

## 1919 siawood+

**Next-generation professional abrasives** 



#### 1919 siawood + Next-generation professional abrasives



The latest generation of the classic 1919 siawood sets new standards in stationary wood sanding. Produced from the highest-quality raw materials in one of the world's most state-of-the-art abrasives manufacturing plants, 1919 siawood + meets the highest demands of the woodworking industry and the professional trades. Its maximum process stability is the result of a consistently high removal rate and perfect Swiss surface quality over the entire lifetime of the abrasive.

#### **Product profile**

Grit: blue-fired aluminium oxide

Grit range: P36—P220 (grit range expansion to P400 in 2015)

Backing: P36-P80: extra-sturdy f-wt paper P100-P220: sturdy f-wt paper

Coating: open

Bonding: synthetic resin Equipment: TopTec

#### **Advantages**

- Premium product for the highest quality demands in stationary wood sanding
- Minimal clogging thanks to modern coating technology
- Outstanding performance and long life
- Very high stock removal with good finish
- Exceptional sturdiness and rigidity of the backing additionally strengthened for tough applications in the P36 to P80 grit range
- Lower sanding costs due to longer lifetime and fewer belt changes

#### **Applications**

- Calibrating surfaces
- Coarse sanding of solid wood and wood-based materials
- Fine sanding of solid wood, veneers and wood-based materials

#### **Application**











Product	Dimension
siafast discs	Ø115 mm / Ø125 mm / Ø150 mm, various hole patterns
Plain rolls	115 mm x 50 m
Manual belts and sleeves	Width > 30 mm, < 400 mm, length < 1000 mm
Edge and long belts	Width < 400 mm, length ≥ 1000 mm
Wide belts	Width > 400 mm, ≤ 1700 mm
Segmented belts	Width > 1700 mm

#### Maker 5 – Abrasives manufacturing of the highest order



#### Maker 5 - The future of abrasives production

One of the world's most state-of-the-art abrasives production plants manufactures 40 million square metres of abrasives per year. And it does so at a maximum production speed of 80 m/min. The result is premium-quality abrasives made from the best ingredients to produce a Swiss quality product.

#### **Customer requirements determine production**

Maker 5 enables sia Abrasives to react quickly and flexibly to customer orders and to minimise stocks because this ultra-modern facility allows for largely uninterrupted production. This represents cutting-edge technology for the world of abrasives.

#### 2,000 versions largely without interruption

sia Abrasives uses a completely new machine concept to ensure its virtually uninterrupted production of over 2,000 different versions of abrasives — especially with regard to bonding agent production, backing changeover, bonding agent application and grit changeover. The result is a fully automated manufacturing process with one specific aim, namely to provide you with the key to a perfect surface.

#### Unique process and quality control

High-precision, laser-controlled and ultrasound-monitored measurement procedures record over 1,000 permanently controlled process parameters in order to deliver top products in consistent quality.

#### Production widths of up to 1,950 mm

The new production width of 1,950 mm allows for the manufacture of abrasives that were not possible with the previous maximum manufacturing width of 1,350 mm. Especially the increasing demand for extra-wide sanding belts with as few belt joints as possible can therefore now also be met by sia Abrasives. This not only increases productivity, but improves above all surface quality. The result is an immaculate sanding finish.

### Consideration for people and nature – "Made in Switzerland"

The Maker 5 abrasives manufacturing plant is not only one of the most state-of-the-art facilities of its kind, it is also a clear commitment to Switzerland as a production location. Ecological criteria are important to sia Abrasives. A new bonding agent preparation method prevents problematic industrial wastewater from being produced. Optimised air conduction processes and heat recovery systems reduce the need for heat energy considerably. Optimised processes when switching to a new product cause considerably less waste and reduce disposal requirements to protect the environment.



#### **TopTec – Further improved with Maker 5 Technology**



#### State-of-the-art coating technology

- Very uniform scattering thanks to exceptionally consistent grain positioning
- Outstanding lifetimes due to less clogging
- Maximum removal rate and optimised sanding pattern thanks to laser-checked, electrostatic coating



#### **Superior belt joints**

- Best manufacturing quality and high quality consistency
- Excellent sturdiness and long life
- Comprehensive, solution-oriented belt joint concept
- Many years of know-how thanks to sia Abrasives Engineering



#### **Best antistatic properties**

- Less cleaning required, less wear and longer lifetime of equipment thanks to reduced dust accumulation in machines and assemblies
- Better work conditions due to minimised dust in the ambient air
- Longer belt life and greater durability due to low level of clogging



#### **Consistent quality**

- Quality products "Made in Switzerland"
- High-precision, laser-controlled and ultrasound-monitored measurement procedures for consistent product quality and exceptional quality reliability



#### **Pioneering manufacturing processes**

- Swiss technology from one of the world's most state-of-the-art manufacturing plants
- Backing, base and size coats, and abrasive grains are combined with each other in a fully automated, high-tech process at the plant
- Production width of up to 1,950 mm

#### 1919 siawood + Next-generation professional abrasives

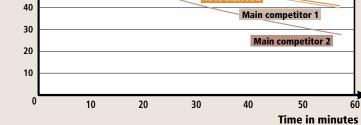
#### Removal rate / Sanding performance

The efficiency of an abrasive is largely dependent on the sanding performance, and therefore the removal rate, when calibrating or finishing solid wood and wood-based materials. Premium quality, bluefired aluminium oxide and controlled grit coating have enabled us to increase the removal rate of our 1919 siawood + by another 20%.

**Your advantage:** The higher sanding performance of 1919 siawood + shortens your sanding process and increases your productivity.

The values for the exponential trend lines were ascertained under the following conditions: Abrasive: sanding belt 100 x 2000 mm, grit 150, Material: beech, Contact pressure: 3 kg, with contact roller

# Material removal in grammes 80 70 60 50 1919 siawood+



#### **Clogging / Lifetime**

The lifetime of an abrasive is primarily determined by the resistance to clogging when sanding wood — especially resinous softwood. State-of-the-art, controlled coating technology on the Maker 5 has provided a significant increase in lifetime.

**Your advantage:** The new-generation 1919 siawood + enables you to sand for up to 30% longer than with the tried-and-tested 1919 siawood – for maximum productivity and process stability!

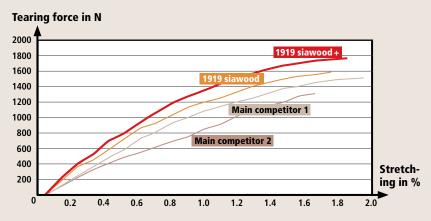
The belt was used under the following conditions: Abrasive: half 1919 siawood + / 1919 siawood, long belt 150 x 8000 mm, grit 180, Material: pine, Sanding time: 5 mins at constant contact pressure, with dust extraction



#### **Sturdiness / Tear resistance**

A sanding belt is subjected to especially high stress when calibrating or edge sanding. The more sturdy and resilient the sanding belt, the less likely it is that belt tears and unproductive downtimes will occur. For this reason, we have further strengthened our 1919 siawood + by approximately 15% in the P36 to P80 grit range.

**Your advantage:** Reduced risk of belt tears and unproductive downtimes thanks to one of the sturdiest paper backings on the market.



Tear resistance measured on 50 mm test strips in the sia Abrasives test lab (see illustration on right).







Ihre Lösung für perfekte Oberflächen Your Key to a Perfect Surface

www.sia-abrasives.com