Groz-Beckert: Driving precision and innovation across the textile value chain

In an era where efficiency, sustainability and performance define competitiveness in the global textile industry, Groz-Beckert stands out as a cornerstone of technological excellence. As a global leader in industrial machine needles, precision components, fine tools and systems for textile production and joining, the company has built a formidable presence across more than 150 countries.

What truly distinguishes Groz-Beckert is its comprehensive coverage of the textile production spectrum – spanning knitting, weaving, nonwovens, tufting, spinning and sewing. Each of these product areas is not only supported by decades of expertise but continually enhanced through innovation, ensuring relevance in a rapidly evolving industry.

Knitting: Precision meets energy efficiency

With more than 160 years of expertise and a portfolio exceeding 50,000 products, Groz-Beckert's Knitting product area remains a benchmark for reliability and innovation. Its offerings support a wide range of machines, including circular and flat knitting machines as well as machines for the legwear and warp knitting sectors, complemented by technical consultation and testing services.

A standout innovation is the **LCmax™ needle**, designed for circular knitting applications. Its wave-shaped shank geometry reduces friction and energy consumption while enhancing machine efficiency. This innovation aligns with manufacturers' growing focus on lowering energy costs and improving sustainability without compromising output.

Weaving: Total solutions for complex requirements

With its Weaving product area, Groz-Beckert positions itself as a holistic solutions provider rather than a component supplier. From heald frames, healds, drop wires, warp stop motions and products for leno weaving to sophisticated preparation systems, the company supports the entire value chain – enabling reduced downtime, improved flexibility and consistent quality.

Recent innovations include **high-performance reeds** portfolio designed to support both conventional and technical textile applications, including demanding fabrics with high mesh counts in metallic and synthetic materials. Additionally, the **KnotMaster tying machine** enhances efficiency during warp changes, significantly reducing idle time and boosting productivity in modern weaving mills.

Nonwovens: Driving performance across diverse industrial applications

The nonwovens segment highlights Groz-Beckert's ability to serve both traditional textile and highly specialized industrial markets, including automotive, hygiene, and medical sectors. Its product range covers card clothing, felting and structuring needles as well as jet strips and is supported by services such as the wire mounting service, application advice and customer projects.

Among its notable innovations is the **Litespeed™ felting needle**, engineered to reduce insertion and removal time while extending needle board life and minimizing bending risks.

Tufting: Integrated systems for high-performance surfaces

With over two decades of expertise, Groz-Beckert's Tufting division addresses the growing demand for durable textile surfaces, from carpets and bath mats to artificial turf for sports and landscaping. Its product range encompasses tufting knives and needles as well as loopers and reed finger modules, which can be purchased as individual parts, as modules or as a perfectly integrated complete system to produce high-quality textile surfaces. The **Gauge Part System** exemplifies this integrated approach, ensuring precision alignment and consistent quality across all components.

Spinning Components: Efficiency at the fiber stage

At the beginning of the textile value chain, Groz-Beckert's Spinning Components division delivers advanced solutions for the carding process. Its comprehensive range includes metallic card clothing for every stage, from the blowroom to the revolving flat card, as well as revolving tops, stationary flats and cleaning fillets supporting optimal fiber processing.

An important innovation here is the introduction of a **maintenance-free cylinder wire – CMF**, designed for extended service life and reduced operational costs. By minimizing maintenance requirements while maintaining consistent quality, this development directly addresses the industry's demand for higher productivity and cost efficiency.

Sewing: Digitalization and Performance Enhancement

The Sewing segment underscores Groz-Beckert's commitment to both product excellence and digital transformation. With around 2,500 needle variants, the company caters to applications ranging from apparel to automotive interiors.

Special application needles SAN™ 10 and SAN™ 10 XS stand out for the gentle processing of finest fabrics. Equally transformative is **INH 2.0 (Ideal Needle Handling)**, a fully digital quality management system that enables end-to-end lifecycle tracking of sewing needles and improves transparency, compliance and operational control.

A Partner for the Future

Across all product areas, Groz-Beckert's strategy is clear: combine precision engineering with digital innovation and customer-centric services. Whether through energy-efficient knitting needles, innovative nonwoven solutions or digitally integrated sewing management systems, the company continually pushes the boundaries of what textile production can achieve.

In a highly competitive global landscape, where manufacturers face pressure to optimize costs, improve quality and adopt sustainable practices, Groz-Beckert emerges not just as a supplier, but as a strategic partner. Its holistic approach – spanning the entire textile value chain – ensures that innovation is not isolated but interconnected, creating lasting value for the industry.