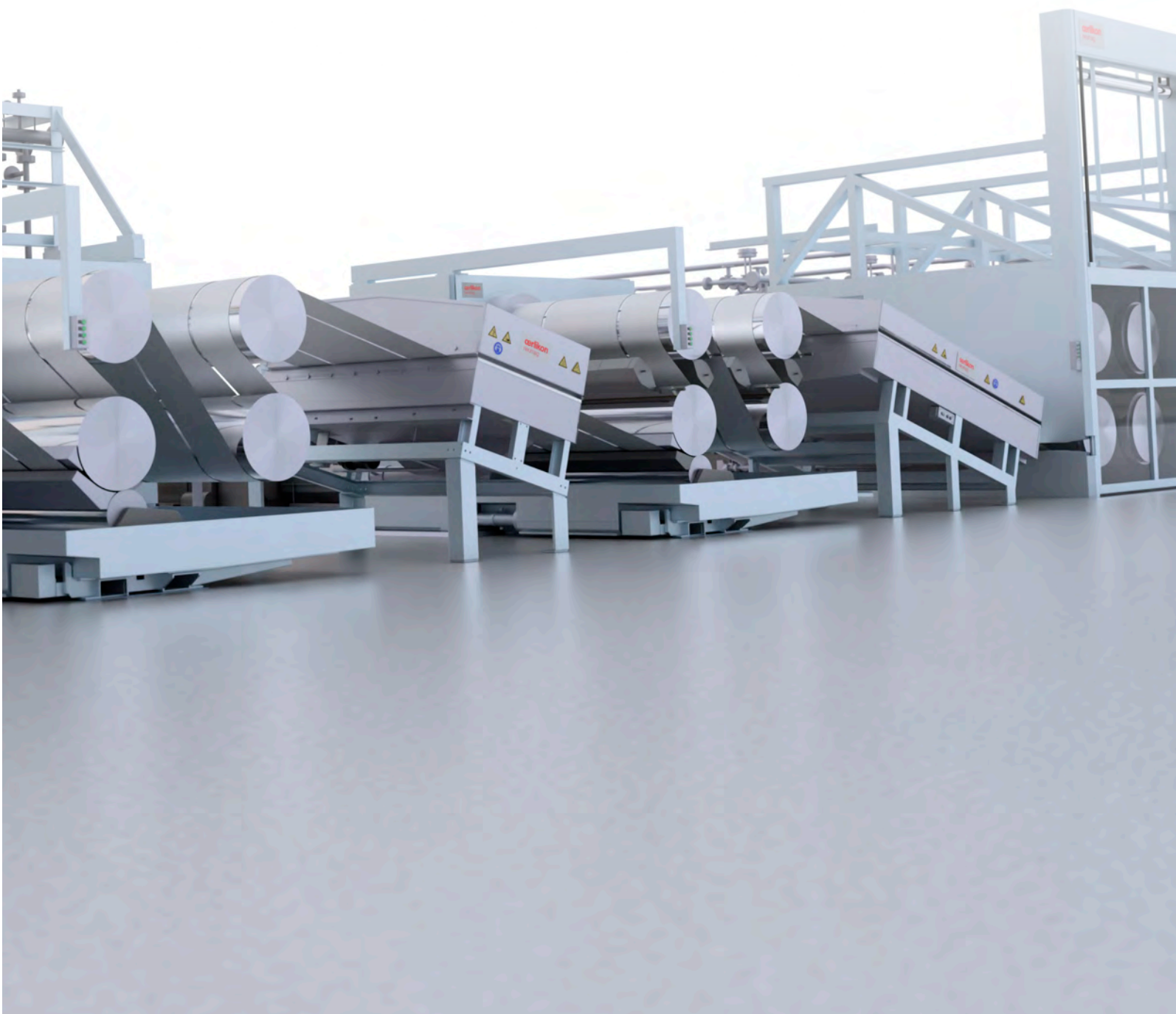


# **Polyester staple fiber production with EvoSteam**



# EvoSteam process revolutionizes polyester staple fiber production

There is a huge demand for textile fibers: population growth of around 3% per annum, increasing prosperity and many other factors are fueling this demand. In view of noticeable climate change and its impact on people and the economy, resource- and environment-friendly manufacturing methods are absolutely crucial for the future.

Oerlikon Neumag has shifted its focus to this and has developed the EvoSteam process, a process for more sustainable polyester staple fiber production. The objective of this process is to lower both operating expenses (OPEX) and the carbon footprint with minimal consumption of energy, water and polymer – simultaneously with the excellent fiber qualities demanded by downstream processes.

## **EvoSteam process dispenses with liquid baths**

Completely dispensing with water baths generates significant savings in terms of water, energy and finishes, while also increasing occupational safety and cleanliness at the production line. The function of the immersion bath is now assumed by a carefully-coordinated setup comprising of godets and pulsed spray nozzles. With this, the moisture is metered precisely and added according to the needs of the process.

## **Improving the fiber qualities through optimized draw point release**

The fiber quality achieved with the EvoSteam process plays an important role for smooth, error-free downstream processes and is a decisive factor for fiber manufacturers' margins. In addition to the fiber cross-section and the fiber tenacity, the uniformity of the fibers is also of great importance here. The EvoSteam process caters to these requirements and optimizes the release of the draw point. The draw point release is achieved by a precisely focused vapor curtain. This avoids friction between the filaments in the tow.

## **Higher Efficiency\***

up to **12%**

## **Energy Savings\***

up to **8%**

## **Waste Reduction\***

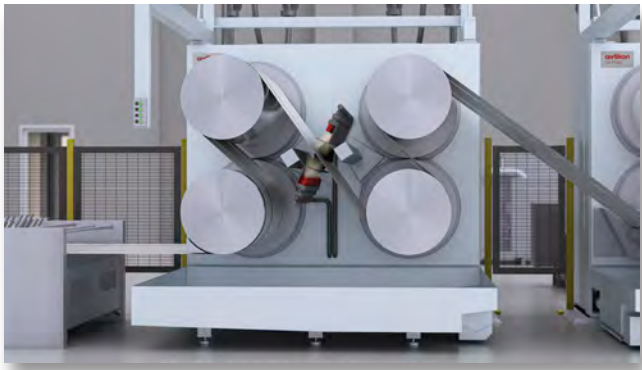
up to **50%**

## **Water Savings\***

up to **8%**

**\*compared to conventional technology**

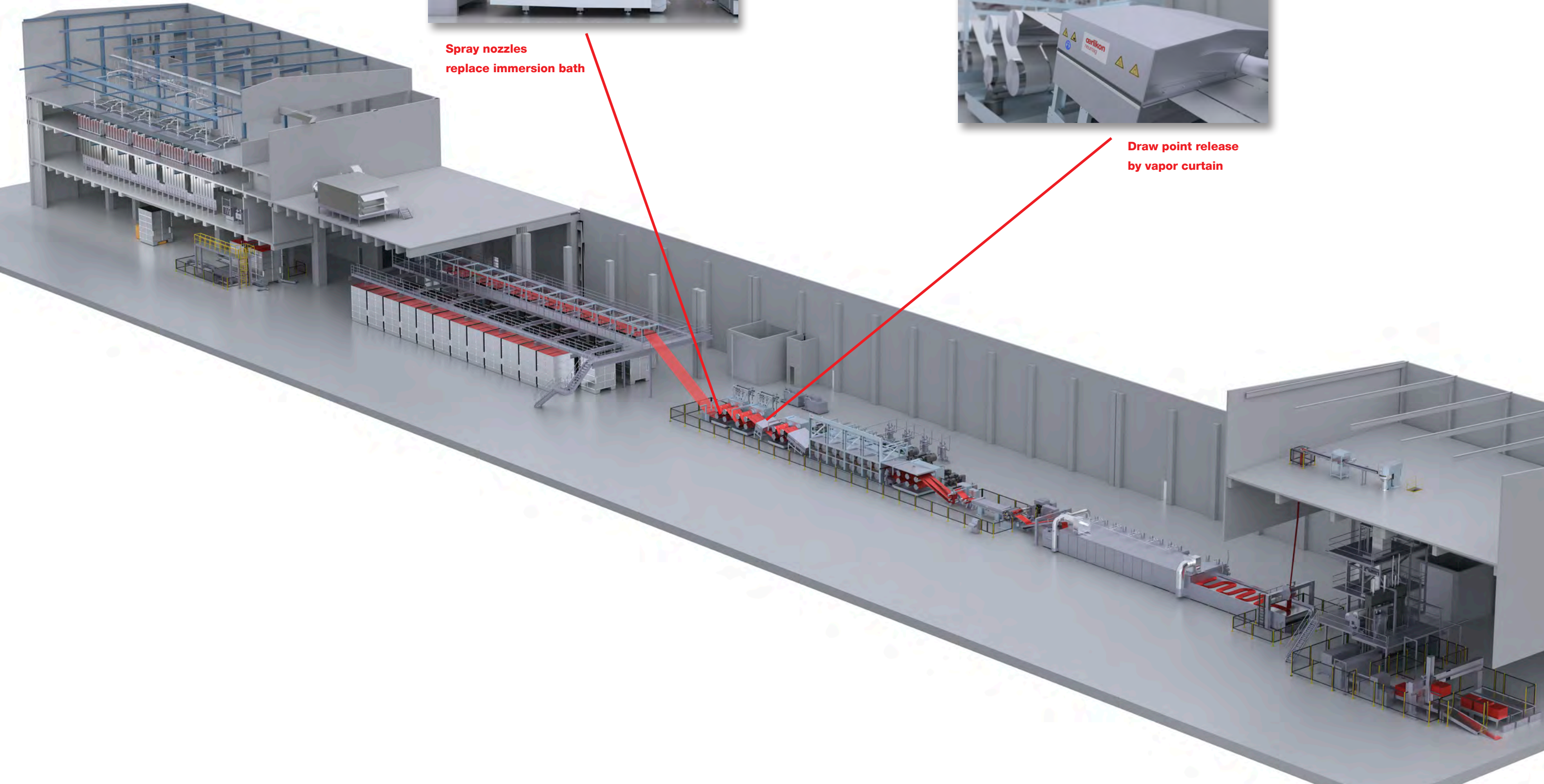
# EvoSteam process for cotton type fiber production

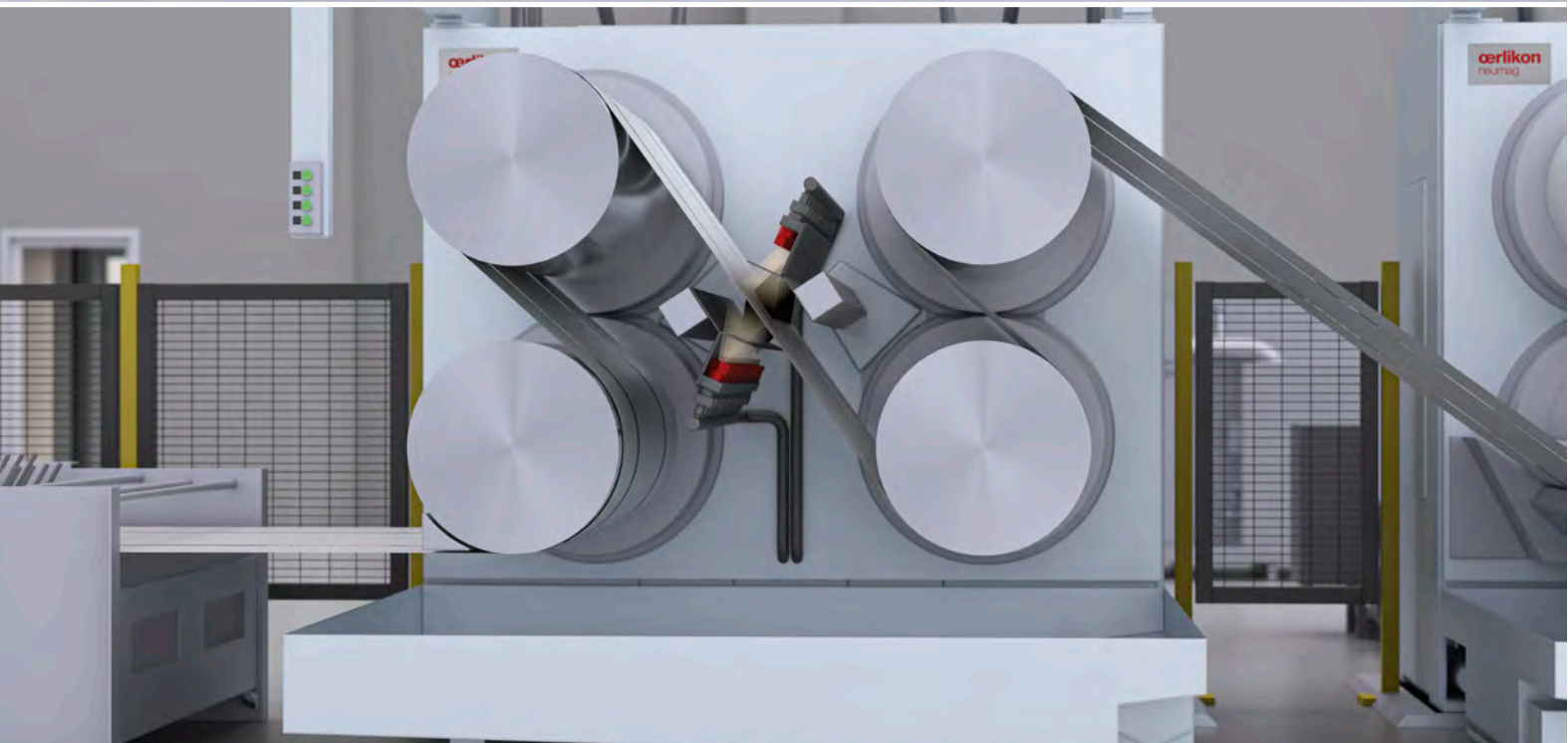
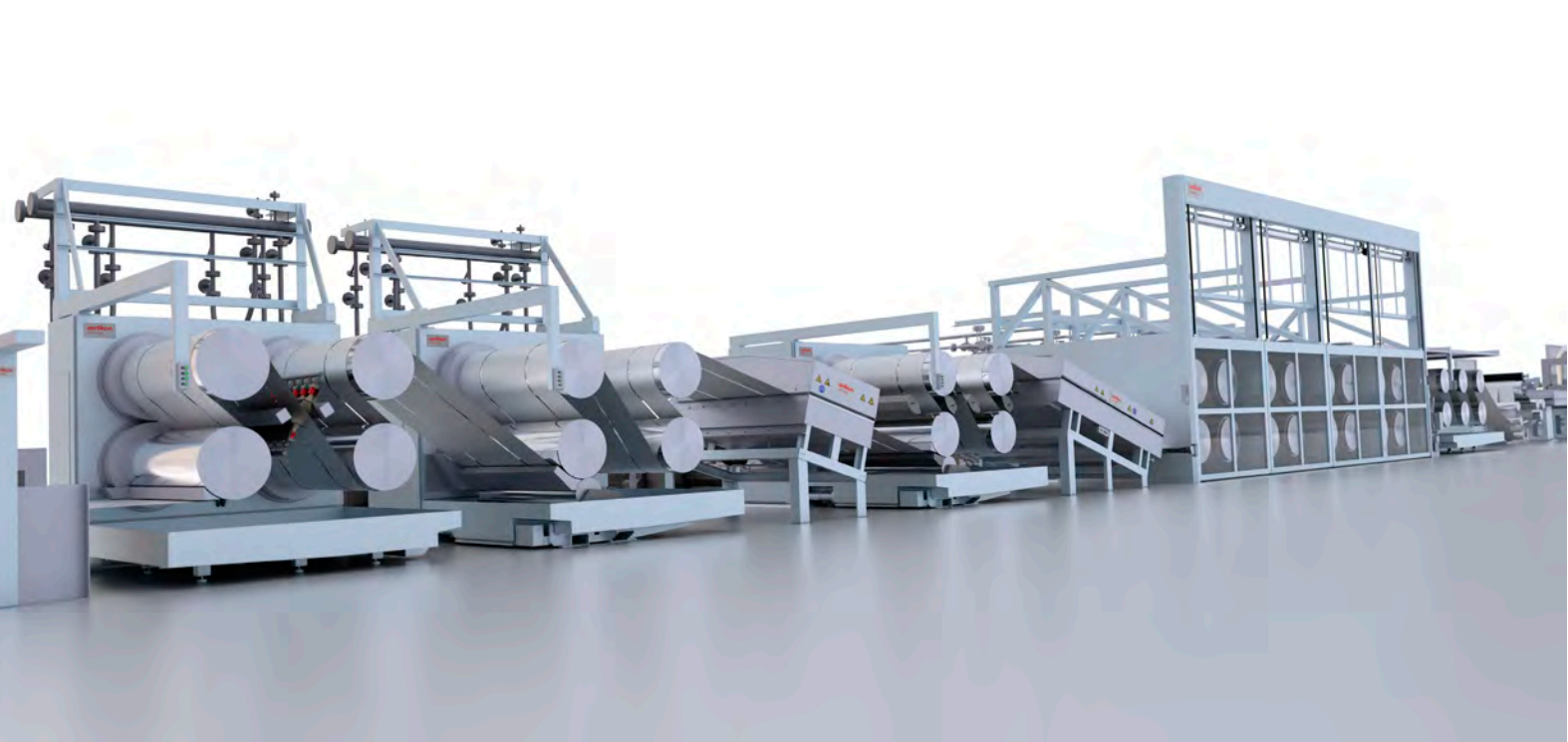


Spray nozzles  
replace immersion bath



Draw point release  
by vapor curtain





**Oerlikon Neumag**

Zweigniederlassung der  
Oerlikon Textile GmbH & Co. KG  
Christianstraße 168 – 170  
24536 Neumünster  
Germany

T +49 4321 305 353

F +49 4321 305 212

[sales.neumag@oerlikon.com](mailto:sales.neumag@oerlikon.com)

[www.oerlikon.com/polymer-processing](http://www.oerlikon.com/polymer-processing)