



Aerospace

Abrasive systems for the aerospace industry



Your partner for abrasive applications in the aerospace industry – at your service worldwide

As one of the world's leading suppliers of abrasives, we stand for 140 years of expertise, unrivalled innovativeness and one of the most comprehensive ranges of products incorporating solutions for a wide variety of materials.

Our tried-and-tested products are designed to meet the high requirements of the aerospace industry. We focus on surface treatment in the entire process for the manufacture of interior and exterior components, to OEM lacquering, through to maintenance and repair.

sia Abrasives' perfectly coordinated production and logistics concept ensures worldwide availability of products with consistently high quality. Processes which have been approved once can therefore easily be transferred to our customers' other, global locations.

Moreover, our experienced surface experts are on hand to advise you about process optimisation on location.

www.sia-abrasives.com





Tier suppliers

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OEM

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MRO

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Perfect surfaces

- ▶ **Product search**
- ▶ **Technologies**
- ▶ **Products**

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► Tier suppliers

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- Composite components
- Aluminium components
- Metal components

► OEM

from page 20

- Lacquering preparation on primer
- Preparing for logo application
- Finishing, polishing



► MRO

from page 26

- Sanding after chemical paint stripping
- Sanding off paint
- Cabin conditioning
- High-gloss panels



► **Technology leader**
with the highest quality standards



► **Know-how**
for important branches of industry

► **Aerospace**

sia Abrasives assists users in the aviation industry with manufacturing components, sanding fillers or primers, or sanding off old lacquer.



► **Automotive**

With our centre of excellence for the automotive industry, we at sia Abrasives are your experts for the processing of automotive body parts. We place a great deal of emphasis not only on supplying abrasives tailored to the many different requirements of each process step, but also on optimising the customer's entire sanding process from start to finish.



► **Motors and Drives**

sia Abrasives offers a comprehensive range of products for sanding applications, e.g. on camshafts and crankshafts, steering assembly parts, shock absorber parts, valves, hydraulic and pneumatic components, ball bearings etc.



Global partner

At the headquarters of sia Abrasives in Frauenfeld, Switzerland, we develop, produce and distribute complete abrasive systems tailored to specific requirements and applications for the treatment of all surface types. sia Abrasives employs around 1,300 people worldwide and is represented with partners in over 80 countries.

Production expertise

With the commissioning of Maker 5, the world's most modern abrasives production plant, we once again raised the bar. At our location in Frauenfeld we produce and convert coated abrasives for perfect surface treatment of automobiles, wood, metal and composite materials.

Innovative solutions

As a world-leading manufacturer of high-quality abrasives with 140 years of expertise and unrivalled innovativeness, we can offer one of the most comprehensive range of products incorporating solutions for perfect surface finish. We are your abrasives specialists. We have industrial expertise. We know the process steps of our customers and can offer the right sanding solution for any material.

Pioneer and trailblazer since 1875

Frauenfeld stands not only for the future of abrasives production, but also for the tradition of sia Abrasives. Our company was founded here, in the capital of the Canton of Thurgau, in 1867 and began producing coated abrasives in 1875.

Swiss finish

► Wind Power

The wind power industry is built on future-oriented technologies and materials. Tool-optimised abrasive solutions and perfect surface finish can significantly improve energy yield and efficiency.



► Watches and Jewellery

For watch and jewellery manufacturers, sia Abrasives offers high-tech abrasives for surface treatment and finishing of watch cases, bracelets and other items of jewellery made of stainless steel, platinum, gold, silver and titanium.



► Surgery

For manufacturers of implants and surgical instruments, sia Abrasives offers perfect abrasive solutions for metalworking applications such as removal of casting burrs and surface finishing.



▶ **Maker 5**

Welcome to the future

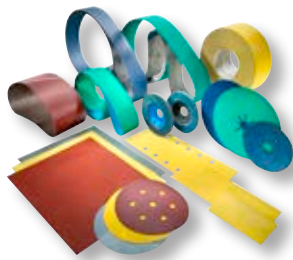


▶ **Types of abrasives**

The right one for everyone

▶ **Coated abrasives**

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



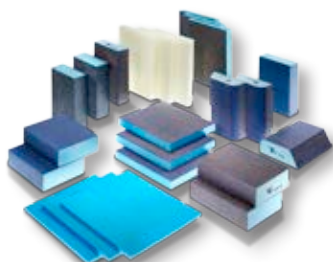
▶ **Nonwoven abrasives**

Nonwoven 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.



World's most modern abrasives plant

The impressive size and complexity of Maker 5 really become apparent when you take a virtual tour through the heart of our abrasives production facility. Numerous finely coordinated components make possible a modularised "just in time" manufacturing process, which will make possible the next generation of modern abrasives.

Impressive production volumes

With Maker 5 we are able to produce 40 million square metres of abrasives a year in addition to our other two production plants in Frauenfeld. With a manufacturing width of one metre, this is the equivalent of once around the globe. In Maker 5 we also use new machines capable of producing sanding belt rolls up to two metres in width. These extra-wide sanding belts have opened up new market segments, for example in the panels industry. Technically, we will continue to improve Maker 5.

Fit for the future

The system is engineered in such a way that we can convert and extend it at any time to keep pace with the growing requirements of markets and our customers.

Our green plant

The plant was constructed according to strict ecological criteria. Optimised air conduction processes and heat recovery systems reduce energy consumption considerably. All harmful substances are destroyed in an exhaust air treatment plant.

Cutting edge technology

▶ Product innovations Always one step ahead

▶ FiboTec

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 on page 34



▶ sianet

The powerful net-backed abrasive with and without ceramic grit. The special net structure enables dust-free sanding with the highest abrasive performance. The ceramic abrasive grit ensures the highest removal rate and longest lifetime.

More information on page 35, 40



▶ siafix

siafix products from sia Abrasives offer a stress-free quick change system for a wide variety of sanding applications on high-alloy metal through to composites, from material removal through to surface finishing – ideal for use in hard-to-reach areas.

For further information visit
www.sia-abrasives.com







Tier suppliers

- ▶ **Composite components**
- ▶ **Aluminium components**
- ▶ **Metal components**

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► Tier suppliers

Supplier industry



► Much shorter processes with top surface quality

The high requirements placed on tier suppliers in the aerospace industry are continually increasing. Complex specifications of the required components and increasingly the outsourcing of sub-processes and overall processes pose great challenges for this sector, such as shorter lead times, higher quality requirements and cost pressure.

The high product performance and long lifetime of sia products enable process times to be shortened, which leads to cost reduction long-term. Our focus is on consistent product quality and convincing abrasive performance that you can rely on. Abrasive systems from sia Abrasives are the solution for your application – whether it is modern composites or metal applications.



Best Practice – Severely clogging materials

Some materials quickly lead to the abrasive becoming clogged, even in the coarse grit range. FiboTec multi-hole combined with the open coating from sia Abrasives 1950 siaspeed ensures the best dust extraction rates and significantly reduces clogging. In addition to this, we recommend the 1948 siaflex series for fine sanding composite materials.

Your advantage: Less consumption of abrasives, reduced downtimes when changing abrasives, and more efficient work processes

Product recommendation	
	1950 siaspeed, FiboTec

► Composite component manufacture

Deburring with an angle grinder



2511 siabite,
siafix

Grit:
120



Page 37

Aggressive abrasive performance with long lifetime due to self-sharpening effect of the ceramic grit

2820 siamet,
siafix

Grit range:
120 – 180



Page 37

All-rounder with high removal rate and very good edge stability and tear resistance

Deburring with a power file



2511 siabite,
siafix

Grit:
120



Page 37

Aggressive abrasive performance with long lifetime due to self-sharpening effect of the ceramic grit

2820 siamet,
siafix

Grit range:
120 – 180



Page 37

All-rounder with high removal rate and very good edge stability and tear resistance

Preparing with a random orbit sander



1950 siaspeed, FiboTec

Grit range:
80 – 320



Page 37

A versatile all-round product with very high abrasive performance and good lifetime

Best results with:
Hard or soft type backing pad

1948 siaflex

Grit range:
80 – 320



Page 36

Highly flexible and adaptable to contours, suitable for general use in dry and wet sanding applications

Best results with:
Hard or soft type backing pad

7900 sianet

Grit range:
80 – 320



Page 40

Powerful net-backed abrasive with the best dust extraction rates

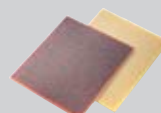
Best results with:
Hard or soft type backing pad

Preparing with manual sanding



7972 siasponge soft

Grit:
medium, fine



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Colour-coded foam products for maximum conformability and process reliability

▶ Aluminium component manufacture

Deburring with a straight grinder



2824 siamet
Grit range:
60 – 150



Page 38

Spiral belt for sanding applications on inner radii or pipes

Deburring with a mini angle grinder



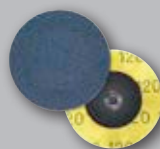
2511 siabite,
siafix
Grit range:
60 – 120



Page 37

Aggressive abrasive performance with long lifetime due to self-sharpening effect of the ceramic grit

2820 siamet,
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Page 37

All-rounder with high removal rate and very good edge stability and tear resistance

Deburring with a power file



2511 siabite,
siafix
Grit range:
60 – 120



Page 37

Aggressive abrasive performance with long lifetime due to self-sharpening effect of the ceramic grit

2820 siamet,
siafix
Grit range:
60 – 120



Page 37

All-rounder with high removal rate and very good edge stability and tear resistance

Smoothing and blending flaws with a mini angle grinder



6924 siamet HD,
siafix
Grit:
coarse



Page 39

High-performance discs for consistent finishing over a long lifetime

6250 sia scm,
siafix
Grit:
coarse



Page 39

Rigid SCM product with best tear resistance for sanding on edges

Lacquering preparation with a random orbit sander

	1815 siatop Grit range: 120 – 180		Page 36	Minimal effort required thanks to rigid backing for tough applications Best results with: Hard or soft type backing pad
	1948 siaflex Grit range: 120 – 180		Page 36	Highly flexible and adaptable to contours, suitable for general use in dry and wet sanding applications with a finer finish Best results with: Hard or soft type backing pad
	7900 sianet 7500 sianet CER Grit range: 120 – 180		Page 40	Powerful net-backed abrasive with the best dust extraction rates Best results with: Hard or soft type backing pad
	7241 siacarbon Grit range: 180 – 320		Page 40	Fastest results with a consistent finish thanks to diamond technology
	6120 siafleece 6130 siafleece HD Grit: very fine		Page 38, 39	Nonwoven abrasive which is highly flexible and adaptable to contours for manual and portable machine sanding

Lacquering preparation with manual sanding

	6120 siafleece Grit: very fine		Page 38	Nonwoven abrasive which is highly flexible and adaptable to contours for manual and portable machine sanding
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Best Practice: High belt stability

If sanding belts tear due to substandard belt joints, it can lead to time-consuming amendments or losses in productivity. The market-leading belt joints from sia Abrasives are made to high quality standards and offer high quality consistency, ensuring a loss-free and efficient production process.

Your advantage: No damage to components thanks to excellent stability and long life of the belt joints

Product recommendation



2511 siabite

2820 siamet



► Metal component manufacture

Deburring with a mini angle grinder



Titanium, inox:
2511 siabite

Grit range:
36 – 60

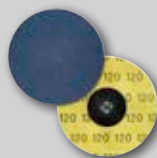


Page 37

Aggressive abrasive performance with long lifetime due to self-sharpening effect of the ceramic grit

Steel:
2820 siamet,
siafix

Grit range:
36 – 60



Page 37

All-rounder with high removal rate and very good edge stability and tear resistance

Titanium, steel:
6924 siamet HD,
siafix

Grit:
coarse



Page 39

High-performance discs for consistent finishing over a long lifetime

Deburring with a power file



Titanium, inox:
2511 siabite

Grit range:
36 – 60



Page 37

Aggressive abrasive performance with long lifetime due to self-sharpening effect of the ceramic grit

Deburring with a straight grinder



Steel:
2824 siamet spiral belt

Grit range:
36 – 150



Page 38

Spiral belt for sanding applications on inner radii or pipes

Deburring with an angle grinder



Titanium:
4515 siabite,
siafix

Grit range:
36 – 60



Page 38

Aggressive, long-life ceramic fibre disc with sturdy backing for tough sanding applications

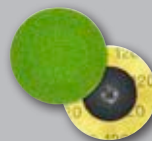
Best results with:
Turbo backing pad for fibre discs

Matching with a mini angle grinder



Titanium, inox:
2511 siabite

Grit range:
60 – 120

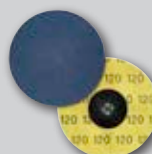


Page 37

Aggressive abrasive performance with long lifetime due to self-sharpening effect of the ceramic grit

Steel:
2820 siamet,
siafix

Grit range:
60 – 120



Page 37

All-rounder with high removal rate and very good edge stability and tear resistance

Matching with a power file



Titanium, inox:
2511 siabite

Grit range:
60 – 120



Page 37

Aggressive abrasive performance with long lifetime due to self-sharpening effect of the ceramic grit

Matching with an angle grinder



Titanium:
4515 siabite

Grit range:
60 – 120



Page 38

Aggressive, long-life ceramic fibre disc with sturdy backing for tough sanding applications

Best results with:
Turbo backing pad for fibre discs

Finishing with a mini angle grinder



Titanium, steel:
6924 siamet HD,
siafix

Grit:
coarse / medium

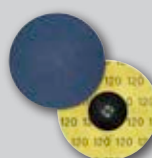


Page 39

High-performance discs for consistent finishing over a long lifetime

Steel:
2820 siamet,
siafix

Grit range:
120 – 180



Page 37

All-rounder with high removal rate and very good edge stability and tear resistance

Finishing with a straight grinder



Steel:
9166 siafleece siamop

Grit range:
extra cut – very fine







OEM

- ▶ **Lacquering preparation on primer**
- ▶ **Preparing for logo application**
- ▶ **Finishing, polishing**

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OEM

Original Equipment Manufacturer



► Tried-and-tested sanding processes for reliable results

Constantly increasing numbers of passengers make for a positive outlook in the international aerospace industry and increase demand for capacities in the OEM sector. Efficient processes and the best-possible first results in OEM lacquering are crucial – regardless of which production site the work is done at.

sia Abrasives can be your partner on location, providing advice and solution-oriented assistance for your application. Our worldwide network

of local sites and service stations ensures consistent product quality and convincing performance on every continent.

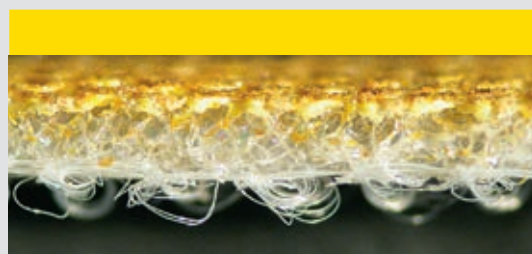
Through its many years of working with partners from the industry, e.g. paint and lacquer manufacturers, sia Abrasives knows the high requirements of OEM companies and is available as a surface specialist to meet global expectations with high quality consistency and reliable service.



Best Practice – Scuffing

A major process step in OEM lacquering is reactivating the primer. Sanding solutions from sia Abrasives enable work to be done more efficiently due to their exceptional product lifetime. Moreover, the sanding finish remains consistent over the majority of the life cycle. High process reliability due to minimal risk of sanding through on edges thanks to the pressure-equalising foam intermediate layer of 7241 siacarbon.

Your advantage: Improved productivity due to consistent results over a long product lifetime



Product recommendation

7241 siacarbon



► Lacquering preparation on primer

Primer sanding, removing dust inclusions or orange peel effect with a random orbit sander



1950 siaspeed, FiboTec

Page 37

Grit range:
120 – 320



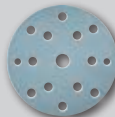
A versatile all-round product with very high abrasive performance and good lifetime

Best results with:
Hard or extra soft type backing pad

1948 siaflex

Page 36

Grit range:
120 – 320



Highly flexible and adaptable to contours, suitable for general use in dry and wet sanding applications

Best results with:
Hard or extra soft type backing pad

7900 sianet

Page 40

Grit range:
120 – 320



Powerful net-backed abrasive with the best dust extraction rates

Best results with:
Hard or extra soft type backing pad

Reactivating primer with a random orbit sander or manual sanding



6130 siafleece HD

Page 39

Grit:
fine A



Very powerful nonwoven abrasive thanks to optimised grit distribution

One-sided grit application to protect the backing pad

6120 siafleece

Page 38

Grit:
very fine A



Nonwoven abrasive which is highly flexible and adaptable to contours for manual and portable machine sanding, with siafast

7241 siacarbon

Page 40

Grit range:
240 – 320



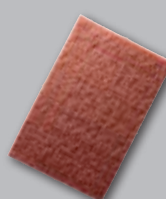
Minimal risk of sanding through on edges for maximum process reliability with a good finish

Best results with:
Hard or extra soft type backing pad
Intermediate pad

6120 siafleece

Page 38

Grit:
very fine A



Nonwoven abrasive which is highly flexible and adaptable to contours for manual and portable machine sanding, with siafast

▶ Preparing for logo application

Keying with a random orbit sander

	1950 siaspeed, FiboTec Grit range: 240 – 600		Page 37	A versatile all-round product with very high abrasive performance and good lifetime Best results with: Hard or extra soft type backing pad, intermediate pad
	1948 siaflex Grit range: 240 – 600		Page 36	Highly flexible and adaptable to contours, suitable for general use in dry and wet sanding applications Best results with: Hard or extra soft type backing pad, intermediate pad
	7900 sianet Grit range: 240 – 400		Page 40	Powerful net-backed abrasive with the best dust extraction rates Best results with: Hard or extra soft type backing pad, intermediate pad
	6120 siafleece Grit: very fine /ultra fine		Page 38	Nonwoven abrasive which is highly flexible and adaptable to contours for manual and portable machine sanding, with siafast

Keying with manual sanding

	1950 siaspeed Grit range: 240 – 600		Page 37	A versatile all-round product with very high abrasive performance and good lifetime
	1948 siaflex Grit range: 240 – 600		Page 36	Highly flexible and adaptable to contours, suitable for general use in dry and wet sanding applications
	7900 sianet Grit range: 240 – 400		Page 40	Powerful net-backed abrasive with the best dust extraction rates

Keying with manual sanding and nonwoven abrasive

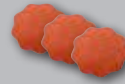
	6120 siafleece Grit: very fine / ultra fine		Page 38	Nonwoven abrasive which is highly flexible and adaptable to contours for manual and portable machine sanding, with siafast
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► Finishing – Polishing

Removing dust inclusions with a mini angle grinder or Finiblock



1913 siawat
Grit range:
1500 – 2000



Page 36

Leading wet abrasive which is highly adaptable to contours and shapes

Removing dust inclusions with manual sanding



1913 siawat
Grit range:
1500 – 2000



Page 36

Leading wet abrasive which is highly adaptable to contours and shapes

Removing dust inclusions with a random orbit sander



7940 siaair
Grit range:
2000 – 3000



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Perfect finish in wet and dry applications for polishing preparation

Best results with:
Extra soft type backing pad,
protective pad

Polishing



siachrome polishing system

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Best results with:
siachrome polishing system
and lambskin discs





MRO

- ▶ **Sanding after chemical paint stripping** Page 27
- ▶ **Sanding off paint** Page 28
- ▶ **Cabin conditioning** Page 28
- ▶ **High-gloss panels** Page 29



MRO

Maintenance, Repair and Overhaul



► Reducing downtimes

Worldwide MRO suppliers are always looking for solutions to reduce their customers’ downtimes – while ensuring consistently high work quality. New technologies and innovative products enable service intervals to be reduced and sanding times to be substantially minimised, for example in lacquering applications, by employing more efficient processes.

Some global MRO players already trust in the high-performance abrasive solutions of sia Abrasives when it comes to reconditioning aircraft, enabling them to reduce downtime costs.

In direct comparison to competitor products, sia Abrasives impresses with shorter process times in time-consuming sanding applications. Extensive sanding tests on original lacquer systems prove that sia products can significantly reduce sanding times.

The following sanding test proves our superior results compared to our competitors. sia sanding systems can achieve a time saving of up to 30%.

Performance comparison



An oscillating sanding motion is used to sand a defined work area with a defined contact pressure. After a sanding time of three minutes, the work rate is compared by means of the material removal rate.

Performance comparison under the following conditions:
Abrasive: 150 mm diameter disc, multi-hole, 15-hole and net-backed abrasive, Grit: 120
Material: BaseCoat / ClearCoat lacquer system, Machine: Eccentric, 150 mm, 5 mm stroke,
Backing pad: Multi-hole soft, with dust extraction, Contact pressure: 2 kg

Result after 3 minutes – considerably more material removal

	1950 siaspeed
	7500 sianet CER
	Competitor A
	Competitor B
	Competitor C

► Exterior – Sanding after chemical paint stripping

Removing paint residues with a random orbit sander



1950 siaspeed, FiboTec

Page 37

Grit range:
180 – 320



A versatile all-round product with very high abrasive performance and good lifetime

Best results with:
Hard or extra soft type backing pad

7900 sianet
7500 sianet CER

Page 40

Grit range:
180 – 320



Powerful net-backed abrasive with the best dust extraction rates

Best results with:
Hard or extra soft type backing pad

7972 siasponge soft

Page 41

Grit:
medium / fine



Colour-coded foam products for maximum conformability and process reliability

Cleaning after chemical paint stripping



Steel:
6120 siafleece
Grit:
very fine A

Page 38, 39

6130 siafleece HD
Grit:
fine A



Very powerful nonwoven abrasive thanks to optimised grit distribution, coated on one side

Titanium, inox:
6120 siafleece

Page 38

Grit:
very fine



Nonwoven abrasive which is highly flexible and adaptable to contours for manual sanding



Best Practice – Radome

The curved shape of the aeroplane's nose (radome) makes uniform surface treatment more difficult and poses a risk of sanding flaws. Use our soft intermediate pad, which adapts to the convex radome shape and transfers contact pressure evenly, to achieve perfect surface quality.

Your advantage: Best surface quality, even on rounded and curved shapes

Product recommendation



1950 siaspeed
7972 siasponge soft
Intermediate pad



► Exterior – Sanding off paint

Paint stripping, removing logos with a random orbit sander



1950 siaspeed, FiboTec

Grit range:
80 – 240



Page 37

A versatile all-round product with very high abrasive performance and good lifetime

Best results with:
Hard or soft type backing pad

1948 siaflex

Grit range:
80 – 240



Page 36

Highly flexible and adaptable to contours, suitable for general use in dry and wet sanding applications

Best results with:
Hard or soft type backing pad

7900 sianet
7500 sianet CER

Grit range:
80 – 240



Page 40

Powerful net-backed abrasive with the best dust extraction rates

Best results with:
Hard or soft type backing pad

► Interior – Cabin conditioning

Keying/sanding off with a random orbit sander



1950 siaspeed, FiboTec

Grit range:
120 – 320



Page 37

A versatile all-round product with very high abrasive performance and good lifetime. FiboTec multi-hole pattern for optimised dust extraction and longer lifetime.

Best results with:
Hard or soft type backing pad

7900 sianet
7500 sianet CER

Grit range:
120 – 320



Page 40

Powerful net-backed abrasive with the best dust extraction rates

Best results with:
Hard or soft type backing pad

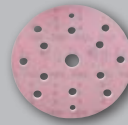
► Interior – High-gloss panels

Spot repair, removing orange peel effect with a random orbit sander



1950 siaspeed

Grit range:
800 – 1500



Page 37

A versatile all-round product with very high abrasive performance and good lifetime. Ultrafine grit range for excellent surface quality.

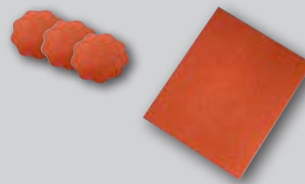
Best results with: Extra soft type backing pad, intermediate pad

Spot repair with Finiblock or hand sanding block



1913 siawat

Grit:
2000, 2500



Page 36

Leading wet abrasive which is highly adaptable to contours and shapes

Best results with:
Finiblock, hand sanding block

Polishing preparation



7940 siaair

Grit range:
1000 – 3000

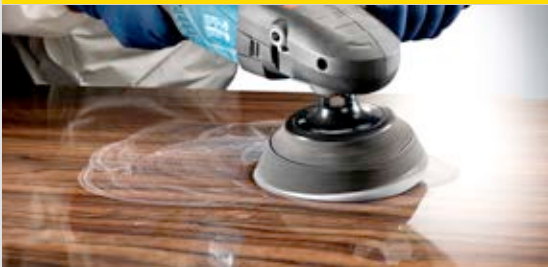


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Perfect finish in damp sanding for polishing preparation

Best results with:
Extra soft type backing pad,
protective pad

Polishing



siachrome cut,
siachrome finish,
siachrome magic



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Best results with:
siachrome polishing discs





Product solutions

- ▶ **Product search**
- ▶ **Technology**
- ▶ **Products**

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Abrasive series for the aerospace industry



	Materials														Conversion forms								Applications				
	Acrylic glass (Plexiglass)	Paints	Primer filler	Gelcoats	Primers	High alloy steels	Plastics	Lacquers	Metals	Non-ferrous metals	Bodyfiller	Other metals with hard to grind surfaces	Non-alloy / low-alloy steels	Composites	Belts	Sheets	Delta and polygons	Flap wheels	Rolls	Foam abrasives	Discs	Strips	System components	Sanding off	Sanding down	Keying	Sanding out
1815 siatop						▼				▼			▼								▼				▼		
1913 siawat		▼	▼		▼			▼			▼					▼			▼		▼	▼			▼	▼	
1948 siaflex	▼	▼	▼	▼	▼		▼	▼	▼		▼			▼		▼	▼		▼		▼	▼			▼	▼	
1950 siaspeed	▼	▼	▼	▼	▼		▼	▼	▼		▼			▼		▼	▼		▼		▼	▼			▼	▼	
2511 siabite						▼			▼			▼			▼				▼							▼	
2820 siamet									▼	▼				▼	▼						▼				▼	▼	
2824 siamet									▼	▼				▼	▼										▼	▼	
4515 siabite						▼															▼					▼	
6120 siafleece		▼		▼	▼	▼	▼	▼	▼	▼			▼					▼	▼		▼	▼	▼				
6130 siafleece HD						▼			▼	▼			▼					▼								▼	
6250 sia scm						▼			▼				▼		▼						▼		▼				
6924 siamet HD		▼			▼	▼			▼	▼		▼	▼								▼				▼	▼	▼
7241 siacarbon				▼	▼		▼	▼	▼												▼	▼					
7500 sianet CER		▼	▼	▼	▼		▼	▼	▼		▼			▼					▼		▼	▼		▼		▼	
7900 sianet		▼	▼	▼	▼		▼	▼	▼		▼								▼		▼	▼		▼		▼	
7940 siaair		▼		▼			▼	▼											▼		▼	▼					
7972 siasponge soft		▼	▼		▼		▼	▼												▼	▼	▼				▼	

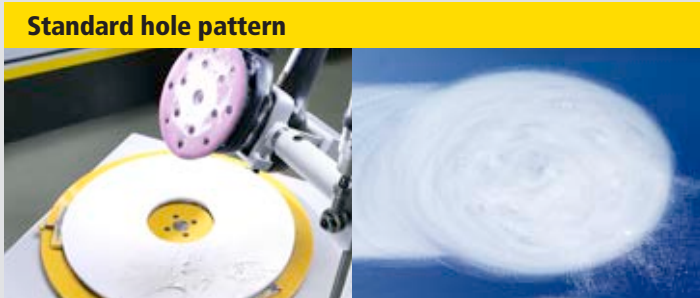


Applications													Use				Backings													
	Removing discolouration	Removing rust and paint	Deburring	Fine sanding	Finishing	Blending	Lacquer retouching	Scuffing	Surface treatment	Flatting	Polishing	Weld preparation	Structuring	Portable machine sanding	Manual sanding	Stationary belt sanding	Stationary machine sanding	Fibre	Cloth rigid	Paper light	Paper heavy	Special	Fleece	Wet sanding	Self-adhesive	siafast	siasoft	Dry application	Available in grit ranges:	Page:
	▼	▼	▼						▼				▼	▼			▼	▼			▼				▼	▼		▼	24-150	36
				▼			▼	▼		▼				▼	▼	▼	▼			▼				▼	▼	▼			60-3000	36
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				▼										▼	▼		▼			▼						▼	▼	▼	40-1500	37
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	▼	▼	▼			▼			▼			▼		▼		▼			▼									▼	36-400	37
	▼	▼	▼			▼			▼			▼		▼		▼			▼									▼	36-150	38
	▼		▼			▼			▼			▼		▼		▼		▼										▼	36-120	38
	▼	▼	▼				▼						▼	▼	▼		▼					▼	▼	▼		▼	▼	▼	coarse – ultra fine S	38
	▼	▼	▼		▼									▼		▼						▼	▼	▼			▼	▼	coarse – super fine A	39
	▼	▼	▼			▼			▼					▼			▼					▼	▼	▼			▼	▼	extra coarse – very fine	39
	▼	▼	▼	▼	▼	▼		▼						▼								▼					▼	▼	extra coarse – medium	39
														▼									▼	▼		▼	▼	▼	80-500	40
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				▼				▼			▼				▼							▼				▼	▼	▼	medium – micro fine	41

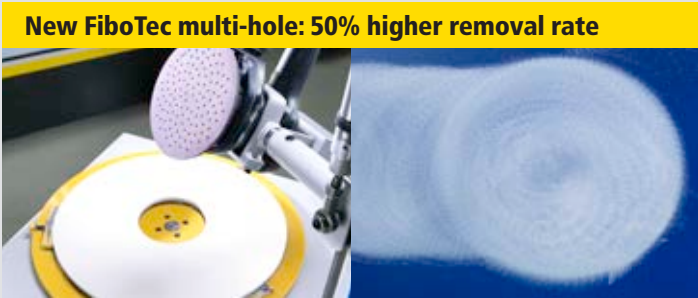
FiboTec

**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 longer abrasive life.



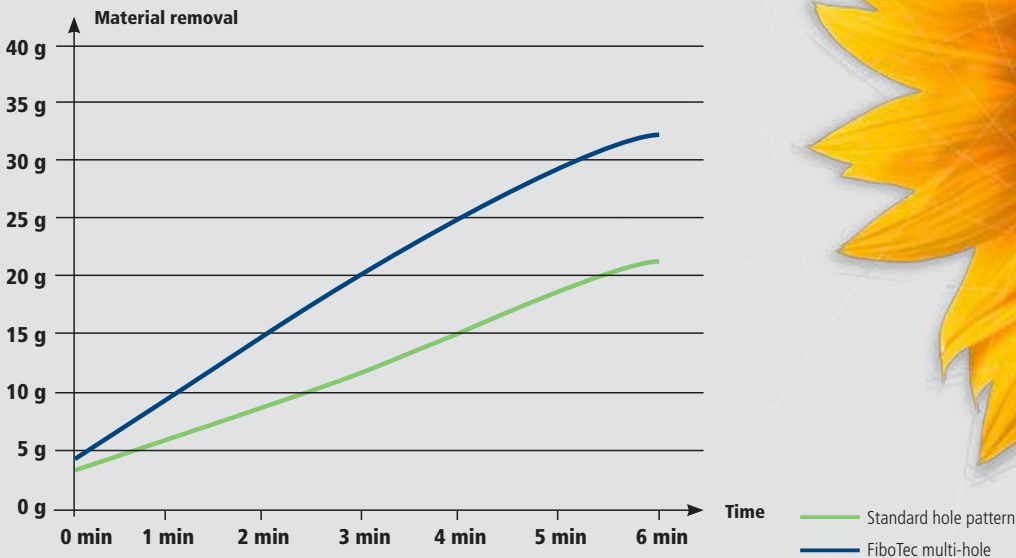
Stringent, robot-aided testing in laboratory conditions produced astounding performance results:
Depending on material and application, FiboTec works four times longer than standard abrasive discs.



- 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



Net-backed abrasives

Full surface dust extraction thanks to open net backing

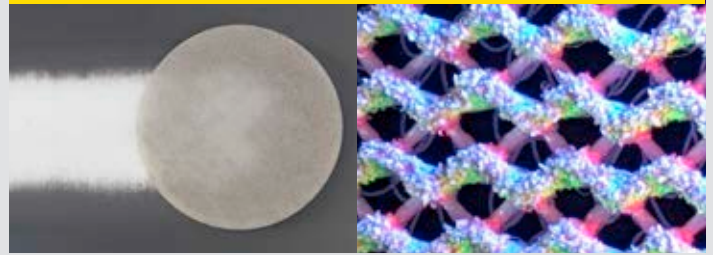
Grit on a net backing enables full surface dust extraction thanks to the open backing structure. For the first time, this dust extraction ensures a virtually dust free work environment in which one's health is protected, process reliability is improved and the lifetime of the abrasive is increased.

Grit on a cloth/paper backing



Grit on a cloth or paper backing is embedded in binder resin on the whole surface, and dust extraction is enabled by punched holes. The grit is glued together and has little space to incorporate dust, which can strongly influence the lifetime of the abrasive.

Grit on a net backing

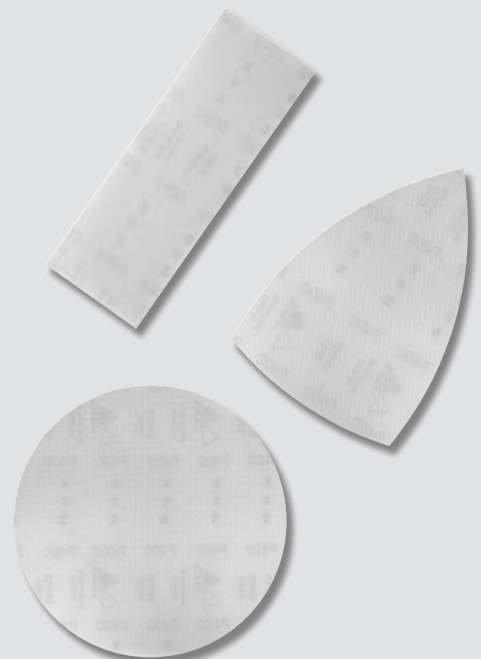
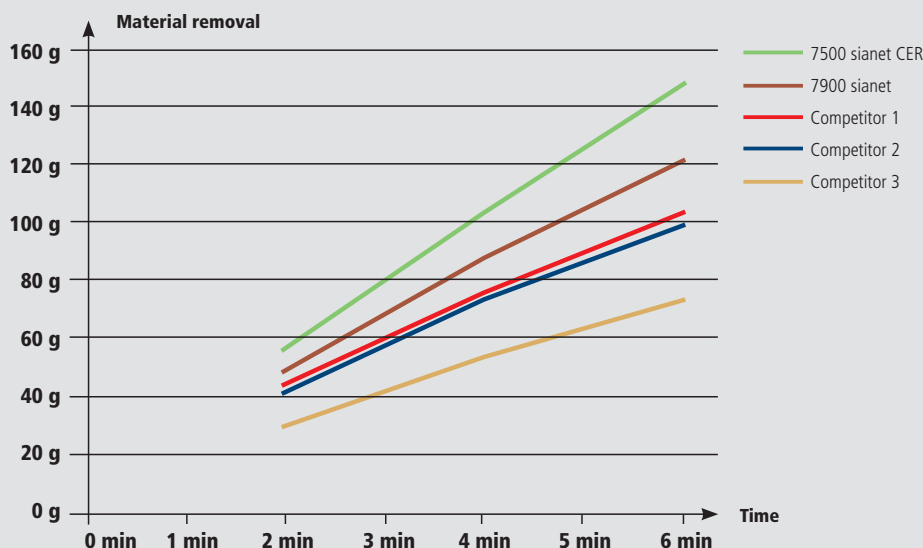


A net backing, consisting of a polyester fibre, is coated using a modern specific manufacturing procedure. Thanks to a sophisticated process, only the top fibre of the net is coated with grit. The inner, functional structure and the back of the abrasive with the siafast fastening loops remain free of grit.

This precise grit coating ensures full surface dust extraction for a dust free work environment and maximum removal rate.

Performance comparison

Abrasive: 7500 sianet CER, 7900 sianet, competitor product 1, competitor product 2 and competitor product 3
Grit: 180
Material: Bodyfiller
Machine: Eccentric, 150 mm, 5 mm stroke. Backing pad: 103-hole, soft
Robotised machine under laboratory conditions



1815 siatop – Fast and cost-effective surface treatment of steel and non-ferrous metals



Product profile

Grit type:	Zirconia alumina	
Grit range:	24 – 150	
Backing:	Fibre	24 – 40
	f-wt paper	50 – P150
Coating:	Closed	
Bonding:	Resin over resin	
Coating:	Cooling additive	

Advantages

- Outstanding performance in dry sanding applications
- Fast and safe change of abrasive with siafast hook and loop fastening system
- The low-cost alternative to fibre discs
- Minimal effort required for high stock removal

Application

- Removal of paint
- Removal of rust
- Weld preparation
- Removing discolouration
- Sanding down
- Surface treatment
- Deburring

1913 siawat – Wet sanding quality



Product profile

Grit type:	Semi-friable aluminium oxide	P60 – P1200
	Silicon carbide	P1500 – P2500
Grit range:	60 – 3000	
Backing:	d-wt paper	P60 – P600
	c-wt paper	P800 – P2500
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

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

1948 siaflex – Flexibility for any application



Product profile

Grit type:	Blue-fired aluminium oxide/white aluminium oxide	
Grit range:	40 – 1500	
Backing:	Paper	
Coating:	Electrostatic	P40 – P180
	Electrostatic open	P220 – P600
	Electrostatic	P800 – P1500
Bonding:	Resin over resin	
Coating:	Stearate	P180 – P800

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 coatings and impurities
- Sanding out unevenness at the edges of repaired surfaces
- Flattening bodyfiller and primer fillers
- Fine sanding primer fillers
- Keying old and new lacquers
- Removing orange peel effect and dust inclusions

1950 siaspeed – At full speed to a perfect surface



Product profile

Grit type:	Mixed grit types	40 – 80
	Semi-friable aluminium oxide / blue-fired	P100 – P600
Grit range:	40 – 1500	
Backing:	Paper	
Coating:	Electrostatic open	P220 – P600
	Electrostatic	40 – P180
Bonding:	Resin over resin	
Coating:	Stearate	from 80

Advantages

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

Application

- Keying polyesters and composites
- Sanding out feather edges, flash rust and stone chips
- Shaping bodyfiller and primer fillers
- Keying new components and factory primers
- Sanding down old lacquer
- Scuffing old and new lacquers for blending
- Flattening bodyfiller, primer fillers and lacquers

2511 siabite – The performance specialist



Product profile

Grit type:	Ceramic aluminium oxide
Grit range:	36 – 120
Backing:	y-wt cloth
Coating:	Closed
Bonding:	Resin over resin
Coating:	Cooling additive

Advantages

- Less machine interruptions thanks to long lifetime
- Minimal effort required thanks to highly aggressive abrasive grit
- Heat-reduced cutting thanks to active additive with cooling effect
- More efficiency thanks to the highest performance
- Improved flexibility for power files thanks to special flexing

Application

- Weld preparation
- Sanding down
- Deburring
- Smoothing and blending of flaws
- Removing discolouration
- Surface treatment
- Structuring and final sanding

2820 siamet – The cost-effective specialist for a wide range of applications



Product profile

Grit type:	Zirconia alumina
Grit range:	36 – 400
Backing:	y-wt cloth
Coating:	Closed
Bonding:	Resin over resin
Coating:	Cooling additive

Advantages

- High edge stability, high initial tearing resistance
- High performance for all metals
- Aggressive cut

Application

- Removal of paint
- Removal of rust
- Weld preparation
- Removing discolouration
- Sanding down
- Surface treatment
- Deburring
- Smoothing and blending of flaws

2824 siamet – Leading performance in metalworking applications



Product profile

Grit type:	Zirconia alumina
Grit range:	36 – 150
Backing:	y-wt cloth
Coating:	Closed
Bonding:	Resin over resin
Coating:	Cooling additive

Advantages

- Aggressive cut
- High performance for all metals

Application

- Deburring
- Removal of rust
- Weld preparation
- Sanding down
- Removing discolouration
- Surface treatment
- Smoothing and blending of flaws

4515 siabite – The ceramic fibre disc for heavy-duty applications



Product profile

Grit type:	Ceramic aluminium oxide
Grit range:	36 – 120
Backing:	Fibre
Coating:	Closed
Bonding:	Resin over resin
Coating:	Cooling additive

Advantages

- High-performance product with ceramic aluminium oxide
- Active additives with a cooling effect greatly reduce discolouration
- Sturdy fibre backing

Application

- Weld preparation
- Removing discolouration
- Sanding down
- Surface treatment
- Smoothing and blending of flaws
- Deburring

6120 siafleece – For even surface finishes in manual and portable machine sanding



Product profile

Grit type:	Aluminium oxide Silicon carbide
Grit range:	coarse – ultra fine S
Backing:	Nonwoven
Coating:	Mechanical
Bonding:	Resin over resin

Advantages

- Highly flexible and adaptable to contours
- For manual or portable machine sanding
- Low clogging
- Suitable for general use in dry and wet sanding applications

Application

- Removal of rust
- Removing discolouration
- Structuring / finishing

6130 siafleece HD – The basis for highest surface quality



Product profile

Grit type:	Aluminium oxide Silicon carbide
Grit:	coarse – super fine A
Backing:	Nonwoven
Coating:	Mechanical
Bonding:	Resin over resin

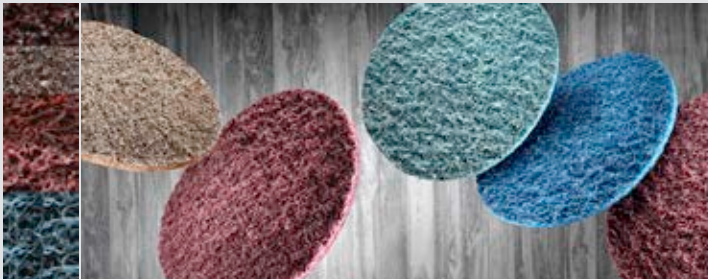
Advantages

- Increased lifetime as a result of the grain distribution through the fleece
- No damage to the backing pad thanks to one-sided coating
- High flexibility for hard-to-reach areas
- Consistent sanding pattern due to improved grain consistency
- High tear resistance
- Low clogging
- Burr-free sanding
- Can be used wet or dry

Application

- Finishing of stainless steel on grained surfaces (matt finish)
- Satin finishing of surfaces
- Finishing to prepare for coating and electroplating
- Weld blueing removal from stainless steel
- Removal of light oxide
- Light deburring
- Removal of casting seams

6250 sia scm – The flexible and powerful solution for an optimal surface finish



Product profile

Grit type:	Aluminium oxide
Grit range:	extra coarse – very fine
Backing:	Nonwoven
Coating:	Mechanical
Bonding:	Resin over resin

Advantages

- Long lifetime
- Excellent surface quality
- Suitable for general use in dry and wet sanding applications

Application

- Deburring
- Removal of rust and paint
- Removing discolouration
- Surface treatment
- Smoothing and blending of flaws
- Structuring / finishing

6924 siamet HD – High-performance discs for surface finishing of steels



Product profile

Grit type:	Aluminium oxide
Grit range:	extra coarse – medium
Backing:	Nonwoven
Coating:	Mechanical
Bonding:	Resin over resin

Advantages

- Major time-saving thanks to highest aggressiveness and highest stock removal rates
- Excellent performance on hard materials
- More durable so more resistant on edges
- Considerably more resistant to smearing than existing products; especially at the edge of the disc when working at tight angles
- Excellent and consistent finish over a long period of time

Application

- Smoothing and blending of flaws
- Sanding down
- Light deburring
- Removing polishing scratches
- Removing discolouration
- Removing paint
- Removing rust

7241 siacarbon – The harder, the more efficient



Product profile

Grit type:	Diamond
Grit range:	80 – 500
Backing:	Cloth
Coating:	Special process
Bonding:	Resin over resin

Advantages

- Excellent performance on hard materials
- Extremely long lifetime thanks to state-of-the-art diamond technology
- Full-surface dust extraction
- No dependence on hole system
- Minimal risk of sanding through on edges
- Increased efficiency due to measurable time-saving
- Consistent removal rates

Application

- Keying scratch-resistant lacquer systems and composite materials
- Keying new components and factory primers
- Keying aluminium

7500 sianet CER – The powerful net-backed abrasive with ceramic grit



Product profile

Grit type:	Ceramic aluminium oxide
Grit range:	80 – 400
Backing:	Knitted fabric
Coating:	Electrostatic
Bonding:	Resin over resin

Advantages

- Full-surface dust extraction
- No dependence on hole system
- High removal rate without clogging
- High tear resistance thanks to sturdy net backing
- High-performance product with ceramic aluminium oxide

Application

- Sanding down coatings and impurities
- Keying primers
- Fine sanding solid wood, veneers, solid surface materials, priming foil, plaster and plasterboard
- Intermediate sanding of lacquers

7900 sianet – The powerful net-backed abrasive



Product profile

Grit type:	Blue-fired aluminium oxide / white aluminium oxide
Grit range:	80 – 400
Backing:	Knitted fabric
Coating:	Electrostatic
Bonding:	Resin over resin

Advantages

- Full-surface dust extraction
- High removal rate without clogging
- Very efficient and productive
- High tear resistance thanks to sturdy net backing
- Ideal for wood that smears or wood containing oils or resins

Application

- Sanding down coatings and impurities
- Keying paints, lacquers, bodyfillers, primer fillers and plastics
- Keying primers
- Fine sanding surfaces and edges
- Intermediate sanding of lacquers
- Preparation for polishing on high-gloss surfaces
- Fine sanding solid wood, veneers, solid surface materials, priming foil, plaster and plasterboard

7940 siaair – The perfect Swiss finish



Product profile

Grit type:	Aluminium oxide
Grit range:	240 – 4000
Backing:	Knitted fabric with foam backings
Coating:	Special process
Bonding:	Resin over resin

Advantages

- High stock removal rates and excellent finish
- Low clogging thanks to damp sanding
- Extremely long lifetime
- Highly adaptable to contours, curves and profiles
- Pressure-equalising foam gives perfect surface finish
- Waterproof and washable
- Resistant to silicon remover

Application

- Matt finishing of conventional old and new lacquers as well as composite materials
- Fine sanding of primer fillers in hard-to-reach areas
- Producing a matt finish for blending
- Preparation for polishing on high-gloss surfaces

7972 siasponge soft – For dry sanding in hard-to-reach areas



Product profile

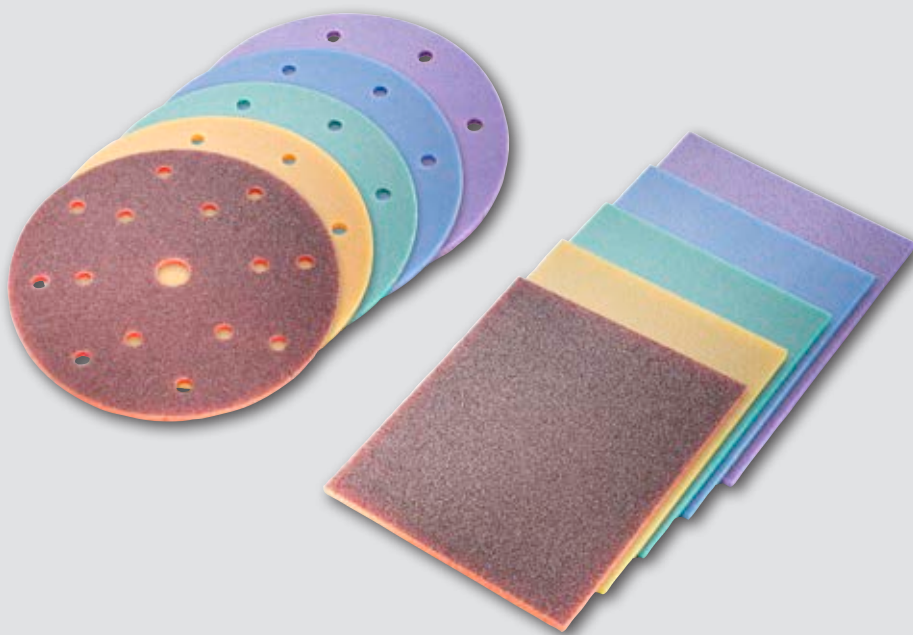
Grit type:	Aluminium oxide
Grade:	medium – micro fine
Backing:	Foam (closed structure)
Coating:	Mechanical
Bonding:	Elastic binder
Coating:	1-sided

Advantages

- Colour coded for easy identification
- Low clogging thanks to 3D properties imparted by foam, binder system and grit
- Minimal risk of sanding through from high contact pressure
- Moulds itself to the workpiece
- Regular scratch depth due to consistent grinding performance
- No risk of sanding through thanks to pressure-equalising foam

Application

- Keying conventional old and new lacquers, primer fillers and paints
- Fine sanding primer fillers in hard-to-reach areas
- Scuffing lacquers
- Keying wood, composite materials, paints, lacquers and primer fillers
- Flatting fillers
- Intermediate sanding of lacquers



siachrome – The fast, simple and brilliant polishing system



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

Application

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

Backing pads for random orbit sanders



From extra soft to hard, available in a wide variety of hole patterns and dimensions, the sia backing pads are the perfect addition to our coordinated abrasive systems – for your sanding application, suitable for market-standard fastening systems.

Advantages

- Comprehensive product range

Application

- Flatting, fine sanding, scuffing and microfinishing with dual action sander

Backing pads for rotary sanders



Comprehensive backing pad range in a wide variety of dimensions, hardnesses and fastening systems.

Advantages

- Comprehensive product range

Application

- Coarse sanding to fine sanding with a rotary sander

Intermediate and protective pads



Pressure-equalising intermediate pads provide optimum protection against sanding through on edges. Available in a wide variety of dimensions and hole systems.

Advantages

- Optimum adaptation of the abrasive to the workpiece
- Less sanding through on edges

Application

- Sanding on rounded and curved shapes
- Fine sanding and finishing in the ultrafine grit range

Standard hand sanding tools



Compatible, fully integrated system including files, blocks with suction hose and fasteners. The complete range of hand sanding tools 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

- Flattening and fine sanding different materials such as bodyfiller or primer filler

Flexible hand sanding tools – The solution for shaping



Compatible, fully integrated system including files, blocks with suction hose and fasteners. The complete range of hand sanding tools 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

Hand sanding blocks



The complete abrasive system also includes the sia hand sanding blocks and pads from the smallest dimensions for spot repair through to special forms for wet sanding in a wide variety of grades.

Advantages

- Problem solvers for special applications

Applications

- Suitable for flattening, for correcting flaws and for sanding concave and convex shapes
- Product solutions for dry and wet sanding
- Special applications
- Clear coat rework



Your Key to a Perfect Surface

www.sia-abrasives.com