

From Pilot Validation to Industrial Scale-up: Jiaren's Textile to Textile recycling solution

Building on the solid technical foundation established with Teijin, Jiaren has developed a long-term industrial pathway for DMT-based polyester textile-to-textile chemical recycling. The journey began with 10k tonne-scale production and progressed through continuous process improvement, operational validation and commercial application.

Over the past 14 years, Jiaren has operated a 30,000t recycling manufacturing as a commercial demo site reliably and continuously. This long-term operation has enabled the company to build extensive experience in feedstock management, process control, product quality, production safety and plant stability.

Based on this accumulated expertise, Jiaren has invested in another 150kt integrated new chemical scaled-up recycling base. Its first 50k-tonne line has completed production ramp-up and is now operating steadily above 90% capacity utilisation.

The presentation will share how Jiaren transformed an established technology foundation into a proven, scalable and commercially industrialised textile-to-textile recycling solution.