



# Components – the key to success

1  
Assembly of a roller  
bearing with a view  
of the ball track.

2  
Automated texturing  
disc production.

**Sports clothing, home textiles and technical textiles made from synthetic fibres have become an integral part of our lives. Saurer is a leading supplier of components for their manufacture.**

The use of man-made fibres has increased rapidly since the 1950s. A decisive factor for this development is the high functionality of the fibres, which can be provided with specific characteristics (e.g. windproofing).

Additionally, there are economic factors such as high availability, lower raw material costs and good recyclability, a characteristic that is becoming more and more important.

The main customers, the clothing and home-textile industries, strive to give flat synthetic yarns the touch of cotton, i.e. a character like natural fibre. This is done in the finishing process of texturing: flat yarn is

## "Components with a direct influence on yarn quality."

permanently crimped by friction. This increases the fibre volume, elasticity and heat retention, and the yarn acquires a comfortable feel.

The cornerstone in texturing was a magnetic spindle bearing that was developed for speeds of up to 1 million rpm. However, with increasing production speeds, this reached its technical limits, which cleared the way for the texturing unit that remains process relevant to the present day.

Thanks to great expertise and proximity to the process, the company from Hammelburg was able to establish itself as a preferred supplier. Bearing systems such as twist stoppers, nip rollers and polyurethane texturing discs – a consumable part of the otherwise maintenance-free units – have a direct influence on the yarn quality. The latest generation of extremely successful texturing discs was introduced in 2019 with the CoolFlow Disc. Improved heat transport has resulted in a significant lowering of the load on the disc at process speeds of up to 1 000 m/min, and therefore an extension of the service life.

For several years the company has been establishing itself outside the textile industry. Bearings for food production and special solutions for robotics are just two examples of successful knowledge transfer.

With the beginning of production of textile machine components by FAG Kugelfischer in 1957, the products made a name for themselves in the industry very quickly. The booming demand for technologically advanced bearing components allowed the company to position itself as a leading supplier. In the 1990s the business unit

was separated from the FAG Group and became TEMCO Textilmaschinenkomponenten GmbH. Since 2006, Engineered Bearing Solutions has been a part of the Saurer Group, in addition to other leading component manufacturers.

### Good to know.

- About 80% of all manufactured synthetic fibres are made of polyester
- Synthetic functional textiles can also be thermoregulating, dirt repellent, antimicrobial, flame retardant, UV resistant, electrically shielding and chemical resistant
- In a passenger car there are about 21 kg of man-made fibres (including airbags, safety belts and tire cord)
- In the manufacturing of DTY yarn (drawn textured yarn) Temco components are essential



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