

Fiber industry worldwide – where is the journey heading?

Textile fibers have a long history since their advent. Flax is the oldest known fiber, used for the first time several tens of thousands of years ago, followed by cotton, silk and other natural fibers. Manufactured fibers were invented much later to meet the growing demand of fibers by the textile industry. The first man-made fiber to be produced at the end of the 19th century was a cellulose wood-based fiber, viscose (rayon). Synthetic fibers became commercially available later – polyamide (nylon) as from the late 1930s.

With rising population growth and economic development demand for textiles rapidly grew and so did the production of fibers used to manufacture them. In 2023, global fiber production reached almost 110 million tons, more than 3/4 of which being man-made (the remaining 1/4 being mostly cotton).

As matter of fact, since the very start, the history of man-made fibers has been a never-ending success story. And the industry has been constantly reinventing itself, even more so in today's challenging world. In fact, the fiber industry is undergoing a significant transformation, driven by sustainability, technology, consumer preferences and market factors, just to cite the most important ones.

Indeed, the focus is increasingly on sustainable sourcing and production. The search for eco-friendly raw materials – be they recycled or eco-based – will gain in importance to decrease the environmental footprint of the final product.

Recycling and reusing textiles is in the lift, given the rapidly growing amounts of textile waste. A rising number of companies are looking at ways of using waste materials and reclaiming fibers – whatever their origin – from apparel and textiles, with the aim of incorporating them into new products. On the other hand, the demand for bio-degradable and biobased fibers, such as those based on cellulose or derived from other materials is expanding. Consumers are becoming more conscious about the environmental impact of the products they buy, which leads to a higher request for sustainable fibers from an environmental but also from a social and ethical point of view. In that respect, companies and brands that focus on sustainability and transparency are likely to gain market share...

Moreover, customization is on the rise with advancements allowing for more individualized products based on personal preferences and smaller series and more individualized products.

Also, advancements in technology are improving fiber production efficiency. Innovations such as digitalization, automated manufacturing and 3D techniques are gaining in importance,



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allowing for more efficient production, faster, focused and with reduced waste. On the other hand, the integration of technology into textiles, including sensors and conductive fibers will see smart fabrics that can find applications in health, adapt to environments, generate energy etc. As industries from healthcare to sports discover the potential of these innovative materials, the demand for high-performance fibers that offer both functionality and comfort is on the rise.

And when it comes to fiber markets, those emerging will see growth, with mainly countries in Asia investing in infrastructure and technology to meet global demand. Nevertheless, while globalization has dominated the textile industry for decades, there is a growing trend to localize production to reduce transport times and costs and to meet demand for local products, linked to circularity aspects and rising protectionism. This may lead to more re-shoring or near shoring. Europe, although further specializing, may see new fiber production capacities develop, not the least due to the climbing recycling rates. As a matter of fact, governments through regulations promoting sustainability in the textile industry could influence sourcing and production practices.

The journey ahead for the fiber industry involves navigating numerous challenges, including supply chain issues and the need for ethical labor practices. As the market evolves, cooperation between the different stakeholders in the value chain, ranging from raw materials and fibers to brands and retailers will be crucial to addressing these issues.

Ultimately, the future of the fiber industry will be defined by more sustainable, innovative and consumer-centric practices, allowing an adaptation to the challenges and opportunities of a rapidly changing world. This will ensure a resilient and responsible industry for the generations to come.