

# it's true



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Our 2023 highlight:  
The ITMA in Milan

**TRÜTZSCHLER**

## Editorial

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Dear Customers,  
Partners and Friends of Trützschler,  
Dear Employees,

2023 was an incredibly eventful year for our company. In particular, the ITMA 2023 in Milan exceeded our high expectations and showed the importance of personal interactions with our customers and business partners. In this spirit, our latest issue of *it's true* magazine features several photos highlighting our top moments from this fantastic industry event.

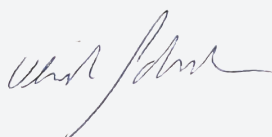
You can also find information about the TCO 21XL, our new 12-head combing machine that we introduced to the world at ITMA. There's a report into how this machine is now successfully installed and running at Bakan Tex, a leading manufacturer of combed yarn in Uzbekistan.

Further, there is a summary of our new flagship in carding, the TC 30i. The intelligent card, that already inspired our customers at the ITMA, is ready for sales in 2024. Following our cooperation with the Turkish company Balkan Textile Machinery INC.CO. we also share insights into the growing market demand for our TRUECYCLED recycling process.

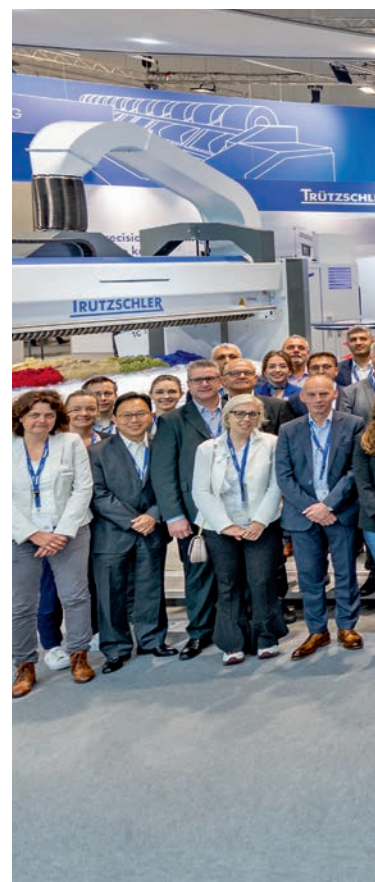
On top of this, our teams provide details about the biggest milestones and achievements from across our business units and production sites worldwide. In India, for example, we recently celebrated the production of our 15,000th card. The Trützschler Card Clothing (TCC) team also has cause for celebration: For 20 years, TCC has been supporting global spinning and nonwovens customers with innovative solutions from our location in Neubulach, Germany.

Enjoy reading this lively issue of *it's true* magazine. We wish you a successful end to 2023, with health and happiness for you and your loved ones during the new year.

Warm regards,



Dr.-Ing. Ulrich Schwenken,  
CEO Trützschler Group SE



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ITMA 2023



Printed on 100 % recycled paper



Ready for sales:  
All eyes on the TC 30i

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T-SUPREMA

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Welcome T-SUPREMA!



TRÜTZSCHLER

TRÜTZSCHLER SPINNING

TRÜTZSCHLER MAN-MADE FIBERS

TRÜTZSCHLER NONWOVENS

it's true

Wherever you are. We are here.  
My Trützschler.

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Author: Martin Dovern

**The next-generation TC 30i carding machine captured imaginations at the ITMA 2023. This innovative card inspired our customers – while confirming Trützschler as the trendsetting pioneer for textile machinery.**

**From smart functions to sustainable features, the new card generated a lot of excitement. And the successful launch event in Milan will soon be followed by the sales release of our TC 30i in 2024.**

# All eyes



on the

TC30i

**READY  
FOR  
SALES**



You want to card better than ever before? Get ready to order our new flagship in carding, the **TC 30i, in 2024!**

### Key benefits and highlights

The TC 30i offers a huge range of groundbreaking new features and fascinating details. However, three benefits particularly excited the crowd at ITMA...

**1** High levels of performance and yarn quality thanks to 35 % more active flats and 14 % increased carding length in combination with the intelligent gap optimizer T-GO.

**2** Operator-independent, consistent results thanks to automatic and continuous carding gap setting with T-GO.

**3** More sustainable and economical use of raw materials thanks to a redesigned suction system that collects different types of waste separately – enabling 50 % of card waste to be reused. The TC 30i also comes with the proven WASTECONTROL system – an easy-to-use and effective assurance against unnecessary fiber loss.

### A model for each application

We are also launching a version of this card specifically developed for textile recycling. It answers technical challenges in processing secondary fibers like high short fiber content, on average shorter fibers and yarn and fabric particles.

### Carding soon...

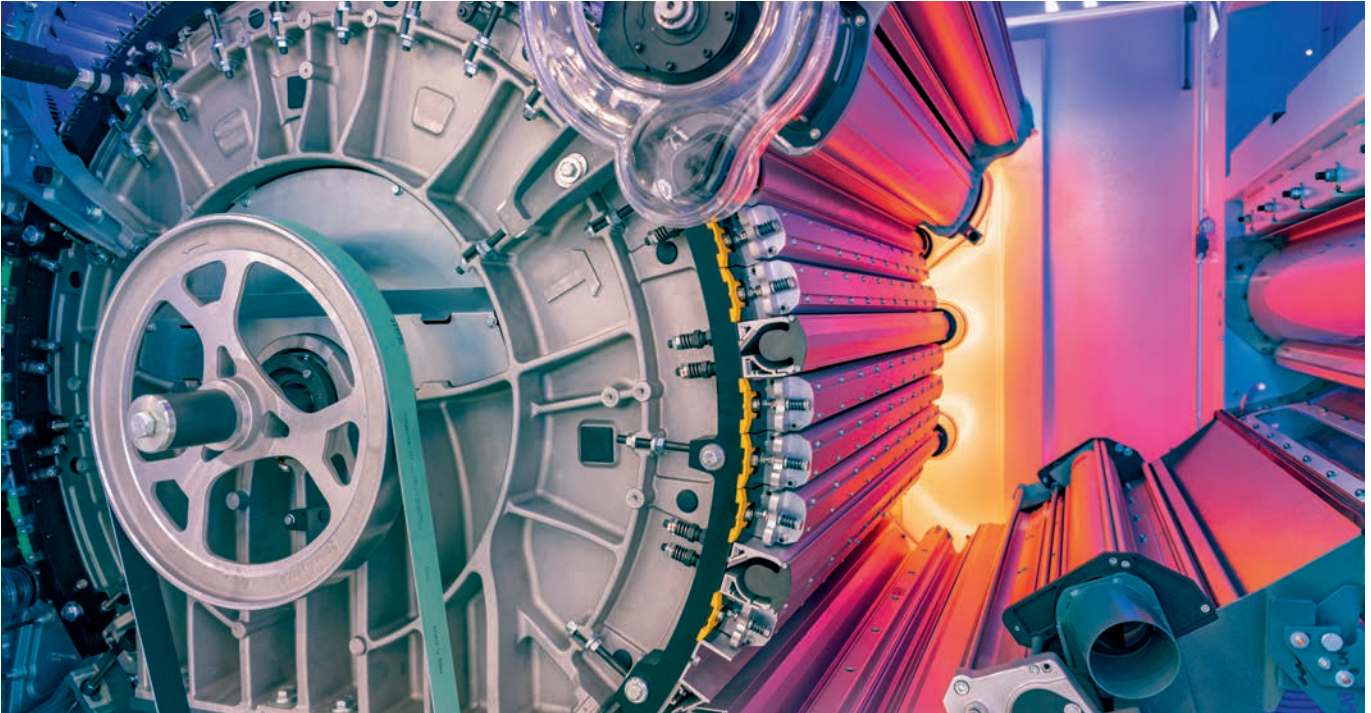
Right now, our dedicated team is putting the finishing touches to our plans for the TC 30i sales release. It's a pioneering new card with the power to maximize quality – while capturing imaginations too.

The redesigned suction system caught a lot of interest



**If you want to know more, check out our latest animation:**





More active flats for better quality  
and more sustainability

## TC 30i and IDF 3

### What can be more sustainable than saving process steps and machinery?

With the Integrated Draw Frame 3, drawing processes can be significantly shortened. Shorter processes require less resources, less energy and less production space. And the IDF 3 offers much more.

**Higher yarn quality**  
and homogenous slivers  
through advanced measuring  
devices.

**Increased efficiency**  
by 3% through new can  
changing principle that  
minimizes can change times.

**Easy accessibility**  
for optimal machine handling.





# The world's first 12-head comber: TCO 21XL

Author: Eva Trenz

**A new high-performance comber was introduced at the ITMA in Milan: the TCO 21XL.**

**Its twelve heads helped it to turn heads at the trade show – and now the first real-world results from the Uzbek customer Bakan Tex are confirming its great performance and quality levels.**

**Find out why this innovative comber is capturing the imagination with features like its high-capacity drafting system.**

**Are you ready? Lights, camera... ACTION!**

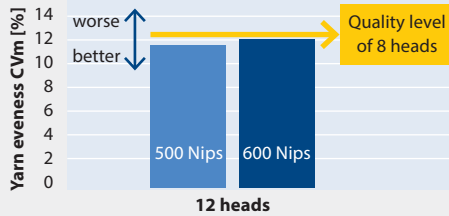
## **Panorama view: Great performance in Uzbekistan**

Right now, the first TCO 21XL combers are rolling off the production lines. Our pioneering customer Bakan Tex, founded 2017 in Tashkent, Uzbekistan, has already enjoyed an exclusive sneak-peek at this comber.

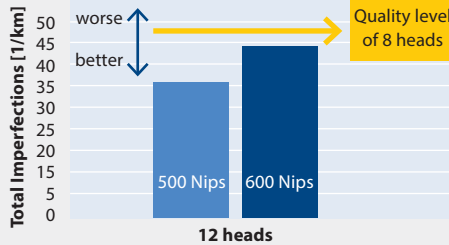
In its state-of-the-art spinning mill, Bakan produces 14,500 tons of combed cotton yarn per year, ranging from Ne 20 to Ne 40. The company has a high degree of automation and focuses on future-oriented technologies. "The production and quality data of the TCO 21XL are simply fantastic," says Mr. Sekar, General Manager. "We're incredibly excited about how the 12-head comber is going to benefit our business." Thanks to the TCO combers already installed at Bakan Tex it was possible to perform a comprehensive comparison with the eight-head and twelve-head machines under the same production conditions, see diagram 1 and 2.



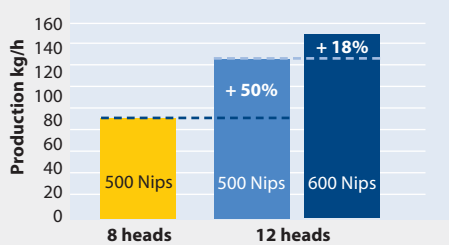
**Diagram 1: 12 heads provide slightly better yarn uniformity than 8 heads**



**Diagram 2: 12 heads deliver less total imperfections than 8 heads**



**Diagram 3: Production increase with 12 heads at different nip rates**



**Review: Special appearance at ITMA 2023**

Our visitors at this year's ITMA trade show got to meet the TCO 21 XL – and they were thrilled to have their market needs so well addressed on one product: The new comber features proven drive technology DUAL DRIVE and 2TWIN DRIVE, as well as twelve heads with the power to increase productivity by 50 % while requiring 25 % less space. Our new ONLINE NOIL MONITORING function also impressed the ITMA participants. This function automatically detects variations in the noil and gives a warning signal in case of significant changes. This enables valuable material cost savings and facilitates later steps in the process.

**Close up view: Increasing productivity and space savings**

Increasing productivity without increasing costs is the goal of the 12-head concept. By increasing the number of combing heads by 50 %, it is possible to improve productivity by 50 %, reaching rates of up to 150 kg/h, see diagram 3.

The TCO 21XL comber also offers significant advantages in space savings, as it requires 25 % less floor space to accommodate the same number of combing heads, see diagram 4. This not only reduces initial construction costs but also results in lower ongoing operating costs, including those associated with lighting, air conditioning, and other overheads.

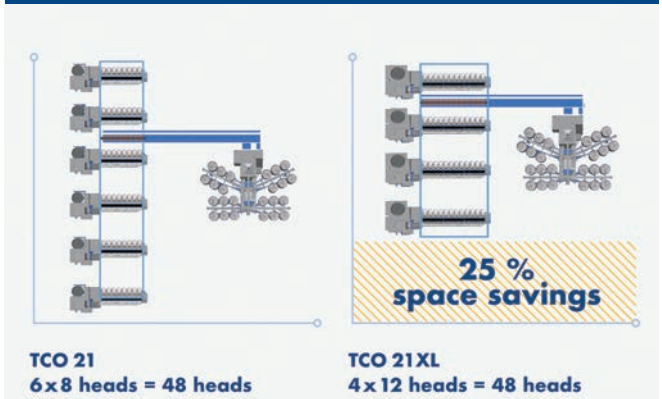
**It's showtime!**

The TCO 21XL has enjoyed a lot of positive attention in recent weeks. Now, it's ready to embrace its most important role – delivering quality for customers worldwide!

Mr. Sekar, General Manager at Bakan Tex in Tashkent, Uzbekistan



**Diagram 4: Space savings**



# truecycled® A holistic approach to textile recycling success

Author: Dr. Bettina Temath

USHA yarns, a leading Indian yarn manufacturer, is producing recycling yarns in a state-of-the-art TRUECYCLED line – and got a special certificate for this at the ITMA 2023



**More info on  
our website**



**Trützschler has taken a bold step to tackle the global problem of textile waste: We expanded our portfolio to become the first full-liner in the preparation of textile waste – from mechanical recycling to the spinning preparation of torn secondary fibers.**

**Tearing and spinning preparation are both key processes for achieving the best possible quality from secondary fibers. That means our customers can tap into a competitive advantage by embracing this holistic approach.**

Our new complete TRUECYCLED solution is the result of our cooperation with the company Balkan Textile Machinery INC.CO. in Turkey, which we announced at the ITMA 2023 trade event in Milan. Since then, Trützschler has received many inquiries for recycling systems. More and more customers are now producing recycled yarns on a TRUECYCLED line: State-of-the-art recycling installations, configured and fine-tuned by Trützschler experts based on the customer's specific requirements.

#### Success with a systems approach

Recycling systems face significant technological challenges. On average, torn fibers are much shorter than virgin fibers. The percentage share of short fibers in the fiber mass is much higher. Unopened yarn and fabric particles are also difficult to process. Not surprisingly, much academic and practical research is currently conducted to find solutions for these problems.

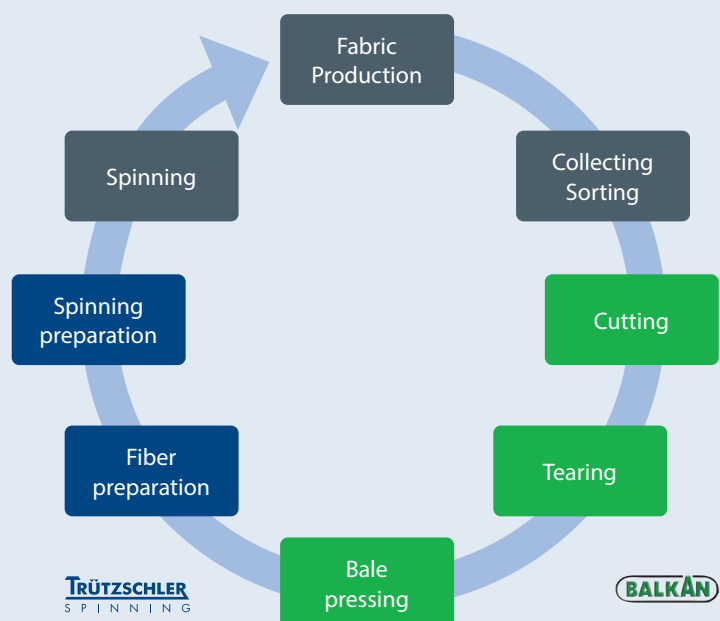
Dr. Georg Steguschter, a researcher specializing in textile recycling, believes a systems approach is needed. He is working at the Recycling atelier, a model factory for mechanical recycling in Augsburg, Germany, which is committed to delivering the latest technological insights for textile recycling. "A perfect fine-tuning between tearing and spinning preparation is key for obtaining the best possible quality results and avoiding unnecessary fiber shortening," he says. "This can be achieved if you are in control of both processes – and have the necessary expertise for both processes too."

#### Gentle but effective

In some cases, for example, it may be advantageous to have less aggressive settings in the tearing line. This can help avoid unnecessary fiber shortening. The remaining higher share of unopened fabric must then be handled in a high-performance spinning preparation line. This starts with the right blow room configuration for perfect opening, cleaning and blending. A card that is specially designed for recycling materials, such as the new TC30Ri, can also enable gentle but effective treatment of fibers. A shortened drafting process is also a must. The integrated draw frame IDF 3 can make this possible. The draft is high enough to provide excellent levelling of the numerous short fibers, but low enough to prevent floating fibers. "There is a lot of technological potential for improving the quality of the end-product through the right configurations and settings," Steguschter says. "There's a growing number of examples that show how higher quality end-products can be achieved from recycled materials, and how the share of pre- or postconsumer waste in yarns can be increased without compromising on quality." A new chapter in mechanical recycling is now beginning – and Trützschler's TRUECYCLED system will play a leading role in this exciting story!

## First full-liner in mechanical recycling and preparation of textile waste

Trützschler now offers a complete system covering the whole process, from cutting and tearing textile waste through to carding and drawing secondary fibers. Thanks to this holistic approach and Trützschler's expertise for the whole process, manufacturers can avoid unnecessary fiber shortening and achieve the best possible quality results.



# Looking back on **the** highlight 2023: ITMA Milano

**We are still buzzing with excitement from a successful ITMA – the highlight of 2023 for us!**

Our experts had a fantastic time discussing big trends and topics like sustainability, efficiency and digitalization with the amazing crowd who visited our stand. Customers gave positive feedback for our booth's design and the innovations we displayed from every Trützschler business unit. After meeting lots of new contacts and having countless great conversations (plus a few scoops of ice cream from our very own Trützschler ice cream stand) as well as an amazing customer evening at the Leonardo da Vinci Museum of Science and Technology, it's now time to look back on just some of the biggest moments.



**People had fun at our photo booth.**



**One of our many fruitful conversations.**



**F.l.t.r.: Prashant Agarwal, JMD Wazir Advisors; Naresh Kumar, ATE Marketing, Charlotte Fontaine, Member of the Shareholders' Committee of the Trützschler Group SE; Honorable Dr. Neena Malhotra, Ambassador of India to the Republic of Italy, Heinrich Trützschler, Shareholder of the Trützschler Group SE; Honorable Darshana Jardosh, Minister of State for Railways & Textiles, Government of India; Dr. Michael Schürenkrämer, Shareholder of the Trützschler Group SE; Rohit Kansal, Additional Secretary Ministry of Textiles, Government of India; Mr. Varun Vaid, Director Wazir Advisors.**



**There was a lot going on at the Trützschler booth. All members of the shareholder family have also been present – up to the 5th generation.**



**Good mood and a lot of appreciated people from all over the world at our 1320-square-meter stand.**



**Christian Franke, Head of Project Department Spinning, provides interested visitors with a glimpse of our state-of-the-art blow room line.**



**A talk about our digital solutions and the Trützschler service.**



**Milestone:**  
Our Indian customer Vardhman Textiles Limited has placed a large order for Card Clothing at the ITMA. Peter Gäbler, Managing Director Trützschler Card Clothing (second from the left), and Neeraj Jain, Joint Managing Director Vardhman Textiles Limited (second from the right), are looking forward to the next years of trustful cooperation.

**Fun, fun, fun.**



**Our visitors got insights into the new 12-head comber TCO 21XL.**



**Our Nonwovens expert Markus Nienhaus (right) explains the homogeneous air flow in the energy-efficient Modular Performance Dryer for the production of hydroentangled (spunlaced) nonwovens.**



**Our card clothing solutions have been very popular too.**







**One team: Happy faces of the Trützschler ITMA crew.**

**Successful moment: Charlotte Fontaine, Member of the Shareholders' Committee of the Trützschler Group SE, handed over a TRUCYCLED certificate to our customer Anurag Gupta, Managing Director of Usha Yarns. Usha Yarns produces sustainable yarns from recycled textile waste in a state-of-the-art installation which consists of Trützschler fiber preparation technology.**





Our customer evening at the Leonardo da Vinci Museum of Science and Technology was a real success.





More impressions here:



# Welcome T-SUPREMA!

Author: Jutta Stehr

## T-SUPREMA



**In May 2019, our team opened the Nonwovens Customer & Technology Center (NCTC) in Egelsbach, Germany. Dozens of customers have booked the facility to conduct extensive machine, fiber and product trials since then. But four years later, the NCTC faced a new challenge – to integrate our brand-new T-SUPREMA needle-punching technology alongside its more than 20 multi-functional line configurations for hydroentangling and through-air bonding processes. The NCTC is now the best place to go to efficiently develop industrial scale needle-punching, spunlacing and through-air bonding processes for any end product our customers have in mind.**

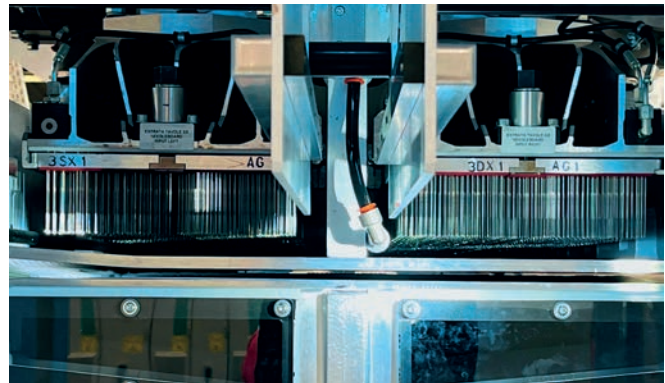
From left to right: Technology: Alberto Baggio (Mechanical Supervision), Fabio Barausse (Mechanical Supervision), Nicola Olivo, Co-Owner; Trützschler Nonwovens: Peter Enning (Services), Alexander Koch (Installation and Start-Up), Emre Turan (Production), Raphael Klassen (Production), Bodo Heetderks (Director Technology)

### One of the most versatile bonding technologies

Needle-punching is one of the most versatile bonding technologies. And with the increasing trend toward recycling, it will have additional growth potential. Functional materials in cars or furniture, for example, often rely on needle-punched nonwovens made from recycled fibers. Trützschler Nonwovens decided to enter this field - and is proud to offer the T-SUPREMA brand of tailor-made production lines with smart-designed machinery. It's a new solution supplied by Trützschler and our key collaborators at Texnology s.r.l., as well as selected partners. And the 5,000-square-meter NCTC facility in Egelsbach now features a complete industry-scale needle-punching line. This includes:

- T-Blend fiber preparation system
- Multi-purpose NC roller card with 3.0 m working width
- A CLH Crosslapper with 4.5m layering width
- A WD web drafter
- 2 needlelooms incl. feltdrafter
- EOL with accumulator and winder

The T-SUPREMA line processes all kinds of natural, man-made and even recycled fibers. It covers the entire range of needle-punched products including geo- and automotive textiles, filter media and nonwovens for special applications like tennis balls, shoe insoles, mattress toppers and much more. Adding the needle-punching line at our NCTC makes sure customers can always test out every innovation in our Trützschler Nonwovens portfolio.



Needlelooms: the heart of a needle-punching line

## Spunlacing, needle-punching and through-air bonding processes available at the NCTC

In addition to these services, it's also possible to arrange trials for wet-laying/spunlacing and carded/pulp trials thanks to our close partnership with Voith. In fact, the lines at our NCTC are so highly versatile that we are able to combine processes to meet each customer's unique needs – for example by pre-needling the web and bonding it with the AquaJet.

### Always evolving our NCTC

The pioneering NCTC in Egelsbach is still fairly new. However, it has already experienced several additions and expansions to stay up-to-date with developments in the nonwovens market. Our experts at the facility are constantly exploring ways of offering a wider range of testing options for new and existing customers. We're excited to welcome your team to the NCTC soon!

Customers can explore a growing range of services at the NCTC. This includes:

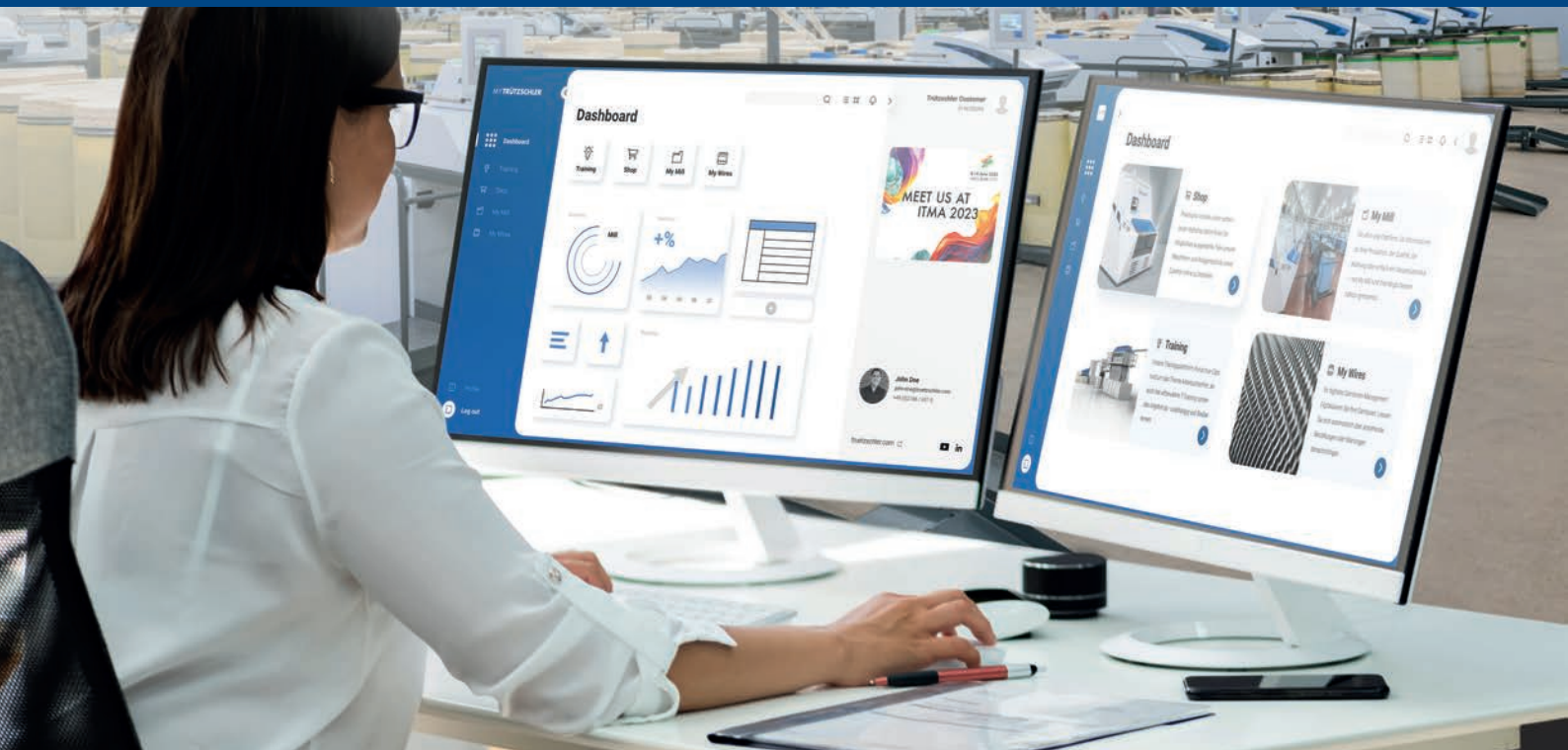
- 1 **Testing raw materials, processes and product ideas**  
(e.g. if your site is running at full capacity)
- 2 **Trying out Trützschler's machines**
- 3 **Optimizing your manufacturing processes together with our experienced team of on-site experts**
- 4 **Training your employees for thorough qualification**

# Trützschler service goes digital

Everybody has felt the pain of digital tech that creates more problems than solutions – but our new service will make sure that won't happen to you.

Digital Start-Up is a special service that helps our customers get maximum value from Trützschler's digital solutions. From personalized configurations through to analyzing data and optimizing production processes in real time, you can rely on Digital Start-Up to support your yarn production processes.

Author: Eva Trenz



**Entering the virtual space**

Every day, technical service experts from Trützschler visit customers around the globe. We travel to Brazil, India, Türkiye, the USA... and now we're adding another location to the list: The virtual space. Our Trützschler Services team works with you to make sure you feel the full benefit of our digital solutions for yarn production.

**Digital Start-up: A new and exclusive service**

Now, all customers that commission a new installation can also access our new service: Digital Start-Up. This comprehensive onboarding program generates quick wins from Day One and will help you achieve top levels of performance for many years. It offers:

- **Guided onboarding** for our all-in-one platform My Trützschler including My Mill, Training, Shop and much more.
- **On-site training** for all machines and services.
- **Digital audits** that combine online and on-site guidance, training and troubleshooting.

During digital audits, technical experts from Trützschler guide and train each customer's team based on specific real-time data from our mill monitoring system My Mill. By working closely in this way, you can get your mill to 100 % performance faster than ever, while also learning how to finetune your unique processes on your own. Online support is always available to help you solve issues quickly and achieve stable yarn quality.

**With you everywhere**

The My Trützschler platform offers the best way to keep track of all digital solutions. It provides seamless access to your digital Trützschler world, with important insights from digital services including My Mill, Training, Shop and My Wires.

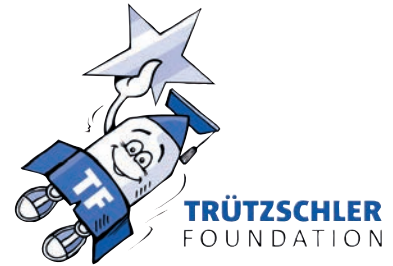
The My Identity tool ensures safe access on any device, anywhere – and it saves you time with single sign-on authentication. The digital Trützschler world is growing all the time. Find out about the latest apps and services on My Trützschler.

# MY TRÜTZSCHLER

- ✓ **Stay up-to-date, anywhere and all the time.**
- ✓ **Order parts and components online quickly and easily (My Shop).**
- ✓ **Upskill your employees with online training activities (My Training).**
- ✓ **Expert know-how to improve the performance of your (My Mill).**



# Apprentices honored for their special commitment



Author: Kleo Knippertz



F.l.t.r.: Ralph Thannisch, Trützschler Group SE; Florian Schürenkrämer, Trützschler Group SE; Rene Haas, Trützschler Group SE; Philip Haberkamp, Trützschler Group SE; Leon Baumgart, Trützschler Group SE, Alexandra Sander Hernandez, Trützschler Group SE; Ares Bernhardt, Trützschler Group SE; Richard Bischoff, Trützschler Group SE; Marco Frommenkord, ROCKID.one; Heinrich Trützschler, Trützschler Group SE; Edda Schürenkrämer, Trützschler Group SE; Caroline Lange, Trützschler Foundation; Dr. Michael Schürenkrämer, Trützschler Group SE; Georgina Schrötgens, Trützschler Foundation; Mario Schwarz, ROCKID.one; Daniela Perner, IHK Mittlerer Niederrhein. Photo: Andreas Baum.





**Several apprentices in Mönchengladbach were recently honored for their outstanding commitment during the “Azubis an Schulen” project. The young people played a pivotal role in advancing digital education and media skills among schoolchildren – earning them a special award from the Trützschler Foundation, its partner ROCKID.one and Mayor of Mönchengladbach Felix Heinrichs, as well as Daniela Perner, Managing Director at the Lower Rhine Chamber of Industry and Commerce (IHK Mittlerer Niederrhein).**

“Azubis an Schulen” was a complete success for all involved.  
Photo: Andreas Baum

A total of 31 apprentices have received a personal award recognizing their commitment to promoting digital education and media skills among students at five elementary schools in Mönchengladbach during the past school year. The apprentices are employed by local companies including NEW AG, Gladbacher Bank AG, SMS group GmbH, AUNDE Group, Vanderlande Industries GmbH & Co. KG, Stadtwerke Service Meerbusch Willich GmbH & Co. KG and Trützschler Group SE. In close cooperation with the teachers, they taught school students how to use tablet devices, search engines and work-related software correctly, while also providing insights into programming robotics. Ares Bernhardt, an apprentice in the field of electrical/electronic engineering at the Trützschler Group SE, believes the initiative was a great success for everybody involved. “Spending time with these kids was very exciting,” he says. “It was cool to teach other people for a change – and I was surprised by how eager the students were to learn. I highly recommend other trainees to take part in this project because it’s a fantastic opportunity for personal and professional growth.”

Betül Düz, an office management trainee at NEW AG, shares this sentiment. “I felt supported by the teachers and ROCKID.one the whole time. Overall, it was a great team effort between teachers, students and trainees – I really enjoyed it.”

### High praise from Mayor Felix Heinrichs

The Mayor of Mönchengladbach, Felix Heinrichs, sees significant potential in the future of the “Azubis an Schulen” project and is impressed by the unprecedented commitment of the companies and young people involved. “It’s simply great that a large number of companies and trainees in Mönchengladbach are willing to invest time and effort to share knowledge with elementary school children at eye level,” he says. “This social commitment demonstrates a strong spirit of unity. The project also shows that cooperation between companies in Mönchengladbach and the Lower Rhine Chamber of Industry and Commerce (IHK Mittlerer Niederrhein) is working perfectly. I’m delighted by this shared achievement.”



Caroline Lange, Chairwoman of the Trützschler Foundation, is looking forward to further collaboration with ROCKID.one. Photo: Andreas Baum

After successfully establishing the project at 70 schools in four German states over the past four years, the Trützschler Foundation and ROCKID.one are aiming for even more success in Mönchengladbach next year. The “Azubis an Schulen” project will be rolled out at another 5-10 elementary schools. In addition, the two partners are pursuing an extracurricular learning concept in cooperation with the Junior University in Mönchengladbach. “We are very pleased that we have been able to win over so many companies and trainees for this great project in Mönchengladbach – and we will continue to give this initiative our full support. The Trützschler Foundation will continue to provide funding for ‘Azubis an Schulen’ for the next two years,” says Caroline Lange, Chairwoman of the Board of Directors of the Trützschler Group SE.

# 20 years success story of Trützschler's card clothings

Authors: Winnie Rothfuß, Harald Schliepe

Trützschler representatives, employees and their families celebrated the 20th anniversary of TCC and the expansion of its site in Neubulach, Germany





Highly engaged and talented people are the key to this success story. More than 150 employees now work at the TCC headquarters in Neubulach-Oberhaugstett, with more than 350 people serving customers as part of its global team.

**Trützschler Card Clothing (TCC) is still a comparatively young business. But Trützschler's comprehensive portfolio of products and services is shaping the card clothing industry – with big plans for the future...**

### **The origin story**

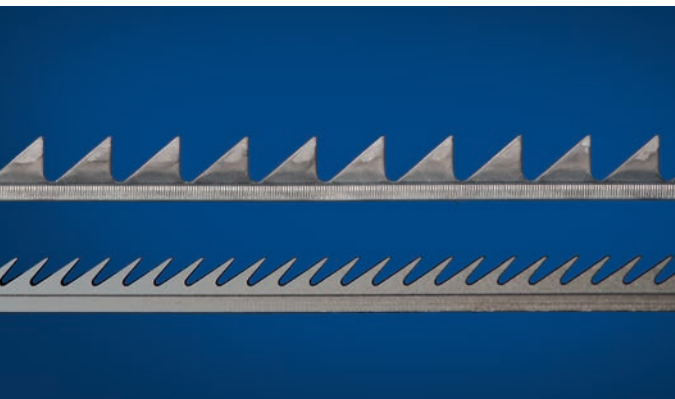
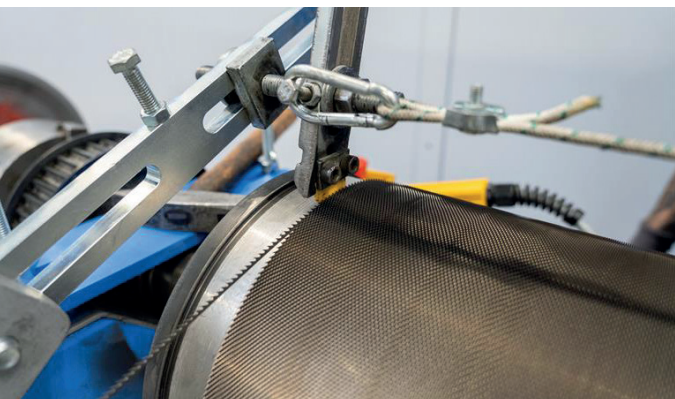
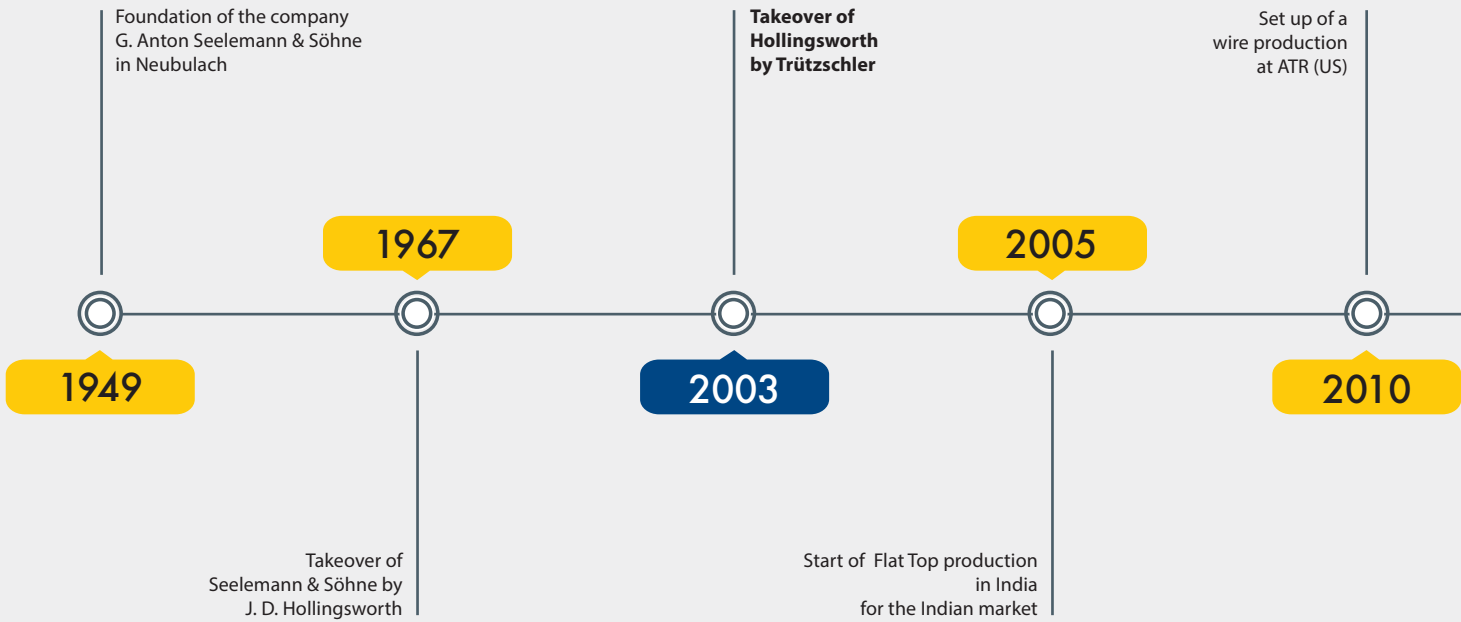
A giant leap in the card clothing technology is marked in the 1950s. At that time, Germany's Black Forest region was a hotspot for producing textiles and attracted companies around the world – one of it was the American textile machinery producer Hollingsworth. After filing for bankruptcy in 1996, it narrowed its portfolio to focus on card clothing. The company also placed a stronger emphasis on modernizing and automating its facilities.

### **Bold decision, big challenges**

The card clothing business in the Black Forest made impressive advances. In 2003, Trützschler took the bold decision to acquire the company and step into the card clothing market. This led to the creation of Trützschler Card Clothing (TCC). It led to some big challenges too.

First, Trützschler needed to optimize the card clothings produced in Neubulach-Oberhaugstett to fit its carding machines – and it needed to do it quickly. That involved detailed evaluations and trouble-shooting exercises. On top of this, each new generation of card clothing brought additional challenges that required the Trützschler team to adjust its products and processes.

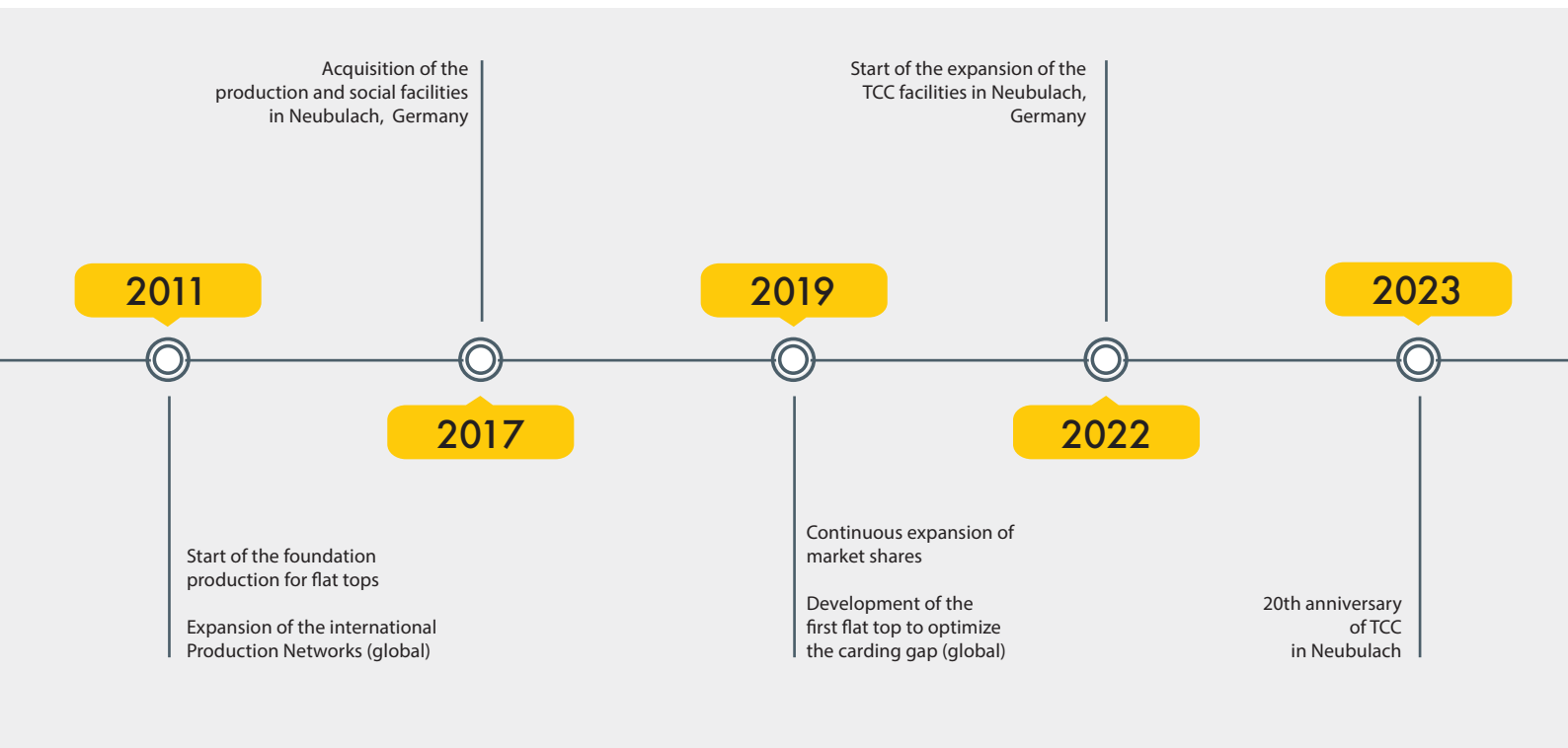
Thanks to close cooperation between colleagues from the Spinning, Nonwovens and Card Clothing teams at Trützschler, we now offer a uniquely comprehensive card clothing portfolio with support from our deep expertise in this area. This valuable competitive advantage helped Trützschler take over the American part of Hollingsworth in 2010, which is now integrated into American Trützschler in Charlotte.



» 20 years ago Trützschler entered the card clothing industry.

From the heart of the Black Forest we supply our customers with clothings for cards, roller cards, wires for cleaners and of course OE-opening rollers.

TCC service equipment ensures simple working mode and highest flexibility for all types of clothing.



### Twists, turns and technology leadership

Huge changes have happened since Trützschler entered the card clothing industry 20 years ago. Magnet systems for the flat top of the card are one very special milestone for card clothing technology. These Magnotop (M-Top) systems enable faster and simpler servicing during production, as well as significant savings in operating costs. The different wire geometries of GX and FGX are further examples of big progress. Our team also developed the self-adjusting flat top, Precisetop (P-Top), which enables continuous carding gaps that are thinner than a sheet of paper.

Major technological developments like these are the result of close collaboration and interaction between departments at Trützschler Group for two decades. That team spirit and passion for shared success have made our company a global technology leader in the card clothing business today.

### Growing and going global

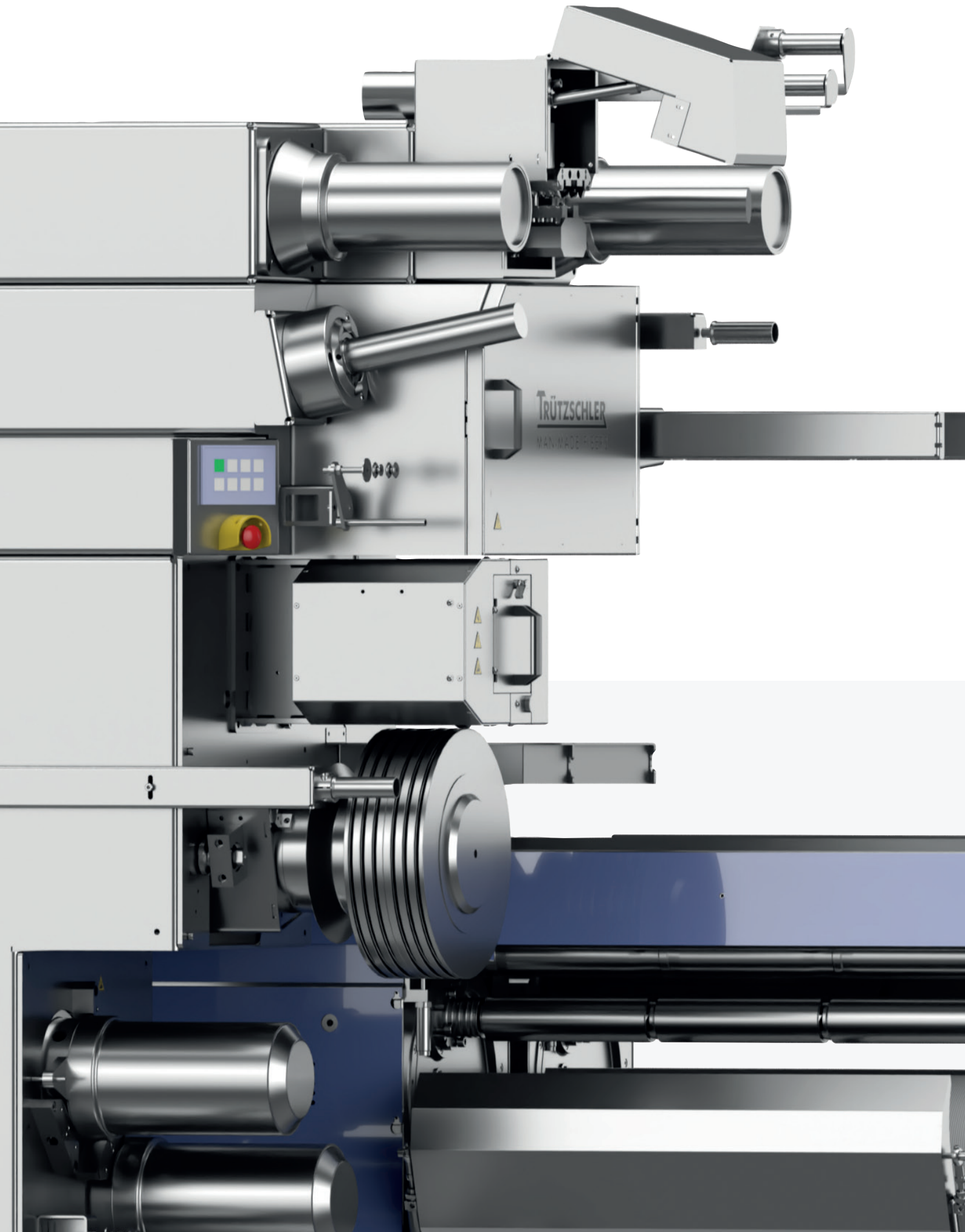
From its starting point in the Black Forest, TCC has expanded worldwide at impressive speed. The company now offers production sites, sales teams and service experts close to its customers around the globe. Importantly, the production facility in Neubulach-Oberhaugstett has also experienced remarkable growth. The site is now larger and features a broader range of production processes, with significant efficiency improvements. This growth of TCC and the high demand for its wires has empowered our card clothing business to rapidly increase its production volume in the last 20 years.

Highly engaged and talented people are the key to this success story. More than 150 employees now work at the TCC headquarters in Neubulach-Oberhaugstett, with more than 350 people serving customers as part of its global team. Looking ahead, TCC is still taking steps to carry this expansion into the future. The ongoing construction of a new logistics center is just one flagship project. At all times, TCC teams are continuously improving the production processes at its growing network of sites to maximize efficiency while minimizing the environmental footprint.

### A never-ending story...

The development of TCC may only stretch back for two decades, but it's a tale packed with big moments and exciting plot points. Since it joined Trützschler Group in 2003, TCC has benefitted from its parent company's distribution channels and OEM equipment. In the same spirit, the Trützschler Group has enjoyed positive progress overall as a direct result of the two-decade success story of TCC.

Today, TCC has a powerful reputation for leading technological advances and setting new standards in the card clothing market with its inspiring R&D activities and truly global market perspective. In just 20 years, the business has developed a comprehensive range of products and services that are trusted around the world. And its global team of passionate people is excited to continue this story for many years into the future.



# MO60

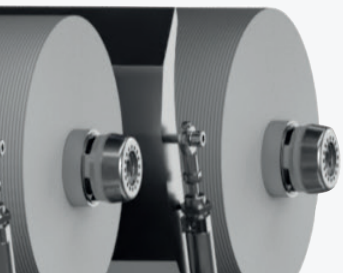
## New benchmark in efficient carpet yarn production

Author: Céline Schneider



The OPTIMA range of modular extrusion lines for man-made fibers is like a family. And it's growing. Back in 2019, we added the innovative MO40 for (semi-)industrial multifilament yarns.

Now, we're delighted to announce another addition to the family: The MO60 for mono-color, low denier yarns. It offers a 50 % increase in throughput and produces six yarn ends. That's a truly welcome addition...



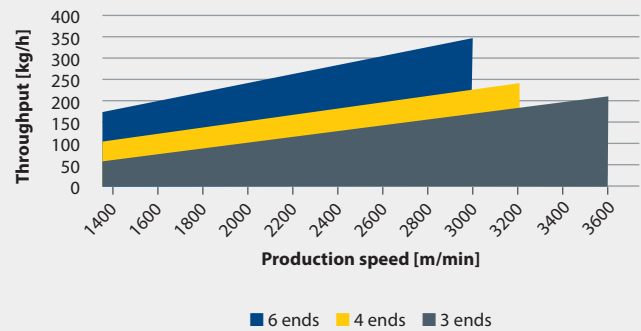
Like all OPTIMA configurations, the MO60 has a straight yarn path that minimizes stress on the yarn and results in less yarn breakage. But our new family member also guarantees high-quality yarn and excellent dyeing uniformity because it features proven Trützschler components including our rectangular spin pack, flow-optimized quenching system, double-shell draw rolls and HPc texturing system. This all makes the MO60 significantly more efficient than its OPTIMA brothers and sisters that have three or four yarn ends. The diagram no. 1 shows the difference.

On top of this, each extra yarn end cuts the energy cost per kilogram of yarn. This means the fixed and variable conversion costs for this unique six-end configuration are almost 50 % lower than a three-end process and more than 33 % lower than a four-end process. You can see the savings on diagram no. 2.

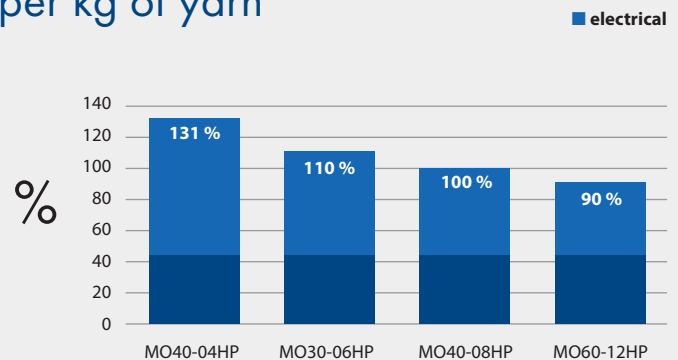
#### Welcome to the family

The MO60 adds a truly special new branch on our OPTIMA family tree. Its positive impact on yarn quality, dyeing uniformity and operating efficiency offers exciting value for carpet yarn producers. And the new addition also helps cut energy costs and reduce the related emissions for customers in this dynamic industry. We're excited to welcome the MO60 into our OPTIMA range. And we're excited to talk to new and existing customers about its potential to join your family too!

## 1 Throughput by number of ends – 1600 dtex



## 2 Specific energy cost per kg of yarn



## Technical data MO60

<b>Polymer</b>	PP, PA6, PET
<b>Process</b>	monocolour
<b>Position pitch</b>	2,500 mm
<b>No of ends / pos</b>	6
<b>No of extruders / lines</b>	1
<b>No of pos / line</b>	1 - 2
<b>Capacity / line</b>	up to 9.5 tons/day
<b>Spin pack type</b>	rectangular, top loading
<b>Spinneret size</b>	240 x 109 mm
<b>No of ends / pack</b>	1
<b>Max. filaments</b>	up to 700
<b>Titer range</b>	700 – 1,500 dtex
<b>Dpf range</b>	2 - 10 dpf



Scan the QR code to get more information about the **MO60**



**Trützschler India:**

# Racing from zero to 15,000 card

Author: S.K. Joshi

**Start your engines: Trützschler has zoomed to a big milestone in India – making the 15,000th carding machine for this rapidly growing market.**

**How did our team hit this landmark? With experts in our engine room and innovation in our fuel tank.**

In 2023, Trützschler India celebrated the production of its 15,000th card at our site in Ahmedabad. This victory comes at the end of a long road that we've travelled at rapid speed. Trützschler's first cards rolled onto the Indian market in 1992. 31 years later, our local team has now raced to 15,000 cards – with powerful momentum for the journey ahead.

**Starting position**

The DK 740 carding machine was the first Trützschler model to join the race for market space in India. Spinners across the country quickly recognized the advantages of having German technologies available from a card manufacturer with a local presence. Demand gathered pace, with almost 1,500 cards of this model entering sites across India. And our innovators pushed the accelerator by launching the DK 780 and DK 800, which featured improved technology and additional functions.

**Driving progress**

More than 5,600 cards from the DK series drove out of Trützschler's factory gates and safely arrived at our customers' sites between 1992 and 2009. Our team also picked up valuable insights into the spinning industry in India during this time – and used that knowledge to turbo boost our business in this market. In 2009, our world-class production facility introduced the TC 5 in India. This card series offers single/triple licker-in for processing different needs like man-made fibers or recycling. It surged to success at express speed. Today, TC series cards are the most successful cards in India and operate at spinning mills up and down the entire country.

**No finish line in sight**

Our expert team in Ahmedabad now produces the latest generations of high-performance cards for the local market – but we're not hitting the brakes. Trützschler innovators are still revving their engines for the next phase of our never-ending journey to keep supporting textile producers in this exciting market. Fasten your seatbelts. We're aiming to produce the next 15,000 cards in India at lightning speed!



Happy 15,000th cards day in India

# THE NEW CARD

**SALES  
RELEASE  
COMING  
2024**



## Next-generation carding: **The TC 30<sup>i</sup>**

The TC 30<sup>i</sup> gives productivity, quality and sustainability a boost. Its 14% extended carding length with 35% more active flats leads to even higher performance, while the sophisticated new suction system is able to create more value from waste.

Of course, it comes with T-GO, the only proven and automatic gap optimizer for operator-independent precision and efficiency.

**TRÜTZSCHLER**  
SPINNING