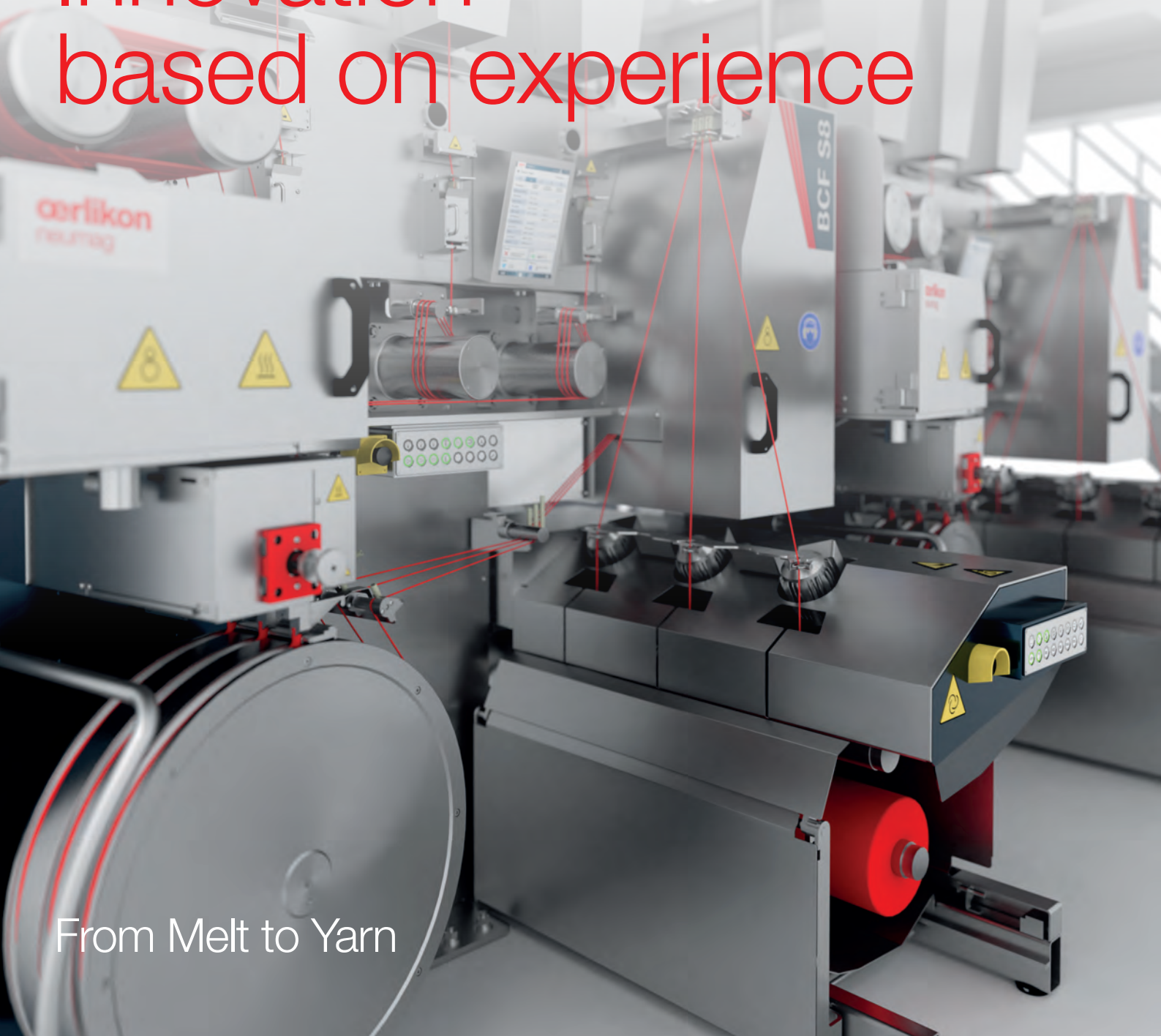


Carpet yarn production with BCF S8

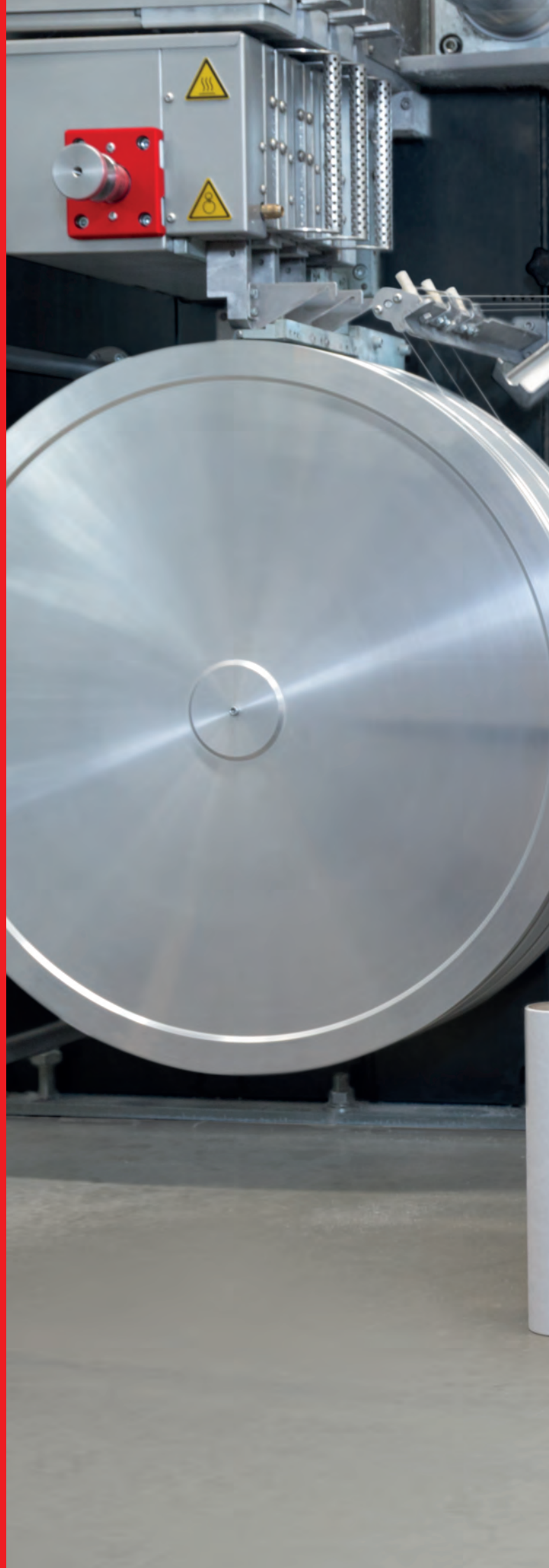
Innovation
based on experience



From Melt to Yarn

Your benefits

From Melt to Yarn – Solutions along the textile value chain	4
BCF carpet yarn production with Oerlikon Neumag BCF S8	6
Key benefits	
■ Enhanced product portfolio	8
■ Savings in OPEX	10
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From Melt to Yarn

Solutions along the textile value chain

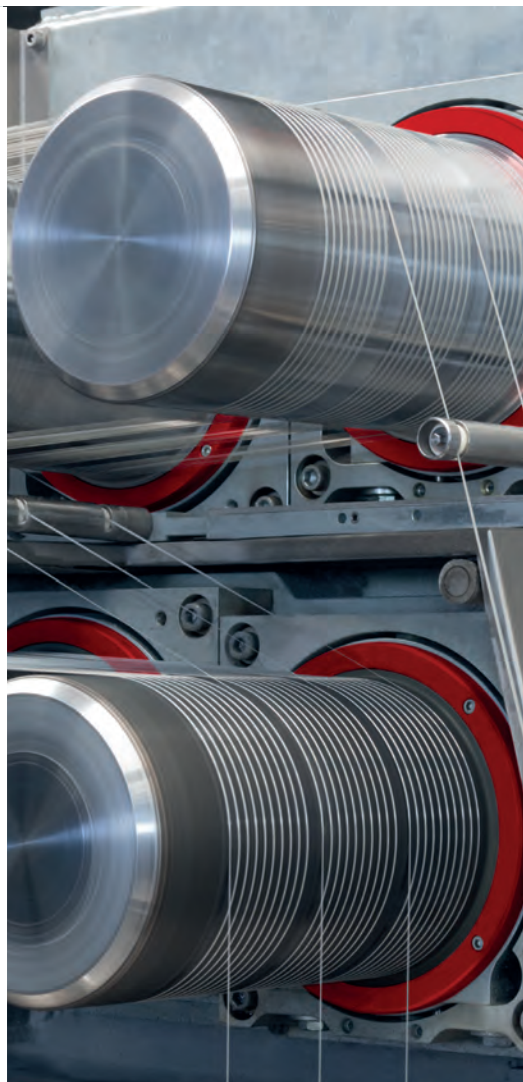
Place your business ideas in professional hands! Consulting, engineering, plant design, high-tech machinery and lifecycle management – the whole package from a single source. Many years of experience in textile machine construction and our strong global network form a solid basis and the perfect prerequisites for us as your solutions provider.

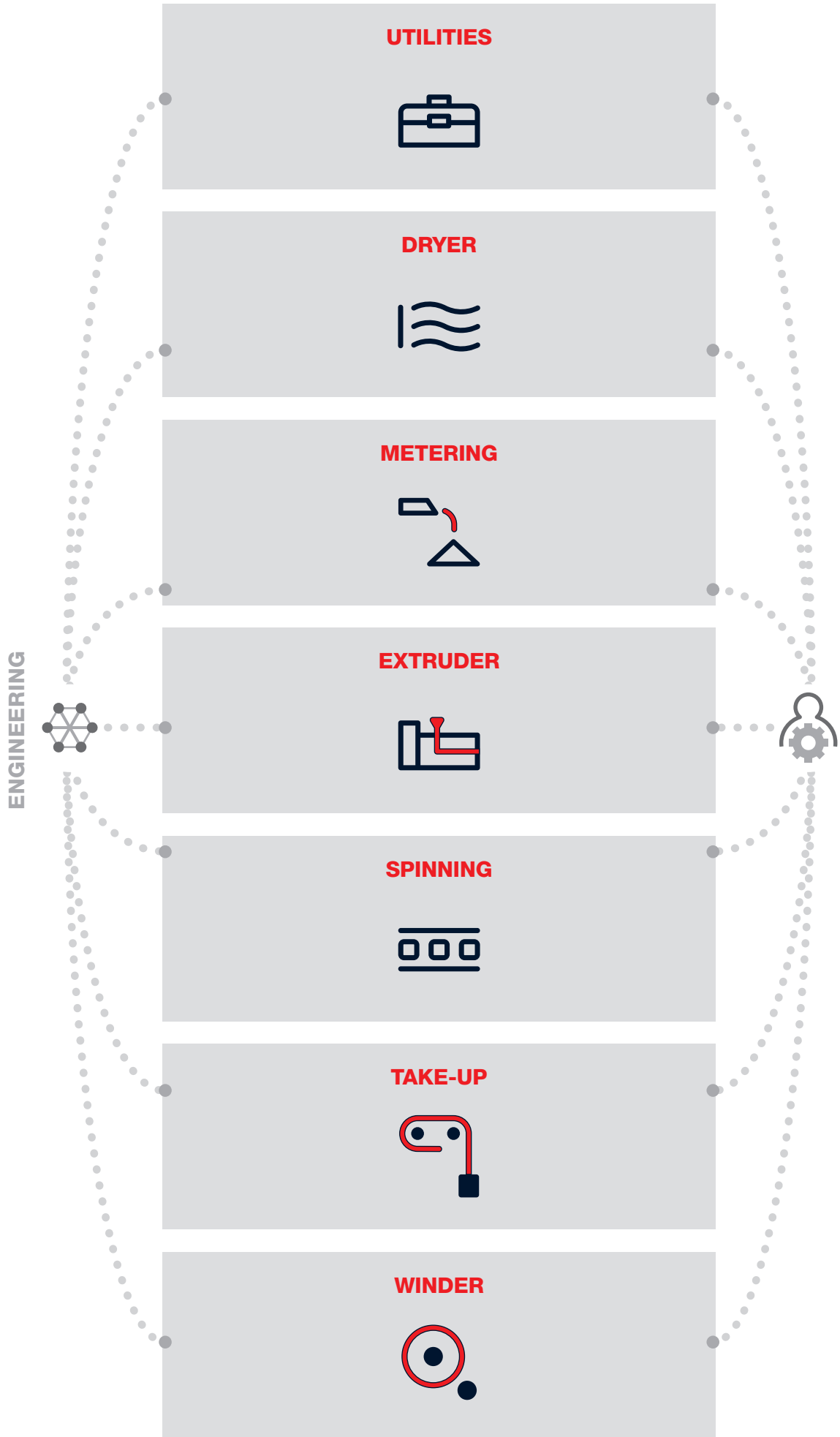
Define your yarn properties from the very outset

From melt to fiber, from extrusion to BCF carpet yarn – we have your value-added chain under control. And you increase your profits. Because an optimized manufacturing process encompassing all production steps provides you with the greatest possible influence on the quality of your end product, and your production costs.

Add to this the fact that our brand strength will make financing your project a profitable investment.

Extensive experience in engineering and management competencies help us deliver even complex projects and processes. You can rely on that!





CUSTOMER SERVICES
Consulting, Lifecycle Management, Technical Support

BCF carpet yarn production with Oerlikon Neumag BCF S8

Today, BCF carpet yarn manufacturers, whether producing commodities or niche products, are faced with increasing pressure on quality and efficiency. In demand are methods and means that increase the performance, quality and efficiency of the production process. This is the starting point of the BCF S8.

The idea

The BCF S8 plant offers high productivity and enhances the product portfolio to a new level for you to compete in a continuously changing market. Your success is very important to us. For this reason, we have continued to extend the straight yarn path from spinning into the draw field for a more improved production process.

The benefits

Your benefits are the most important drivers when developing our products. Profit from

- Enhanced product portfolio
- Lower OPEX
- Multiple innovations for a more reliable process and higher product quality
- Trendsetting human-machine interface

e-save
comprehensive efficiency

e-save provides you with a competitive edge

With e-save, Oerlikon Manmade Fibers introduced a label for particularly energy-efficient systems, machines and components back in 2004. Over the past years, e-save has established itself as the trademark of a comprehensive efficiency program. This underlines the preeminent role of Oerlikon Manmade Fibers when it comes to commercial success and sustainability.

Compared to other concepts available on the market, our BCF S8 plant solution convince in terms of

- Energy: with up to 5% less energy consumption compared to the S+
- Economics: 99% efficiency at the highest production speeds
- Ergonomics: intuitive operation by trendsetting human-machine interface



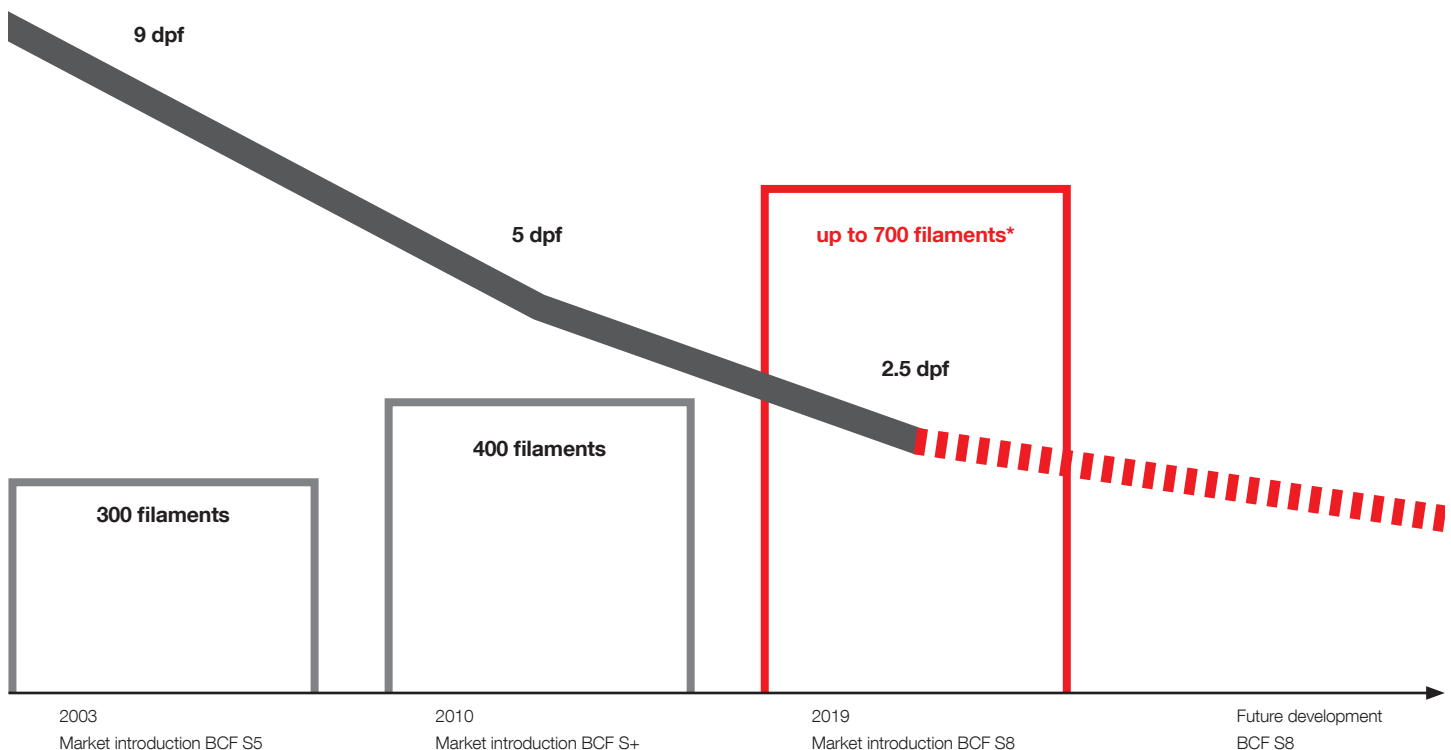
Be prepared for the future – low dpf and the highest number of filaments

Ever finer titers and more filaments per end are on trend. Expand your product portfolio! Manufacture finer titers and more filaments than ever before – guaranteed!

Your benefits:

- Up to 700 filaments per end
- Fine titers of 2.5 dpf – guaranteed
- Prepared for the journey to low dpf

Journey to low dpf



* Performance guarantees for more than 500 filaments may require further verification.



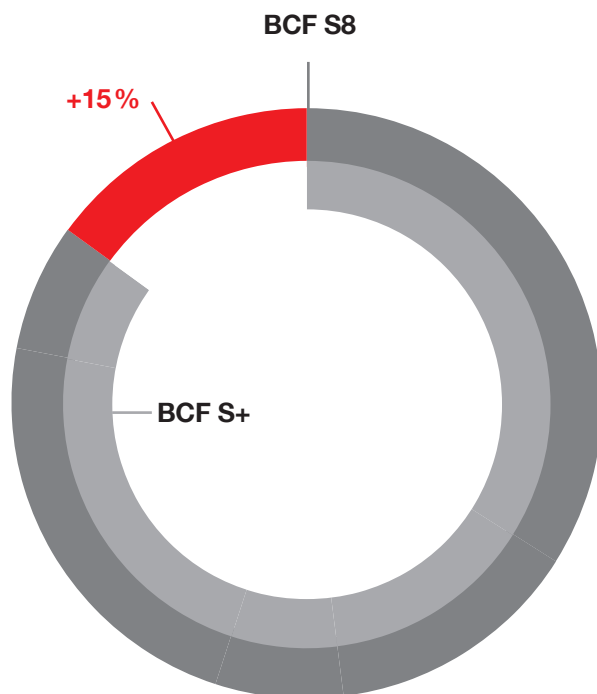
Cost-efficient manufacturing – remain competitive

Competition within the BCF carpet yarn market is intense. The consequence: constantly rising cost pressure. The solution: an efficient system with an optimized production process provided by our BCF S8

Your benefits:

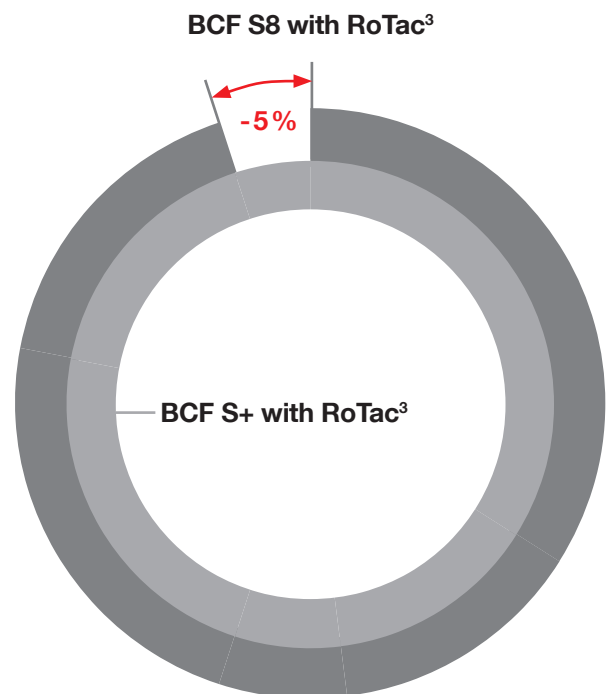
- Higher production speeds than ever before
- System efficiency of 99%
- Higher throughputs of up to 15%
- Energy savings of up to 5% per kilogram of yarn

Increased productivity (benchmark example)



Example calculation for PET mono, 1400 dtex

Reduced energy consumption



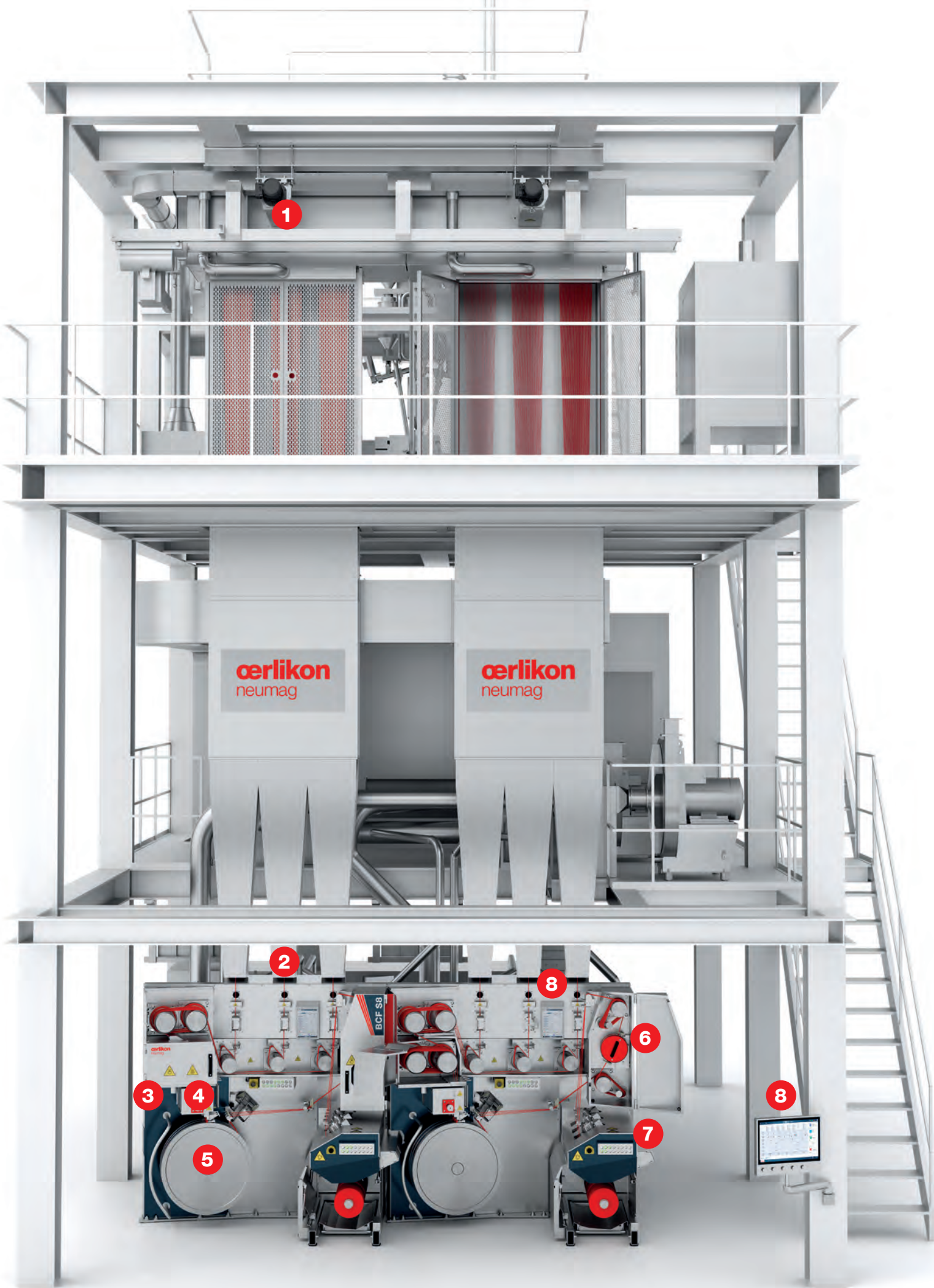
Up to 50 % savings in tangle air with RoTac³ compared to conventional tangling



Smart innovations take a big move

Future-oriented development steps make the BCF S8 the most efficient Oerlikon Neumag BCF system. How have we accomplished this? Lots of smart innovations make a big difference.

- 1** Spinning
 - Increased spin pack width with up to 700 filaments
 - New spin pack design for optimized shearing
- 2** ■ Absolute straight yarn path from infeed through to cooling drum due to sequential threading
- 3** ■ Short distance between godet duo and texturing head reduces compressed air consumption
- 4** Texturing units
 - Mechanical protection of nozzles and lamella chambers
 - User-friendly handling due to separate texturing units
- 5** Cooling drum
 - 800 mm diameter for higher retention time
 - New enhanced V-groove for high crimp quality
- 6** ■ RoTac³ enables perfect tangling results and saves energy
- 7** Winder Witrax III-37
 - Process speeds of up to 3700 m/min
 - Enhanced safety shielding
- 8** New touch HMI
 - Intuitive operation as well as the take-up touch screen for smart and easy operation



Trendsetting human-machine interface for intuitive operation

In the digital age, machine control systems are used not only for communication between man and machine. They are also designed to decisively help increase machine and workflow efficiency.

Digitalization has finally also arrived for the human-machine interface in the BCF S8. In addition to a completely new appearance, smart features and logics simplify your everyday work.

One HMI – five-fold benefit

- Intuitive, role-based operation
- Ideal summary of machine parameters due to contemporary user interface and look & feel
- Smart information at a glance
- Easy process analytics
- Easy troubleshooting

Next-level human-machine communication

A completely new alarm philosophy has been developed to control the BCF S8. Subsequent errors are already suppressed in the PLC and are not transmitted to the HMI.

Sophisticated filter mechanisms and display options are used to swiftly provide an overview of the current or historical state of the system in the HMI.

Additionally error analysis and searching have become considerably simpler.

Take-up touch screen

Take-up touch screen is a further highlight that makes the most important information immediately accessible on the machine. Operating states, alarm notifications as well as actual and target values are directly available at all take-ups.

Modular and future-proof

The new HMI system is modular in structure. Further intelligent functions are currently being developed.

cerlikon neumag | BCF technology | John Doe | 21/04/18 13:30:00

BCF S8

Utilities	Compressed Air	Fan	Chiller	Air Condition	Silo		
Dryer							
Metering							
Extruder							
Spinning							
Take Up							
Winder							
Information	MP 34-01 33:41:12 98,2 % 12 / 01 1st	MP 34-02 33:41:12 98,2 % 12 / 01 1st	MP 34-03 33:41:12 98,2 % 12 / 01 1st	MP 34-04 33:41:12 98,2 % 12 / 01 1st	MP 34-05 33:41:12 98,2 % 12 / 01 1st	MP 34-06 33:41:12 0,0 % - / - - / -	MP 34-08 33:41:12 66,1 % 12 / 01 1st

Alarms

✖ Position 6 Godet 3 Drive: Motor overtemperature

KPI

➔ 99,4 %

Tasks

📋 To Do 1
To Do 2
To Do 3

Trends

📈 Trend 1

Products

📦 BCF 1400dtex 500F
80%

ENG

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BCF S8 | Extruder 1 Overview

Production - Basic

Metering 2	Polymer	Add. 1	Add. 2	Add. 3
Met. Rate	000,00 %	000,00 %	000,00 %	000,00 %

Extruder 2	Drive	00000 A	00000 %/A	00000 KW	00000 %/KW	00000 rpm	00,000 %/rpm
Heating	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	
	000,00 °C	000,00 °C	000,00 °C	000,00 °C	000,00 °C	000,00 °C	
	000,00 %	000,00 %	000,00 %	000,00 %	000,00 %	000,00 %	
Mess. Head	00,000 %						
Melt	000,00 °C	000,00 bar					

Melt Pipe	Zone 1	000,00 °C
-----------	--------	-----------

Screen Changer	Zone 1	000,00 °C	Pressure	Before	Behind
				000,00 bar	000,00 bar

Melt Pipe	Zone 1	000,00 °C
-----------	--------	-----------

Spinning Beam 2	Heating	000,00 °C				
	Melt	000,00 bar	Position 1	000,00 bar	Position 2	000,00 bar
	Spin. Pump	000,00 rpm		000,00 rpm		000,00 rpm
	Melt	000,00 bar		000,00 bar		000,00 bar

Alarms

✖ Zone 3: Heating fault

KPI

➔ 100 %

Tasks

📋 To Do 1
To Do 2
To Do 3

Trends

📈 Trend 1

Products

📦 No information

ENG

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BCF S8 | Position 3

Production Mode

Production - Basic

Speed	Temperature	Pressure
actual	actual	actual
production	production	production

Spinning Pump	000	000	rpm			
Spinfinish	000	000	rpm			
Inlet Godet	000	000	m/min			
Pre Draw	000	000	m/min	000	000	°C
Main Draw	000	000	m/min	000	000	°C
Texturizing	000	000	°C	000	000	bar
Cooling Drum	000	000	m/min			
Draw Off 1	000	000	m/min			
Rotac	000	000	m/min	000	000	bar
Draw Off 2	000	000	m/min			
Winder	000	000	m/min			

Alarms

✖ Godet 3 Drive: Motor overtemperature

KPI

➔ 99,4 %

Tasks

📋 To Do 1
To Do 2
To Do 3

Trends

📈 Trend 1

Products

📦 BCF 1400dtex 500F
80%

direct | block

ENG

Partnering for Performance

The Oerlikon Manmade Fibers segment's Customer Services department has one all-embracing mission: it wants to make your production increasingly efficient and productive, and your business increasingly competitive and profitable. To do this, it offers you a close working relationship – Partnering for Performance.

Our services for your success

Textile technologies are becoming ever more efficient and flexible, opening up great opportunities to enhance your competitiveness. At the same time, this progress accelerates the race in the market. To be able to keep up and react swiftly to changing market situations, it is important to maintain and expand your technical capabilities and to utilize them properly.

To achieve these, we place emphasis on a close, trusting service partnership with you to ensure reliable production and gain a technological edge, to secure your investment and to guarantee success in the future. Together, let us exploit the strengths of our technologies for your business.

Our goal: your operational efficiency

Through our partnership, we want to increase your operational efficiency to the best effect. With this in mind, we focus on optimizing your operating and manufacturing processes, your system and logistics management and the acquisition of further skills by your staff. Your success grows with the interplay of all the factors involved.

For this, we offer you the performance of a technology leader with a unique global service network, along with highly-qualified service and engineering experts. We will advise and support you in all phases of your business along the entire value creation chain of fiber production:

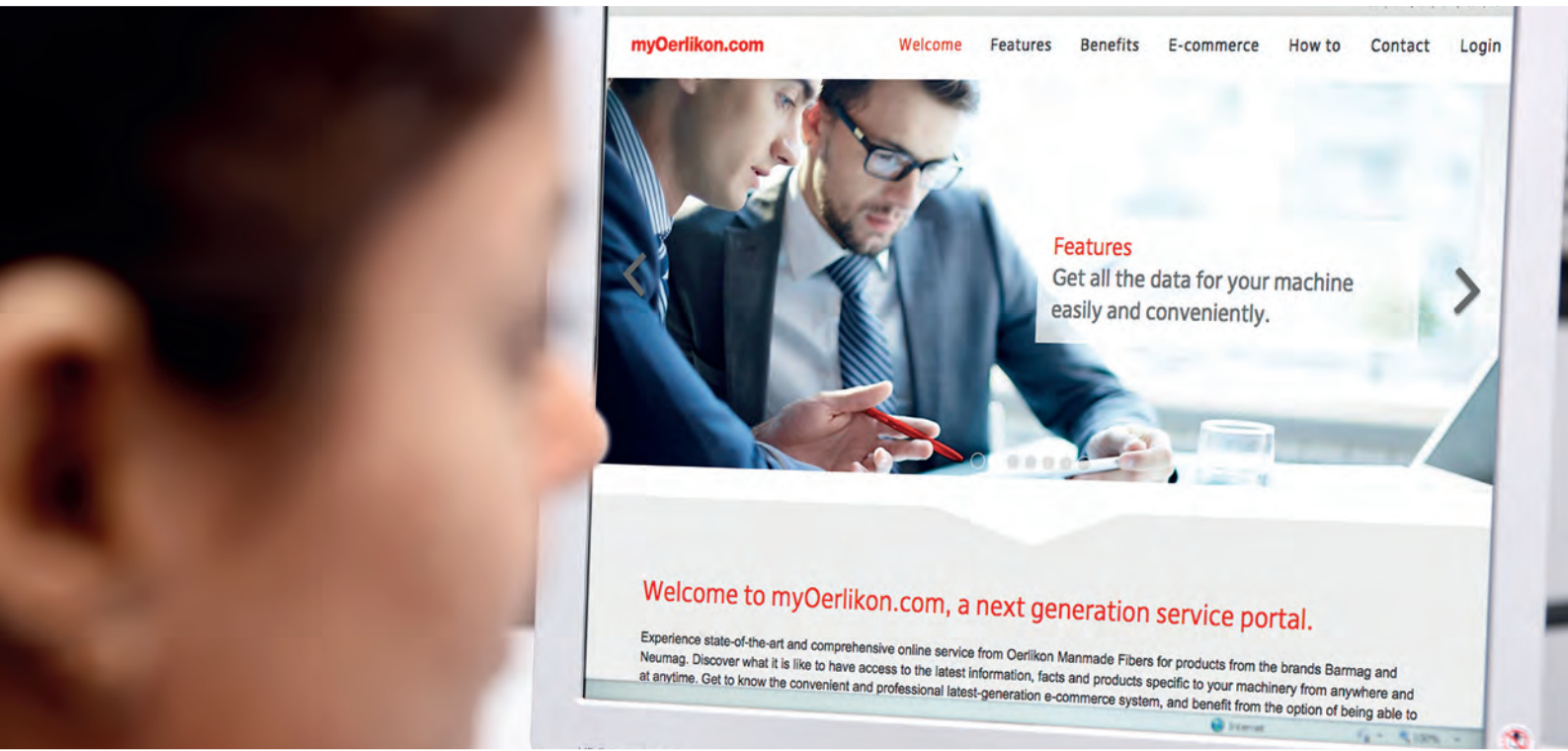
- With start-up services for the installation or relocation of your systems,
- With technical support around the clock,
- With modern services for maintenance and repair, performance enhancement and staff training,
- With longterm maintenance contracts for a continuously troublefree systems performance,
- With individual performance checks for an optimized plant operation, and
- With modernization and upgrades from the manmade fiber specialist.

Whatever you need, you can select services tailored to those requirements from a service portfolio that is unique in the industry.

Further information on our comprehensive Customer Service can be found here



Or contact us:
customer-services.neumag@oerlikon.com







Our promises

With our Oerlikon Barmag and Oerlikon Neumag competence brands, we are the world market leader for manmade fiber filament spinning systems, texturing machines, BCF systems, staple fiber systems and artificial turf systems. As a service provider for engineering and aftersales services, we offer total solutions for the entire textile value added chain. We attach great importance to energy efficiency and sustainable technologies in all our developments.

To what extent do you profit from this? Our market position guarantees you the benefits and quality of leading technologies, our sustainable products save you money and our comprehensive services save you time and hence increase your profit.

**More on Oerlikon Neumag
BCF solutions**



**Or contact us:
sales.neumag@oerlikon.com**

Oerlikon Neumag

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