

fibers and filaments

the experts' magazine

issue 29 – march 2018



Moving closer to serving customers

The journey to becoming a service provider

System builders are increasingly becoming service providers, supporting clients as partners for long-term solutions even after the machines have been purchased.



Service Online app for texturing solutions

More than digital customer communications

Within the context of the comprehensive digitization of our environment, production processes are increasingly interlinked with modern information and communication technologies.





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Editorial



Dear Customers, dear Readers,

Digitization, automation, personalization of products, sustainable production, agile processes - the (textile) world is changing. The variety of topics clearly shows that striving for a holistic approach will be essential in the future. More than ever, we have to look for solutions with perspective. Not only from melt to yarn; our aspiration is a comprehensive service portfolio around our customers' plants.

Service is also the topic of the March edition of Fibers and Filaments. The focus is on the change from plant manufacturer to service provider. Partnership-based consulting is gaining an ever-greater significance in the machinery and plant business. It is our job to find the right solution for your individual corporate goal. A solution that will also work long-term in helping you position your business in a flexible way to respond to changing market conditions.

It is a matter of getting the most out of the hardware for a process, often helped by details. It can mean a modernization, optimizing a process, an app or even a special small component. To evaluate this and provide advice and service accordingly, is the job of a good customer service.

In this edition of our magazine, you will find news about our service app for DTY machines, as well as new possibilities in the area of maintenance and start-up supported by Microsoft HoloLens. Be inspired by stories of our customers' and partners' experiences, who secure their success in the market by a variety of services. And learn about new technologies in the area of BCF yarn production.

We would love to hear your feedback

One final word on our own behalf: part of an open and fruitful partnership is an open feedback culture. That is what we want for our magazine. Fibers and Filaments has been providing you with news about the market, technology, service and business for more than 10 years. Is our content still relevant to you? Do you have wishes and suggestions? Let us know by writing to fibers.filaments@oerlikon.com.

Wishing you an interesting read

Yours sincerely,

Georg Stausberg
CEO Oerlikon Manmade Fibers Segment

Domotex 2018

A good start into the new year

In January, like every year, the floor coverings sector started full throttle into the new year at the Domotex trade fair in Hanover, Germany. 1,615 exhibitors and 45,000 trade visitors from more than 100 nations came to Hanover to be inspired by current trends and to present their latest products.



Always a magnet for visitors: Oerlikon Neumag at the Domotex.

Oerlikon Neumag experienced a very good visitor resonance again. With the Sytec One, the company placed the focus on a plant for demanding processes (further information about this technology can be found on page 12). Hands-on technical discussions were held in the customer service area. Recurring topics were: framework agreements for original parts, service maintenance contracts or modification of existing plants.



After four days, the Oerlikon Neumag exhibition team returned to Neumünster with a potpourri of orders. All in all, nine global customers placed their trust in the world market leader, signing contracts for new plants, modifications, original parts and maintenance. (che)

China Textile Machinery Association establishes chemical fiber machinery division

On December 5, China Textile Machinery Association's chemical fiber machinery division held their founding conference and their first members' conference in Wuxi, Jiangsu Province. Wang Shutian, President of the China Textile Machinery Association, Vice President Lu Honggang, Deputy Secretary Hou Xi and more than 60 representatives from national chemical fiber machine construction companies

attended the conference. Together with seven other companies, Oerlikon Manmade Fibers was elected as Chairman Unit. Oerlikon Manmade Fibers is the only foreign investment company involved.

The eight elected Chairman Units of the chemical fiber machinery division are: Oerlikon (China) Technology Co., Ltd., Beijing Research Institute of Automation

for Mechanical Industry, Beijing Chonglee Machinery Engineering Co., Ltd., Handan Hongda Chemical Fiber Machinery Co., Ltd., Hi-Tech Heavy Industry Co., Ltd., Jiangsu Tianming Machinery Group, Shaoyang Textile Machinery Co., Ltd., Wuxi Hongyuan Electromechanical Technology Co., Ltd. The first executive Chairman Units are Beijing Chonglee Machinery Engineering Co., Ltd. and Wuxi Hongyuan Electromechanical Technology Co., Ltd. The Secretary General is Yang Chongchang, Research Fellow at Donghua University.

The aim of establishing the chemical fiber machinery division is to intensify communication between equipment businesses and provide better products and services for yarn producers. (jli)

The newly founded chemical fiber machinery division with its eight elected Chairman Units aims to intensify communication between systems providers and yarn producers.





Maintenance workshop at Xinfengming Customer proximity showcased

Systems and machines are precious assets for manmade fiber manufacturers across the globe and are the essential foundations for the success of these businesses. For this reason, more and more Oerlikon Barmag customers are relying specifically on the expertise of the company's employees when it comes to maintaining and future-proofing their machine technology. One of these manufacturers is the Chinese Xinfengming Group.

In October 2017, the to-date largest Oerlikon Barmag on-site maintenance workshop commenced operations at the site of its subsidiary Tongxiang Zhongchen Chemical Fiber Co. Ltd. The 32-member team of experts carries out preventative maintenance and winder repairs on the customer's premises, while also providing the corresponding technical support. The declared objectives of the collaboration between Xinfengming and Oerlikon Barmag include reducing system downtimes and thus increasing productivity along with improving yarn

quality. Jianyu Sheng, Vice President of Xinfengming, puts it precisely: "Let professional people do the professional things." Furthermore, the customer's staff is being relieved of these activities and is able to assume other tasks instead.

Occupying approx. 600 m², the Oerlikon Barmag workshop is equipped with everything required to cope with the demands of a high-quality maintenance and repair service, including tools manufactured in-house. Oerlikon Barmag original parts can be swiftly replaced, which increases the durability of the machines. In addition, it ensures the provision of these original parts in the long term. The workplace organization in the workshop, designed in accordance with the 5S system, guarantees consistently high-quality and efficient maintenance work. These are the benefits that this fully-integrated manmade fiber manufacturer is establishing with the aim of being able to keep its systems and machines competitive in the long run. (wa)



Handling quality: two Oerlikon Barmag employees at work.

Events

ITM

April 14-17, 2018, Istanbul, Turkey
www.itmexhibition.com

14. Symposium „Textile Filter“

April, 17-18, 2018, Chemnitz, Germany
www.stfi.de/textile-filter

Domotex Gaziantep

April 24-27, 2018, Gaziantep, Turkey
www.domotexturkey.com

IGATEX

April 26-29, 2018, Lahore, Pakistan
www.igatex.pk

Techtextil North America

May 22-24, 2018, Atlanta, USA
www.techtextil-northamerica.us.
messefrankfurt.com

International Nonwovens Symposium

May 23-24, 2018, Rome, Italy
www.edana.org

ANEX

June 6-8, 2018, Tokyo, Japan
<https://anex2018.com>

Home Fashion Technology Week

July 4, 2018, Mumbai, India
July 6-7, 2018, Panipat, India
www.hftw.co.in

Two major contracts from China



Oerlikon Barmag has been awarded two large orders from two of the top 10 global manmade fibers manufacturers. Both companies are located in China. The orders include POY and FDY yarn spinning technology for efficient and sustainable polyester production. The two contracts have a total value of approximately Euro 460 million.

The WINGS POY and WINGS FDY equipment will be delivered in stages over a two-year period, with the initial delivery scheduled in 2019. Both systems will be installed at the customers' sites in the Zhejiang province in China.

"These orders confirm the strong recovery in the filament equipment market and the continued trust our market-leading customers have in us and our technologies," said Dr. Roland Fischer, CEO of the Oerlikon Group. (aw)

Nonwovens business gaining ground

Oerlikon's nonwovens business was able to record an order intake in the mid double-digit million Euro range within the past six months. A total of four plants was sold to leading international producers of nonwoven fabric. Installation and commissioning will take place over the course of this and the next year. In the customer service department, some minor and major orders for service, spare parts and maintenance were placed.

Since its foundation in the summer of 2017 as a small, flexible entity within Oerlikon's Manmade Fibers segment, the nonwovens unit has been focussing exclusively on the development and the distribution of nonwoven technologies in the area of spunbond, meltblown and airlaid. (che)

Manmade fiber systems market rebounds

Following reserved investment behavior in 2016, the manmade fiber industry experienced a remarkable recovery last year. This development is not least due to the revived demand for spinning and texturing machines from the People's Republic of China.

In 2017, machine and systems manufacturers delivered manmade fiber systems capable of producing a further 3 million metric tons (mmt) of yarn; twice as much as in the previous year. For 2018, the trend is indicating a further increase in investment in an additional 1 mmt to 4 mmt. Once again, both China and India will be the main sales markets for manmade fiber machines and systems. There appears to be no short-term end to this current boom in investment in the manmade fiber industry. (sr)

Oerlikon customer meeting in Daman India with great growth potential

The Oerlikon Manmade Fibers Customer Days in Daman, India, which were held for the ninth consecutive year since 2010, were dominated by growth and a prosperous Indian Chemical Fiber Industry. Oerlikon's technology and market experts presented the latest innovations in the field of polymer processing, filament spinning, texturing, staple

fiber, BCF and nonwoven to more than 300 guests. At the end of the one-day seminar, all participants agreed: India still has great potential for sustainable growth in the field of manmade fiber production and is well positioned to face international competition. (aw)





'From Melt to Yarn'

Xuzhou Silk relies on total solutions package

Chinese yarn manufacturer Xuzhou Silk Fiber Science & Technology is relying on Oerlikon Manmade Fibers' 'From Melt to Yarn' total solutions. The project – recently commissioned in the Suzhou region – comprises the modernization of an existing continuous polycondensation (CP) system and 80 POY spinning plant positions to incorporate the WINGS concept. Products manufactured include cationic dyeable-type POY yarn, something of a challenge both for the manufacturer and the systems supplier.

The various project parts are being carried out by the Chinese Oerlikon Barmag Huitong Engineering joint venture, Oerlikon Textile Beijing and Oerlikon Barmag of Remscheid, Germany. The benefit for Xuzhou Silk is that it has a single contact partner accompanying the entire process chain. This ensures that the individual process steps are optimally harmonized, while also enabling a holistic approach in terms of customer support throughout the entire lifecycle of the investment. (bey)



Customer service moves to new premises

On 5 December, a celebration was held on the occasion of the opening of the new premises of Oerlikon Neumag customer services. In future, 60 colleagues will work in an area of 1,500 square meters of modern office space. "Over the last few years, we have continuously developed our advisory service and other services for our customers. Thanks to this performance, we have managed to increase our order intake by well over 60%. We have boosted our human resources in order to be able to meet our own and our customers' expectations. 'Partnering for Performance' is our guiding principle: We support our customers in order to help them do their business in the best possible manner with machines and plants from Oerlikon Neumag. Our customers perceive us as a strong partner," says Tilmann Seidel, Head of Customer Services, visibly pleased about the success in the customer service business. (che)

Tilmann Seidel ceremonially opens the new premises of the Neumünster-based customer service: in the future, 60 employees will support Oerlikon Manmade Fibers customers in all matters in an area of 1,500 square meters.



High-denier POY manufacture Concepts conquer the market

WINGS HD – the special concept for high-denier POY yarns – has already proven to be very popular among international yarn manufacturers just a few months following its market launch. Several orders have been placed already and initial commissioning at several customers' sites is planned for early 2019.

To date, high-denier yarns have been manufactured by means of plying and were textured using single positions in downstream processing. Solutions provider Oerlikon Barmag also has a downstream solution for this in its portfolio, namely its new automatic eAFK HD texturing machine. This innovation reduces the number of production steps in the overall yarn manufacturing process, making it more efficient and less expensive.

High-denier POY yarns are used in carpet pile, home textiles and the automotive sector – here, specifically for yarns deployed in door cladding, seats and roof linings. (bey)



The special WINGS concept for high-denier POY yarns has hit a nerve with the market.

Moving closer to serving customers

The journey to becoming a



System builders are increasingly becoming service providers, supporting clients as partners for long-term solutions even after the machines have been purchased. The driving force behind this trend is a growing competition that is also pressuring textile manufacturers to constantly adapt to the market and improve performance. To be able to provide customized consultation services and support using tailored service contracts, innovative technologies and process competence, machine manufacturers such as Oerlikon Manmade Fibers maintain close contact with their clientele.

service provider

A person in a dark suit and blue tie is holding a single wooden stick horizontally. Below it, a stack of several more wooden sticks is visible, arranged in a stepped fashion. The background is dark and out of focus.

Even when investing in machines or systems, the accompanying service agreements and maintenance contracts frequently play a central role in purchase decisions. Meanwhile, these demands are also rising after the actual sale: customers increasingly expect comprehensive after-sales and service offerings. And international system builders are moving more strongly towards this. According to a study published by the VDMA (Verband Deutscher Maschinen- und Anlagenbau/

Mechanical Engineering Industry Association) and the McKinsey consultancy back in 2014, 60 percent of surveyed system builders attribute growing significance to their after-sales service. Another survey conducted by the BearingPoint management and technology consultancy in 2017 believes that the international service business of major machine and system builders in Germany, Austria and Switzerland is on an expansion course.

These activities are very much gaining strategic importance: good service strengthens the customers' market position, making them successful in the long term. This also benefits the systems business designed as long-term partnerships. The necessary success factors range from drafting global service strategies with market and customer-appropriate service products all the way through to implementing suitable business models. Above all, the focus is on introducing digital service concepts; in other words, a kind of Service 4.0. The 'Service Trends 2020' study published by IMPULS Management Consulting, for example, forecasts growing demand for internet-based services such as teleservices, remote diagnostic and online shops for spare parts by 2020. With solutions for these, systems suppliers not only want to reduce their service reaction times worldwide, they also want to provide customers with information regarding improvements to the operation of their systems.

This offensive is aimed at increasing customer loyalty. Under the banner of 'service excellence', companies are increasingly trying to convince customers with quality, efficiency and response capabilities. Associations such as the VDMA are already developing European and international standards for these in conjunction with companies – very much in line with the motto: customer enthusiasm through customized and surprising services promotes loyalty and economic success.

Partnering for Performance: in partnership with our customers

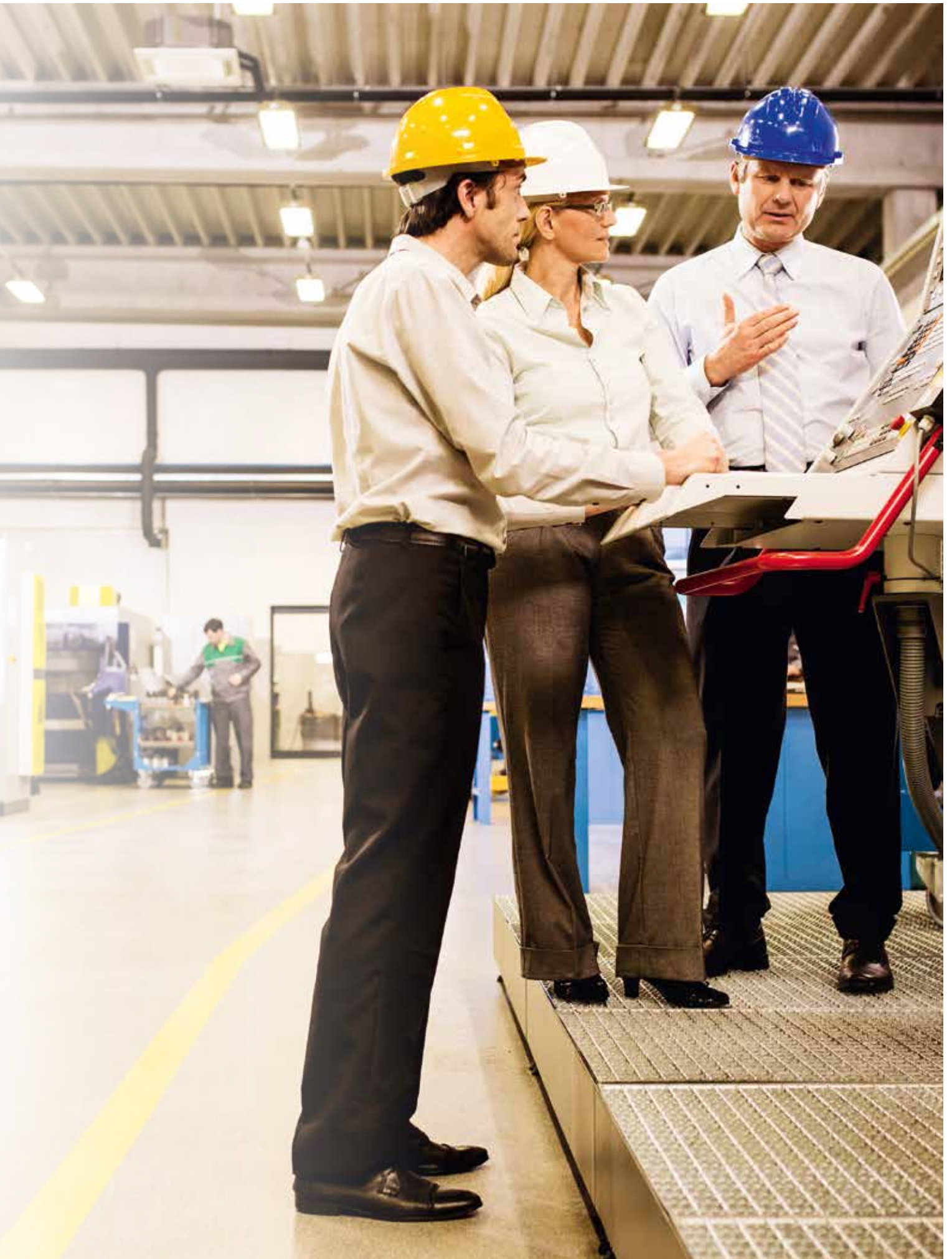
At Oerlikon Manmade Fibers, this is known as: 'Partnering for Performance'. "We strive towards ever better service quality and thus increasing customer loyalty, as we can match our technological strengths exactly to the special objectives of our customers and exploit them in close communication. On request, we accompany and advise fiber manufacturers along the entire value chain, advancing towards a high-performance level", states Dr. Wolfgang Ernst, Director of Service Sales, getting to the heart of the matter. "Here, we have high-quality members of staff with process and manufacturing know-how that – process-crossing – covers the entire process chain: from raw material warehousing through to packaging. It is in such situations that small issues frequently become apparent and whose optimization results in considerably improved overall performance. Ultimately, it is our objective to strengthen our customers' market positions and to make them successful with our systems in the long term."

Under the banner of 'service excellence', companies are increasingly trying to convince customers with quality, efficiency and response capabilities.

This close-knit service partnership is, on the one hand, built on trust, transparency and maintaining regular contact. "With trust established, our service experts are frequently able to uncover hidden performance potential when advising on-site and surprise customers with the appropriate solutions", comments Dr. Ernst. "In future, these services will also increasingly be supported by remote services and other new digital service tools. To this end, experts from all parts of our network can contribute their knowledge in the event of specialist questions."

On the other hand, Oerlikon Manmade Fibers strengthens its service competence with a growing range of targeted offerings. These include, above all, customized consultation and support aimed at enabling customers to use their systems to the best possible extent after purchasing, to structure processes more efficiently and to adapt to new market situations and product specifications. Here, an ever-greater number of service products are being developed: from components such as a new sensor, which identifies yarn breaks in the case of particularly critical, extra-fine and spun-dyed yarns, and diverse modernizations and upgrades – all the way through to extending the life of machines and systems.

In regards to continual support and machine performance, the focus is also increasingly on customized, tiered maintenance contracts and customer-based maintenance workshops. Furthermore, Oerlikon Manmade Fibers has improved the organization of its service fulfillment and is in the process of further optimizing the availability of original spare parts with new logistics and warehousing concepts. Another area in which the company wishes to become more active is its training offerings: for instance, for operators. Because well-trained employees contribute significantly towards reducing downtimes, waste and costs as well as keeping system performance and production quality high. And – last but by no means least – the digitization of service is promoted: software and system innovations – such as virtual 'HoloLens' devices – enable real-time monitoring and machine technology support around the world through Oerlikon Manmade Fibers' service staff. Dr. Ernst: "The future of service lies in technologies of this kind." (tho)





Sytec One

Cost-efficient BCF yarn production for demanding processes

The market for manufacturing BCF yarn is increasingly requiring demanding processes – for instance, when processing recycled polyester. However, there are challenges outside of commodity products. An efficient solution for these is the Sytec One BCF system.



An increase in requirements for manufacturing carpet yarns can result in a higher number of yarn breaks.

For this reason, highly-standardized production systems often require compromises when it comes to throughput, quality and economy. In such cases, the Sytec One offers a fantastic alternative to multi-end technologies.

Single-end technology for greater efficiency

This BCF system works with just one filament per position and is therefore suitable for particularly demanding manufacturing processes, such as recycled polyester

and fine filaments, for example. The reason: only one filament tears in the event of a yarn break. All other filaments are not influenced and continue running. This

not only simplifies troubleshooting, it also reduces the time required for re-string-up. Furthermore, less waste is produced. Overall, this increases productivity compared to three-end technologies. To this end, the efficiency of the Sytec One with ten yarn breaks a day is still in excess of 98%, while three-end technology achieves merely 92% efficiency.

Higher process speed as a result of straight yarn path

The machine concept of Sytec One offers further benefits. Its absolutely straight yarn path in the spinning system and texturing unit permits considerably higher process speeds of up to 15% compared to multi-end technologies. And higher titers of up to 6,000 dtex can also be manufactured without problems. The straight yarn path and the associated gentle yarn guide also

ensure less friction for the individual filament. Which means: fewer yarn breaks and a more stable process.

Optimized key component: spin pack

The Oerlikon Neumag engineers have also developed a new design for the Sytec One's spin pack. The yarn quality is essentially affected by this component, which is central to all BCF machines. The corresponding solution for the Sytec One optimizes the polymer flow in the spin pack, reducing the polymer dwell time. This results in faster product conversions and dye changes, increasing system efficiency.

In addition to this, the spin packs are now wider, allowing yarns with up to 500 filaments to be manufactured.

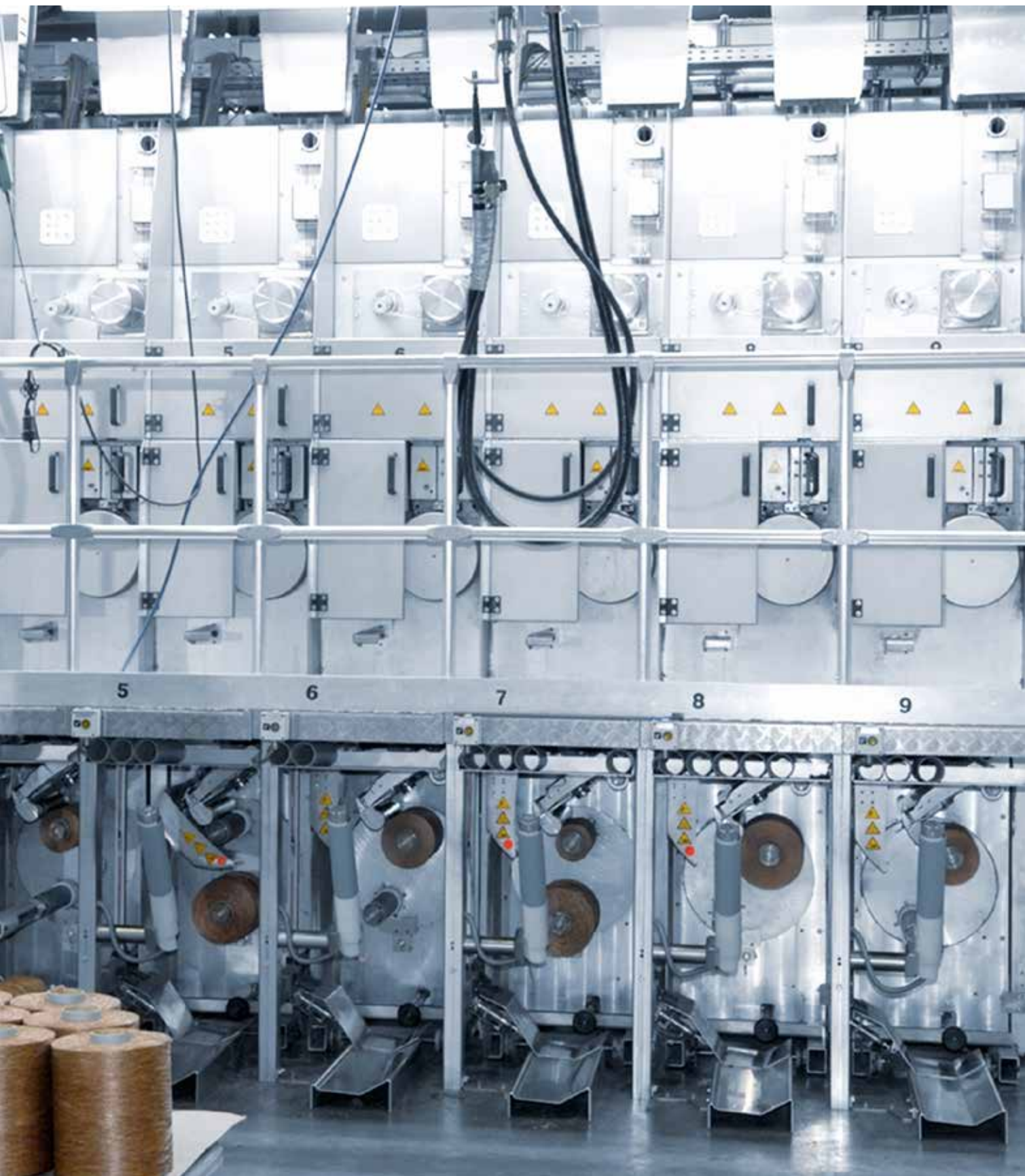
The product mix is crucial

In view of the benefits, the single-end Sytec One is an excellent alternative for processes with high break rates, fine filaments and frequent dye changes. "The system is recommended for cases where demanding processes make up an increasing share of business. The product mix is therefore crucial for selecting the technology", summarizes Martin Rademacher, Vice President of Sales at Oerlikon Neumag.

"We are always willing to give advice and discover what the appropriate solution is." Here, Oerlikon Neumag offers their customers the choice of both single-end and three-end system technologies. (che)

The Sytec One single-thread BCF line is particularly suitable for demanding production processes such as recycled polyester or fine filaments.





Original parts guarantee success

Ensuring worry-free production with framework agreements

Abu Dhabi National Carpet Factory (ADNC) is the leading industrial carpet manufacturer in the United Arab Emirates (UAE). The company has been successful with Oerlikon Neumag BCF systems since having been established back in 2001. But the customer service department of the Neumünster-based systems maker has also made an essential contribution to the success of Abu Dhabi National Carpet Factory.

Oerlikon Neumag has supported the company through the various stages of its development over the course of many years now. The BCF systems market leader looks after its customers throughout the entire lifecycle of their investments. The resulting partnership is based on trust, comments Amer Waleed, Production and Maintenance Manager at ADNC. "Trust in the fact that I am well looked after in all situations and have the support of a reliable partner at all times. Selling a system is one thing. But we would lose confidence in our technology supplier without a reliable, high-performance customer service. And once you lose confidence, you have no reason to reorder. We have had an excellent partnership with Oerlikon Neumag for many years now, one that gives us a sense of security."

Original parts guarantee first-class yarn quality

The loyal Oerlikon Neumag customer manufactures polypropylene, polyester and polyamide 6 BCF yarns, which are further processed into high-end carpets in the in-house facilities. The trendsetter's main market is the high-price segment in the Middle East – and





Amer Waleed (right), Production and Maintenance Manager at Abu Dhabi National Carpet Factory, relies on the expertise of Oerlikon Neumag's service consultant Finn-Eric Jordt.



it goes without saying that quality plays a particularly important role here. "This is why I rely exclusively on original parts for my systems, as they guarantee fewer system downtimes and stable, superlative yarn quality. Ultimately, these make our production more efficient", comments Amer Waleed, talking about his experience with original parts.

And the decision for the recently signed framework agreement covering screens and seals was eminently logical due to the fact that it guarantees punctual delivery of parts at better prices. Further benefits include no warehousing costs and guaranteed availability. "I am able to estimate fairly accurately how many screens and seals I will need at what times each year. A made-to-measure

framework agreement ensures just-in-time provision, while transferring responsibility for sufficient stocks to Oerlikon Neumag. Furthermore, the unit prices are considerably better with the framework agreement", summarizes the production expert, positively assessing the service offering.

Sustainability is a must

Numerous national and international environmental and quality certifications support the claim that the company manufactures sustainable products. And Amer Waleed also feels that he is being supported by Oerlikon Neumag. "We have ascertained that we consume considerably less energy and generate less waste using the S5 and S+ systems than we would with alternative systems. To this end, investing in innovative technology is already paying dividends – even in the medium term."

ADNC is planning to expand its capacities to ensure it is well-equipped for the future. "We want to further consolidate our position as a supplier of high-quality carpets and tap into new markets across the globe with our products", states Amer Waleed. (bey)

Info

Framework agreements covering the provision of original parts guarantee uninterrupted production processes. Therefore, parts availability is ensured without the yarn manufacturer incurring warehousing costs. Of particular interest: all import and export documents are prepared in a manner that guarantees timely provision of parts with fixed delivery dates. And all this at better prices than in the case of one-off orders.

For more information on our framework agreements, please contact service. neumag@oerlikon.com or service.barmag@oerlikon.com.

Meltblown on the rise

Oerlikon's nonwovens unit strengthens its market position

Meltblown filtration media, possibly the most challenging of all synthetic fabric usages, are increasingly used in ever more sophisticated applications. From HEPA air filtration (99.997% efficiency) to sophisticated blood filtration, the consumption of meltblown filtration media has grown annually by an average of 6% in all market segments. And the forecasts for the coming years remain stable.

The requirements to be met by filtration media are becoming increasingly stringent, and as a result the equipment used in their production needs to be improved constantly. Approximately 600 tons of nonwovens with an area weight of only a few grams are produced every year. The average width of a meltblown spinning line for filtration media is 1.6 meters, but the actual application product can be as small as the size of a stamp. For this reason, constant fabric properties in cross direction and machine direction, such as fibre laydown orientation, pore size distribution and air permeability or a low pressure difference (Delta P), are key factors in the production of filter nonwovens with consistent high-yield potential.

“With our meltblown technology it is possible to produce even highly critical raw materials such as thermoplastic polyurethane with minimum area weight tolerances.”

Michael Latinski, Head of R&D Meltblown Technology

Meltblown plants work at a production rate of 24 hours a day, 7 days a week. The spinning packs are cleaned approx. every two months. Through the use of Oerlikon's "quick change" nonwoven spinning pack as well as with the help of automatic shutdown and re-starting, it has been possible to reduce the downtime occurring in connection with these cleaning cycles to such a degree that nearly continuous production is possible at the plants. In addition, Oerlikon's multi-patented nonwovens concept allows rotating of

the meltblown beam, thus providing the manufacturer of nonwovens with a high degree of flexibility.

Whether CFD-designed pressure cavities for optimised fluid and air distribution, inhouse manufacturing know-how for compliance with extreme machining

tolerances or FAUS control systems for production with maximum yield – Oerlikon keeps driving the nonwoven technology forward.

Proof of this is furnished by the investments made over the last few months by leading meltblown nonwoven companies in plants supplied by the Neumünster-based manufacturer. In the last two years, Oerlikon's nonwovens unit received four orders from three of these companies, two of them in the last two months alone. The recent successes demonstrate that by continuously developing its meltblown technology further, the company is not only securing its market position but strengthening it steadily. (mcn)

In the meltblown development center at Neumünster, clients can use new developments such as Oerlikon's recently presented elektro-charging unit for their own trials.



Talking to Mohammed Farid Khamis, founder and “Service solutions bring BCF sys



owner of Oriental Weavers Group systems' performance to perfection"

Being one of the world's largest producers of machine-woven carpets, Oriental Weavers is successful with Oerlikon Neumag technologies. However, the global player not only relies on machines and systems supplied by the BCF systems market leader, but also on its solutions and services, which play a crucial role in making Oriental Weavers successful.

Founded in 1980 by entrepreneur Mohammed Farid Khamis, Oriental Weavers has been traded on the Egyptian Exchange since 1993. From a single loom the company has emerged as the largest producer of machine-woven carpets in the world and today is the global leader in tufted and jet-printed rugs and carpets. With 17,000 employees working in 31 factories in Egypt, the US and China, Oriental Weavers exports more than 60% of its production to more than 150 countries on six continents. The company sees itself as a trendsetter: On average it launches a new product every two weeks.

"Efficiency, reducing waste and minimizing downtimes and maintenance intervals are further benefits here. All of these save time and money."

» **Mr. Khamis**, you have been relying on machines and systems by Oerlikon Neumag for almost twenty years now. In the past, Oriental Weavers has relied on its own expertise to maintain and develop manufacturing of high-quality yarn for producing world-class carpets. Only recently, you joined forces with Oerlikon Neumag in this area by signing a service agreement. What were your thoughts leading to this decision?

We manufacture carpets at the top end of the quality scale. For this reason, it is only logical for us to draw on the innovative Oerlikon Neumag technologies, guaranteeing that we are able





Connects a strong partnership: Oerlikon Neumag's Technical Sales Manager for Modification Jan Pauer, Syam Ibrahim, R&D Consultant at Oriental Weavers, Oerlikon Neumag Service Consultant Robert Jürgens and Mohammed Farid Khamis, founder and owner of the Oriental Weavers Group (from left to right).



“Good customer service provides support both in terms of profitable production and stable processes.”

to manufacture high-quality yarns. The fantastic experience with the systems to date has encouraged us to expand our partnership to include services.

» For several months now, you have been relying on Oerlikon Neumag's maintenance and process expertise. Oerlikon Neumag technicians visit you on a regular basis to advise you on processes. In what way does this help in your daily business?

The processes are becoming ever more complex – as are the demands of our clientèle. Sometimes, it also helps to take a look from the outside to enable us to objectively assess and optimize our own processes. The Oerlikon Neumag experts support us above all when it comes to process quality and yarn quality. These in turn help us manufacture elaborate and increasingly sophisticated yarns that are truly trendsetting. Efficiency, reducing waste and minimizing downtimes and maintenance intervals are further benefits here. All of these save time and money.

» Apart from the latest service contract, the partnership between Oriental Weavers and Oerlikon Neumag has been intensifying, with greater co-operation on various levels. Original parts availability is constantly being improved, while custom upgrade and modernization solutions are being developed. How does this affect your business and your plans to grow?

A reliable after-sales service is definitely a sales argument. We expect our partners to provide service throughout the entire lifecycle of our investments. This definitely includes the prompt provision of original parts, consultation and support in the case of all required upgrades and modernization solutions as well as regular maintenance. Good customer service provides support both in terms of profitable production and stable processes.

» You rely on original parts from Oerlikon Neumag. How do original parts influence the performance of your BCF system?

In our experience, original parts guarantee stable processes. We have fewer yarn breaks and achieve excellent yarn quality. Our customers reward this by paying higher prices. (bey)



Gülsan signs service contract

Long-standing customer places their trust in Oerlikon Neumag technology

Turkish company Gülsan has invested in a comprehensive service contract. The contract encompassing the provision of Oerlikon Neumag original parts and the modification of BCF S+ systems with RoTac³ tangling units and color pop compacting (CPC) was signed at the Domotex 2018 trade fair in Hanover, Germany.

Gülsan are one of the largest carpet yarn manufacturers and regard themselves as carpet yarn production pioneers. “Stable, efficient yarn manufacturing – which the innovative technologies and the high quality of everything from the individual part to the entire system supplied by Oerlikon Neumag guarantee – is very important to us”, explains Vedat Topçuoğlu, talking about the success of his company.

Producing tricolor efficiently with RoTac³

The RoTac³ ensures extremely energy-efficient and even tangling of BCF yarn. The very best prerequisites for stable, unproblematic further processing of the yarn and optimizing production costs.

A very uniform appearance, and an optimum tangle result in the BCF spinning system for Tricolor carpets is crucial. These tangle knots are produced in defined spacings and tenacities using RoTac³. Thanks to this tangling option, uniform tricolor results that cannot be achieved using conventional tangling units are produced even at high speeds.

Color pop compacting

Strongly separated yarns can be manufactured efficiently with the CPC (color pop compacting) unit from Oerlikon Neumag. The individual threads are provided with yarn cohesion in the CPC unit before texturing, thus preventing entanglement in downstream process stages, producing a strongly color-separated yarn. The CPC unit ensures a uniform distribution of colors and a carpet appearance with clear contrasts of colors. (che)



Relies on quality through service contracts: Gülsan CEO Vedat Topçuoğlu (2nd from left)

About

Gülsan began manufacturing carpet yarn in 1993 and was the first Turkish producer of BCF yarn made from polypropylenes, with the annual capacity meanwhile exceeding 100,000 tons in this area alone. The company has successively expanded its product portfolio, so that it is now able to offer the entire range of PP, PET and PA yarns.

Service Online app for texturing solutions **More than digital customer communications**

Within the context of the comprehensive digitization of our environment, production processes are increasingly interlinked with modern information and communication technologies.

In the future, people, machines, systems, logistics and products will communicate and cooperate with each other, simplifying many processes as a result.

Imagine your DTY machine is calling you!

- The process data reveal that the productivity of the DTY machine is deteriorating?

Acting fast is absolutely crucial! One tap on the newly-developed Oerlikon Barmag Service Online app on a smart phone and the customer is talking directly to the service technician, receiving immediate support. It could hardly be any quicker! In contrast to a 'standard chat', the service app has the option of tracking the history of the chat in detail, which can be very helpful in the case of complex issues.

- Your machine software needs to be updated?

No problem! The app checks the machine-specific software, downloads the corresponding updates from Oerlikon Barmag's server and transfers





them to the machine, where all that is left to do is install them. The next step will see customers being provided with all relevant documentation online, with error reports also being downloadable at all times.

■ Always out and about and still everything under control?"
A child's play in the future! As a further step towards networked processes, customers will in future be able to access the life data of their production systems on their smart phones using the app. On request, these data can be accessed by the Oerlikon Barmag experts and provide fast support when solving problems or even preventing and minimizing malfunctions in advance. With this, manmade fiber manufacturers are able to considerably increase the production efficiency of their machines and yarn quality; improving their competitiveness within the market.

Digital transformation is creating whole new dimensions – also and specifically – in terms of demanding manufacturing processes. With a unique combination of experience and knowledge, Oerlikon Barmag supports manmade fiber manufacturers in conquering precisely these new dimensions – both now and in the future. (wa)

Continuing digitization simplifies the mastering of complex processes.



The app for your success.

Customer service with Microsoft HoloLens

Far away, yet so close

What do you do if your winder is on strike and the service manual fails to provide assistance? Or a process is not working? Oerlikon Manmade Fibers customer service's remote service supported by Microsoft HoloLens is perfect in such cases.





Mixed reality is the magic word here, the combination of virtual reality and augmented reality – creating even more benefits for users. Let us consider the above-mentioned case of the defective winder: the Microsoft HoloLens creates a direct link to the service department expert in Remscheid, Neumünster or at any other site in the world. Simply by means of a Skype call. The video and audio stream ensures that the service employee sees exactly what the Microsoft HoloLens wearer sees. Hence allowing the service officer to provide competent support. The bidirectional video channel can, for instance, send relevant information to the screens, whether

these are drawings, documents or even hand-written notes and markings. This way, the operator can have the expert remotely guide him or her through the repair step-by-step, while still having both hands free to work and maintaining full communication.

Another example: yarn manufacturing adjustment issues are not uncommon, particularly in the case of process changes. Minor things frequently influence the yarn or the package build. The remote service solution is ideal for quickly removing production obstacles. The benefits of the new remote service using Microsoft HoloLens are plain to see: the expertise from the global Oerlikon Manmade Fibers sites is swiftly and easily made available anywhere in the world, which in turn minimizes production downtimes and cuts costs. The technology is already being deployed by several yarn manufacturers in India.

Info

Microsoft HoloLens is an augmented reality device that enables users to show interactive 3D projections in the immediate surroundings with the support of a natural user interface. HoloLens also works without smart phones or additional computers. The user looks through transparent screens that show the projections. However, the high-resolution projections are not holograms and are not displayed by pixels or grids as in the case of Samsung Gear VR and Oculus Rift, but by means of projected light points. Microsoft HoloLens is controlled using gestures, voice and head movements. ©Wikipedia

There are also plans to provide support during commissioning for a pilot customer located a considerable distance from its nearest service station. The Microsoft HoloLens-supported remote service was unveiled at the ITMA Asia and the India ITME trade shows last year. (bey)

For further information, please contact: service.manmade@oerlikon.com

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fibers.filaments@oerlikon.com
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aw André Wissenberg
bey Susanne Beyer (responsible)
che Claudia Henkel
jli James Li
mcn Ed McNally
sr Rainer Schneider
tho Thilo Horvatitsch
wa Ute Watermann

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