flexible, ideal for hard-to-reach areas
- Long lifetime thanks to dense grit coating
- Can be used wet or dry

Applications

- Keying and matt sanding solid surfaces, varnishes and paints
- Removing spray vapour
- Sanding paintwork treated with stripping agents
- Sanding profiled and rounded workpieces

Product	Fineness	Dimensions	Article ID
siafast discs	very fine	Ø 150 mm no holes	7866.2539.6921.01
	ultra fine	Ø 150 mm no holes	7866.2539.8715.01
	micro fine	Ø 150 mm no holes	7866.2539.9913.01

siachrome – Fast, easy, brilliant



Product information

Polishes, pads and cleaning cloths are technically coordinated with each other and are colour coded. Use the recommended pad and polish combinations to achieve the best result.

Advantages

- Complete polishing system consisting of polishes, sealants and pads
- Consistent colour concept for efficient and process-reliable polishing
- Suitable for hard and soft varnishes and solid surfaces

Applications

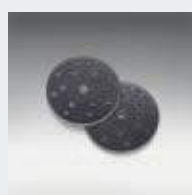
- Buffing up varnishes and solid surfaces
- Removing fine scratches and overspray, holograms

Product	Description	Dimensions / Contents	Article ID
siachrome cut	Abrasive polish with high gloss level	1 kg	0020.6663.01
siachrome finish	Finishing polish for perfect high gloss	1 kg	0020.6664.01
siachrome magic	Cleaning agent for non-streak shine	0.5 l	0020.6666.01
Polishing disc, yellow		Ø 85 mm	0020.6672.01
		Ø 145 mm	0020.6671.01
Polishing disc, black		Ø 85 mm	0020.6675.01
		Ø 145 mm	0020.6676.01
Lambskin disc		Ø 85 mm	0020.6673.01
		Ø 135 mm	0020.6674.01
Premium cloth		400 x 400 mm	0020.6670.01

Accessories



Air chamber backing pad	Article ID
Ø 150 mm, 103-hole (5/16" + M8)	
hard	0020.5741.01
soft	0020.5740.01



Intermediate Pad	Article ID
Ø 150 mm 103-hole with J-Hook	0020.5886.01



Guide control black powder set	Article ID
including 2 cartridges of 30 g each	0020.2302.01



Protection Disc	Article ID
Ø 150 mm	0020.3453.01



Product	Article ID
Microfibre cloth 380x380 mm	0020.3185.01



Backing pad	Article ID
Ø 125 mm, M14	0020.6669.01
Ø 125 mm, 5/8"	0020.6741.01
Ø 75 mm, 5/8"	0020.4899.01



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