

High-performance coated abrasives for the boardmaking industry



Expertise

Your Key to a Perfect Surface

sia Abrasives is one of the world's most successful suppliers of abrasives and sanding systems. Our success is based on innovative management and sound financial structures, enhanced by above-average reliability, excellently trained staff and a wealth of in-depth experience. In fact, we have been concentrating on our core competence – surface processing – for more than 130 years. This focus guarantees that our business partners will find that we are always ready to make the maximum effort – we supply quality products at value-for-money prices. Working on a basis of trust, we are fully committed to achieving maximum customer satisfaction.

www.sia-abrasives.com



Quality products

Made in Switzerland

Carefully selected first-class raw materials, ultra-modern production and packaging plant, and highly advanced sia production technologies – these are the factors that guarantee consistently high-quality products. sia abrasives are developed on the basis of detailed material analysis to meet demanding user needs. This means that sia abrasives are representative examples of high-grade Swiss precision and quality workmanship – in line with our goal, «commitment to top quality surfaces». sia Abrasives' quality management system is certified to ISO 9001.

Ecology

Use sia abrasives for the good of the environment:

1. Ecological responsibility

In the development, procurement and manufacture of sia abrasives, we accord high priority to protecting people, the environment and resources – reflected by ISO 14001 certification of the sia Abrasives environment management system since January 2004.

2. Clean production

Modern bonding systems and extensive extracted air purifying installations ensure that all sia abrasives are produced in an environmentally friendly way, free of emissions.

3. Safe disposal

All sia abrasives are free from hazardous materials and can be safely and harmlessly disposed of in conventional industrial and public waste incinerators.

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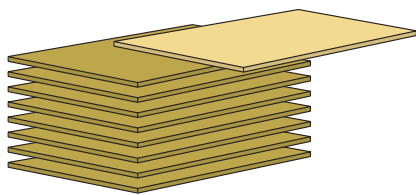
04 – 09

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Customer advice



On-site – professional to professional

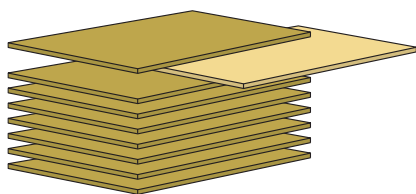
As requirements become more and more complex, there is an increasing need for specific expertise. Our specialists bring their many years of experience to your door, helping you find optimum solutions to every question involving sanding technology.

We place a great deal of emphasis on providing advice – for example, correct handling of the sanding belts can save time, reduce waste and thereby bring cost savings. On request, we can even offer sanding seminars tailored to your requirements.

Even after excellent training, sanding problems can still occur, and in these cases our sanding technicians are on hand to offer personal assistance either on site or by telephone.

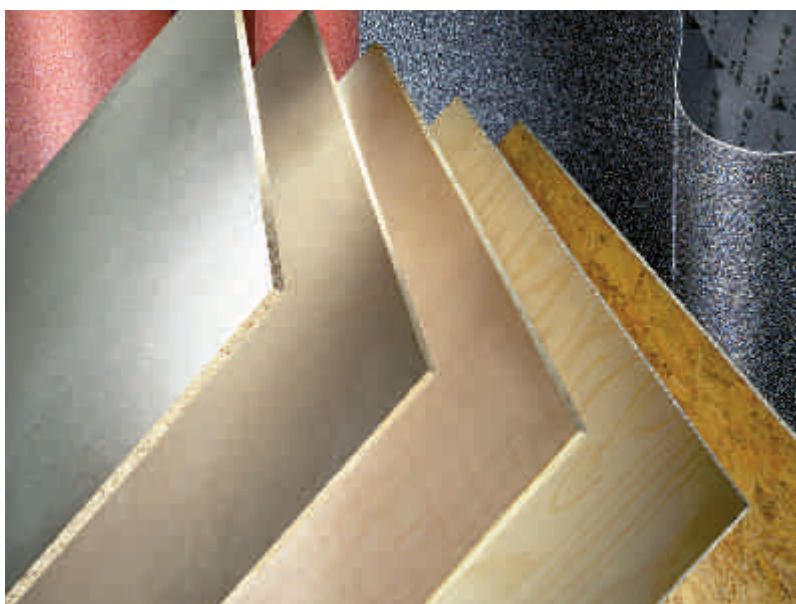


Surface technology

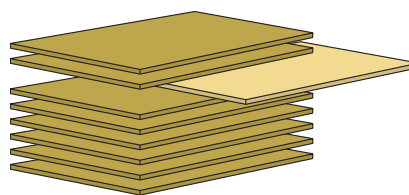


Cost-effective, profitable and efficient

Perfect surfaces are becoming more important all the time. Our comprehensive high-performance system guarantees top results, meeting board manufacturers' requirements for cost-effectiveness, profitability and efficiency. The required surface quality is achieved by a carefully coordinated combination of the correct abrasive and the ideal belt joint, sanding machines and material. Our highly experienced specialists know the right solution for every application.



Machining process



On-site professional analysis

To enable you to optimise your machining process, our sanding technicians will pass on their knowledge and experience of how to use the right product, as well as the correct grit sequence for calibration, intermediate and final sanding. Their recommendations take full account of key factors such as cutting speed and chip removal. Close cooperation with leading sanding machine manufacturers and board producers ensures that our range meets the needs of our customers, helping them reduce costs by using the appropriate abrasives.



Cost saving

Reduction of machine downtimes by:

- Using high-quality abrasives
- Applying our high-tech siaslide pad system
- Regular servicing of the sanding pads (felt or PUR strips and graphite cloth)
- Carrying out general maintenance work
- Using a belt loading aid
- Not wearing the belts out to the stage of joint damage and breakage
- Compliance with the correct belt handling and storage recommendations



Imeas



Binos

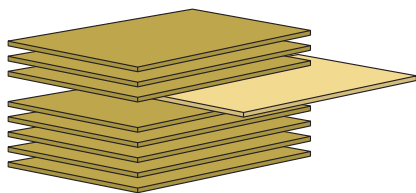


Kimwood



Steinemann

Abrasives

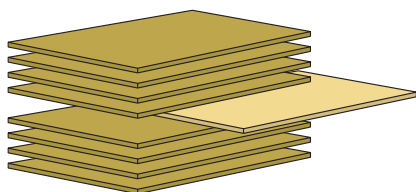


High-tech belts in Swiss precision

siapan belts are state-of-the-art products, manufactured with meticulous care from selected raw materials. This is why they meet the most demanding requirements regarding stability and surface quality. Belt joints are extremely important elements in the structure of a sanding belt. They have to be carefully chosen to match the application and the particular abrasive product. Every belt joint has a major influence on the surface quality of the boards, because even the slightest imperfections are discernible on the workpiece.

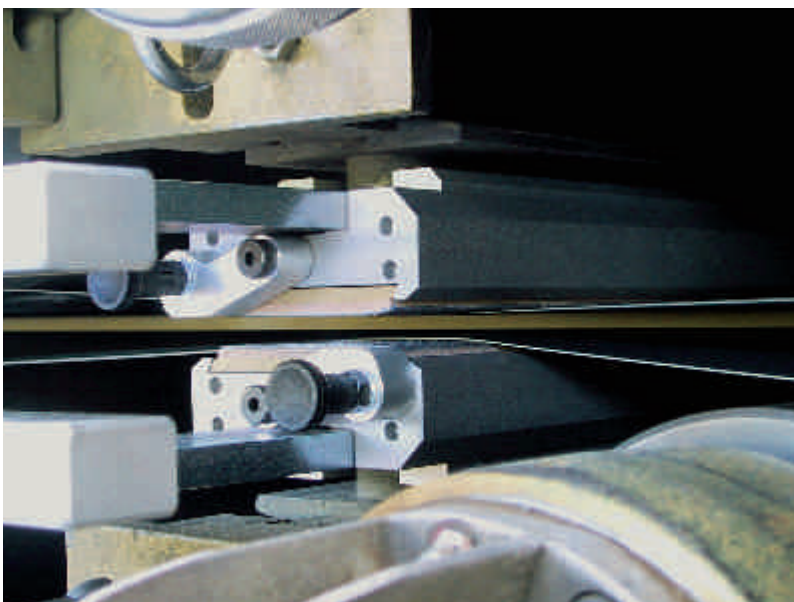


Tools and accessories



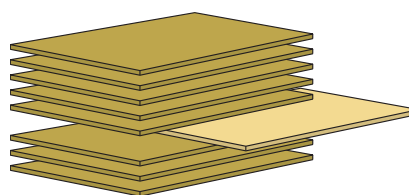
Comprehensive range

Our comprehensive range of accessories, both for our unique siaslide pad system and for all conventional sanding pad types, comprises products that have been tried and tested in practical use. Expertise in selecting the right sanding pad to meet the requirements of the application is the key to a perfect sanding result.





Application training

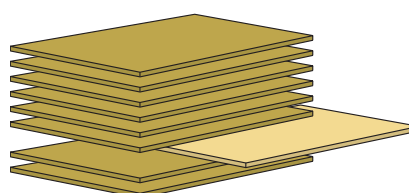


Customer-specific seminars in Switzerland

Every year, many specialists from a very wide range of industrial sectors receive comprehensive training at our training centre in Frauenfeld. In the calm and relaxed atmosphere of our seminars, participants can extend their knowledge of the products and exchange their experiences. This is the starting point of many long-lasting business relationships.



Documentation

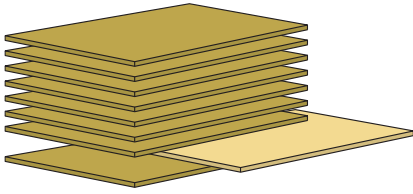


Application-orientated, safe and clear

A variety of documentation, such as product data sheets, belt-handling recommendations, and storage and transport recommendations provide valuable reference to complement the information provided by our specialists.

In particular, we draw your attention to FEPA safety recommendations and FEPA safety data sheets for abrasives on backing materials. You can download these documents from our website at www.sia-abrasives.com.

Packaging



Perfect protection

siapan belts for the boardmaking industry are packaged in special cartons to ensure perfect protection during transport and storage. For paper and combination belts, an additional airtight polyethylene packaging is used to provide extra protection from changing climatic conditions.

Clear marking of every packaging unit

- Number
- Form number
- Grit size
- Product name and number
- Dimensions
- Order number
- Article number
- Pictogram showing type of abrasive
- Barcode
- Safety symbols

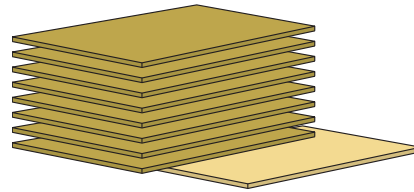
All sia abrasives are extremely resistant under normal climatic conditions. Suitable storage will ensure that the full performance characteristics are maintained.

Optimum storage

- Storage in the original cartons, in a horizontal or vertical position
- No direct contact with concrete floors (possibility of moisture absorption)
- Do not store near open windows (draughts) or in the direct vicinity of heaters
- Ideal storage temperature: 18°C – 25°C
- Relative humidity: approx. 55%
- Paper and combination (paper/cloth) belts should be removed from the packaging two days before use and properly hung



Distribution



The right quantity to the right place at the right time

Worldwide sales of our products and services are guaranteed as a result of an extremely efficient, intelligent distribution system. Our local specialists spare no effort to keep improving the system, constantly adapting it to our customers' needs.

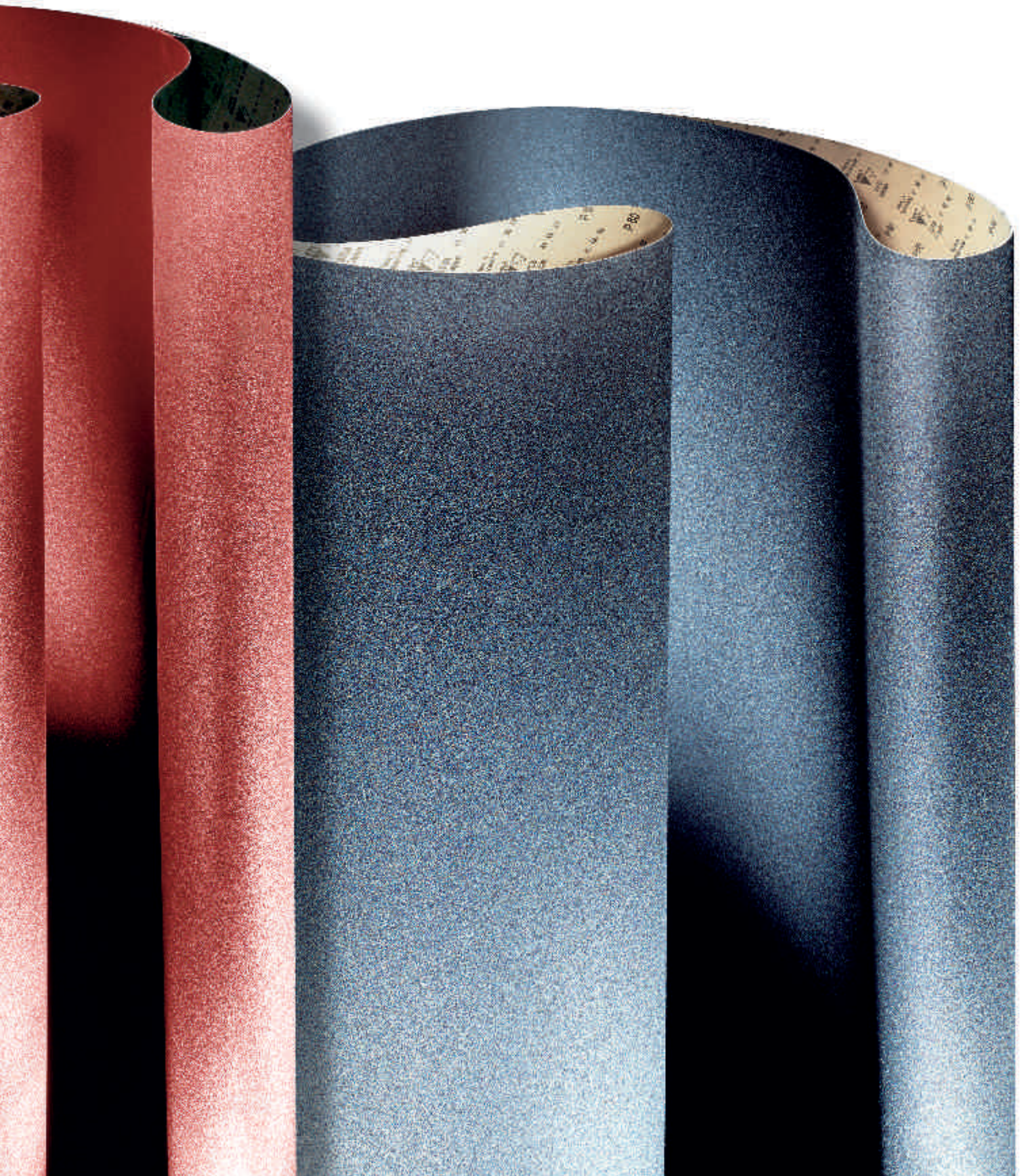
The sia group has a presence in more than 85 countries throughout the world, with 15 group companies and a large number of proven agencies.





Your Key to a Perfect Surface

Made in Switzerland by sia Abrasives



siapan high-tech belts

siapan belts are state-of-the-art products manufactured with meticulous care from selected raw materials, to meet the most demanding requirements for stability and surface quality.



1718 siapan TopTec

Material	Use	
Particle boards MDF boards HDF boards	Calibration sanding	
	Intermediate sanding	
	Final sanding	
OSB boards	All sanding operations	
Plywood boards Core boards Glued wooden boards Formboards	Calibration sanding	
	Intermediate sanding	
	Final sanding	
Synthetic resin boards Laminates	All sanding operations	
	Roughening reverse	

Grit range

P024	
P036	
P040	
P050	
P060	
P080	
P100	
P120	
P150	
P180	
P220	

Backing	g-weight paper
Grit type	silicon carbide
Sanding belt width	refer to key *
Belt joint	



P060 – P220
The upper and lower sections are ground to a scarf joint and glued together. No excess thickness, for a surface finish without chattermarks.

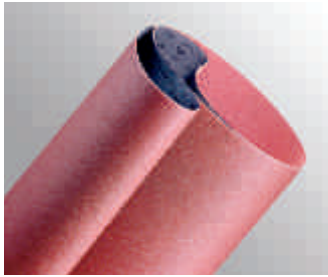
Recommendations

- Emphasis on efficiency or the rate of chip removal
- Exceptions
- Emphasis on finish or board surface quality
- Exceptions

* The critical limit starts at belt width 2800 mm. Use of a belt loading aid is essential from belt widths of 1600 mm upwards.



















































2718 siapan z TopTec



2918 siapan z TopTec



3708 siapan TopTec

z-weight polyester cloth

silicon carbide

up to 3300 mm



P024 – P180

Spliced joint with tape inserted on the grit side, no excess thickness anywhere in the grit range.



P024 – P050 (available on request)

Joint for the coarse grit range.
The grit coating is ground down in the overlapped area.

z-weight polyester cloth

semi-friable aluminium oxide

up to 3300 mm



P036 – P040

Joint for the coarse grit range.
The grit coating is ground down in the overlapped area.



P050 – P120

Joint for the fine grit range.
The grit coating is ground down in the overlapped area.

paper/cloth combination

silicon carbide

up to 3300 mm



P036 – P050

The grit coating is ground off in the area of the overlapped cloth layer.



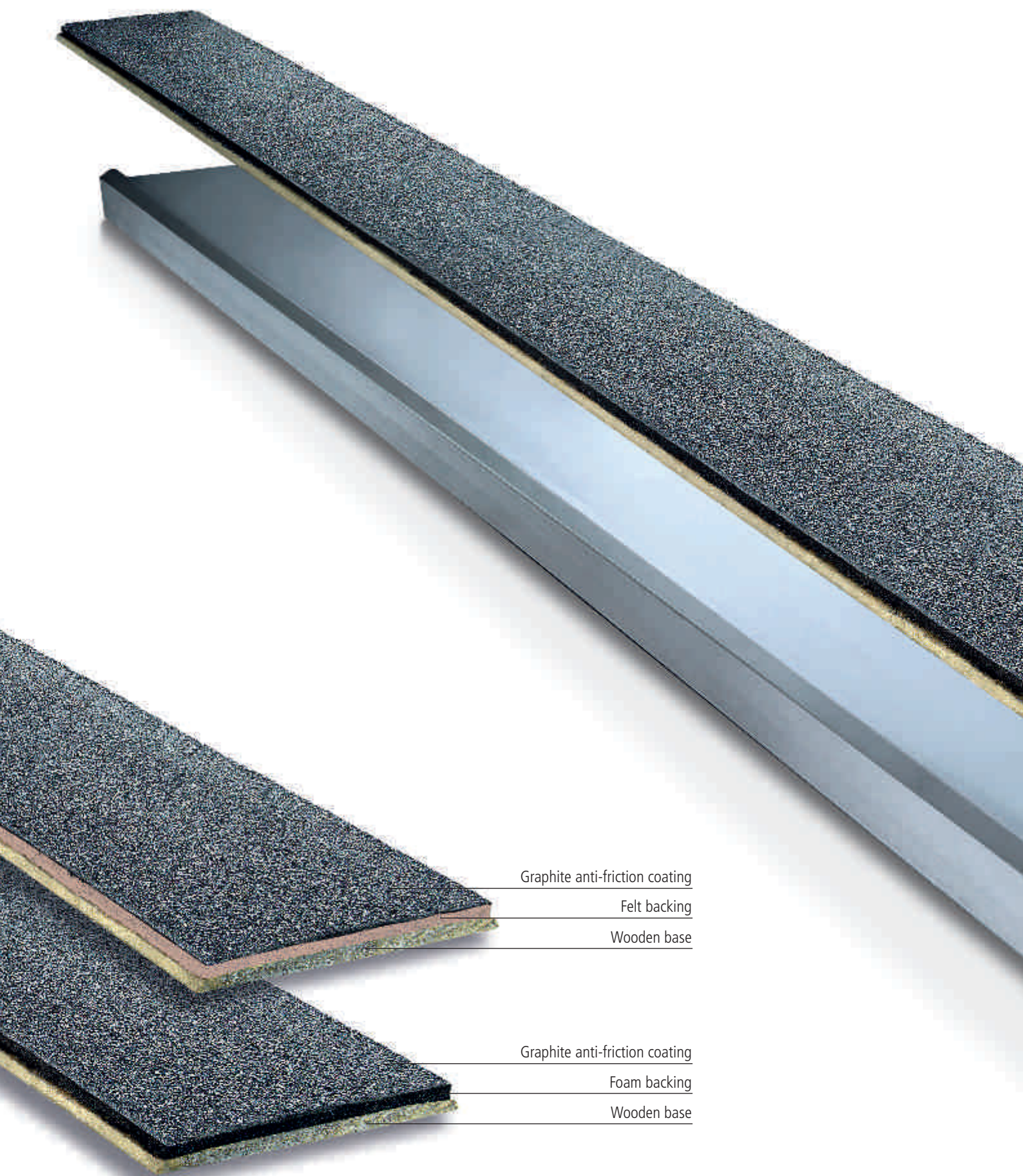
P060 – P120

Combination of overlapped and spliced joint with tape inserted on the grit side.



P150

Tape is glued with paper by $\frac{2}{3}$ and with cloth by $\frac{1}{3}$, thinner below the joint.



Graphite anti-friction coating

Felt backing

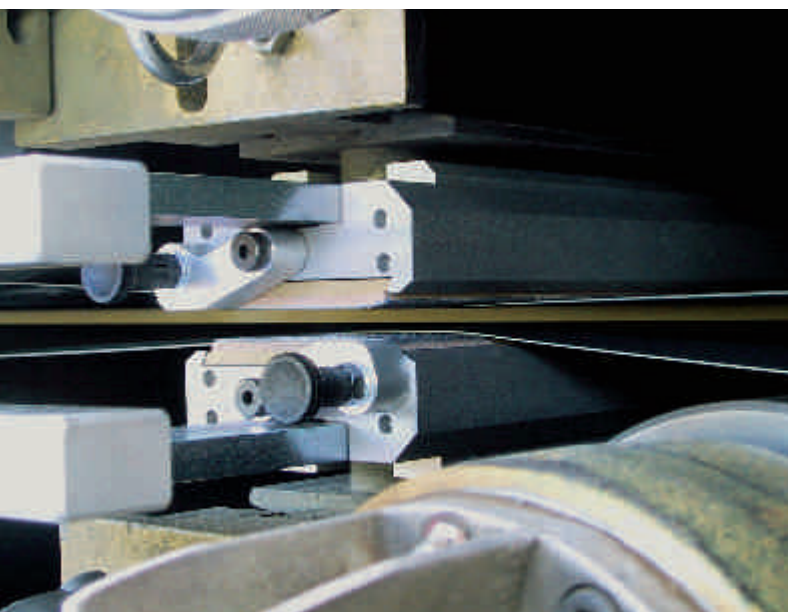
Wooden base

Graphite anti-friction coating

Foam backing

Wooden base

siaslide pad system

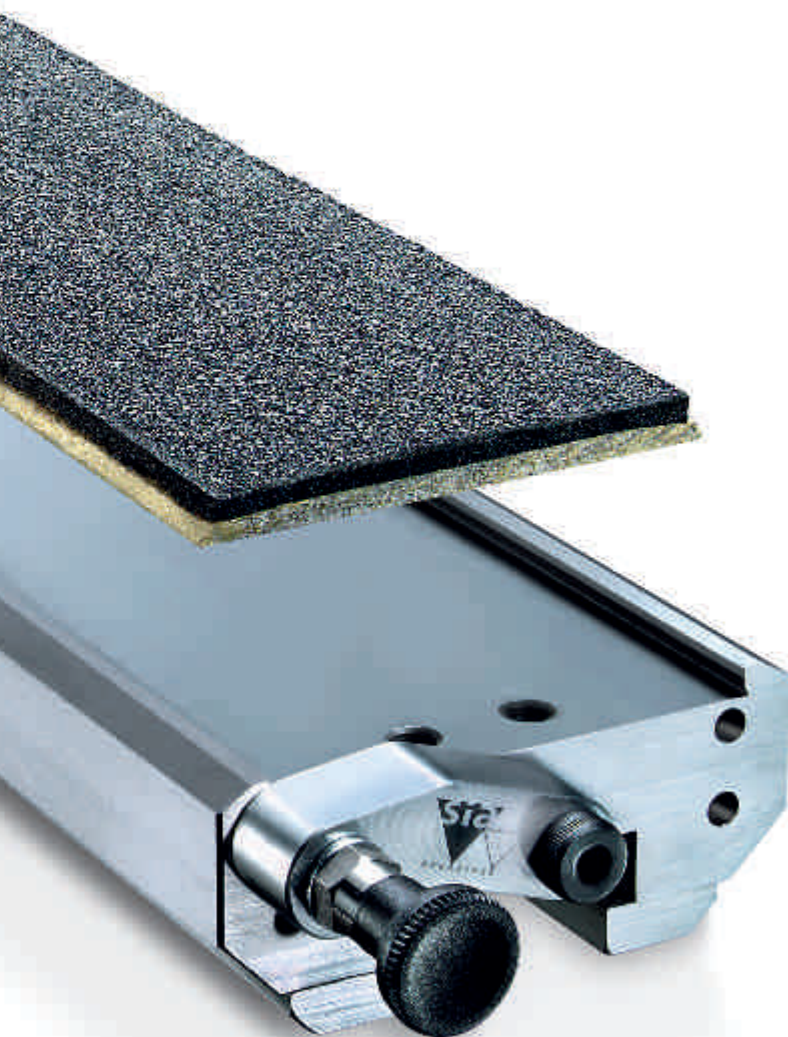


The innovation for consistent sanding precision

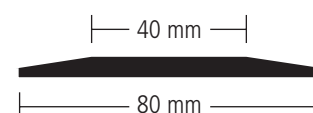
The new feature is the sanding shoe with the innovative siaslide pad, making life considerably easier for the user. Time-consuming fitting of the abrasive is a thing of the past with the siaslide pad system, because the permanently installed sanding platen (aluminium beam) remains in the machine even when the siaslide pads are being changed.

The ready-to-use pad – comprising a wooden carrier and a support backing with graphite – is simply pushed into the shoe. This ease of handling speeds up the work process as a result of shorter machine changeover times. An additional benefit is the elimination of expensive maintenance and spare-parts costs. Users can enjoy consistent precision in the sanding process, with perfect results on the workpiece. A positive side effect is that the siaslide pad can be disposed of or recycled on site.

The new siaslide pad system is an ideal complement to the top Swiss quality siapan high-tech belts.



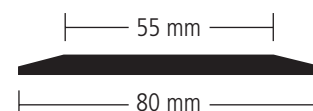
siaslide pad system range:



Pad type 80/40

Version: felt (heavy) or PU foam (soft)

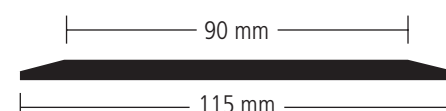
Length: 1400 – 3480 mm



Pad type 80/55

Version: felt (heavy) or PU foam (soft)

Length: 1400 – 3480 mm



Pad type 115/90

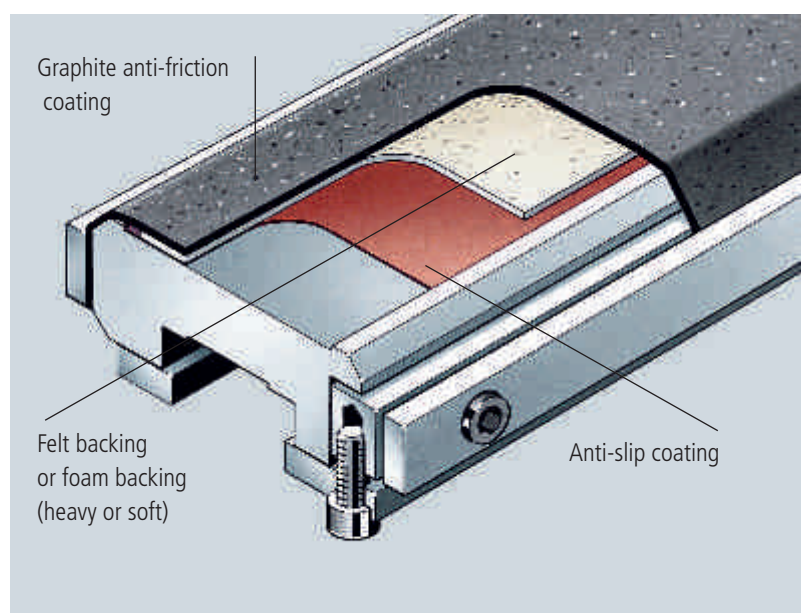
Version: felt (heavy) or PU foam (soft)

Length: 1400 – 3480 mm

The alternative

Everything for conventional sanding platen units

Our wide, comprehensive range of accessories for conventional sanding platen units is coordinated to the entire range of abrasives, fully meeting every need of users worldwide.



Application	Product	Rolls	Article no.
Graphite canvas, scaly (HD) for general purposes	9006 siaphit 1	150 mm x 50 m 180 mm x 50 m	T5071 T5072
Graphite canvas, granular (450) for extreme operating conditions	9060 siaphit 5	150 mm x 50 m 180 mm x 50 m	T5075 T5076
Felt backing, (wool felt), for sanding platen Thickness: 3 mm Density: 0,44 g/cm ³ Colour: white	9063 siafelt	40 mm x 25 m 67 mm x 25 m *77 mm x 30 m 180 mm x 50 m	T6927 T6928 T8693 T6929
Felt backing, (synthetic needled felt), for sanding platen Thickness: 3 mm Density: 0,53 g/cm ³ Colour: beige	sia support hp-h	40 mm x 50 m 47 mm x 50 m 65 mm x 50 m	T8907 T8908 T8909
Foam backing, for sanding platen CFC-free PU foam Thickness: 5 mm Temperature- and form-resistant up to 100°C	9165 siapur light	40 mm x 30 m 47 mm x 30 m 67 mm x 30 m *77 mm x 30 m 107 mm x 30 m	T6924 T8575 T6925 T6932 T6926
Stützbelag, for sanding platen CFC-free PU foam Thickness: 3,5 mm Temperature- and form-resistant up to 100°C	9239 siapur heavy	40 mm x 30 m 47 mm x 30 m 67 mm x 30 m 77 mm x 30 m	T8974 T8972 T8975 T8973
Anti-slip support, flexible abrasive, P60, self-adhesive	1919 siawood	68 mm x 25 m 108 mm x 25 m	T6022 T6023

* items not stocked

Abrasive belts for perfect surfaces



The new TopTec generation of abrasive belts from sia Abrasives marks another milestone in the development of application-optimized abrasive belts that offer major customer benefits.

They achieve outstanding sanding results and excellent surface quality by combining several key assets – a controlled coating process, belt joints that are individually matched to the application and the abrasive backing, and antistatic properties based on an innovative production process.



Controlled coating



sia high-tech coating machines guarantee:

- Optimized grit quantities
- Perfect grit adhesion
- Uniform grit positioning
- Tested to FEPA standard

... Benefits that all add up to perfect surface quality



Best belt joints



sia belt joints lead the market thanks to their consistently high quality:

- Specific application-oriented belt joints
- High-quality processing
- High stability and long lifetimes
- No sanding errors

... Benefits that all add up to perfect surface quality



Dust-free process



The antistatic treatment of the belts gives you these benefits:

- Dust-free workpieces
- Clean machines
- Efficient dust extraction
- Clean ambient air
- Longer belt lifetimes
- Low clogging

... Benefits that all add up to perfect surface quality





sia Abrasives – Your Key to a Perfect Surface

Headquartered in Frauenfeld, Switzerland, the sia Group ranks amongst the world's top three suppliers of innovative abrasive systems. It develops, manufactures and distributes complete abrasive systems, including custom-made systems for specific requirements and applications, for surface finishing on workpieces of all kinds. Our sanding and grinding expertise is genuine surface technology. The sia Group employs some 1,100 people around the world.



Coated Abrasives

Traditional coated abrasives and complete abrasive systems for conventional surface finishing on all types of materials.



Nonwoven Abrasives

Products for preparatory work, cleaning and shaping, usually without modifying the workpiece geometry.



Micro-Finishing

Products on special backing material to achieve constant finish results for the graphic, optical and metal industries.



Abrasive Foams

Abrasive foams of different shapes and hardness for the precise treatment of wood, filler, paints and lacquers.

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