

Wood

Finishing systems for solid wood,
wood-based materials and varnishes



sia Abrasives – 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 or 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.

www.sia-abrasives.com





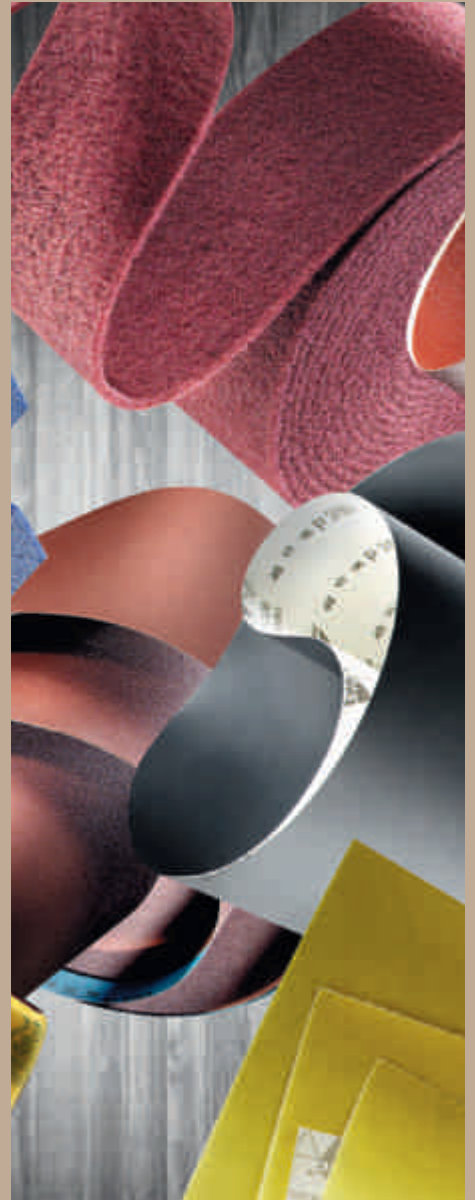
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Perfect surfaces

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Top-quality products from Switzerland



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

The painstaking selection of first-class raw materials, the most up-to-date fabrication and assembly systems, plus sophisticated manufacturing technologies raise sanding products to the highest level. sia abrasives undergo continuous development in response to demanding user requirements and detailed material analyses. They represent top-quality Swiss precision and quality workmanship with the aim of a commitment to the perfect surface.

Innovative abrasives



Coated abrasives

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



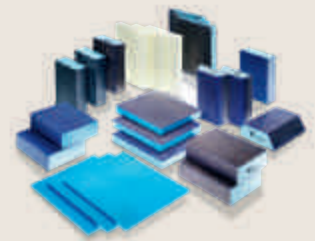
Non-woven abrasives

Non-woven products for preparation, cleaning, finishing and regraining, especially on metal.



Microabrasives

Products on special polyester film to give defined surface structures in the areas of graphics, optics and the auto industry.



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 waste water to ensure they meet prescribed values confirm the cleanliness of our waste water.

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» Compliance Regulations 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.

Types of abrasives

Coated abrasives



Non-woven abrasives

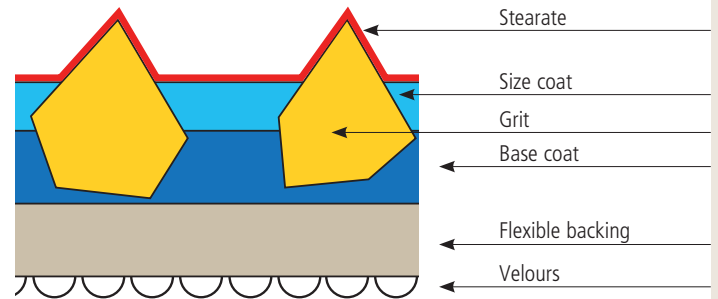


Foam abrasives



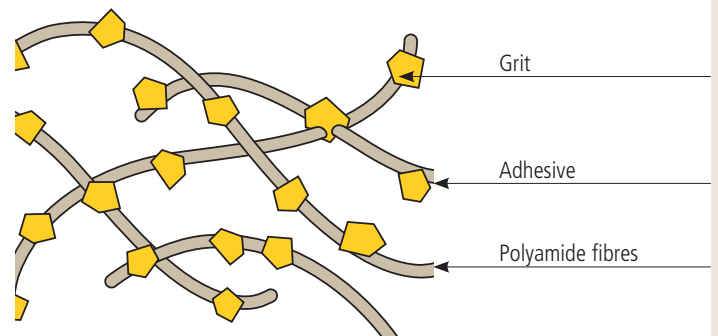
Classic flexible abrasives and complete finishing systems for conventional surface treatment on all types of material.

The basic construction is based on a flexible backing layer. The grit is initially fixed by using a base coat on the flexible backing. The second application of adhesive, the size coat, is made following a drying process and secures the grit more firmly to the backing. Other coatings may be added on top of the size coat. These consist mainly of substances to reduce early choking or clogging of the abrasive during the sanding process or of chemicals which provide a cooling effect during hard sanding on metal-based materials.



Non woven products for preparatory and cleaning work as well as structuring, usually without changing the geometry of the workpiece.

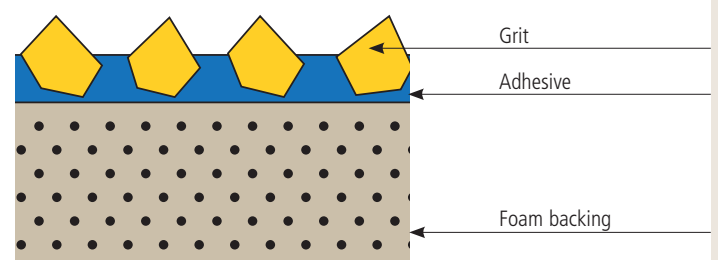
In a continuous process, the fibres are carded, layered and needle-punched to form a non-woven fabric. This creates a fine, polyamide fabric as a three-dimensional backing. In a subsequent process it is sprayed with a blend of bonding agents and grit which penetrates into the fabric.



Foam-backed sanding blocks in the widest possible variety of shapes and hardness grades for precision finishing of wood, fillers, paint and varnish.

In a special process, PUR/EVA is made into large foam blocks which form the basis of the foam backing. The blocks are then further processed into sheets and strips.

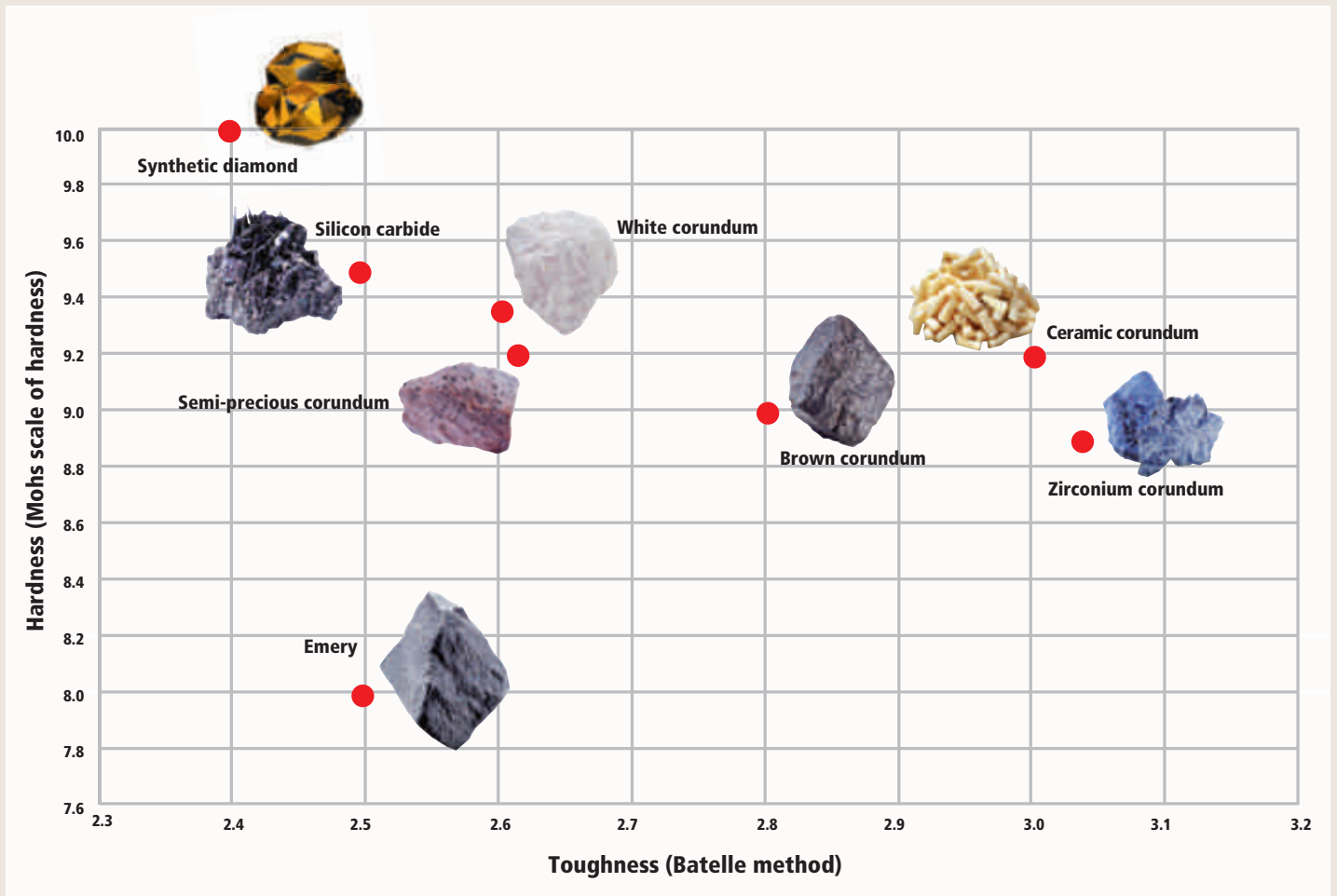
Afterwards, a thin layer of adhesive is applied in a spraying process. In a final processing stage, the grit is applied in multiple coating stages.



Grit minerals



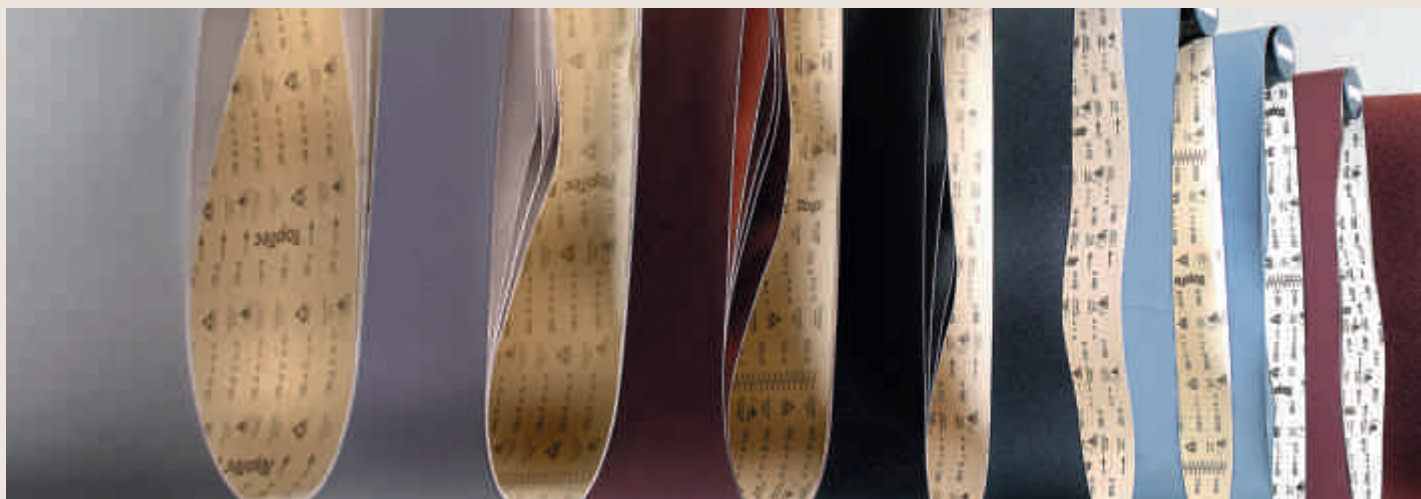
The most common materials used to make abrasive grit today are the synthetic minerals aluminium oxide and silicon carbide in their various forms. There is also a growing use of special minerals such as zirconium aluminium oxide, ceramic aluminium oxide and diamond. The use of natural minerals such as garnet and emery, however, is rapidly declining. The grit's hardness and toughness, which are a function of the starting material used, determine the properties and applications of the abrasives.



Applications

- | | |
|------------------------------|-----------------------------------|
| Emery | ferrous metals, precious metals |
| Zirconium aluminium oxide | steel alloys |
| Ceramic aluminium oxide | high-alloy steel |
| Brown aluminium oxide | wood, metal |
| Semi-friable aluminium oxide | paint, wood, metals |
| White aluminium oxide | wood, varnish, paint |
| Silicon carbide | varnish, sheet materials, stone |
| Synthetic diamond | hard-finish varnish, glass, stone |

Storage



Due to fluctuations in humidity and/or temperature, incorrect storage of abrasives can result in the following negative effects:

- changes in dimensions
- buckling
- reduced sanding performance
- belt slippage
- belt flutter
- breakage of belts or joints

Correct storage means:

- achieving optimum sanding results
- guaranteed product life
- guaranteed good performance
- saving money

Storage conditions:

- temperature: 15 – 25 °C | 59 – 77 °F
- relative humidity 40 – 70%
- store abrasives in their original packaging
- hang up belts

Never store abrasives:

- on heaters
- near open windows
- on concrete floors

Safety

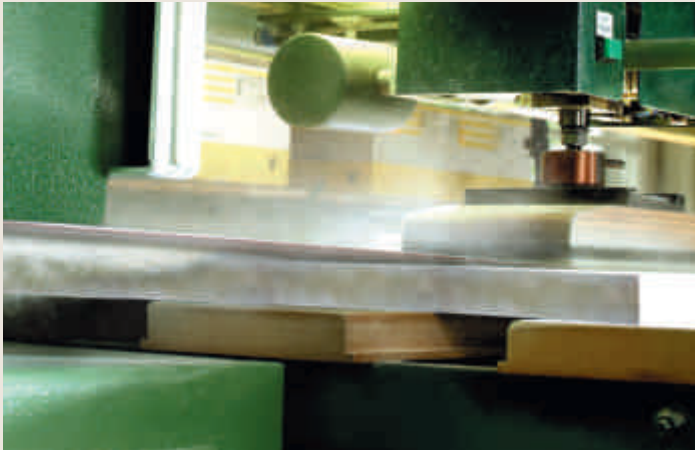


For safety reasons, sia Abrasives recommends that its customers wear ear protection, protective eyewear, masks and gloves and that they use a dust-removal system. Where sia Abrasives prints pictograms on products and/or packaging, these must be complied with.

The sia abrasives products listed in this catalogue (exception: 2747 siatur) do not contain any hazardous materials (EU Directive 67 / 548 / EEC) and may be disposed of in an environmentally compatible way in modern waste-incineration plants. We refer specifically to the FEPA safety recommendations and the safety datasheets for abrasive products on backing material, which you can download from www.sia-abrasives.com.

Antistatic finish

Without antistatic finish



Static charges

Any material-removal process generates friction and static charges, resulting in a positive or negative electrostatic voltage on the workpiece and belt (kV/m). If these charges cannot be conducted to an earth ground, the belt, the workpiece and dust all become statically charged.

This charging process causes dust from the sanding process to stick like a magnet to the workpiece and the machine, an effect made worse by using abrasives that have a low-grade antistatic finish. The result is a greater need for cleaning and, at the same time, a reduction in belt life.

With antistatic finish



Antistatic effect

However, if sanding belts are used which contain carbon fibres, soot, graphite and/or dissolved salts (electrolytes) in the paper and/or adhesive, static voltages can be grounded through contact points on the machine such as drive or guide rollers.

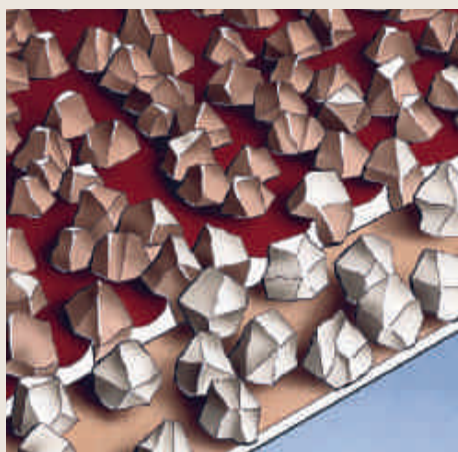
Paper, fabric and abrasive grit are insulators rather than conductors, so it is the abrasive's construction which determines whether or not a belt's anti-static properties are effective or not. For this reason, only the very best products are awarded the TopTec seal of quality.

Effects and advantages of an antistatic finish:

- conductivity releases/neutralises dust
- optimum dust removal
- longer belt life
- clean workpiece surfaces and edges
- clean machinery
- improved surface quality

TopTec – Top technology for perfect surfaces

Controlled scatter



sia high-tech scatter technology offers the following benefits:

- optimum grit volume
- perfect grit adhesion
- even grit distribution
- tested to FEPA standards

... and, as a result, perfect surface quality

Optimum belt joints



sia belt joints offer the following benefits:

- high and consistent quality
- specific application orientation
- high-quality finishing
- high level of stability and long service life
- no sanding faults

... and, as a result, perfect surface quality

Dust-free process



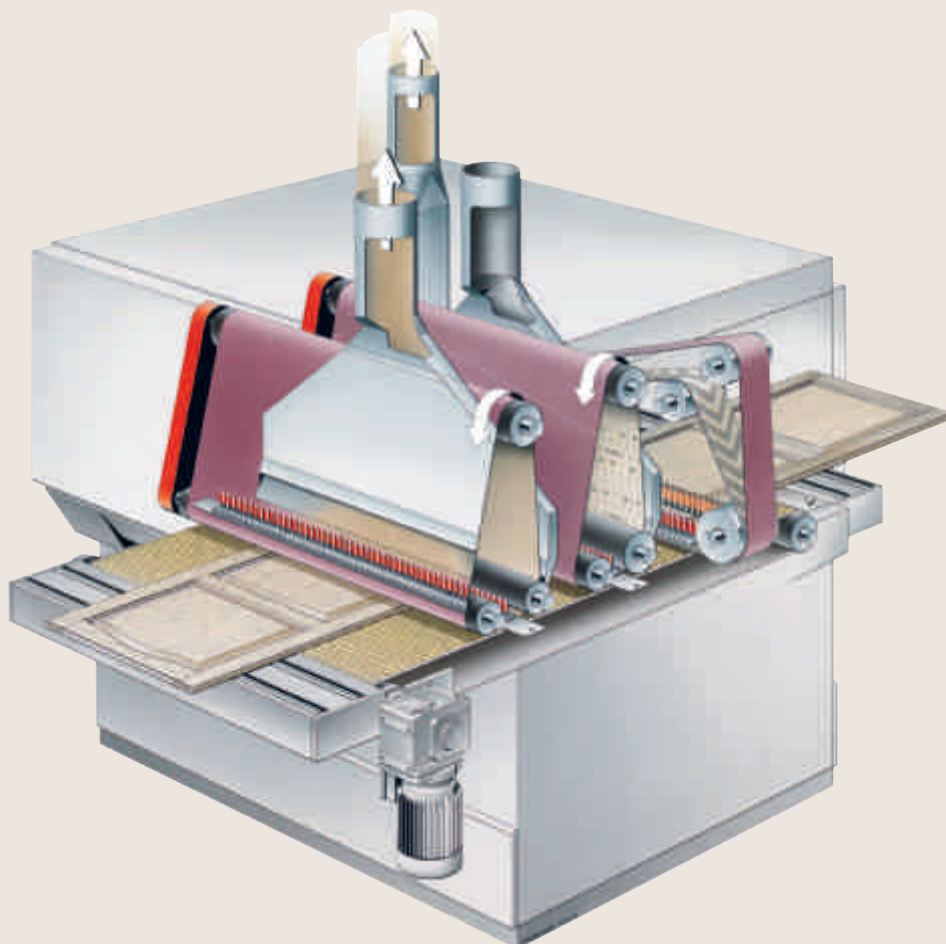
The antistatic treatment of the belts has the following benefits:

- dust-free workpieces
- clean machinery
- efficient dust extraction
- clean environmental air
- longer belt life
- low clogging

... and, as a result, perfect surface quality

With TopTec, the new generation of sanding belts, sia Abrasives reaches another milestone in the development of application-optimised sanding belts with maximum customer benefit.

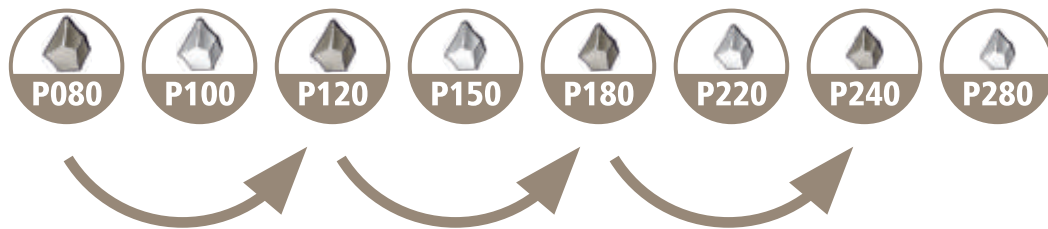
Outstanding sanding results and superior surface quality come from the combination of controlled grit distribution, belt joints and backing materials designed to suit the specific application along with antistatic properties that arise from a brand-new production process.



Optimum grit sequence

Using the optimum grit sequence during the sanding process not only gives better sanding results but is also important in achieving the most economical surface treatment. For this reason it is important never to skip more than one grit size at one time!

For example:



The main exceptions to this are given below:

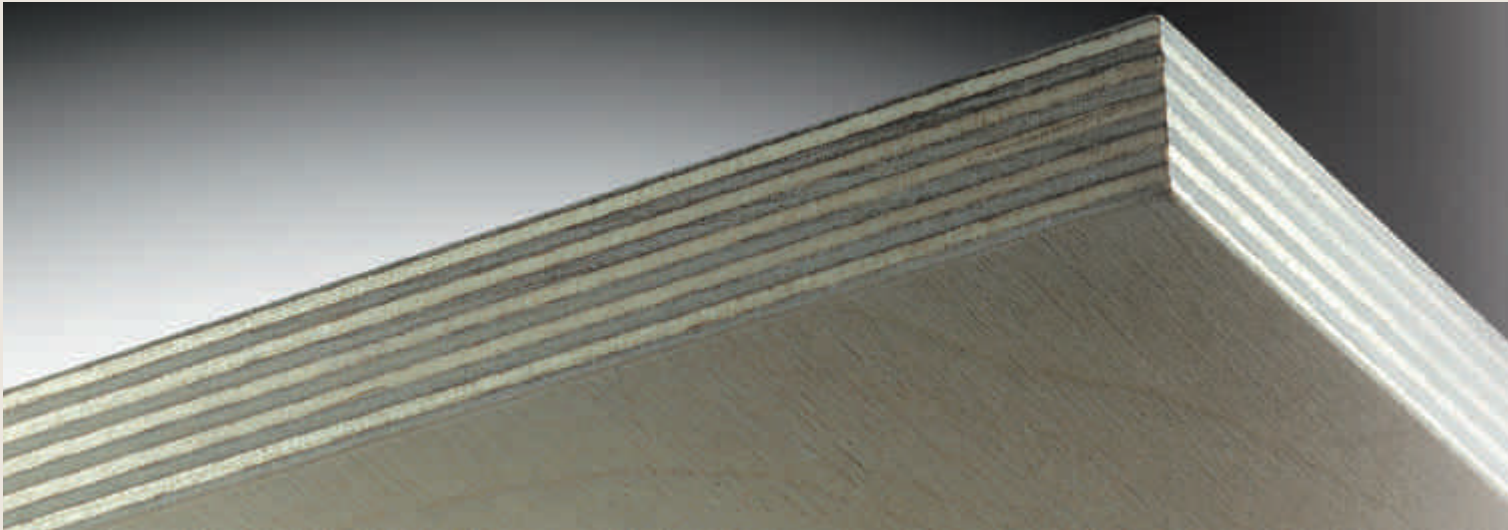
from	to	Remark
Contact belt sanding 	Pad belt sanding 	Use next finer grit e.g. P150 and P180
Cross belt sanding 	Pad belt sanding 	Use same grit e.g. P150 and P180
Pad belt sanding 	Orbital sanding 	Use same grit e.g. P150 and P180
Orbital sanding 	Hand sanding 	Skip two grit sizes e.g. P150 and P240





Sanding technology

Wood-based materials	16
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**Plywood** (consists mainly of veneers)

The term plywood refers to sheets of wood made up of a number of layers of veneer glued one on top of the other.

Each layer is rotated through 90° before being glued down to the layer beneath. The grain on the two visible sides runs parallel. The number of layers is therefore uneven. Plywood can be obtained in various kinds of wood and should be finished with an abrasive appropriate to the relevant wood; only the outermost layer is sanded, and this contains no adhesive. Plywood is used mostly for making furniture, models and also for interior finishing.

**Particle board** (consists mainly of wood chips)

Chipboard is a subgroup of wood particle board. It is a flat, compressed sheet with a surface made of especially fine-grade chips.

It is made by gravity- or air-spreading processes, and during its manufacture there is a gradual transition from the coarse-grained inner layer to the fine-grained outer layer. Chipboard is in most cases veneered or covered with an outer coating. Because the edge faces of chipboard are very rough, these are rarely finished and are usually covered, for instance with an edging of solid wood.

**MDF** (consists mainly of wood fibres)

MDF (medium-density fibreboard) is a sheet material made from wood fibres. MDF's technical properties make it one of the world's fastest-growing wood products. Based on finely crushed fibres of conifer wood, usually without bark, and produced by a gentle compression process, the result is a wood product which is consistently homogeneous in both its length and width.

MDF board is very easy to work with and is highly versatile in its applications. It is often used as a base material for laminate flooring and in the furniture industry, where the ability to finish its edges (profiling) is a highly desirable property.

Applications	Product
<p>Manual</p> 	<p>1960 siarexx cut</p> <p>2936 siatur jj</p>
<p>Hand sander</p> 	<p>1707 siapar</p> <p>1749 siaral f</p> <p>1919 siawood</p> <p>1960 siarexx cut</p>
<p>Edge belt</p> 	<p>1749 siaral f</p> <p>1919 siawood</p> <p>2920 siawood</p>
<p>Profile belt</p> 	<p>2747 siatur</p> <p>2933 siatur</p> <p>2936 siatur jj</p>
<p>Cross/long belt</p> 	<p>1749 siaral f</p> <p>1919 siawood</p> <p>2920 siawood</p>
<p>Wide belt</p> 	<p>1749 siaral f</p> <p>1919 siawood</p> <p>1993 siawood</p> <p>2920 siawood</p>

Plywood	Chipboard	MDF	Page
✓	✓	✓	48
✓		✓	56
	✓	✓	36
	✓	✓	40
✓	✓	✓	43
✓	✓	✓	48
	✓	✓	40
✓	✓	✓	43
✓	✓	✓	53
		✓	51
✓			55
✓			56
	✓	✓	40
✓	✓	✓	43
✓	✓	✓	53
	✓	✓	40
✓	✓	✓	43
✓			50
✓			53

Plywood

- | | |
|--------------------------|---|
| Use | <ul style="list-style-type: none">• Calibration and sanding out scratches• Fine sanding before painting |
| Tips | <ul style="list-style-type: none">• Always choose the abrasive to suit the type of wood in the top layer |
| Calibrating | <ul style="list-style-type: none">• Work with a hard contact roller |
| Paint preparation | <ul style="list-style-type: none">• Do not skip more than one grit size in the sanding sequence• Always use an aggressive abrasive. Blunt grit presses the wood fibres together instead of sanding them off• Pad belt sanding creates a finer surface finish than abrasive contact belt sanding• The graphite coating on the sanding pad must not be damaged• Use less contact pressure and choose a suitable cutting speed• The more glossy the paint, the finer the sanding must be• Always sand in the direction of the fibres for the last pass before painting |





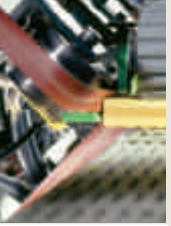


Chipboard

- | | |
|--------------------|---|
| Use | <ul style="list-style-type: none">• Calibrating the panel before covering• Flush sanding of solid wood edges |
| Tips | <ul style="list-style-type: none">• Chipboard is most efficiently worked using belts with silicon carbide types of abrasive |
| Calibrating | <ul style="list-style-type: none">• Work with a hard contact roller |





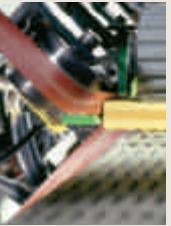


MDF

- | | |
|--------------------------|--|
| Use | <ul style="list-style-type: none">• Calibrating the panel before covering• Fine sanding before painting• Fine sanding profiled edges |
| Tips | <ul style="list-style-type: none">• Fibreboard is most efficiently worked using belts with silicon carbide types of abrasive |
| Calibrating | <ul style="list-style-type: none">• Work with a hard contact roller |
| Paint preparation | <ul style="list-style-type: none">• Do not skip more than one grit size in the sanding sequence• Always use an aggressive abrasive. Blunt grit presses the wood fibres together instead of sanding them off• Pad belt sanding creates a finer surface finish than abrasive contact belt sanding• The graphite coating on the sanding pad must not be damaged• Use less contact pressure and choose a suitable cutting speed• The more glossy the paint, the finer the sanding must be |

Cutting speeds

	Contact belt	Pad belt	Lengthways/ cross belt	Edge belt	Profile belt	Profile wheel	Hand sander
							
Plywood	20 – 30 m/s 66 – 98 ft/s	10 – 22 m/s 33 – 72 ft/s	10 – 22 m/s 33 – 72 ft/s	12 – 18 m/s 39 – 59 ft/s	10 – 22 m/s 33 – 72 ft/s	10 – 15 m/s 33 – 49 ft/s	5 – 10 mm stroke Setting 5 – 6
Chipboard/ MDF	20 – 30 m/s 66 – 98 ft/s	10 – 22 m/s 33 – 72 ft/s	10 – 22 m/s 33 – 72 ft/s		10 – 22 m/s 33 – 72 ft/s	10 – 15 m/s 33 – 49 ft/s	5 – 10 mm stroke Setting 5 – 6

Feed rates

	Contact belt	Pad belt	Lengthways/ cross belt	Edge belt	Profile belt	Profile wheel	Hand sander
							
Plywood	5 – 10 m/min 16 – 33 ft/min	8 – 15 m/min 26 – 49 ft/min	8 – 15 m/min 26 – 49 ft/min	8 – 15 m/min 26 – 49 ft/min	10 – 20 m/min 33 – 66 ft/min	8 – 10 m/min 26 – 33 ft/min	

Maximum material-removal rates

Contact belt sanding



Grit size	Roller	Removal in mm	Removal in inches
P036	Steel/hard rubber roller	< 1.00	< 0.04
P040	Steel/hard rubber roller	< 0.80	< 0.03
P060	Steel/hard rubber roller	< 0.60	< 0.02
P080	Medium rubber roller	< 0.40	< 0.019
P100	Medium rubber roller	< 0.30	< 0.012
P120	Soft rubber roller	< 0.20	< 0.008
P150	Soft rubber roller	< 0.10	< 0.004
P180		-	-
P220		-	-
finer		-	-

Pad belt sanding



Grit size	Removal in mm	Removal in inches
P036	-	-
P040	-	-
P060	-	-
P080	< 0.30	< 0.012
P100	< 0.20	< 0.008
P120	< 0.15	< 0.006
P150	< 0.10	< 0.003
P180	< 0.05	< 0.002
P220	< 0.03	< 0.001
finer	< 0.03	< 0.001

Solid wood and veneer

Beech



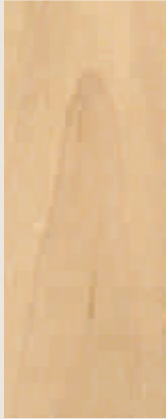
Oak



Walnut



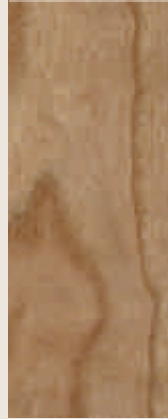
Maple



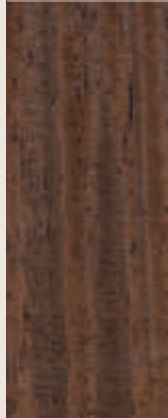
Limba



**American
cherry**



Wenge



Sipo



Spruce



Jelutong



Larch



Pine



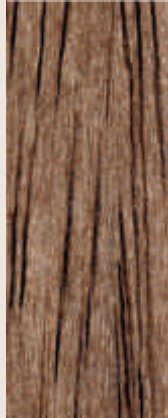
Douglas fir



**Weymouth
pine**



Durian



Asian oak



Yew



Hemlock



Fir



Redwood





Ramin



Birch

Hardwood

Because of its fibrous nature and close vascular structure, hardwood is a strong, heavy wood.

Its slow rate of growth makes the wood dense and hard and thus difficult to finish.



Iroko



Teak

Wood containing resin/oil

Both hardwoods and softwoods can contain resins or oils in their cellular structure.








These protect the tree from extreme weather conditions and help it to heal after physical damage.

The oils and resins, however, adversely affect the wood's sanding properties.

Softwood

Wood that is lighter than 'hardwood' is categorised as 'softwood'. It grows more quickly than hardwood and has a comparatively loose, open vascular structure.

This wood is therefore softer and more sensitive to pressure but is easier to finish.

Application	Product	
Manual		
	<ul style="list-style-type: none"> 1950 siaspeed 1960 siarexx cut 2936 siatur jj 2951 siatur h Foam-backed abrasives 	
Hand sander		
	<ul style="list-style-type: none"> 1919 siawood 1950 siaspeed 1960 siarexx cut 2920 siawood 5550 siaprime 	
Hand belt sander		
	<ul style="list-style-type: none"> 2921 siawood 2933 siatur 	
Edge belt		
	<ul style="list-style-type: none"> 1919 siawood 1920 siawood 1939 siawood 2920 siawood 	
Profile belt		
	<ul style="list-style-type: none"> 2933 siatur 2936 siatur jj 2943 siatur h 2951 siatur h 	<ul style="list-style-type: none"> r = > 10 mm r = > 5 mm Profile wheel r = < 5 mm
Cross/lengthways belt		
	<ul style="list-style-type: none"> 1919 siawood 1920 siawood 1939 siawood 2920 siawood 2933 siatur 	
Wide belt		
	<ul style="list-style-type: none"> 1919 siawood 1920 siawood 1939 siawood 1993 siawood 2918 siapan z 2920 siawood 	

Hardwood	Wood containing resin / oil	Softwood	Page
✓	✓	✓	46
✓	✓	✓	48
✓		✓	56
✓	✓	✓	58
	✓	✓	62 – 64
✓	✓	✓	43
✓	✓	✓	46
✓	✓	✓	48
✓			53
✓		✓	59
✓	✓	✓	54
	✓	✓	55
✓	✓	✓	43
✓			44
	✓	✓	45
✓	✓	✓	53
	✓	✓	55
✓		✓	56
✓	✓	✓	57
✓	✓	✓	58
✓	✓	✓	43
✓			44
	✓	✓	45
✓	✓	✓	53
✓	✓	✓	55
✓	✓	✓	43
✓			44
	✓	✓	45
	✓	✓	50
✓		✓	52
✓	✓	✓	53

Coarse sanding of solid wood

- Use**
- Sanding irregular areas and taking out planeing marks
 - Calibrate to desired thickness
- Tips**
- Work with a hard contact roller
 - Cloth belts are sturdier and last longer in heavy use
 - Aluminium oxide grit produces the best results on solid wood









Cleaning veneer

- Use**
- Sanding off glue on joints
 - Sanding down breakthroughs of glue and excessive filler
- Tips**
- Glue and adhesives quickly clog sanding belts. That is why it is better to use less expensive cross belts instead of broad belts.




Paint preparation

- Use**
- Final sanding and cutting back of wood fibres before painting
 - Sanding out dirt, pencil marks, scratches and the wood's own oil, which can reduce paint adhesion
- Tips**
- Always follow the recommendations of the paint supplier to determine the last grit size before painting
 - Do not skip more than one grit size in the sanding sequence
 - Always use an aggressive abrasive
 - Blunt grit presses the wood fibres together instead of sanding them off.
 - Pad belt sanding creates a finer and higher-grade surface finish than contact belt sanding (with roller)
 - The graphite coating on the sanding pad must not be damaged
 - Use less contact pressure and choose a suitable cutting speed
 - The more glossy the paint, the finer the sanding must be
 - In the case of precious woods (fine-pored hardwood), sand using 1–2 grit sizes finer than usual
 - The final sanding pass prior to painting must always be made in the direction of the grain to avoid crosswise scratches becoming visible after painting
 - Therefore, always cross-sand assembled workpieces (mitres).
 - Aluminium oxide grit produces the best results on solid wood and veneers
 - A silicon carbide grit can be used for the final sanding before painting for a fine surface finish.

Cutting speeds

	Contact belt	Pad belt	Lengthways/ cross belt	Edge belt	Manual belt	Profile belt	Profile wheel	Hand equipment
								
Solid wood	20 – 30 m/s 66 – 98 ft/s	10 – 22 m/s 33 – 72 ft/s	10 – 22 m/s 33 – 72 ft/s	12 – 18 m/s 39 – 58 ft/s	3 – 8 m/s 10 – 36 ft/s	10 – 22 m/s 33 – 72 ft/s	10 – 15 m/s 33 – 49 ft/s	5 – 10 mm stroke Setting 5 – 6
Veneer		10 – 22 m/s 33 – 72 ft/s	10 – 22 m/s 33 – 72 ft/s			10 – 22 m/s 33 – 72 ft/s		5 mm stroke Setting 5 – 6

Feed rates

	Contact belt	Pad belt	Lengthways/ cross belt	Edge belt	Manual belt	Profile belt	Profile wheel	Hand equipment
								
Solid wood	5 – 10 m/min 16 – 33 ft/min	8 – 15 m/min 26 – 49 ft/min	8 – 15 m/min 26 – 49 ft/min	8 – 15 m/min 26 – 49 ft/min		10 – 20 m/min 33 – 66 ft/min	8 – 10 m/min 26 – 33 ft/min	
Veneer		8 – 15 m/min 26 – 49 ft/min	8 – 15 m/min 26 – 49 ft/min			10 – 20 m/min 33 – 66 ft/min		

Maximum material removal rates

Contact belt sanding

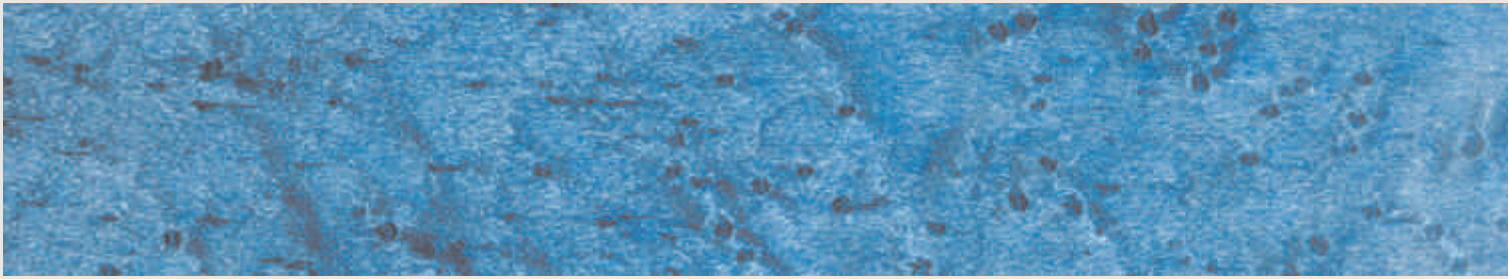
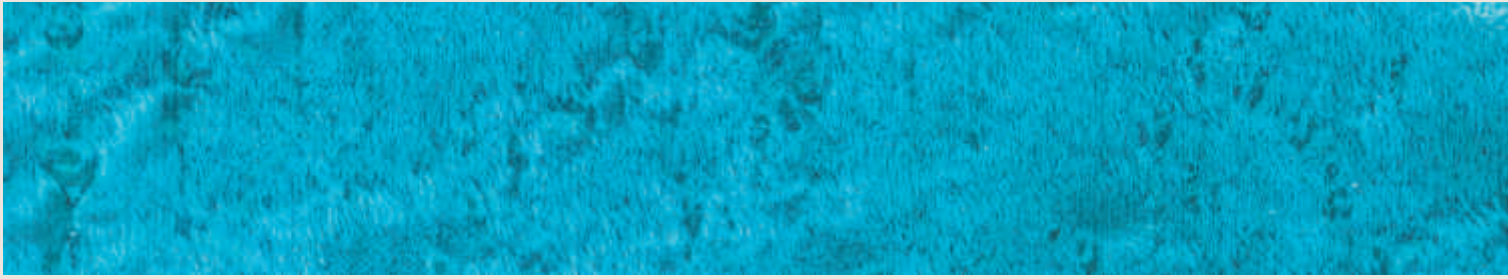


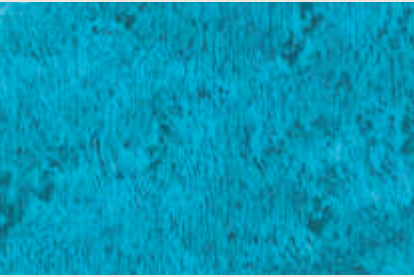
Grit size	Roller	Removal in mm	Inches
P036	Steel/hard rubber roller	< 1.00	< 0.04
P040	Steel/hard rubber roller	< 0.80	< 0.03
P060	Steel/hard rubber roller	< 0.60	< 0.02
P080	Medium-hard rubber roller	< 0.40	< 0.019
P100	Medium-hard rubber roller	< 0.30	< 0.012
P120	Soft rubber roller	< 0.20	< 0.008
P150	Soft rubber roller	< 0.10	< 0.004
P180		-	-
P220		-	-
finer		-	-

Pad belt sanding



Grit size	Removal in mm	Inches
P036	-	-
P040	-	-
P060	-	-
P080	< 0.30	< 0.012
P100	< 0.20	< 0.008
P120	< 0.15	< 0.006
P150	< 0.10	< 0.003
P180	< 0.05	< 0.002
P220	< 0.03	< 0.001
finer	< 0.03	< 0.001





UV-hardened varnishes

- Almost solvent-free
- Approx. solids content 99 %
- UV curing leads to a short processing time
- Thin varnish layer (furniture industry), industrial parquet coating
- Workpieces usually flat, varnish frequently applied by roller on production line
- Very hard-wearing



UP varnish (unsaturated polyester)

- Mostly 2-component system; hardening is initiated by adding a curing agent
- Approx. solids content 90 %
- Thick varnish layers possible
- Minimal varnish shrinkage
- Very hard, robust varnish
- Intermediate rather than coarse (P150–P240) for better adhesion



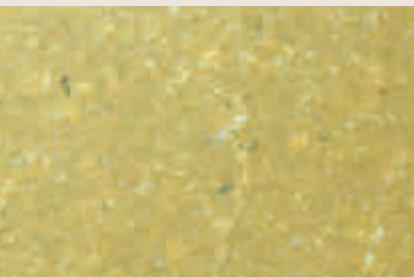
Water-based varnishes

- Water used as thinner
- Approx. solids content 30–40 %
- Drying is a physical process, curing partially a chemical process
- Drying time somewhat lengthy and more difficult to control
- Wood fibres raised by water absorption
- Usually thermoplastic
- Sanding material tend to clog easily



NC (nitrocellulose) varnishes

- Contains solvent
- Approx. solids content 20 %
- Drying is a physical process
- Thin layers
- Thermoplastic
- Scratches from sanding in wood and varnish quickly visible



PUR (polyurethane) varnishes

- Contains solvent
- Approx. solids content 30–40 %
- Drying is a physical process, curing is a chemical process
- The better the varnish has set, the lower the tendency to clog



Oil / wax

- Natural wood protection, e.g. linseed oil (impregnation)
- Oil is absorbed by the wood, filling up the cell cavities
- Does not form a film

Applications	Product
--------------	---------

Manual



- 1748 siarexx fine
- 1913 siawat fc
- 1960 siarexx cut
- 6120 siavlies speed
- Foam-backed abrasives

Hand equipment



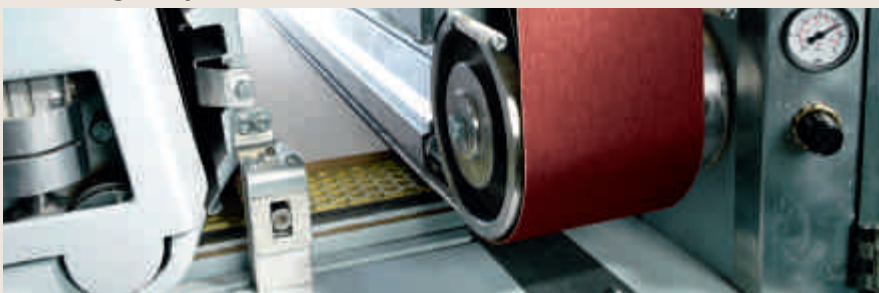
- 1748 siarexx fine
- 1950 siaspeed
- 1960 siarexx cut
- 6120 siavlies speed
- 7940 siaair

Profile belt



- 2747 siatur
- 2936 siatur jj
- 2951 siatur h

Cross/lengthways belt



- 1727 siawat fc
- 1729 sialac
- 1749 siaral f
- 1796 sialac
- 1913 siawat fc
- 1919 siawood

Wide belt



- 1729 sialac
- 1749 siaral f
- 1796 sialac
- 1919 siawood
- 1920 siawood

UV varnish	UP varnishes	Water-based varnish	NC varnishes	PUR varnishes	Oil / wax	Page
✓	✓	✓	✓	✓		39
	✓			✓	✓	42
✓	✓	✓	✓	✓		48
✓	✓	✓	✓	✓	✓	60
✓	✓	✓	✓	✓	✓	62 – 64
✓	✓	✓	✓	✓		39
	✓		✓	✓		46
✓	✓	✓	✓	✓		48
✓	✓	✓	✓	✓	✓	60
	✓			✓		61
	✓	✓	✓	✓		51
	✓			✓		56
	✓	✓	✓	✓		58
✓			✓	✓		37
✓	✓		✓	✓		38
	✓					40
✓						41
	✓			✓		42
		✓	✓	✓		43
✓	✓		✓	✓		38
	✓					40
✓						41
		✓	✓	✓		43
	✓					44

Intermediate varnish sanding

- | | |
|-------------------------|--|
| Use | <ul style="list-style-type: none">• Sanding back protruding wood fibres after the first coat of varnish• Increasing varnish adhesion• Sanding out varnishing faults such as orange peel, dust inclusions and unevenness |
| Tips | <ul style="list-style-type: none">• Always follow the recommendations of the varnish manufacturer• The use of an efficient dust-extraction system reduces the sanding dust on the workpiece and prevents premature clogging of the abrasive• Using only as much pressure as necessary reduces overheating of the varnish to a minimum and thus significantly improves the surface quality of the workpiece and considerably prolongs abrasive life |
| Sanding by hand | <ul style="list-style-type: none">• Choose a sander with a short stroke - 2–3 mm is ideal because sanders with a longer stroke remove too much varnish• If possible, use a sander with a soft base plate, e.g. an orbital sander with a soft or extra-soft pad. Hard base plates are too aggressive and remove too much material.• Reduce the sanding speed in the case of varnishes with an increased tendency to clog (stage 3–4 of 6) |
| Wide belt sander | <ul style="list-style-type: none">• Pad belt sanding creates a more even and finer surface finish than contact belt sanding• Sanders with cleaning systems such as a dust extractor are preferable in order to prolong the life of sanding belts• Adjust the feed speed (between 10–18 m/min or 33–59 ft/min) to suit the operation and the varnish in order to prevent unnecessary varnish surface heating• Cross-sanding is recommended in order to achieve the most even finish possible (lengthways / cross band) |

Repairing varnish faults

- | | |
|-------------|--|
| Use | <ul style="list-style-type: none">• Sanding off varnish drips, orange peel and dust inclusions |
| Tips | <ul style="list-style-type: none">• Small areas can be finished using a hand sander (eccentric or orbital sander)• Non-woven materials and abrasives with a soft underlay adapt to the surface structure and do not produce the desired result• Large areas are best sanded using a wide belt sander• Caution with pickled surfaces |

Cutting speeds

	Pad belt	Long / cross belt	Profile belt	Hand sander
Varnish	1 – 4 m/s * 3 – 13 ft/s *	1 – 4 m/s * 3 – 13 ft/s *	3 – 6 m/s 10 – 20 ft/s	2 – 3 mm stroke Setting 3–4

* High cutting speeds for the intermediate sanding of varnish (from 8–12 m/s or 26–39 ft/s) are generally only for saturated polyester varnishes

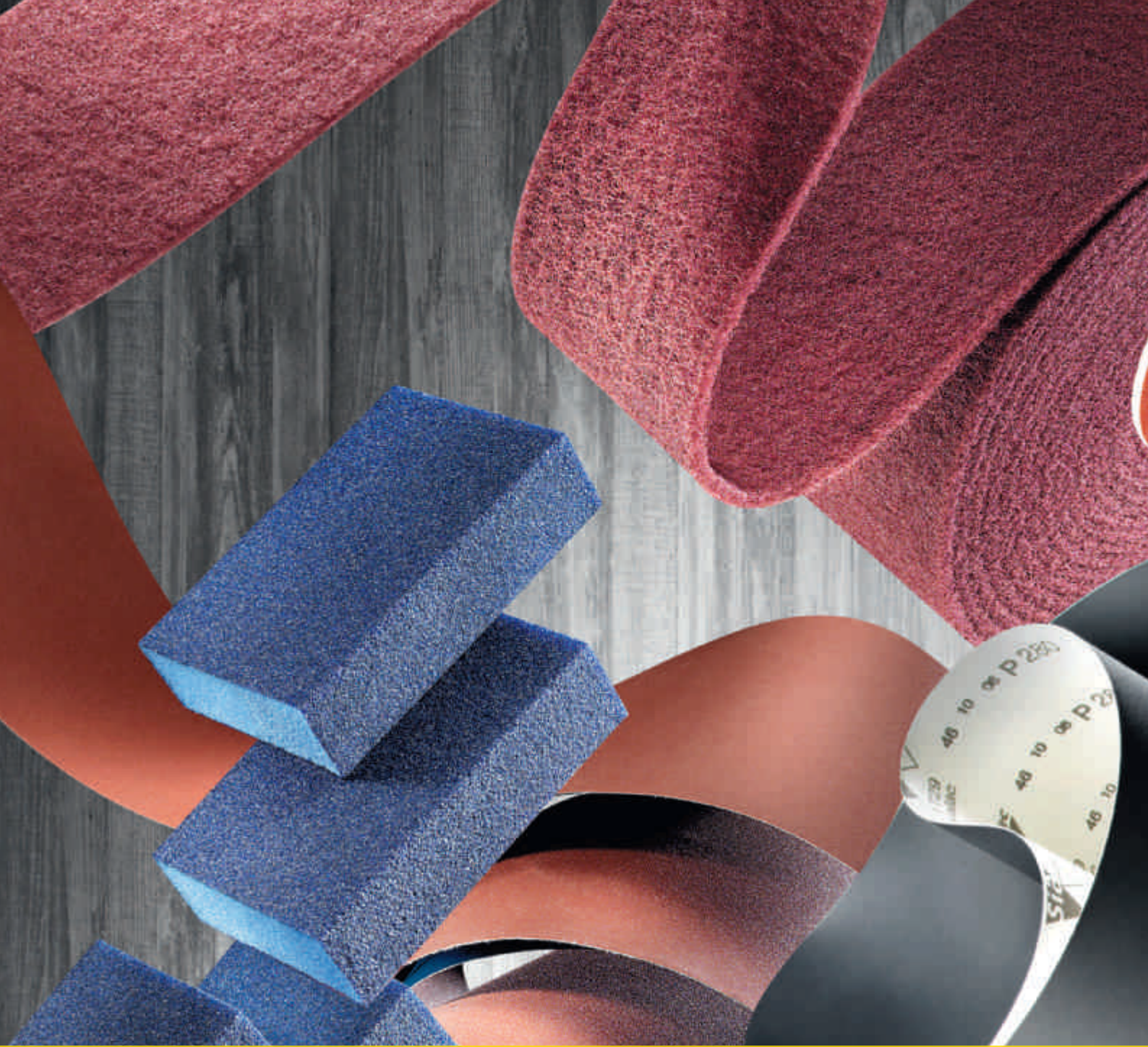
Feed rates

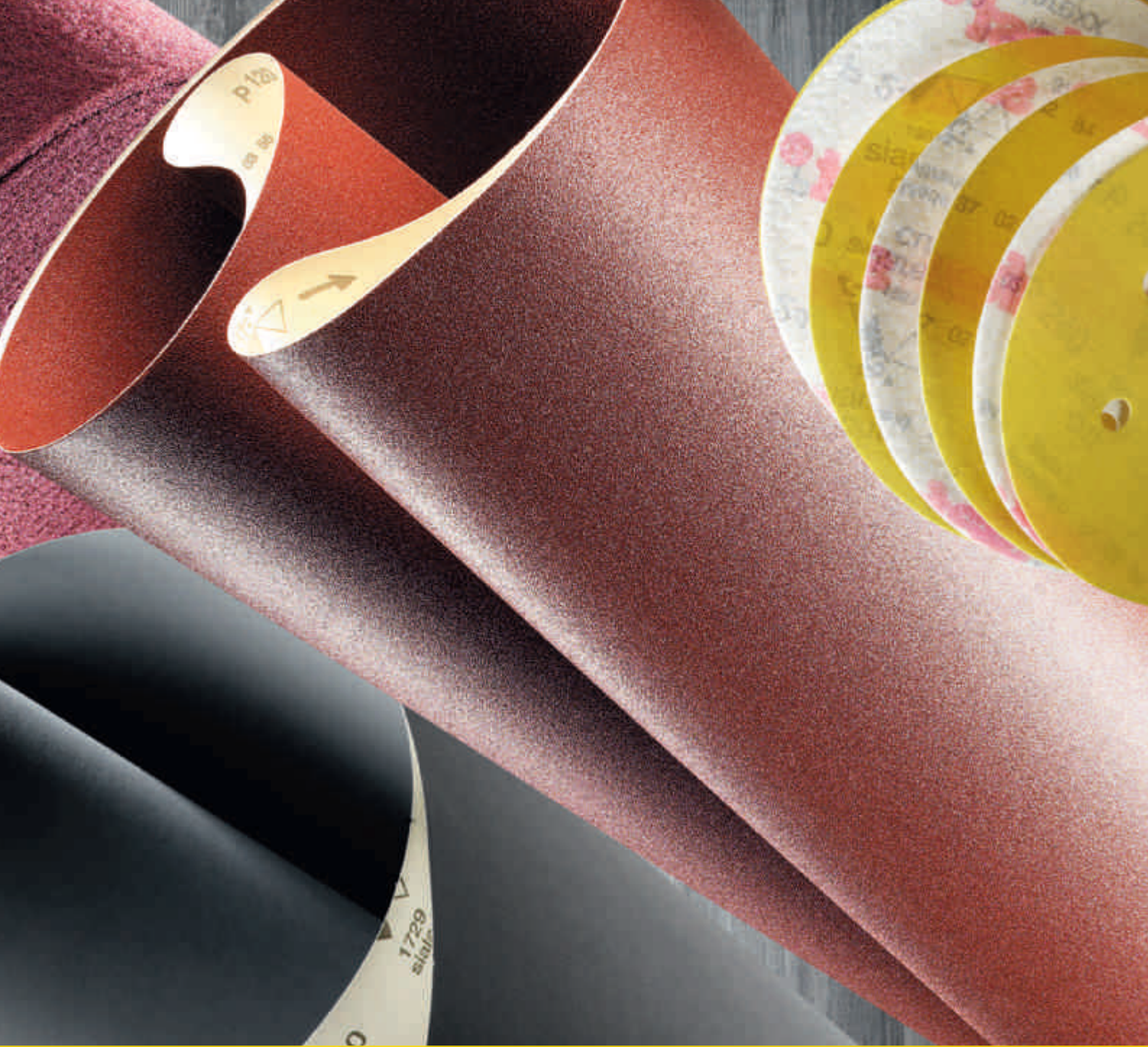
	Pad belt	Long / cross belt	Profile belt	Hand sander
Varnish	10 – 18 m/min 33 – 59 ft/min	10 – 18 m/min 33 – 59 ft/min	10 – 20 m/min 33 – 66 ft/min	

Maximum material removal rates

Pad belt sanding

	Grit size	Removal in mm	Inches
	P180	< 0.05	< 0.002
	P220	< 0.03	< 0.001
	finer	< 0.03	< 0.001





Products





Advantages

- Optimally suited for rotary sanding
- Fast and safe change of abrasive with siafast hook-and-loop fastening system
- Very high performance in heavy-duty applications

Applications

- Keying of insulating boards
- Sanding down of plaster, stone and concrete
- Sanding down of paint and old varnish

Application



Product profile:

Grit:	silicon carbide	
Adhesive:	synthetic resin	
Backing:	y-wt cloth, cotton	P016–P036
	f-wt paper	P040–P150
Grit range:	P016–P150	
Coating:	open	

Product	Dimension			Catalogue No.	Article ID
siafast discs	without holes	∅ 115 mm	∅ 4½"	T3807	1323.3054
	without holes	∅ 150 mm	∅ 6"	T3678	2070.5556
	7-holes	∅ 150 mm	∅ 6"	T3305	3175.8083
siafast strips for sanding boards	supplied on request in whatever size you need.				



Advantages

- Very fine finish
- Smooth, even surfaces, even on curved workpieces
- Adapts extremely readily to contours
- Available up to grit size P1200
- May be used wet or dry

Applications

- Sanding varnish on curved surfaces
- Polishing preparation for high-gloss surfaces
- Fine grit sizes for finishing high-gloss varnish
- Removal of varnish defects

Application



Product profile:

Grit:	silicon carbide
Adhesive:	synthetic resin
Backing:	c-wt paper, water-resistant
Grit range:	P080–P1200
Coating:	closed

Product	Dimension	Catalogue No.	Article ID
Standard curves	230 x 280 mm 9" x 11"	T6032	9040.4306
Long belts and narrow belts	supplied on request in whatever size you need.		



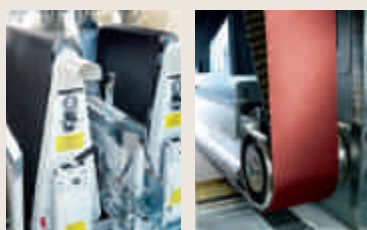
Advantages

- Perfect surface thanks to TopTec
- Dust-free process; antistatic construction gives low dust formation on belt, workpiece and machinery
- Superior surface quality when sanding on industrial varnish systems
- Extra stearate coating prevents belt clogging
- Long product life

Applications

- Intermediate sanding on industrial varnishing systems
- Polishing preparation for high-gloss surfaces
- Intermediate sanding of varnish to sand off raised wood fibres
- Removing paintwork defects

Application



Product profile:

Grit: silicon carbide
 Adhesive: synthetic resin
 Backing: e-wt paper
 Special coating: stearate
 Grit range: P220–P800
 Coating: closed
 Equipment: TopTec

Product	Dimension
Segmented belts	supplied on request in whatever size you need.
Wide belts	
Narrow belts	
Rolls	
Long belts	



Advantages

- Very good results with intermediate varnish applications
- Low clogging
- For hand and machine use
- Fast and safe change of abrasive with siafast hook-and-loop fastening system
- siasoft for excellent pressure distribution
- siasoft+ for excellent adaptability and finest-quality surfaces during disc sanding

Applications

- Intermediate sanding of varnishes
- Keying of primers and fillers
- Fine sanding of profiles and contours

Application



Product profile:

Grit:	silicon carbide
Adhesive:	synthetic resin
Backing:	a-wt paper
Special coating:	stearate
Grit range:	P150–P400
Coating:	open

Product	Dimension			Catalogue No.	Article ID
Standard curves		230x280 mm	9" x 11"	T3201	9485.0463
siasoft strips		115 x 140 mm	4½" x 5½"	T3204	0199.5922
siafast strips	without holes	70 x 125 mm	2¾" x 5"	T3202	2419.5013
	10 holes	115 x 228 mm	4½" x 9"	T3206	6879.6265
Plain rolls		115 mm x 50 m	4½" x 55yds	T3200	8668.5976
siasoft + discs	6 holes	∅ 150 mm	∅ 6"	T3209	4638.7051
	9 holes	∅ 150 mm	∅ 6"	T3210	3754.3598
siafast discs	without holes	∅ 150 mm	∅ 6"	T3284	2968.5006
	6 holes	∅ 150 mm	∅ 6"	T3207	8703.5206
	7 holes	∅ 150 mm	∅ 6"	T3285	4073.7533
	9 holes	∅ 150 mm	∅ 6"	T3208	7819.1753



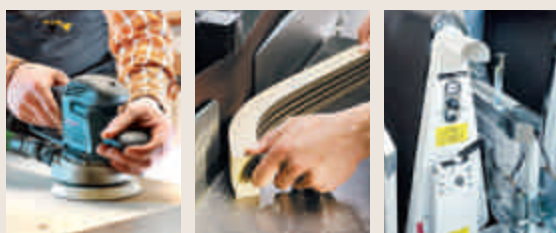
Advantages

- Perfect surface thanks to TopTec
- Dust-free process; antistatic construction gives low dust formation on belt, workpiece and machinery
- Long life when sanding on MDF and HDF sheeting and chipboard
- Optimum surface quality during fine sanding of MDF, high-grade veneers and softwood

Applications

- Sanding of edges and surfaces on MDF, HDF and chipboard
- Coarse and fine sanding of composite/synthetic wood-based materials and GFR surfaces
- Fine sanding of surfaces
- Intermediate sanding of varnishes
- Fine sanding when working with stone

Application



Product profile:

Grit: silicon carbide
 Adhesive: synthetic resin
 Backing: f-wt paper
 Grit range: P036–P400
 Coating: closed
 Equipment: TopTec

Product	Dimension			Catalogue No.	Article ID
siafast discs	without holes	Ø 115 mm	Ø 4½"	T3684	2234.2056
	without holes	Ø 125 mm	Ø 5"	T2241	2453.8834
	without holes	Ø 150 mm	Ø 6"	T3290	2981.4558
	7 holes	Ø 150 mm	Ø 6"	T3289	4086.6618
Wide belts	supplied on request in whatever size you need.				
Long belts					
Narrow belts					
Segmented belts					



Advantages

- Soft construction and flexible bonding ensure finest-quality surfaces
- For thin, difficult-to-sand varnishes
- Especially for use, where surface gloss is paramount and surface quality is more important than high levels of performance

Applications

- Keying and matting of primers
- Intermediate sanding of thin varnish layers
- Final sanding to prepare for polishing

Application



Product profile:

Grit:	silicon carbide
Adhesive:	hide glue
Backing:	e-wt paper
Grit range:	P180–P800
Coating:	closed

Product	Dimension
Wide belts	supplied on request in whatever size you need.
Long belts	



Advantages

- Very fine finish
- Smooth, even surfaces, even on curved workpieces
- Adapts extremely readily to contours
- Available up to grit size P2500
- Highly water resistant
- May be used wet or dry

Applications

- Can be used on oiled surfaces
- Sanding varnish on curved surfaces
- Polishing preparation for high-gloss surfaces
- Fine grit sizes for finishing high-gloss varnish
- Removal of varnish defects

Application



Product profile:

Grit:	semi-friable aluminium oxide	P060–P1200
	silicon carbide	P1500–P2500
Adhesive:	synthetic resin	
Backing:	c-wt paper, water-resistant	
Grit range:	P060–P2500	
Coating:	closed	

Product	Dimension	Catalogue No.	Article ID
Standard curves	230x280 mm 9" x 11"	T6021	3100.3713
siafast strips	without holes 70 x 125 mm 2¾" x 5"	T4827	5980.9923
Long belts	supplied on request in whatever size you need.		
Narrow belts			



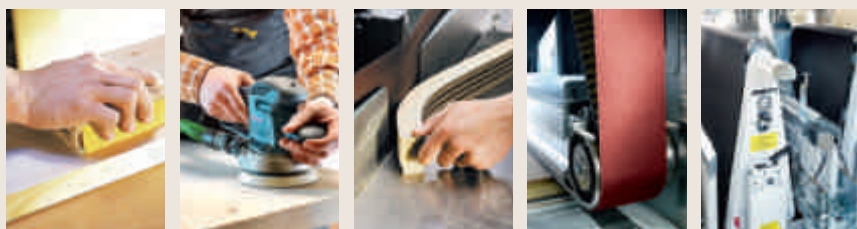
Advantages

- Perfect surface thanks to TopTec
- Dust-free process; antistatic construction gives low dust formation on belt, workpiece and machinery
- Universal all-around product for wood and varnish
- Very versatile
- Outstanding performance and long life
- Backing keeps its shape and is unaffected by changes in temperature and humidity

Applications

- Flush sanding of edges, edge bands and protrusions
- Calibration, medium and fine sanding of surfaces
- Keying and matting of primers
- Intermediate sanding of varnishes
- Final sanding to prepare for polishing

Areas of use



Product profile:

Grit:	aluminium oxide	P036–P220
	silicon carbide	P240–P800
Adhesive:	synthetic resin	
Backing:	f-wt paper	P036–P220
	d-wt paper	P240–P800
Special coating:	stearate	P240–P800
Grit range:	P036–P800	
Coating:	open	P036–P120
	closed	P150–P800
Equipment:	TopTec	

Product	Dimension	Catalogue No.	Article ID
siafast discs	without holes Ø 115 mm Ø 4½"	T6077	5903.5767
	without holes Ø 125 mm Ø 5"	T6078	6123.2545
	without holes Ø 150 mm Ø 6"	T6081	6650.8269
	6 holes Ø 150 mm Ø 6"	T6069	2439.7276
	7 holes Ø 150 mm Ø 6"	T6071	7756.0796
	9 holes Ø 150 mm Ø 6"	T6070	1555.3356
Plain rolls	115 mm x 50 m 4½" x 55 yds	T4119	2404.8046
Segmented belts	supplied on request in whatever size you need.		
Wide belts			
Narrow belts			
Sleeves			
Long belts			
Hand sanding belts			



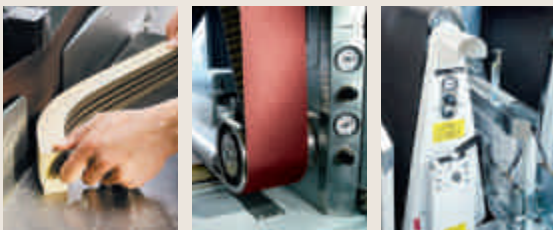
Advantages

- Perfect surface thanks to TopTec
- Dust-free process; antistatic construction gives low dust formation on belt, workpiece and machinery
- High surface quality when sanding hardwood
- High removal rate and fine surface quality on hardwood across the entire grit range
- High surface quality using fine grit sizes

Applications

- Flush sanding of edges, edge bands and protrusions
- Calibration, medium and fine sanding of surfaces
- Intermediate sanding of polyester varnishes

Areas of use



Product profile:

Grit: semi-friable aluminium oxide
 Adhesive: synthetic resin
 Backing: f-wt paper
 Grit range: P060–P400
 Coating: closed
 Equipment: TopTec

Product	Dimension
Wide belts	supplied on request in whatever size you need.
Long belts	
Narrow belts	
Segmented belts	



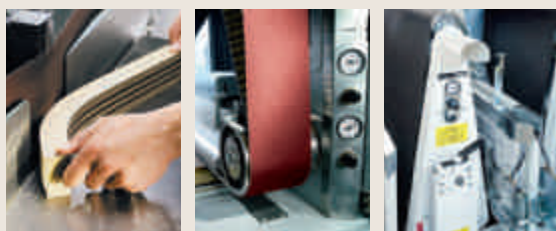
Advantages

- Perfect surface thanks to TopTec
- Dust-free process; antistatic construction gives low dust formation on belt, workpiece and machinery
- Ideal for wood that smears or wood containing oils or resins
- Very good finish on solid wood and veneer

Applications

- Flush sanding of edges, edge bands and protrusions
- Calibration, medium and fine sanding of surfaces

Application



Product profile:

Grit:	semi-friable aluminium oxide
Adhesive:	synthetic resin
Backing:	f-wt paper
Special coating:	stearate
Grit range:	P060–P220
Coating:	open
Equipment:	TopTec

Product	Dimension
Wide belts	supplied on request in whatever size you need.
Long belts	
Narrow belts	
Segmented belts	



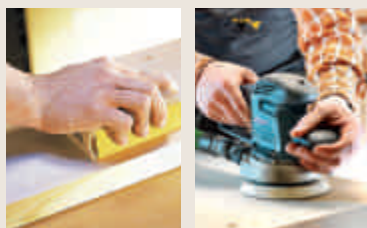
Advantages

- Very high removal rate and product life thanks to high-performance abrasive minerals
- Less clogging thanks to new stearate concept
- Uniform finish

Applications

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

Areas of use



Product profile:

Grit: mixed grit types, semi-friable aluminium oxide, aluminium oxide
 Adhesive: synthetic resin
 Backing: paper / film
 Special coating: stearate
 Grit range: K040–P1500
 Coating: electrostatic

Product	Dimension	Catalogue No.	Article ID
siafast discs	without holes Ø 80 mm Ø 3 3/16"	T2026	5816.8425
	without holes Ø 125 mm Ø 5"	T2030	6783.7705
	without holes Ø 150 mm Ø 6"	T2020	7332.9183
	5 holes Ø 125 mm Ø 5"	T2031	0845.6297
	6 holes Ø 125 mm Ø 5"	T2032	3031.0713
	7 holes Ø 150 mm Ø 6"	T2021	8438.1710
	8 holes Ø 125 mm Ø 5"	T2033	8286.8318
	9 holes Ø 125 mm Ø 5"	T2034	3560.7130
	9 holes Ø 150 mm Ø 6"	T2022	2237.4737
	9 holes Ø 203 mm Ø 8 1/8"	T2029	5002.6471
	15 holes Ø 150 mm Ø 6"	T2023	7546.2948
	17 holes* Ø 150 mm Ø 6"		1866.3684
	siafast strips	without holes 70x125 mm 2 3/4" x 5"	T2050
without holes 70x420 mm 2 3/4" x 16 13/16"		T2052	3210.1376
without holes 115x230 mm 4 1/2" x 9"		T2051	0465.4240
8 holes 70x150 mm 2 3/4" x 6"		T2040	8457.3676
8 holes 70x198 mm 2 3/4" x 8"		T2041	0062.9565
8 holes 93x180 mm 3 11/16" x 7"		T2044	8801.7879
14 holes 70x420 mm 2 3/4" x 16 13/16"		T2043	5618.8422
18 holes 115x228 mm 4 1/4" x 9"		T2042	5348.6398
siasoft perforated rolls	115 x 125 mm x 25 m 4 1/2" x 5" x 27 1/2 yds	T2150	2237.4334
siasoft sheet	115x140 mm 4 1/2" x 5 1/2"	T2151	4564.0566
siasoft unperforated rolls	115 mm x 25 m 4 1/2" x 27 1/2 yds	T2152	3973.1827



Advantages

- Universally applicable to a broad range of applications
- For hand and machine use
- Fast and safe change of abrasive with siafast hook-and-loop fastening system
- Low clogging

Applications

- Sanding and removal of paint and varnish
- Sanding of solid wood and veneer
- Keying and fine sanding of primer and filler
- Sanding after wetting
- Intermediate sanding of varnishes on surfaces and curves

Application



Product profile: plain

Grit:	semi-friable aluminium oxide	
Adhesive:	synthetic resin	
Backing:	c-paper	P040–P240
	b-paper	P280–P600
Special coating:	stearate P080–P600	
Grit range:	P040–P600	
Coating:	open	P040–P100
	closed	P120–P600

Product profile: siafast

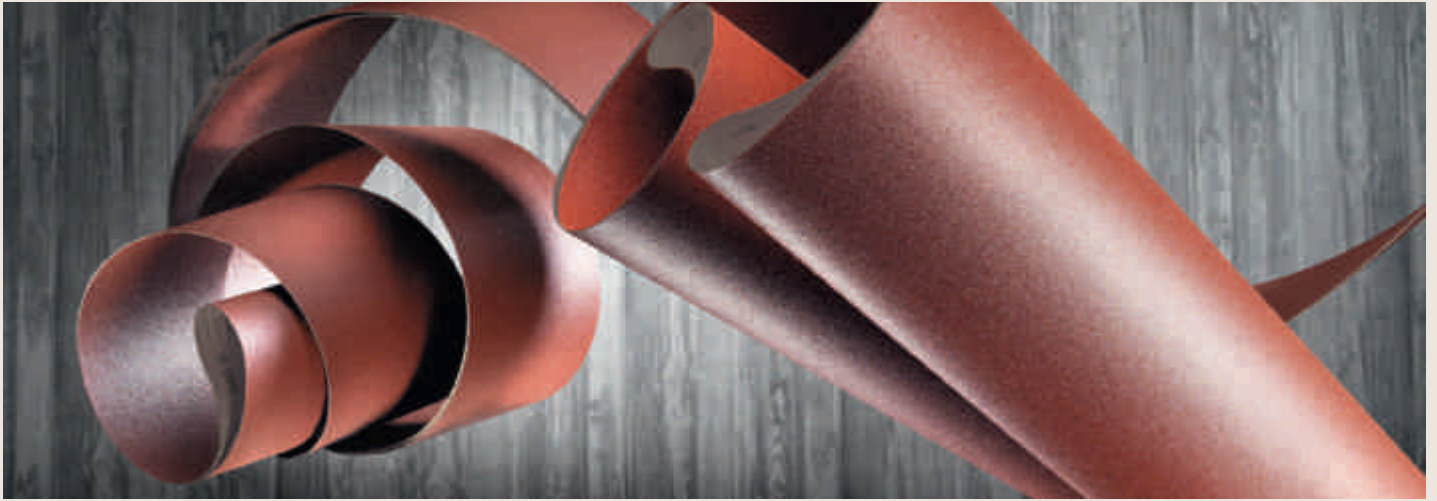
Grit:	semi-friable aluminium oxide	
Adhesive:	synthetic resin	
Backing:	c-paper	P040–P100
	b-paper	P120–P600
Special coating:	stearate P080–P600	
Grit range:	P040–P600	
Coating:	open	P040–P100
	closed	P120–P600

Product	Dimension	Catalogue No.	Article ID
Standard curves	230 x 280 mm 9" x 11"	T3234	4097.5762
Plain strips	without holes 93 x 230 mm 3 11/16" x 9"	T3235	5025.2530
	without holes 115 x 280 mm 4 1/2" x 11"	T3236	8330.1258
	8 holes 80 x 166 mm 3 1/8" x 6 9/16"	T3241	0926.1743
	8 holes 93 x 230 mm 3 11/16" x 9"	T3242	2263.5299
	10 holes 115 x 280 mm 4 1/2" x 11"	T3243	9171.9202
Plain rolls	95 mm x 50 m 3 3/4" x 55 yds	T3229	4880.2269
	115 mm x 50 m 4 1/2" x 55 yds	T3232	3281.1275



Product	Dimension			Catalogue No.	Article ID
siafast strips	without holes	70 x 125 mm	2 3/4" x 5"	T3237	6999.7726
	without holes	81 x 153 mm	3 3/16" x 6"	T3238	3736.3805
	without holes	115 x 115 mm	4 1/2" x 4 1/2"	T3239	8166.0152
	without holes	115 x 230 mm	4 1/2" x 9"	T3240	0681.2776
	8 holes	81 x 133 mm	3 3/16" x 5 1/4"	T3244	4970.4735
	8 holes	81 x 153 mm	3 3/16" x 6"	T3245	5409.8291
	8 holes	93 x 180 mm	3 11/16" x 7"	T3246	9017.6415
	6 holes	100 x 110 mm	4" x 4 5/16"	T3247	4463.3155
	6 holes	115 x 115 mm	4 1/2" x 4 1/2"	T3249	8336.1018
	10 holes	115 x 228 mm	4 1/2" x 9"	T3250	1492.1097
	14 holes	80 x 133 mm	3 1/8" x 5 1/4"	T6005	8797.6897
siafast rolls		115 mm x 25 m	4 1/2" x 27 1/2 yds	T3233	0247.0486
Delta sheets	7 holes	100 x 147 mm	4" x 5 13/16"	T3261	6318.5062
Polygon	6 holes	93 x 93 mm	3 11/16" x 3 11/16"	T3260	5712.4074
	6 holes	95 x 95 mm	3 3/4" x 3 3/4"	T3259	3429.9839
siafast discs	without holes	Ø 115 mm	Ø 4 1/2"	T3251	6779.8996
	without holes	Ø 125 mm	Ø 5"	T3252	6999.5774
	without holes	Ø 150 mm	Ø 6"	T3253	7548.7719
	without holes	Ø 225 mm	Ø 9"		9174.7333
	without holes	Ø 300 mm	Ø 12"	T3254	0811.2845
	6 holes	Ø 150 mm	Ø 6"	T3257	3337.6726
	7 holes	Ø 90 mm	Ø 3 1/2"		1452.5883
	7 holes	Ø 150 mm	Ø 6"	T3288	8654.0246
	8 holes	Ø 115 mm	Ø 4 1/2"	T3255	7568.7492
	8 holes	Ø 125 mm	Ø 5"	T3256	8502.6854
	9 holes	Ø 125 mm	Ø 5"	T6751	4102.2332
	9 holes	Ø 125 mm	Ø 5"	T3282	3919.0489
	9 holes	Ø 150 mm	Ø 6"	T3258	2453.2806
	9 holes	Ø 225 mm	Ø 9"		2362.6881
	15 holes	Ø 150 mm	Ø 6"	T3339	7762.1484
	17 holes*	Ø 150 mm	Ø 6"		2082.2220

*For Festool Multi-Jetstream



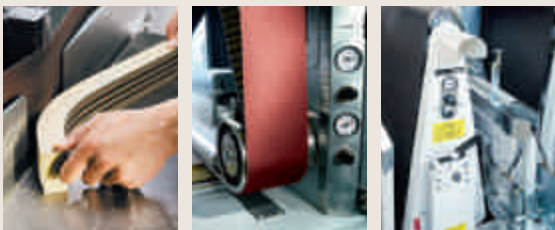
Advantages

- Perfect surface thanks to TopTec
- Dust-free process; antistatic construction gives low dust formation on belt, workpiece and machinery
- Very good finish on solid wood and veneer
- High performance thanks to optimised grit distribution
- Ideal for wood that smears or wood containing oils or resins

Applications

- Flush sanding of edges, edge bands and protrusions
- Calibration, medium and fine sanding of surfaces

Application



Product profile:

Grit: semi-friable aluminium oxide
 Adhesive: synthetic resin
 Backing: f-wt paper
 Grit range: P100–P180
 Coating: open
 Equipment: TopTec

Product	Dimension
Wide belts	supplied on request in whatever size you need.
Long belts	
Narrow belts	
Segmented belts	



Advantages

- Long product life on wood-based materials
- Very flexible
- Very high surface quality
- Adjusts easily to suit profiles and contours

Applications

- Profile sanding of MDF
- Intermediate sanding of varnished profile workpieces
- For radii greater than 5 mm during profile belt sanding

Application



Product profile:

Grit:	silicon carbide	
Adhesive:	synthetic resin	
Backing:	j-wt cloth, cotton	P060–P120
	jj-wt cloth, cotton	P180–P600
Grit range:	P060–P600	
Coating:	closed	
Disposal:	This product contains cryolite and must be disposed of as hazardous waste (2000 / 532 / EC) (EWC-SN 120120).	

Product	Dimension
Long belts	supplied on request in whatever size you need.
Narrow belts	
Rolls	
Slotted rollers	
Slotted strips	



Advantages

- Perfect surface thanks to TopTec
- Dust-free process; antistatic construction gives low dust formation on belt, workpiece and machinery
- High level of lateral belt stability, segmentable
- For continuous, very heavy-duty use, washable
- High removal rate in coarser grit sizes on softwood and hardwood

Applications

- Industrial coarse sanding of various types of solid wood
- Coarse to medium sanding in plywood manufacturing
- Coarse to fine sanding of glued solid-wood panels

Application



Product profile:

Grit:	semi-friable aluminium oxide	
Adhesive:	synthetic resin	
Backing:	z-wt cloth, polyester	
Grit range:	P036–P120	
Coating:	open	P036–P060
	closed	P080–P120
Equipment	TopTec	

Product	Dimension
Wide belts	supplied on request in whatever size you need.
Segmented belts	



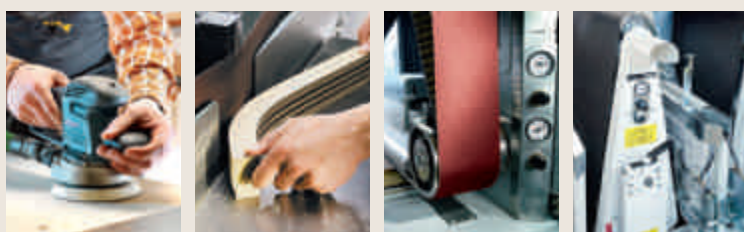
Advantages

- Perfect surface thanks to TopTec
- Dust-free process; antistatic construction gives low dust formation on belt, workpiece and machinery
- Long service life thanks to robust backing
- High removal rate in coarser grit sizes on softwood and hardwood

Applications

- Flush sanding of edges
- Fine sanding of surfaces and edges
- Coarse to fine sanding in plywood manufacturing
- Coarse to fine sanding of glued softwood panels
- Sanding down of old varnish and paint

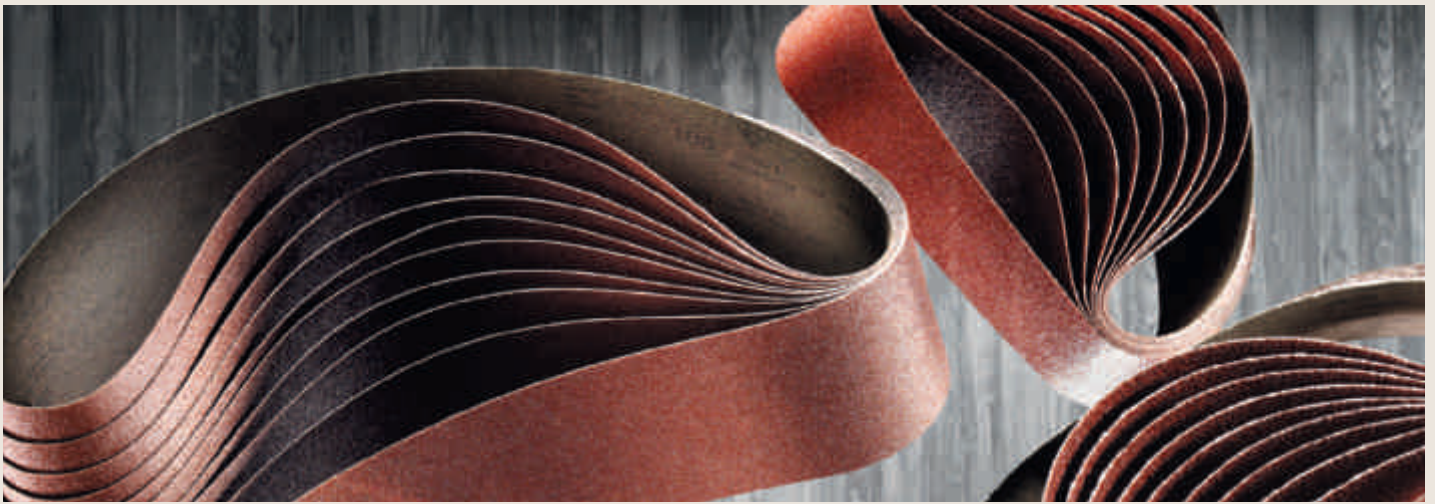
Areas of use



Product profile:

Grit:	semi-friable aluminium oxide	
Adhesive:	synthetic resin	
Backing:	y-wt cloth, cotton	P016–P050
	x-wt cloth, cotton	P060–P320
Grit range:	P016–P320	
Coating:	open	P016–P120
	closed	P150–P320
Equipment:	TopTec	

Product	Dimension	Catalogue No.	Article ID
siafast discs	without holes \varnothing 115 mm \varnothing 4 1/2"	T6754	7608.9528
Wide belts	supplied on request in whatever size you need.		
Hand sanding belts			
Sleeves			
Long belts			
Narrow belts			



Advantages

- Long service life thanks to robust backing
- Optimised for portable belt sanding

Applications

- Sanding down of old varnish and paint
- Flush sanding of edges and edge bands
- Sanding down of solid wood

Application



Product profile:

Grit: semi-friable aluminium oxide
 Adhesive: synthetic resin
 Backing: x-wt cloth, cotton
 Grit range: P036–P120
 Coating: open

Product	Dimension		Catalogue No.	Article ID
Hand sanding belts	65x410mm	2 ⁹ / ₁₆ " x 16 ³ / ₁₆ "	T5513	1558.0293
	75x457mm	3" x 18"	T5772	1777.9920
	75x480mm	3" x 19"	T5518	2274.6021
	75x533mm	3" x 21"	T5515	3408.5768
	75x610mm	3" x 24"	T5517	5087.1226
	100x552mm	4" x 21 ³ / ₄ "	T5519	6806.6600
	100x560mm	4" x 22"	T5520	6973.7534
	100x610mm	4" x 24"	T5521	8072.1424
	100x620mm	4" x 24 ³ / ₈ "	T5522	8291.8202
	100x860mm	4" x 33 ⁷ / ₈ "	T5523	3509.8109
	100x900mm	4" x 35 ¹ / ₂ "	T5524	4366.9000
	110x620mm	4 ⁵ / ₁₆ " x 24 ³ / ₈ "	T5525	7470.6484



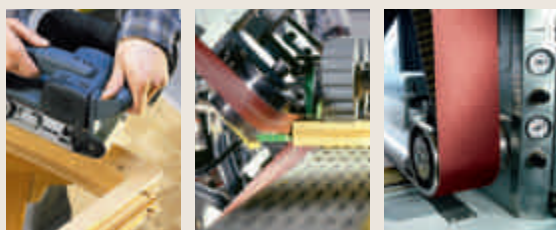
Advantages

- Perfect surface thanks to TopTec
- Dust-free process; antistatic construction gives low dust formation on belt, workpiece and machinery
- High level of dimensional accuracy during profile belt sanding
- Adapts to contours, curves and profiles
- Long product life during sanding of softwood and wood containing resins

Applications

- Coarse and fine sanding of curves and profiles
- Sanding down of old varnish
- Flush sanding of edges and protrusions
- Pre- and post-treatment of surfaces and curves
- Particularly suitable for pneumatic rollers
- For radii greater than 10 mm during profile belt sanding

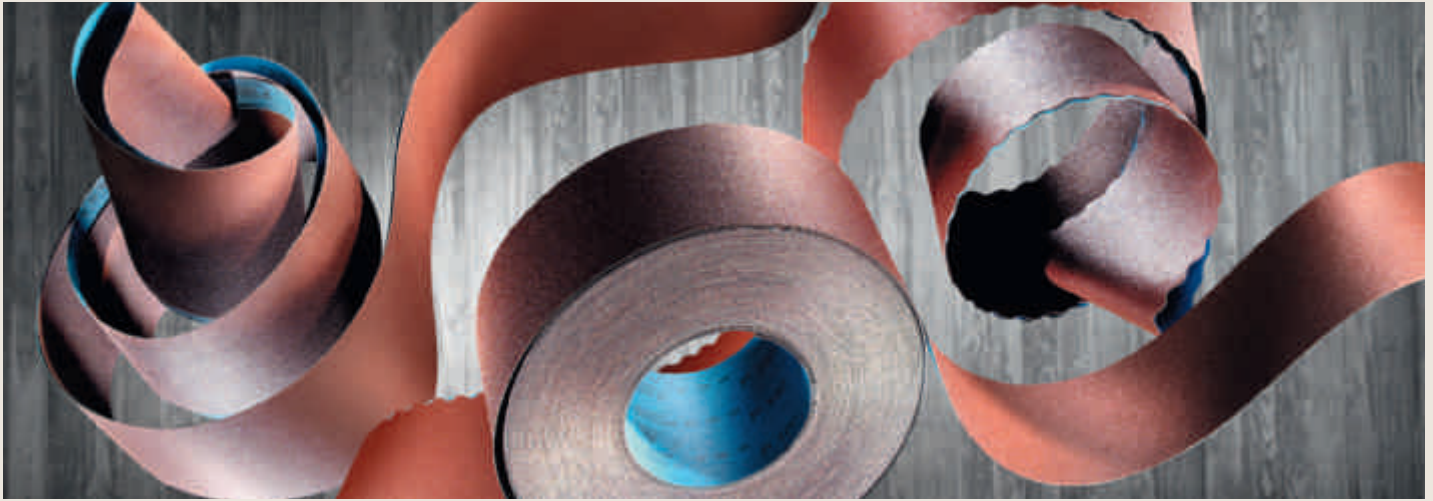
Application



Product profile:

Grit:	semi-friable aluminium oxide
Adhesive:	synthetic resin
Backing:	j-wt cloth, cotton
Grit range:	P060–P220
Coating:	open
Equipment:	TopTec

Product	Dimension
Hand sanding belts	supplied on request in whatever size you need.
Sleeves	
Long belts	
Narrow belts	
Slotted rollers	
Slotted strips	



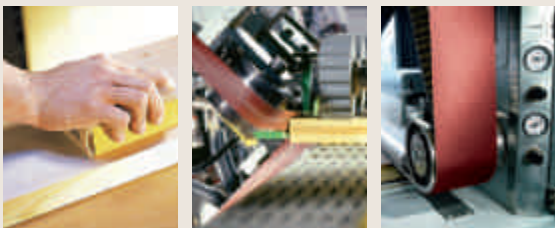
Advantages

- High level of dimensional accuracy during profile belt sanding
- Optimally suited for hand sanding of turned workpieces
- Very adaptable to contours, curves and profiles
- Can be torn to any size required

Applications

- Shaping and fine sanding of profiles and contours
- Intermediate sanding of curves and profiles
- Especially suitable for pneumatic rollers
- Particularly suitable for sanding brushes
- For radii greater than 5 mm during profile belt sanding

Application



Product profile:

Grit: semi-friable aluminium oxide
 Adhesive: synthetic resin
 Backing: jj-wt cloth, cotton
 Grit range: P060–P320
 Coating: closed

Product	Dimension	Catalogue No.	Article ID	
Plain rolls	100 mm x 50 m	4" x 55 yds	T3631	0662.2534
	115 mm x 50 m	4 1/2" x 55 yds	T5059	4446.8229
Narrow belts	supplied on request in whatever size you need.			
Sleeves				
Long belts				
Slashed rolls				
Slashed Assemblies				



Advantages

- Unique abrasive, elastic in marked direction
- very well suited for profile sanding on automatic moulders and double-sided moulder sanders
- Especially well suited for profile sanding on CNC machines
- Fast and safe change of abrasive with siafast hook-and-loop fastening system

Applications

- Fine sanding of profiles in hardwood and softwood as well as MDF
- Sanding of curves and raised panels
- Sanding of curved workpieces

Application



Product profile:

Grit:	semi-friable aluminium oxide
Adhesive:	synthetic resin
Backing:	h-wt cloth, mixed fibres
Grit range:	P080–P240
Coating:	closed

Product	Dimension	Catalogue No.	Article ID	
siafast sheets	435 mm x 1 m	17 ¼" x 39 ½"	T6838	3018.5932
	650 mm x 1 m	25 9/16" x 39 ½"	T6839	0779.9568
Profile sanding set	Languages: German, French, Italian, English, Spanish, Flemish	T7844	0020.0386	
siaklett	700 x 500 mm	28" x 19 ½"	T6999	5797.3499
100 °C contact adhesive	425 g	15 oz	T7071	0020.0379
PUR disc	Ø 180 x 30 mm	Ø 7" x 1 3/16"	T7070	0020.0378
	Ø 180 x 50 mm	Ø 7" x 2"	T7069	0020.0377



Advantages

- Universally applicable to a broad range of applications
- Can be torn to any size required
- High level of dimensional accuracy during profile belt sanding
- Extremely adaptable to contours, curves and profiles
- siasoft version gives excellent pressure distribution during hand sanding

Applications

- Medium to fine sanding of curves and profiles
- Keying of primers and fillers
- Intermediate sanding of varnish on curves and profiles
- Suitable for sanding brushes
- For radii greater than 2 mm during profile belt sanding

Application



Product profile:

Grit: semi-friable aluminium oxide
 Adhesive: synthetic resin
 Backing: h-wt cloth, cotton
 Grit range: P040–P600
 Coating: closed

Product	Dimension	Catalogue No.	Article ID	
Plain rolls	115 mm x 50 m	4 ½" x 55 yds	T5147	4770.6033
siasoft rolls	115 mm x 10 m	4 ½" x 11 yds	T3864	6581.1109
siasoft strips	115 mm x 140 mm	4 ½" x 5 ½"	T3860	6269.3860
Sleeves	supplied on request in whatever size you need.			
Narrow belts				
Slashed rolls				
Slashed Assemblies				



Advantages

- Excellent edge stability with film backing
- Minimum of clogging thanks to special coating and optimised binder resin
- Uniform grain coating
- High level of coating and tear resistance
- High resistance to variation in climatic conditions

Applications

- Sanding of bodyfiller, gelcoat and composites
- Sanding of hard and soft wood

Application



Product profile:

Grit:	mixed grit sizes and ceramic content
Adhesive:	synthetic resin
Backing:	Polyester film
Grit range:	K40–K180
Coating:	electrostatic open

Product	Dimension			Article ID
	without holes	Ø 150 mm	Ø 6"	5425.4472
	7 holes	Ø 150 mm	Ø 6"	6530.6999
	15 holes	Ø 150 mm	Ø 6"	5638.8237
	17 holes*	Ø 150 mm	Ø 6"	9926.6387

*For Festool Multi-Jetstream



Advantages

- Extremely flexible and very adaptable to various shapes
- 3-dimensional grit penetration
- Very low clogging
- Alkali- and solvent-resistant
- Very long product life
- Very low flammability and thus a safe alternative to steel wool

Applications

- Keying and matt finishing on varnish and paint
- Removing spray vapour
- Sanding of paintwork treated with stripping agents
- Sanding of profiled and rounded workpieces

Application



Product profile:

Grit: aluminium oxide
silicon carbide

Adhesive: synthetic resin

Backing: polyamide fibres

Grit range: very fine – microfine

Grit application: sprayed on

Product	Dimension		Catalogue No.	Article ID	
Rolls	100 mm x 10 m	4" x 11 yds	N7056	9327.7238	
	115 mm x 10 m	4 ½" x 11 yds	N7900	3144.5052	
	125 mm x 10 m	5" x 11 yds	N7013	2344.9555	
Sheets	152 x 229 mm	6" x 9"	N7058	4132.9840	
siafast discs	without holes	Ø 150 mm	Ø 6"	N8996	7866.2539
Perforated hand pads	115 x 152 mm	4 ½" x 6"	N7002	0055.7679	



Advantages

- Very long product life
- Low scratch depth with high stock removal
- Foam backing equalises pressure and prevents undercutting
- Water-resistant and washable
- Adapts very easily for sanding edges
- Low clogging when used for dry sanding

Applications

- Ultrafine sanding of mineral-based materials and paint
- Polishing preparation for high-gloss surfaces
- Sanding of UP and PUR varnishes prior to polishing
- Final sanding of mineral-based materials

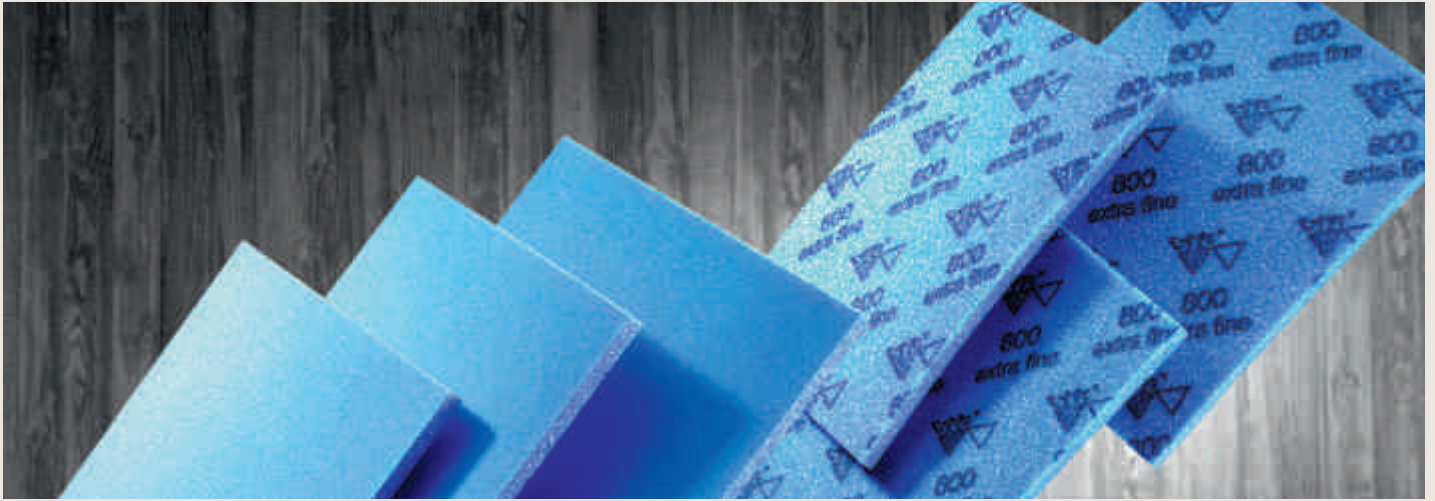
Application



Product profile:

Grit:	white aluminium oxide
Adhesive:	synthetic resin
Backing:	knitted fabric with foam backing
Grit range:	K240–K4000
Coating:	special coating process

Product	Dimension			Catalogue No.	Article ID
Discs	without holes	Ø 80 mm	Ø 3 1/8"	T3306	3647.2462
	without holes	Ø 150 mm	Ø 6"	T3307	5163.3687
Strips		115 x 140 mm	4 1/2" x 5 1/2"	T3308	6329.7598



Advantages

- Pressure-equalising foam gives perfect surface finish
- No undercutting in intermediate sanding due to excess application of pressure
- Moulds itself to the workpiece
- Can be used wet or dry

Applications

- Keying of primers
- Keying of plastics prior to applying filler
- Filler sanding for hard to reach places
- Producing a matt finish on varnishes
- Producing a matt finish on difficult varnish types

Areas of use



Product profile:

Grit:	white aluminium oxide
Coating:	single-sided
Backing material:	EVA foam
Foam density:	soft for maximum mouldability
Grit range:	K280, K500, K800, K1000, K1500

Product	Fineness	Dimension	Catalogue No.	Article ID
Flat pad	medium	115 x 140 x 5 mm 4 1/2" x 5 1/2" x 3/16"	T2275	0020.3794
	fine	115 x 140 x 5 mm 4 1/2" x 5 1/2" x 3/16"	T2275	0020.3795
	extra fine	115 x 140 x 5 mm 4 1/2" x 5 1/2" x 3/16"	T2275	0020.3796
	super fine	115 x 140 x 5 mm 4 1/2" x 5 1/2" x 3/16"	T2275	0020.3797
	microfine	115 x 140 x 5 mm 4 1/2" x 5 1/2" x 3/16"	T2275	0020.3798



Advantages

- Pressure-equalising foam gives perfect surface finish
- No undercutting in intermediate sanding due to excess application of pressure
- Moulds itself to the workpiece
- Can be used wet or dry
- Low clogging

Applications

Paint and fillers

- Keying undercoat prior to applying paint
- Keying of paint and filler on flat surfaces and profiles
- Intermediate sanding prior to application of subsequent coat

Varnish

- Sanding of wood prior to varnishing
- Intermediate sanding on curves, raised panels and raised mouldings
- Removing minor varnish defects
- Fine sanding after wet treatment

Application



Product profile:

Grit: brown aluminium oxide
 Coating: 2-sided
 Backing material: solvent-free PUR foam
 Foam density: extra soft for mouldability
 Grit range: coarse, medium, medium fine, fine, super fine, super fine white

Product	Fineness	Dimension		Catalogue No.	Article ID
Standard pad	coarse	97 x 120 x 12 mm	3 13/16" x 4 3/4" x 1/2"	T2272	0020.4160
	medium	97 x 120 x 12 mm	3 13/16" x 4 3/4" x 1/2"	T2272	0020.4161
	medium fine	97 x 120 x 12 mm	3 13/16" x 4 3/4" x 1/2"	T2272	0020.4162
	fine	97 x 120 x 12 mm	3 13/16" x 4 3/4" x 1/2"	T2272	0020.4163
	super fine	97 x 120 x 12 mm	3 13/16" x 4 3/4" x 1/2"	T2272	0020.4164
	super fine white	97 x 120 x 12 mm	3 13/16" x 4 3/4" x 1/2"	T2272	0020.4165



Advantages

- Very aggressive and robust with uniform surface quality
- Coated on all four sides, ideal for use inside rebates and on flat surfaces
- For use on wood, paint and varnish in the processing industries
- Low clogging

Applications

Paint and fillers

- Sanding down of paint, filler and old paint
- Keying of wood, metal and plastic prior to application of paint
- Keying of paint inside rebates and on flat surfaces
- Removing paint runs and coating defects, e.g. trapped dirt particles

Varnish

- Sanding of wood prior to varnishing
- Intermediate sanding of varnish on surfaces, rebates and gentle curves
- Removing paintwork defects

Areas of use



Product profile:

Grit:	brown aluminium oxide
Coating:	4-sided
Backing material:	solvent-free PUR foam
Foam density:	firm for high stock removal
Grit range:	coarse, medium, medium fine, fine, super fine

Product	Fineness	Dimension	Catalogue No.	Article ID
Standard block	coarse	68x97x27 mm 2 1/16" x 3 13/16" x 1 1/16"	T2274	0020.4166
	medium	68x97x27 mm 2 1/16" x 3 13/16" x 1 1/16"	T2274	0020.4167
	medium fine	68x97x27 mm 2 1/16" x 3 13/16" x 1 1/16"	T2274	0020.4168
	fine	68x97x27 mm 2 1/16" x 3 13/16" x 1 1/16"	T2274	0020.4169
	super fine	68x97x27 mm 2 1/16" x 3 13/16" x 1 1/16"	T2274	0020.4170
Combination block	fine	68x97x27 mm 2 1/16" x 3 13/16" x 1 1/16"	T2276	0020.4171



Advantages

- Excellent grip thanks to special adhesive
- Heavy duty and long-lasting thanks to high-quality raw materials
- Hard-wearing, slip-resistant surface
- Numerous applications
- Weather-resistant
- Easy to attach, even to curves and edges
- Tested and certified
- Cut from roll to suit application (roll length 20 m)
- User-friendly (easy removal of protective film)

Applications

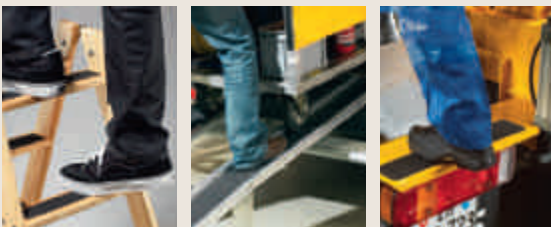
Slippery, wet or oily surfaces are a safety risk. This risk is avoided by laying slip-resistant coverings.

For universal use, the siaway anti-slip tape 5770 is the cost-effective, quick and safe solution to prevent accidents caused by tripping, slipping or falling.

Can be used in industrial, commercial and private areas which are heavily walked on and/or subject to light vehicle traffic.

siaway 5770 can also be used economically and efficiently in critical locations.

Areas of use



Product profile:

Grit:	anti-slip mineral grit
Adhesive:	elastic binder resin
Backing:	light, self-adhesive polyester film, protected by removable film

Product	Dimension		Article ID
Rolls	20 m x 25 mm	22 yds x 1"	9147.1571.0060.01
	20 m x 50 mm	22 yds x 2"	2164.3888.0060.01
	20 m x 100 mm	22 yds x 4"	8134.3817.0060.01
	20 m x 150 mm	22 yds x 6"	4136.6332.0060.01
	20 m x 300 mm	22 yds x 12"	2089.5537.0060.01
	20 m x 400 mm	22 yds x 16"	4061.8448.0060.01

Other sizes on request.



Advantages

- Developed for multi-hole and net-type abrasives
- Also suitable for 6-, 7-, 9- and 15-hole discs
- The 103-hole pattern guarantees consistent dust extraction
- Compatible with all standard orbital sanders thanks to Festo adaptor (5/16" + M8)
- New, heat-resistant Velcro backing guarantees improved extraction and longer product life
- Low vibration thanks to perfectly balanced backing

Applications

- Coarse sanding, precision finishing and micro-finishing using orbital sander
- Pad hardness is optimised for each specific application

Backing pad – hard, soft, extra soft


Type	Stroke in mm	Stroke in inches	Grit range
hard	5.0–10.0	3/16" – 3/8"	P040–P240
soft	5.0	3/16"	P080–P500
extra soft	2.0–5.0	1/8" – 3/16"	P220–P1500

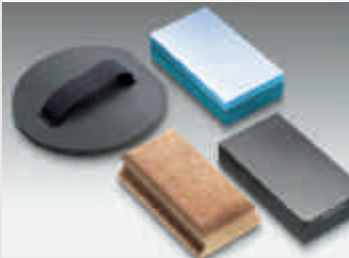
When using an orbital sander, take care to ensure that the most suitable backing pad is used. Soft or extra soft backing pads are recommended for intermediate sanding on varnish. For dust-free operation, we recommend the use of a powerful dust-extraction system.


Product	Dimension	Article ID
Air chamber backing pad, hard	Ø 150 mm 103 holes*	0020.5741.01
Air chamber backing pad, soft	Ø 150 mm 103 holes*	0020.5740.01
Air chamber backing pad, extra soft	Ø 150 mm 103 holes*	0020.5742.01
Intermediate pad J-hook Velcro	Ø 150 x 10 mm 103 holes	0020.5886.01
Intermediate pad micro-Velcro	Ø 150 x 12 mm 15 holes	0020.4546.01


* The following items come with the multi-hole air chamber backing pad:

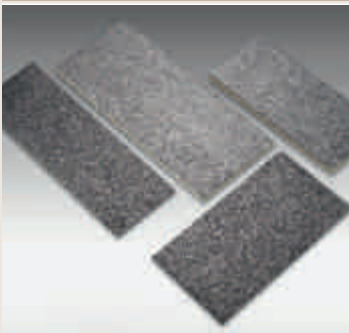
- Fitting kit incl. Festool adaptor and spacers
- Bolts 5/16" + M8
- Fitting instructions in different languages

siabrosse		Dimensions	Grit	Item no.	Item ID
	M14 plate brush	130x50 mm 5 1/8" x 2"	K046	T7067	0020.0495
			K060	T7067	0020.0358
			K080	T7067	0020.0359
			K120	T7067	0020.0360
	M14 circular brush	140x30 mm 5 1/2" x 1 3/16"	K060	T7068	0020.0361
			K080	T7068	0020.0362
			K120	T7068	0020.0363

Hand sanding blocks		Dimensions	Item no.	Item ID
	siafast hand sanding block, medium hard/extra soft	70x125 mm 2 3/4" x 5"	T7055	0020.0342
	siafast cork sanding block, hard	70x125 mm 2 3/4" x 5"	T8435	0020.0095
	siafast wet sanding block hard/soft	70x125 mm 2 3/4" x 5"	T7053	0020.0343
	siafast circular sanding pad soft	Ø 150 mm Ø 6"	T7060	0020.0364

Roll holder		Dimensions	Item no.	Item ID
	Roll holder	235 x 605 x 365 mm 9 1/4" x 23 3/4" x 14"	T6963	0020.0397

Dust cloths		Dimensions	Item no.	Item ID
	Microfibre dust cloth	380x380 mm 15" x 15"	T8496	0020.3185
	Dust cloth	320x400 mm 12 9/16" x 15 3/4" 650x750 mm 25 9/16" x 29 1/2"	T8368 T8348	0020.0016 0020.0088

Sanding-pad coating – self-adhesive graphite coating		Dimensions	Item no.	Item ID
	10 mm 13/32" felt	110 x 250 mm 4 5/16" x 9 7/8" 110 x 333 mm 4 5/16" x 13 1/8" 120 x 250 mm 4 3/4" x 9 7/8" 140 x 250 mm 5 1/2" x 9 7/8" 140 x 333 mm 5 1/2" x 13 1/8"	T7580 T7584 T7581 T7582 T7586	5940.1342 7733.1423 5140.5845 3541.4384 5334.4932
	without felt	110 x 250 mm 4 5/16" x 9 7/8" 110 x 333 mm 4 5/16" x 13 1/8" 120 x 250 mm 4 3/4" x 9 7/8" 140 x 250 mm 5 1/2" x 9 7/8" 140 x 333 mm 5 1/2" x 13 1/8"	T7588 T7592 T7589 T7590 T7594	6860.3508 8653.2589 6060.8011 4461.7017 6254.7098

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