



## YARN INSIDE

### Supima® cotton, the premium raw material for our top quality yarns

The most important quality characteristic of cotton is the fiber length (staple length). It is not only a critical parameter for the maximum spinable yarn count but it also affects several aspects of the yarn quality.

With a staple length of more than 35 mm, the extra long staple (ELS) variety *Gossypium barbadense* provides the best quality and represents only 3% of the worldwide production. The middle staple varieties *G. hirsutum* und *G. arboreum* are with 96% the most widespread species and produce a staple length of 24 to 34 mm. *G. herbaceum* has a short and coarse fiber (less than 24 mm) and represents only about 1% of the worldwide cotton production.

Bühler uses only American extra long staple *Supima®* cotton in both, the Swiss and in the US production. ELS cotton is ideal for premium textile products and provides a number of **very important advantages**:

Compared to middle staple, ELS cotton has a **45% higher breaking strength!** The higher fiber strength leads to a considerably higher yarn strength which allows a smooth further processing, even in critical applications. Additionally, the high strength is an important precondition for several finishing processes.



Our cotton purchasing manager, Paul Schnepf, in a cotton field shortly before harvesting



Top quality ELS cotton fibers

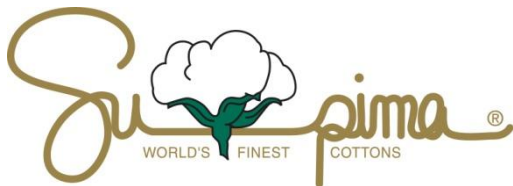
For instance, a resin finish (e.g. for a non-iron treatment) often requires ELS cotton since the fiber loses up to 50% of its strength. Therefore, our yarns are the first choice when good running characteristics, a high resistance in the finishing process and a good durability of the final-article are needed.

ELS cotton is also characterized by outstanding **fiber fineness**. Fine fibers are optimally distributed in the yarn cross-section which results in an even, steady yarn. Moreover the very fine fibers are extremely soft and allow for an extraordinary smooth touch of the product. Due to the nice light reflection of the finest fibers, a silky sheen is achieved.

As the **long fibers** of ELS cotton are spun more firmly into the yarn, the hairiness is reduced. A low hairiness reduces fiber fly in further processing and improves the pilling behavior of the final-article.

In order to meet the highest requirements of our clients, we trust in **Supima®** cotton which provides considerable advantages over other ELS cotton proveniences. Next to an excellent and stable fiber quality, **Supima®** stands out due to minimal foreign fibers contamination. Therefore, **Supima®** is the right choice for applications in white and light shades. In addition, **Supima®** provides the best running characteristics in down-stream processing compared to other ELS cotton fibers.

Other than middle staple cotton, of which 80% are genetically modified today, **Supima®** seeds origin from conventional breeding. Giza 88, the best Egyptian fiber, is of equal quality. However, it accounts for only approx. 25% of the Egyptian cotton crop. All other Egyptian cotton varieties are of a lower quality.



The growing awareness of the **Supima®** brand enhances the demand for products made from this precious fiber. **Supima®** hangtags provide additional information and encourage consumers to purchase products made from “the world’s finest cottons”. ■

## Finest Royal yarns up to Ne 140/2

Due to various requests from our clients, we have developed particularly fine Royal siro-spun yarns. Since recently, we are able to offer our Royal yarns in counts up to Ne 140/2 (Nm 240/2).

With their excellent yarn characteristics, our fine count Royal yarns don’t need to fear a comparison with regular plied yarns. Therefore, Royal yarns are a particularly economical alternative to regular plied yarns. ■

