

Press Release

Oerlikon Manmade Fibers Segment saves resources when installing and operating its machines and equipment

Multiple benefits of the "e-save" programme

Remscheid/Frankfurt, May 7, 2015 – In the Oerlikon Manmade Fibers Segment, sustainability stands as a fundamental principle in all dealings with customers and its own employees. With the Oerlikon Barmag and Oerlikon Neumag brands, the company is a global market leader in the field of filament spinning machines for manmade fibres, texturing machines, and BCF, staple fibre spinning and nonwoven systems. In this interview, André Wissenberg, Vice President Marketing, Corporate Communications and Public Affairs, describes the multitude of aspects under which the Oerlikon Manmade Fibers Segment develops future-oriented products and applications.

Mr Wissenberg, how significant is the issue of sustainability to the corporate culture of the Oerlikon Manmade Fibers Segment?

Sustainability has always played an important role in the Oerlikon Manmade Fibers Segment. The development of new products and customer solutions, as well as the production, manufacture, assembly, and sales and service performed by our 2,500 employees around the globe have always been bound by the requirement to save resources and protect employees. This is why we launched, among other things, our "e-save" programme in 2004, which we have consistently expanded through other "Health, Safety and Environment" initiatives over the years.

Which advantages do your own employees gain from the company identifying itself as sustainable?

Sustainability relates to three areas: economy, environment, society. We are constantly making improvements for our customers and in particular for our employees in all three of these areas. In production, for example, in recent years we have improved processes where appropriate in all production facilities as part of the company-wide Oerlikon Operational Excellence programme.

In Remscheid, the newly developed One-Piece Flow Concept has been implemented for the new WINGS POY 1800 production line and for the production of the traverse beams. This has not only allowed us to increase production capacity by 15%, it has also brought ergonomic benefits for the assembly workers. And it has been possible to reduce energy consumption. We then use such experience at our other German sites, and international sites in China, India and the USA. We are also very active as far as health and safety is concerned. Our employees are able to benefit from age-appropriate workstation optimisation and the redesign of break rooms, to the food on offer in the canteen.

What financial and human resources does the Oerlikon Manmade Fibers Segment have at its disposal for research and development?

The entire Oerlikon Group is constantly investing in innovations to strengthen its leading technological position. Compared to the previous year, expenditure on Research and Development (R&D) in 2014 rose by 19.8% to CHF 121 million, which is around 4% of turnover. In concrete terms, last year's R&D activities resulted in applications for 108 new patents.

With the Oerlikon Barmag and Oerlikon Neumag brands, our Oerlikon Manmade Fibers Segment, as a world leader in the area of filament spinning machines for manmade fibers, texturing machines, and BCF, staple fiber spinning and nonwoven systems offers solutions along the entire textile value added



chain. We always provide our customers with cutting edge technology. With an annual R&D spend of around CHF 30 million, more than 200 engineers and almost 1,200 patents, we have been building on our leading innovative position in the manmade fiber industry for decades.

Are your customers prepared to pay for the sustainable technologies and considerable energy efficiencies of the products of both of these brands?

Yes, because our solutions increase the competitiveness of our customers and allow them to achieve a quick return on investment compared to other solutions although those may appear more cost effective at first glance. In the medium and long term, our customers are considerably more successful with our technological solutions – in terms of profitability and quality.

What is behind the "e-save" philosophy and its four subsections?

The leading technological position of the Oerlikon Manmade Fibers Segment is based on a corporate culture in which considerable importance is placed on future-oriented developments and close partnerships. Superior performance, innovative capacity, integrity and team spirit are the values that shape our daily work, the results of which our employees are happy to be measured against.

With the constant expansion of our "e-save" philosophy we are pursuing constant value creation and enhancement for the manmade fiber industry with high-grade, innovative solutions. We are renowned world-wide for being the experts in our industry. This is thanks to our more than 90 years of experience in all areas of manmade fiber production technology. Today, all innovations are developed by us under the four "e-save" aspects of "energy, economics, environment and ergonomics". The products and technologies developed by us enable our customers to secure sustainable success in the market.

Can the scope of energy savings in textile production be quantified by using the latest machines of the Oerlikon Manmade Fibers Segment?

Or product solutions for the spinning of manmade fibers in particular make a significant contribution to sustainable and economic production. I can give you two examples: Our latest WINGS technology (Winder Integrated Godet Solution) reduces the average energy consumption per ton of POY (Preoriented Yarn) by 40% and that of FDY (Fully-drawn Yarn) by as much as 55% compared to the machines produced in the mid-1990s. Our latest solutions are therefore highly energy efficient.

Our new technologies also increase productivity, as illustrated by another example: The efficiency of the latest model of the WINGS FDY 32-end yarn winder is more than 2.6 times that of the previous ACW FDY 12-end model. This was enabled by the larger number of yarn ends and the optimization of the production process. The savings potential of the POY winder is similar.

How is the Oerlikon Manmade Fibers Segment able to keep the negative effects of industrial production to a minimum?

Industrial production will always affect the environment. By consistently minimising these effects, we are emphasising our responsibility for creating a worthwhile future. Our German sites in Remscheid, Neumünster and Chemnitz are all DIN ISO 50000-1 certified. This means we have enforced a strict energy management programme which has to achieve a 1.5% reduction in energy consumption year on year. Using a centrifuge to recycle cutting oil from machined metal, processing lubricating greases, recycling waste and recovering energy with a heat exchanger are all examples of how we manage our resources in a sustainable manner.

We likewise apply these aspects on the customer side: The manufacture of textile products and the components, machinery and systems used in this are traditionally responsible for a number of consequences relating to the environment. We help to reduce negative influences to a minimum by applying the latest scientific and technical findings. Our products achieve this by, among other things, making the best possible use of all the raw materials used in our production process, a clear reduction



in emissions, optimal energy balances and in some places, a significant reduction in required space.

Which innovations can the textile machinery sector expect to see from the Oerlikon Manmade Fibers Segment in the near future?

We've already successfully launched two innovations onto the market back at the beginning of this year. One was the new, high-efficiency RoTac³ rotating tangle unit in which the compressed air supply is reduced by up to 50%, depending on the type of yarn; the other was the new VarioFil rPET with WINGS POY developed in close cooperation between Oerlikon Barmag and our affiliated company BBE Engineering. We are also working on new technology and service solutions in all of our product ranges to offer our customers solutions which will continue to allow them to be competitive.

Are you going to be presenting new Oerlikon Barmag and/or Oerlikon Neumag textile machines or equipment at the Techtextil or ITMA shows?

In an ITMA Europe year, most companies focus on market launches at the industry's leading exhibition. As will we. At this point, all I'm going to reveal is that we are definitely going to be presenting new filament spinning solutions in Milan. We will use the Techtextil in Frankfurt to present our entire industrial textiles portfolio and discuss individual industrial solutions such as industrial yarn, tyre cord, filtration or geotextiles, with our customers.

What is your strategy for dealing with the attempts by China as one of the core market for textile machines to develop their own high-tech production industry?

In almost all fields of technology we operate in oligopolistically structured markets and have in the filament spinning market, for example a global market share of over 50% and a share as large as 80% in the BCF market. We are keeping a close eye on the development of specific Chinese competitors. A consistent patent system and the prosecution of infringements by our international IP department protect our expertise. As the most important production processes remain constant over a comparably long period, a competitor would need to come up with a revolutionary new process not already protected by us under patent law in order to be able to offer suitable products in today's high-tech fields.

What motivated the Oerlikon Manmade Fibers Segment to join the VDMA's "Blue Competence" sustainability initiative?

As a pioneer in terms of sustainability in our industry, it was logical for us to combine our "e-save" programme with the "Blue Competence" initiative launched by the VDMA in 2011. This creates synergies for both sides, and we can jointly market the VDMA initiative around the globe and thus strengthen the position of Germany as an industrial location.

Quote

"The products and technologies developed by us enable our customers to secure a sustainable success in the market."

André Wissenberg, Vice President and Head of Marketing, Corporate Communications and Public Affairs

Photos (Source: Oerlikon)

Fig 1_Oerlikon André Wissenberg

André Wissenberg, Vice President and Head of Marketing, Corporate Communications and Public Affairs

Fig 2_POY_WINGS_plant

Since it was launched on the market in 2007, the WINGS POY (Winder Integrated Godet Solution for Pre-Oriented Yarn) technology has been installed more than 20,000 times



Fig 3_FDY_WINGS_plant

The WINGS FDY (Winder Integrated Godet Solution for Fully-Drawn Yarn) technology, which was launched on the market in 2010, saves round 55% of the energy of the previous generation of machines from the 1990s.

Information overview

Innovations minimise the negative effects of industrial production

Remscheid. The Oerlikon Manmade Fibers Segment views constantly reducing the negative factors of manmade fibre production as one of the core aspects of its corporate culture. This is aided by the latest scientific and technological findings of the company's own Research and Development (R&D) department, says André Wissenberg, Vice President Marketing, Corporate Communications and Public Affairs. The more than 200 engineers of the R&D department of the company, which is part of the Swiss Oerlikon Group, have an annual budget of around CHF 30 million.

With its Oerlikon Barmag and Oerlikon Neumag brands, Oerlikon Manmade Fibers Segment is a world market leader in filament spinning plants for manmade fibres, texturing machines, BCF, staple fibre spinning and nonwoven systems. As an engineering service provider it offers solutions along the textile value creation chain. In all its developments, the company places considerable value on energy efficiency and sustainable technologies. Wissenberg points out that with its "e-save" programme that it launched back in 2004, the Oerlikon Manmade Fibers Segment is even more focused than ever on the sustainability of its products. It is with this very factor in mind, that the company will be presenting its new filament spinning machine solutions at the ITMA in Milan in November.

(www.oerlikon.com/manmade-fibers)

Short bio

André Wissenberg (born 1970) has been Vice President and Head of Marketing, Corporate Communications and Public Affairs of the Oerlikon Textile segment since 2007, which was renamed Oerlikon Manmade Fibers in 2012, having previously worked as the company's Marketing and Communications Director for six years. Prior to that he worked as a journalist and PR consultant. He has studied linguistics, economics and geography, gaining a Master of Arts.

Corporate information

The Oerlikon Manmade Fibers Segment is a world market leader in the field of filament spinning machines for manmade fibres, texturing machines, and BCF, staple fibre spinning and nonwoven systems. In expanding its product portfolio to include polycondensation plants and their key components, the company covers the entire process from the monomer to the textured yarn.

Oerlikon Barmag's main markets are in Asia, while those of Oerlikon Neumag are in the USA, Turkey and China. Both employ just under 2,500 employees and are represented by the production, sales and service organisations of the Oerlikon Manmade Fibers Segment network in 120 countries. The Oerlikon Manmade Fibers Segment has research centres at its German sites in Remscheid, Neumünster and Chemnitz, and in Suzhou, China. (www.oerlikon.com/manmade-fibers)

œrlikon

For more information:

André Wissenberg Marketing & Corporate Communications Tel. +49 2191 67-2331 Fax +49 2191 67-1313 andre.wissenberg@oerlikon.com

About Oerlikon

Oerlikon (SIX: OERL) is a leading global technology Group, focusing on providing market-leading technologies and services for surface solutions, manmade fibers manufacturing, drive systems and vacuum pumps and components in growth markets. These cutting-edge technologies benefit customers by improving their product performance, productivity, efficient use of energy and resources, and also by contributing to a more sustainable environment. A Swiss company with over 100 years of tradition, Oerlikon has a global footprint of over 15 500 employees at more than 200 locations in 36 countries and sales of CHF 3.2 billion in 2014. The company invested CHF 121 million in R&D in 2014 and has over 1 300 specialists developing innovative and customer-oriented products and services.

For further information: www.oerlikon.com

About Oerlikon Manmade Fibers Segment

Oerlikon Manmade Fibers Segment with the product brands Oerlikon Barmag and Oerlikon Neumag is the world market leader for filament spinning systems used for manufacturing manmade fibers, texturing ma-chines, BCF systems, staple fiber spinning systems and artificial turf systems and – as an engineering services provider – offers solutions along the entire textile value added chain. As a future oriented company, the Oerlikon Group segment's research and development is driven by energy-efficiency and sustainable technologies. With the expansion of the product range to include polycondensation systems and their key components, the company now caters to the entire process – from the monomer all the way through to the textured yarn. The primary Oerlikon Barmag markets are in Asia, with Oerlikon Neumag's main markets in the US, Turkey and China. Correspondingly, the companies – with almost 2 500 employees – have a worldwide presence in 120 countries as part of the Oerlikon Manmade Fibers network of production, sales and distribution and service organizations. At the R&D centers in Remscheid, Neumünster and Chemnitz, highly-qualified engineers and technicians develop innovative and technologically-leading products for tomorrow's world.

For further information: www.oerlikon.com/manmade-fibers