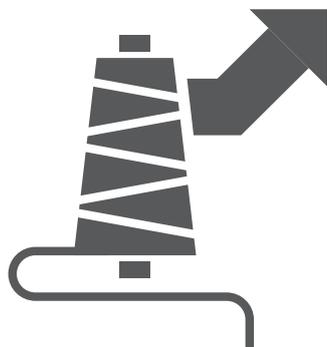
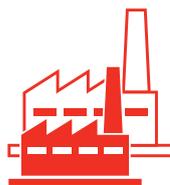
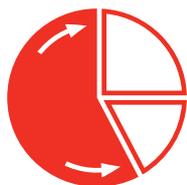


Manmade Fibers Segment



Launching further innovative technologies for the manmade fibers market

Introduced in Asia in 2014 by Oerlikon Barmag, WINGS POY 1800 set a new benchmark for the energy-efficient and sustainable production of polyester threads. The highly energy-saving winder achieves a 20% increase in productivity by winding twelve yarn spools of 15 kilograms each simultaneously, instead of ten with the predecessor model over the same production area. The new WINGS PA HOY winder concept was also introduced in 2014, developed to meet the special requirements of cost-efficient nylon HOY production. Another innovation presented was a new staple fiber system solution – a compact machine that allows for greater flexibility in production, faster product color changes and less material wastage. In the growth market of technical textiles, a next-generation solution for high-modulus low-shrinkage (HMLS) polyester yarn for tire cord was launched in 2014, featuring improvements in enabling filaments' dimensional stability.



With its extensive technological expertise, the Segment has been expanding its leading position for manmade fibers systems and maintaining its Best-in-Class position in its market.

In 2014, the Segment continued to utilize its competence in manmade fibers production and completed a turnkey facility for the manufacture of granulates for PET bottles for a customer in Egypt, from planning through to commissioning.

The Segment has long-standing customer relationships and experience in developing business in growth markets. In 2014, the Segment celebrated its 50th anniversary of successful partnership with the Chinese textile industry.

Key figures

in CHF million	2014	2013	Δ%
Order intake	901	1 073	-16.0%
Order backlog	365	541	-32.5%
Sales (third parties)	1 073	1 130	-5.0%
EBITDA	217	207	4.8%
– as % of sales	20.3%	18.4%	–
EBIT	197	188	4.8%
– as % of sales	18.4%	16.6%	–
Research and development expenses	33	31	6.5%

Best-in-Class

Oerlikon Manmade Fibers Segment: 18.4% EBIT margin (2014); followed by Andritz AG: 4.3% EBIT margin (Q1–Q3 2014).

Profile

The Manmade Fibers Segment, with its brands Oerlikon Barmag and Oerlikon Neumag, is a world market leader for systems used in the manufacture of manmade fibers. Synthetic textile fibers are processed into functional clothing, carpets and furnishings, and increasingly also into technical textiles for airbags and safety belts, as well as into geotextiles for road construction and other industrial applications. The Segment offers end-to-end systems, covering every step in the entire process of manmade fiber production, from melt to yarn. Oerlikon Barmag specializes in large-scale filament spinning and texturing systems for the manufacture and processing of polyester, polyamide and nylon. Oerlikon Neumag's core competencies lie in high-tech production systems for the manufacturing of bulked continuous filament (BCF) carpet yarns, synthetic staple fibers and nonwoven fabrics. In addition, the Manmade Fibers Segment also offers comprehensive engineering and maintenance services, as well as the construction of complete polycondensation solutions. Over 2 500 employees work for the Manmade Fibers Segment at eleven sites worldwide.

Markets

Oerlikon Barmag's key markets are located in Asia, in particular in China, with India as well as the Middle East playing an increasingly important role. Oerlikon Neumag focuses primarily on the markets in the USA and Turkey. Out of the world's 25 largest manmade fiber producers, which cumulatively account for more than 60% of the annual production of filaments and fibers, 22 are customers of the Manmade Fibers Segment. These include global companies such as Shenghong, Tongkun, Newfengming, Indorama and Wellknown Polyesters Ltd.

The addressable market for the Manmade Fibers Segment was valued at around CHF 2.2 billion in 2014. The Segment succeeded in increasing its market share for newly delivered systems and solutions in filament spinning. Chemical filament spinning/texturing is the most important market for the Segment. The anticipated market normalization took effect during the year, notably in Asia, where investments in recent years have resulted in a decrease in demand and delay in further investments in 2014. The market for plastics processing and carpet yarn systems remained stable at a high level, and projects were won in the market for staple fibers and nonwoven fabrics.

Business performance

The Manmade Fibers Segment reported another strong year, with high profitability and sales close to its historical high level despite market normalization effects. Sales was at CHF 1 073 million in 2014, corresponding to a decline of 5.0% compared to the previous year (2013: CHF 1 130 million). Order intake declined by 16.0% to CHF 901 million (2013: CHF 1 073 million). EBITDA amounted to CHF 217 million (2013: CHF 207 million), which corresponded to an EBITDA margin of 20.3% (2013: 18.4%), while the EBIT of CHF 197 million was 4.8% above the prior-year level (2013: CHF 188 million; 16.6%). With these results, the Manmade Fibers Segment has succeeded in retaining its Best-in-Class position compared to peers.

Key developments

In 2014, the foundation stone was laid in Chemnitz, Germany for a new pilot plant for extrusion systems and a variety of specialist winders. At the three German locations – Remscheid, Neumünster and Chemnitz – as well as in Suzhou, China, engineers and technicians are developing and researching new solutions for energy-efficient processes in the spinning and texturing of filaments, as well as for the cost-efficient production of staple fibers and nonwoven fabrics.

The Manmade Fibers Segment continued to utilize its competence in manmade fiber production to penetrate further into the PET beverage bottling business in 2014. A turnkey facility for the manufacture of granulates for PET bottles was completed for a customer in Egypt. Light, shatterproof and recyclable PET bottles are the first choice when it comes to packaging liquids safely and the technology to produce PET granulates is almost identical to that used in the manufacture of manmade fibers. With the innovative technologies provided by the Segment, customers benefit from significant savings in energy consumption, and hence lower operating costs. For this project, Oerlikon was tasked as the general contractor with overseeing and managing the construction of the plant, from planning through to commissioning, all provided from a single source.

As part of the Oerlikon operational excellence program, the Segment implemented process improvements at all production locations. In Remscheid, the newly designed one-piece-flow concept was used both for the new WINGS POY 1800 assembly line and for the production of the change bars, resulting in a 15% increase in production capacity. In Chemnitz, capacity was increased by over 30% thanks to retrofitting work on the warehouse, with new high-rack storage and automated storage space management helping to improve production procedures. Neumünster has optimized its shop floor management and reduced processing times for the assembly of BCF systems by around 30%.