

ACCOTEX® 518 SF.

GLASS FORMING APRONS.

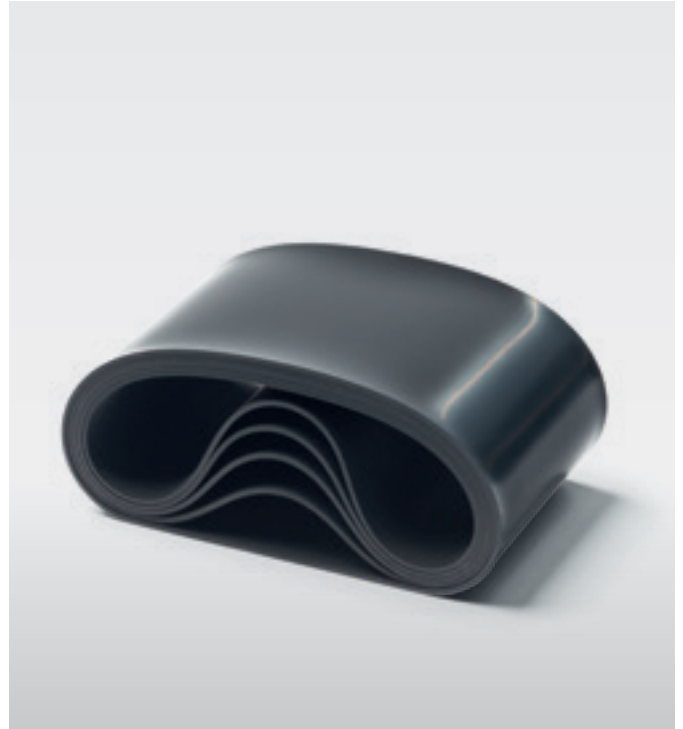
HIGHEST YARN QUALITY DUE TO THE ULTRA SMOOTH APRON SURFACE.

Saurer Components has launched a new type of glass fiber apron Accotex® 518 SF, which is especially designed to meet the growing demands of ultra-fine filaments like BC (4 µm), C (4.5 µm) or D (5 µm).

Surface roughness is directly related to wetting properties. In consideration of ultra-fine filaments, an increase in surface roughness or roughness distribution can lead to more dancing fibers and to higher hairiness. As a consequence loose and loop filaments could be generated. In addition, the finer a filament's diameter, the more attention it requires in order to prevent these problems.

The new glass forming apron Accotex® 518 SF from Saurer Components will avoid all of these issues and defects.

Due to its extraordinary smooth surface, the new chemical composition and the uniform surface quality, a sufficient binder pick up as well as a constant running performance of fiber filaments is ensured. Therefore, the problem of dancing fibers and hairiness is resolved.



Key Performance Factors

- ▶ **Prevention of dancing fibers and hairiness due to extraordinary low surface roughness (<math><0.2 \mu\text{m Ra}</math>)**
- ▶ **Excellent binder pick up owing to special chemical composition**
 - Sufficient binder pick up resulting in proper coated filaments
- ▶ **High abrasion resistance and high elasticity**
- ▶ **Customized sizes**

Accotex® 518 SF

Physico-Chemical Background

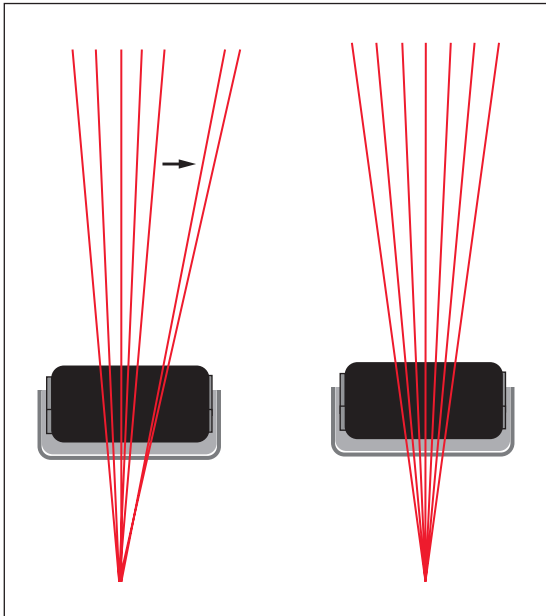
Usually, the rougher the apron is the more binder is picked up. However, especially for ultra-fine filaments an excessive roughness could lead to a higher tendency of walking or dancing fibers. This causes an interruption of the continuous sizing film which results in less coated filaments.

The very smooth and homogeneous surface with $<0.2 \mu\text{m Ra}$ of Accotex® 518 SF reduces tendency

of dancing fibers and hairiness which hence a less interruption of the continuous sizing film resulting in proper coated filaments. Besides this, due to the new chemical composition a sufficient binder pick up is provided.

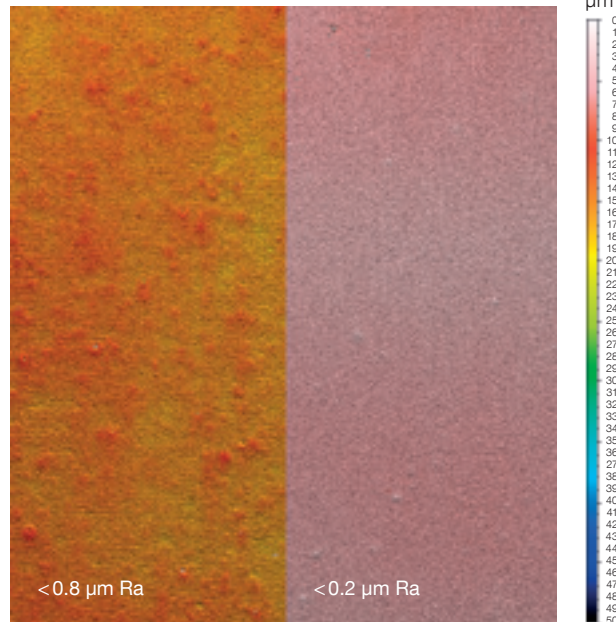
An uniformly coated glass fiber provides the best adhesion between the fiber and the matrix, which results in the best possible performance of the glass fiber in the final product.

Fiber Running Behavior



Left: High roughness results in dancing fibers.
Right: Smooth surface with best running performance.

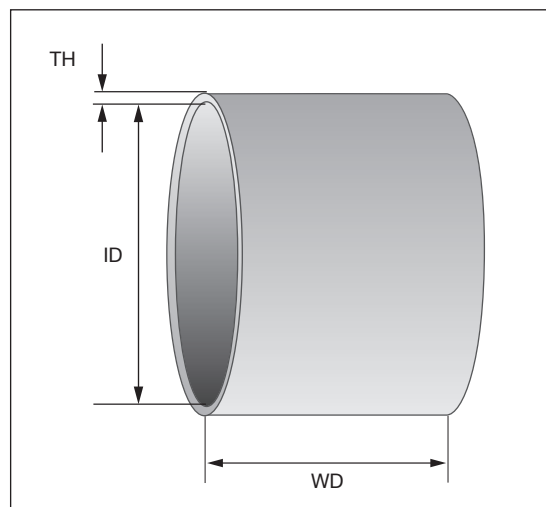
Roughness Profiles



Roughness profiles of Accotex® Glass Forming Aprons
(Picture from a 3-dimensional Profilometer).

Dimensions

- Standard ID 74.3 and 76.2 mm
- Customized Width
- Available in Thickness 1.1 and 1.6 mm



TH = Thickness
ID = Inner Diameter
WD = Width