
RIETER
link
Customer magazine no. 82/2026
The Power of Integrated Packaging
SERVOpack reduces operator effort by up to 85%

CONTENTS

AUTOMATION

04 **The Power of Integrated Packaging**
SERVOpack reduces operator effort by up to 85%

RING/COMPACT SPINNING

06 **Better Spinning, Higher Performance**
Compacting solutions and improved G 38 unlock new production potential

FILAMENT SPINNING

08 **A New Era of Efficiency**
How POY 2.0 revolutionizes filament yarn production

ROTOR SPINNING

10 **When Quality Becomes Productivity**
R 70 turns superior yarn and package quality into higher output

RECYCLING

12 **Three Steps to Better Recycled Yarn**
How Rieter's recycling toolbox improves quality, consistency and performance

CARDING

13 **Perfect Gap, Proven Performance**
Customers achieve high productivity and consistent quality with Carding Gap Control

RING SPINDLE

14 **Energy Savings That Add Up**
In-field measurements confirm nearly 10% lower energy consumption with eNASA

CUSTOMER TRAINING

15 **Ready Before Start-Up**
How Benin Textile trained more than 600 operators with ROOT

RECYCLING

16 **From Trash to Treasure**
How Shobikaa Impex gives plastic waste a second life

DIGITIZATION

17 **Networking Machines, Optimizing Processes**
atmos.io builds an intelligent network out of production data

WINDING

18 **Easier Handling, Stronger Processing**
Autoconer X6 – Smartsplicer with a new design

AFTER SALES

19 **Every Second Counts**
Planned doffer maintenance protects productivity and extends machine life

Cover:
Customers benefit from a fully integrated solution from fiber to package, combining optimized layouts, coordinated production planning and seamless processes.

Publisher:
Rieter

Editor-in-Chief:
Anja Knick
Marketing

Copyright:
© 2026 Rieter Ltd.,
Klosterstrasse 20, 8406 Winterthur,
Switzerland, www.rieter.com,
rieter-link@rieter.com
Reprints permitted, subject to prior approval; specimen copies requested.

Design and Production:
Marketing Rieter CZ s.r.o.

Volume:
Year 38

The data and illustrations in this brochure and on the corresponding data carrier refer to the date of printing. Rieter reserves the right to make any necessary changes at any time and without special notice. Rieter systems and Rieter innovations are patent protected.

If you have any questions or comments, please contact us.

rieter-link@rieter.com



Dear readers,

I am delighted to share with you the first issue of link to include Barmag, the global leader in systems for producing man-made fibers. Together, the new Rieter Group brings an even broader range of technologies and expertise to you, our customers.

The textile industry is undergoing a profound transformation. Rising cost pressure, skilled labor shortages and growing demands for flexibility make one thing clear: automation and digitization are no longer optional. They are essential to the competitiveness of yarn producers.

At Rieter, we are addressing these challenges with a clear goal: to create increasingly autonomous production environments in which machines, processes and people work together intelligently. Automation reduces repetitive manual tasks, while digital solutions provide the transparency needed to make faster, better-informed decisions.

The innovations presented in this issue help yarn producers achieve more from ring, compact and rotor spinning as well as from filament yarn production. The experiences of our customers around the world show how these technologies translate into measurable advantages in productivity, quality and efficiency.

Our direction is clear: we want to help you produce yarn with fewer manual interventions, greater efficiency and consistently high quality. Each innovation brings us another step closer to this goal – and to the increasingly autonomous mill of the future.

I invite you to discover these developments in the latest issue of link. I also look forward to discuss how solutions from Rieter and Barmag can shape the future of your production.

Sincerely,



Daniel Lippuner
CEO

The Power of Integrated Packaging

SERVOpack reduces operator effort by up to 85%

SERVOpack is a key milestone toward Rieter's Vision 2027: the fully automated spinning mill. By integrating packaging into yarn production, it supports the holistic approach required across the entire process, from fiber to final package. The system reduces manual operator effort by 75 to 85% while enabling consistent quality control, conditioning and shipment preparation.

In spinning, productivity is usually linked to spindle speed, winding performance and yarn quality. However, one of the most labor-intensive tasks often begins only after the package leaves the machine. Once yarn has been spun and wound, the packages still need to be checked, sorted, palletized, conditioned, packed, weighed, labeled and prepared for shipment. In many mills, this final stage remains highly manual. SERVOpack automates these tasks and closes the gap between yarn production and shipment (Fig. 1). The system enables mills to deliver not only yarn, but fully conditioned, verified and packed packages as final shipping units ready for dispatch.

The hidden workload behind every package

After packages are produced a series of manual handling steps often begins before the packages can leave the mill:

- removing packages from the machine and transport to a central packaging unit,
- sorting by yarn type or assortment,
- checking weight, diameter and assortment and inspect for winding faults,
- stacking on pallets,
- conditioning to achieve optimal characteristics for downstream processing,
- packing on pallets or in boxes or bags and
- weighting, labeling and wrapping the final shipping units.

Reduce operator requirement by 75 to 85%

A reference mill producing combed yarn Ne 30 illustrates the potential. With a production rate of 0.93 tons per hour, the mill generates roughly 10 000 packages per day at a package weight of 2.5 kg. If one operator can handle around 1 000 kg in eight hours, the manual handling and packaging workload translates into 7.48 operators per shift.

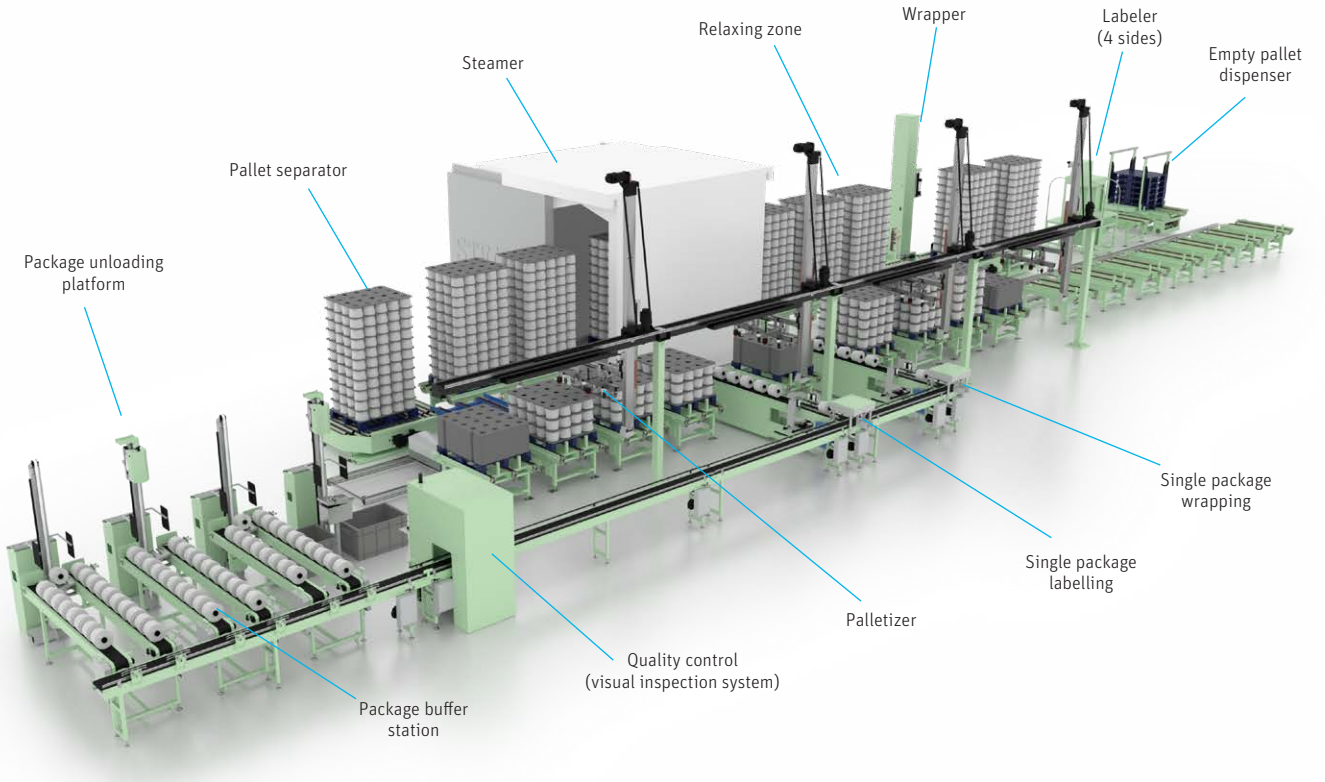


Fig. 1: SERVOpack is much more than yarn packaging.

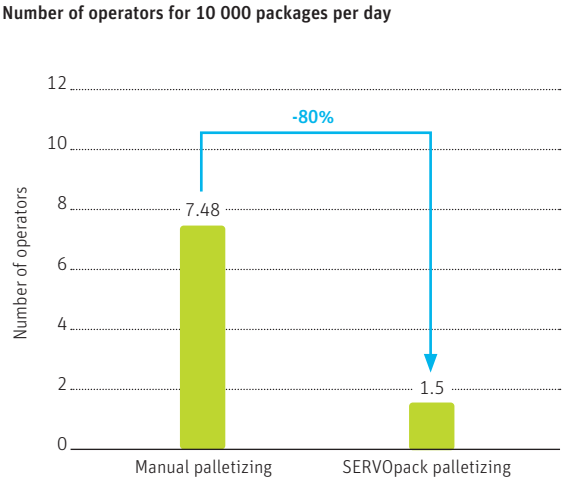


Fig. 2: 80% labor savings with SERVOpack

In practice, the exact requirement varies with production volume, quality-control effort, type of packaging, number of assortments and whether conditioning is required.

Even so, mills typically require five to ten operators per shift for these process steps. SERVOpack reduces this requirement by 75 to 85%. The result is significant labor savings combined with a more stable and reliable process (Fig. 2).

Quality assurance built into the process

SERVOpack also strengthens quality assurance through a clear quality gate. Positioned at package and shipping-unit level, it supports inspection of package weight or diameter, assortment and visible winding faults (Fig. 3). This matters because the final shipping unit is what the customer receives downstream.

Flexible options for fully automated packaging

A key differentiator of SERVOpack is its comprehensive range of fully automated packaging options, tailored to customers' specific logistics and shipping requirements. Following quality inspection, packages can be palletized directly, packed in bags with optional palletizing of the finished bags, or packaged in boxes with optional palletizing of the boxes.

More than packaging: an integral part of yarn production

One of the key strengths of SERVOpack: it is not treated as a downstream add-on but can be planned as a seamless extension of the mill layout and production flow. Customers benefit from optimized layout integration, aligned production planning, smoother process coordination, and one-stop-shop responsibility for solution design, sales and service by experienced Rieter experts.

SERVOpack – more than packaging

- Seamless integration into mill layout and production planning
- Dispatch-ready shipping units: conditioned, checked, weighed and labeled
- Reduced reliance on manual labor and improved consistency across assortments
- Preventing of assortment mix-up
- Faster root cause analysis of detected winding faults
- Single-source sales and service from experienced Rieter specialists



Fig. 3: Automated inspection of winding faults (examples)

Better Spinning, Higher Performance

Compacting solutions and improved G 38 unlock new production potential

Spinning mills need the flexibility to increase productivity, stabilize production and achieve the required yarn quality while keeping operating costs under control. The optimized ring spinning machine G 38 provides valuable process reserves for both ring and compact spinning, while two compacting solutions – COMPACTapron and COMPACT4 – allow customers to select the technology best suited to their raw material, yarn and end-product requirements.

Rieter's compacting solutions and the latest developments for the ring spinning machine G 38 enhance the production of ring and compact yarns. This helps mills achieve reliable performance under real production conditions.

Enhanced spinning performance on the G 38

The G 38 itself has been further developed to improve spinning performance in both ring and compact spinning (Fig. 1). The latest machine developments focus on the spinning zone, where yarn path, yarn tension and the interaction between ring and traveler have a major influence on running behavior.

One main adaption covers the optimization of the spinning geometry, which creates a more favorable yarn path between the drafting system and the spinning point. Parameters such as spinning angle and stretch length are aligned to improve running performance and stabilize yarn formation. Customers benefit from greater process flexibility, enabling higher spindle speeds, reduced twist levels or more stable production, depending on the application.



Fig. 1: The improved G 38 offers higher speeds, reduced twist levels or more stable production.

Another focus was on short-balloon setting. It further improves spinning stability by balancing the various balloon forces during cop build-up. It helps reduce yarn tension peaks, especially in critical cop stages, and therefore supports lower ends down rates and longer traveler lifetime. Alternatively, if a lower ends down rate is not needed, mills can use the gained reserve to increase spindle speed – and therefore production output – while keeping the ends down rate stable.

The optimized spinning geometry and the short-balloon setting work together to improve the spinning of both ring and compact yarns on the G 38. The resulting process reserves can be used in various ways: to increase productivity, enable lower twist levels, reduce ends down rates, extend traveler lifetime or achieve more stable running performance.

Compacting solutions with specific strengths

For spinning compact yarn on the G 38, Rieter offers two pneumatic compacting solutions with specific technological strengths (Fig. 2): COMPACTapron and COMPACT4. Both systems support high yarn quality and efficient compact yarn production, but they differ in their compacting concept and in the way the suction system is designed.

COMPACTapron is positioned as a key compact-spinning solution in the Rieter portfolio. The latest system is based on a one-duct suction concept and lattice-apron compacting technology. Fibers are guided through the compacting zone in a controlled way, supporting high yarn tenacity, low imperfection values, reduced twist multiplier and energy-efficient operation. Interchangeable inserts provide flexibility for different yarn counts and raw materials.

COMPACT4 complements the compact-spinning offering on the G 38. The system is based on a 4-over-4 compacting unit and a two-duct suction concept, with separate suction for fiber waste and compacting. Its controlled compacting zone, positively driven mesh aprons and optimized compacting angle support smooth fiber flow and consistent fiber orientation. This makes COMPACT4 particularly relevant where low hairiness, reduced twist multipliers and stable yarn performance are important.

Turning G 38 technology into mill performance

When ordering the ring spinning machine G 38, customers can select the compacting solution that best meets the requirements of their intended end product.



Fig. 2: Compacting solutions for G 38 with specific technological strengths.

COMPACTapron and COMPACT4 offer distinct technological strengths for compact yarn production, while the optimized spinning geometry and short-balloon setting improve running behavior in both ring and compact spinning.

With this approach, the G 38 supports stable, efficient and high-quality yarn production under real mill conditions. Rather than focusing on a single performance parameter, it helps spinning mills achieve the best possible balance between productivity, yarn quality and process stability.

A New Era of Efficiency

How POY 2.0 revolutionizes filament yarn production

With POY 2.0, Barmag presents a groundbreaking spinning approach that redefines filament yarn production. From optimized core components to automated processes and full digitization, the solution sets new standards in efficiency, sustainability, and ease of use. In an interview with the «link» editorial team, Barmag CTO Jochen Adler explains the technological innovations behind POY 2.0 and highlights how manufacturers benefit from them.



The winder WINGS POY 2.0 features an automatic threading function for the first time ever.

link: Mr. Adler, POY 2.0 was presented as a real highlight at last year's ITMA Asia + CITME. What makes this concept so special?

Jochen Adler: POY 2.0 represents a fundamental realignment of the entire spinning process. We have analyzed every single step of the process and consistently refined it. The goal was a solution that is more efficient, more sustainable and, at the same time, easier to operate – with maximum control over all production parameters.

link: You are talking about a complete overhaul. Which areas did you focus on in the process?

Jochen Adler: We have redesigned both the spinning section and the take-up area. Key components were specifically optimized to make the entire process more robust and higher-performing, resulting in clear improvements in efficiency, usability and sustainable production.

link: A key element is the new spin pack DIO. What makes these components stand out?

Jochen Adler: The spin pack DIO is an excellent example of how we implement innovation down to the last detail. We were able to further improve the already-outstanding rheological properties of the spinning nozzle while also making the design significantly more compact. This saves over 30% in weight and reduces the amount of filter sand needed by about a third, while maintaining the same performance. For our customers, this translates into fewer consumables, easier handling and greater sustainability.

"Reducing the surface area allowed us to achieve energy savings of up to 10%."

link: What effects does this have on the overall process?

Jochen Adler: The more compact design has a direct impact on the spinning beam. Reducing the surface area allowed us to achieve energy savings of up to 10%. This shows just how much individual optimizations can positively impact the entire process.

link: On the topic of cooling, EvoQuench 2.0 also offers some new features. What are the benefits of this further development?

Jochen Adler: To achieve good filament quality, it is crucial that the filaments cool evenly. EvoQuench 2.0 ensures this through its radial quenching technology. At the same time, we have significantly improved usability. Settings can be adjusted more easily, which shortens setup times and reduces waste at the same time.

"With WINGS POY 2.0, we have achieved an important milestone: automated string-up."

link: One highlight is the new WINGS POY 2.0 winding technology. What is the background on that?

Jochen Adler: With WINGS POY 2.0, we have achieved an important milestone: automated string-up. This ensures consistently short loading times and minimizes waste. At the same time, features such as Quick Returns make it easier to switch between different products. This is a clear advantage for customers who need flexible production conditions.

link: What other improvements have been made to the winder?

Jochen Adler: It is the little details that make all the difference: better protection against fluff, secure yarn-end fixation, and an extended XPT housing for longer parking times. All of this helps to increase productivity and prevent unplanned downtime.

link: Digitization plays an increasingly important role in modern production processes. What is the role of atmos.io in this?

Jochen Adler: POY 2.0 is completely integrated into our atmos.io digital platform. The entire process is seamlessly monitored, from melt to finished yarn. Operators have access to all relevant quality parameters at all times and can respond quickly. This reduces waste, improves product quality, and increases profitability.



Jochen Adler has been the Chief Technology Officer (CTO) at Barmag since 2017.

link: All in all, what does POY 2.0 mean for yarn manufacturers?

Jochen Adler: POY 2.0 offers a clear competitive advantage. Our customers benefit from a solution that combines greater efficiency, better quality and sustainable production. At the same time, we are laying the foundation for fully connected and future-proof production.

link: Mr. Adler, if you had to sum up POY 2.0 in one sentence, what would it be?

Jochen Adler: POY 2.0 is the next step in a new era of efficiency.

Dive in deeper. Find out how POY 2.0 improves productivity, quality, and sustainability.

https://l.ead.me/bgxASW

When Quality Becomes Productivity

R 70 turns superior yarn and package quality into higher output

In rotor spinning, productivity is not defined by speed alone. Sustainable productivity is achieved when high rotor speeds are combined with stable yarn quality, optimized package build and smooth downstream processing.

The fully automatic rotor spinning machine R 70 has been developed around the principle that yarn quality drives productivity. Advanced spinning technology, optimized winding solutions and intelligent automation work together to maximize output.

Stable yarn quality for consistent performance

The foundation of productive spinning is stable yarn formation. The components SPEEDpass nozzles, SX fiber channel and the latest sliver condenser design ensure excellent fiber guidance and optimized fiber orientation throughout the spinning process. The result is outstanding yarn evenness, low imperfection levels and reliable spinning conditions.

A key contributor to long-term yarn quality stability is the unique rotor cleaning concept of the R 70 (Fig. 1). Pneumatic rotor cleaning is performed automatically during every piecing cycle, complemented by self-cleaning rotors and automatic mechanical rotor cleaning by the robot at every doffing.

In many spinning applications, rotor contamination gradually affects yarn formation and can eventually reduce yarn strength, requiring periodic manual cleaning interventions. By continuously restoring optimum rotor conditions, the R 70 solutions help maintain stable yarn properties over extended production runs, particularly when processing recycled fibers or waste-containing blends. Nazlı Ceylan Balduk Kurtul, Vice Chairwoman of the Board of Nazar Tekstil in Türkiye confirms: “R 70’s automatic rotor cleaning and highly stable spinning performance ensure consistent yarn quality over extended production periods, while efficient processing of recycled fiber components supports our zero-waste philosophy.”

Winding optimization unlocks additional productivity

Package quality plays a critical role, mainly in downstream processing but also in transportation, storage and dyeing. The R 70 takes package performance a step further with advanced winding optimization capabilities that allow package characteristics to be adapted precisely to customer requirements.

A dedicated package optimization function enables adjustment of package density, winding width and package geometry according to package diameter and end-use requirements. Rounded package edges can be created for dyeing applications, while package shape can be optimized for safer transport and handling (Fig. 2).

Optimized winding conditions with a progressive winding tension profile across the package diameter allow substantially more yarn to be wound onto each package. In customer evaluations, package content advantages of around 10%

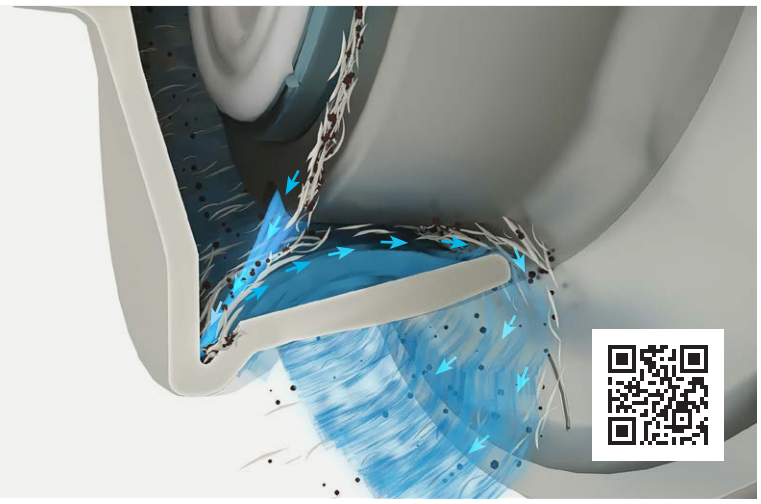


Fig. 1: Unique pneumatic rotor cleaning on the R 70 – watch the animation.



Fig. 2: Rounded package edges – optimized for dying applications

Package optimization with R 70

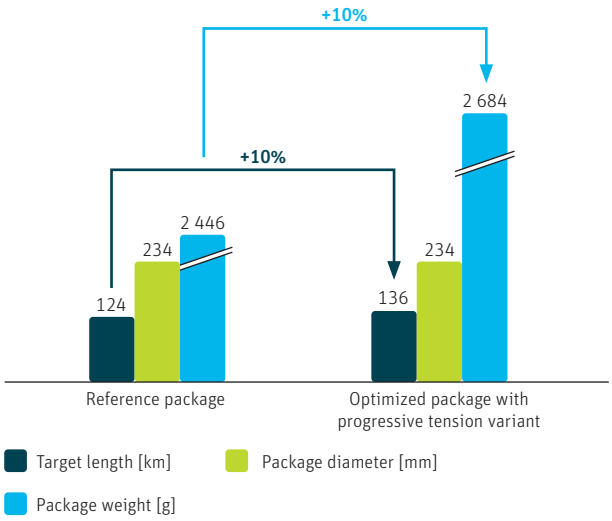


Fig. 3: Customers gain 10% more package content without increasing package diameter.

have been achieved compared with alternative package-building concepts (Fig. 3). More yarn per package reduces package changes, lowers transport costs and improves efficiency throughout the process chain.

Combined with highly stable spinning conditions, the optimized winding process enables the production of packages containing up to 6 kg of yarn, delivering additional benefits for downstream operations.

High productivity and high rotor speeds

The combination of excellent yarn quality and optimized package build allows the R 70 to operate productively at very high rotor speeds. Depending on yarn count and raw material quality, with the proven winding solution production over 250 m/min can be achieved for medium and coarse counts and finer yarns such as Ne 30 and Ne 40 can be in practice spun at 145 000 to 155 000 rpm with Rieter rotor drives.

Economical and sustainable production

Excellent yarn quality and low imperfection levels also create opportunities for more efficient raw material utilization. Blowroom, carding and combing waste as well as recycled fibers can be spun while maintaining stable spinning performance and consistent yarn quality.

At the same time, highly efficient energy utilization contributes to lower production costs. Depending on yarn specification and end-use application, yarn count Ne 30 can be produced with electrical energy consumption as low as 1.16 to 1.23 kWh/kg. In addition, the machine requires only 30% of the compressed-air consumption of comparable spinning solutions, helping mills reduce overall energy consumption by more than 10% compared with commonly available rotor spinning technologies.



"As an export-oriented yarn producer supplying customers in more than 18 countries, we depend on consistent quality, productivity and sustainability. The R 70 delivers excellent yarn strength, stable package quality, high productivity and low energy consumption, enabling us to reliably meet the expectations of customers worldwide."

Nazlı Ceylan Balduk Kurtul,
Vice Chairwoman of the Board,
Nazar Tekstil, Türkiye



"As one of Türkiye's leading underwear manufacturers, we control the entire value chain in-house, from yarn production to finished garments. The Rieter R 70 plays a key role in our spinning mill, while VARIOlot enables fast lot changes, greater production flexibility, and consistently high yarn quality with reliable package performance."

Ömer Tunç, Member of Board of Directors,
Seher Mensucat Tekstil San. ve Tic. A.Ş.,
Türkiye

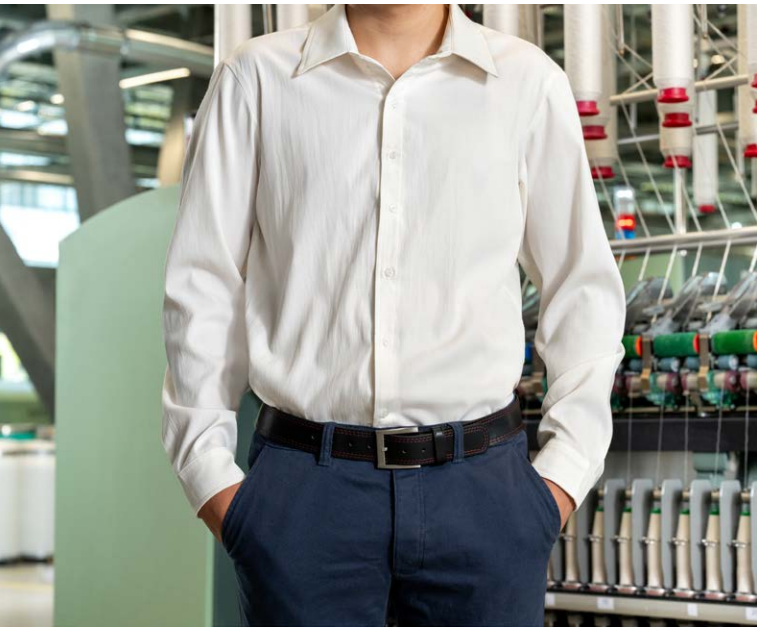
By transforming yarn quality and package quality into measurable productivity gains, the R 70 provides spinning mills with a powerful path toward higher efficiency, lower operating costs and sustainable profitability.

Three Steps to Better Recycled Yarn

How Rieter's recycling toolbox improves quality, consistency and performance

The quality of mechanically recycled fibers has improved noticeably in recent years. Nevertheless, unopened yarn and fabric pieces, high short-fiber content and neps continue to affect spinning performance and yarn quality. Rieter's recycling toolbox combines pre-carding, combing and compact spinning to address these limitations – helping spinners produce more consistent, high-quality ring yarn.

Interest in fiber-to-fiber recycling remains strong, and the quality of mechanically recycled fibers has improved noticeably through incremental advances in the cutting, opening and tearing processes. Even so the basic limitations of mechanically recycled fibers – unopened yarn or fabric pieces, higher short-fiber content, more neps – continue to affect productivity, efficiency and quality in the spinning and downstream processes.



Pre-carding, combing and compact spinning help turn mechanically recycled fibers into high-quality ring yarn.

Practical tools for recycled fiber blends

Using the Rieter recycling toolbox brings ring-spun yarn quality and productivity closer to virgin carded cotton. Its three proven process steps – pre-carding, combing and compact spinning – each address a specific limitation of recycled fibers. They can be applied individually or in combination, depending on raw material quality and the target application.

Cleaner fibers, fewer imperfections

One of the limitations for spinners is the occurrence of unopened yarn pieces. Therefore, pre-carding is considered as an additional fiber refinement step. In Rieter's trials, pre-carding reduced yarn imperfections by around 50% compared to standard recycled fibers, mainly by lowering the number of thick places and neps. It also helped normalize waste levels during blowroom and carding, supporting a more stable blend ratio throughout the process.

Better running performance through combing

Combing addresses the second key challenge: the high proportion of short fibers. In the trials, combing alone reduced yarn imperfections by roughly 65%. Combining pre-carding and combing reduced them by more than 90% compared with the untreated recycled reference blend.

Compact spinning closes the quality gap

Compact spinning, the third tool, improves fiber integration into the yarn body. Trials confirm fewer imperfections and higher yarn tenacity. In addition, the compact-yarn structure improves the fabric appearance and can help extend the lifetime of the end product.

From better fibers to circular production at scale

The technology for producing high-quality ring yarn from mechanically recycled fibers already exists. The next step is to connect fiber preparation and spinning expertise with scalable, economically viable recycling models. Rieter's recycling toolbox provides the technical foundation for improving yarn quality and process performance. This expertise also contributes to Recycling Powerhouse, the new venture created to industrialize, standardize and scale textile-to-textile recycling through the production of high-quality, certified recycled yarns.

Explore the technology, know-how and results behind the recycling toolbox.

https://l.ead.me/bf3VEQ

Perfect Gap, Proven Performance

Customers achieve high productivity and consistent quality with Carding Gap Control

High production in coarse-count applications, increased output compared to previous card models or significantly improved yarn quality: spinning mills in Pakistan, Türkiye and India report measurable results with Rieter's Carding Gap Control.

The card lays the foundation for high-quality yarn and efficient downstream processing. Its Carding Gap Control (CGC) keeps the decisive carding gap – the distance between the flats and the cylinder – at the optimum setting throughout production. The carding gap directly influences nep reduction and yarn quality. However, the ideal gap can change during production, for example as the machine temperature rises.

CGC continuously monitors the distance between the flat wires and the cylinder clothing across the full set of 116 flats. Intelligent software calculates the ideal setting and automatically regulates the gap with an accuracy of a few hundredths of a millimeter. This ensures consistently high quality without manual intervention. CGC is available on the C 81 and can also be retrofitted to the card C 80.

At least 10% more production or better quality

Comparative trials show that CGC can increase production by at least 10% while maintaining the same quality. Alternatively, at an unchanged production rate, sliver quality can improve by 10% or more. High production in coarse-count applications, increased output compared to previous card models or significantly improved yarn quality – customers in Pakistan, Türkiye and India confirm these measurable benefits in daily mill operations.



CGC automatically maintains the optimal carding gap.



"Modernizing our cards C 80 with Carding Gap Control has significantly improved our yarn quality."

Ömer Mutlu, Ring Spinning Mill Manager, Nipaş Tekstil, Türkiye



"The C 81 has it all: outstanding productivity, consistently high quality and smart features like the self-adjusting carding gap, which makes it our first choice in carding."

Munish Avasthi, Chairman and Managing Director, Sportking, India



"The C 81 runs with high productivity in our mill. It produces more than 180 kg/h for coarse counts – twice as much as our previous cards. Carding Gap Control is an important quality assurance at such high production levels."

Muhammad Zubair, GM Technical, H.A. Fibres, Pakistan

Whatch the video to see how Nipaş Tekstil enhances sliver quality.

https://l.ead.me/bgxAgr

Energy Savings That Add Up

In-field measurements confirm nearly 10% lower energy consumption with eNASA

The eNASA spindle is the latest evolution of the Novibra spindle platform. In an industrial trial at Indonesian premium mills, eNASA reduced energy consumption by nearly 10% compared with an alternative spindle, while maintaining production performance and yarn quality. For spinning mills, this means lower operating costs and energy related CO_2 emissions without compromising reliable high-speed operation.

For spinning mills operating tens of thousands of spindles around the clock, even a small reduction in spindle energy consumption can deliver measurable savings. Customer trials at spinning mills in Indonesia confirmed this benefit: under comparable production conditions, the Novibra eNASA spindle consumed nearly 10% less energy than the reference spindle while maintaining production performance and yarn quality (Fig. 1).



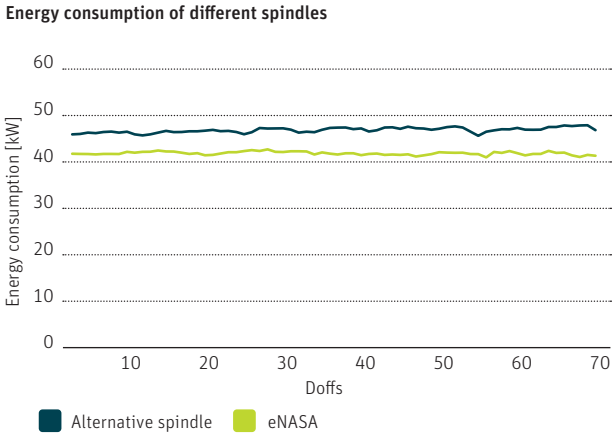


Fig. 1: Nearly 10% energy savings with eNASA compared to a conventional spindle

Why eNASA uses less energy

This energy advantage comes with the performance mills expect from the proven NASA spindle platform: excellent running stability, minimal vibration and reliable operation at high spindle speeds. Advanced manufacturing precision, double damping technology and an optimized wharve diameter of 17.5 mm contribute to stable operation and lower power consumption.

Proven savings under industrial conditions

In Indonesia, high energy costs have a significant impact on overall production costs. Energy efficiency is therefore already an important priority. Spinning mills were eager to test the new eNASA spindle, as both energy efficiency and sustainability are key considerations for the industry. Any technology that helps reduce energy consumption while maintaining high performance is highly valuable in today's manufacturing environment.

The trial was carried out producing a yarn count Ne 30. During the testing period, spindle speeds ranged from 17 500 to 19 500 rpm, representing typical industrial operating conditions.

A smart path to lower operating costs

By combining proven high-speed capability and operational reliability with validated energy savings, eNASA gives spinning mills a practical way to lower energy costs and reduce their environmental footprint – without compromising production performance.

Ready Before Start-Up

How Benin Textile trained more than 600 operators with ROOT

When Benin Textile SA (Btex) expanded its spinning operations, the challenge was not only technical. The company also needed to prepare a large new workforce quickly. With Rieter's Online Operator Training (ROOT), more than 600 operators gained essential knowledge before entering the spinning mill.

Btex is a fully integrated textile company producing high-quality home textiles. Its mill has around 50 000 ring spindles and 2 000 rotor spinning positions and produces 30 tons of towels and 20 tons of sheets per day. To run this capacity reliably, employees need a clear understanding of machine functions, safety routines and correct operating standards.

A digital foundation for consistent training

ROOT provided the digital training foundation. The platform gives operators and technicians practical knowledge of Rieter machines – online or offline, anytime and anywhere. At Btex, learning could begin before employees started hands-on work at the machine.

> "ROOT is a powerful and innovative classroom tool."
>
> Milind Bhortakke, CEO, Btex

Millind Bhortakke emphasizes that the system helps operators understand safety and operational aspects even before entering the spinning mill.

Faster learning through visual instruction

The visual, structured learning method made a clear difference. ROOT's e-learning modules explain machine functions, operating steps and best practices from blowroom to winding in a clear way. "The graphical description makes it easy for the workers to understand machine operation," says Millind Bhortakke. Trainers could then connect digital learning with practical instruction on the machine.

Scalable training with measurable results

For Btex, the benefit was clear: more than 600 workers were trained with ROOT, saving time in practical training and helping the company prepare its team efficiently for mill operations. With ROOT, Btex strengthened operators readiness, supported safe machine operation and created a scalable basis for consistent knowledge transfer. The story shows how digital learning helps spinning mills adopt technology faster, safer and more effectively.



According to Millind Bhortakke, CEO of BTex, ROOT significantly reduced the time required to train more than 600 workers.

Discover how ROOT helps mills train operators faster and improve safety. Watch the video.

https://l.ead.me/bgdwQa

From Trash to Treasure

How Shobikaa Impex gives plastic waste a second life

Shobikaa Impex transforms collected PET bottles into high-quality filament yarns for mosquito nets and textiles. To achieve the required yarn quality and color consistency, the company relies on spinning and texturing technology from Barmag.

Mountains of PET bottles and other plastic waste wash up on beaches around the world every day. Not only do they spoil the landscape, but they also pose a significant environmental problem. Plastic takes about 400 years to decompose, and ends up as microplastics in waterways and soil.

At the same time, much of this waste is actually valuable raw material. This is exactly where the South Indian textile company Shobikaa Impex Pvt. Ltd. comes in, and its production model comes quite close to a circular economy. “From trash to treasure” is how Marappan Sivasamy, Managing Director at Shobikaa Impex, summarizes the concept in a single sentence.

From a bottle to a mosquito net

Shobikaa Impex covers the entire production chain, including material collection, pellet and melt processing, yarn production, and further processing into textile fabrics, all the way through to garment manufacturing and packaging. The waste is sorted at four collection centers and prepared for further processing. As a result, 370 metric tons of plastic bottles – about 20 000 metric tons a year – are recovered from the ocean each week and returned to the product cycle. Shobikaa Impex spins the recycled polyester into filament yarns, which are mainly used to produce mosquito nets.

Expansion into the competitive apparel sector

Given the huge success of its eco-friendly products, management decided some time ago to diversify. The company now also manufactures yarns made from recycled polyester for the international apparel market. As the company expanded into this demanding market, the quality requirements for the yarns also increased.

> “In international competition, high standards are set for yarn quality and color consistency. We can certainly achieve this with Barmag’s spinning and texturing machines.”
>
> Marappan Sivasamy, Managing Director, Shobikaa Impex

Sustainable textile solutions

Shobikaa Impex currently meets 80% of its energy needs from renewable sources. With its technologies, Barmag helps the company process recycled raw materials into high-quality yarns for more sustainable textile solutions.





Equipped with Barmag WINGS POY spinning systems and texturing machines, Shobikaa Impex turns used plastic bottles into high-quality polyester yarn, which is primarily used in the manufacture of mosquito nets.

Networking Machines, Optimizing Processes

atmos.io builds an intelligent network out of production data

Modern filament yarn production facilities generate large amounts of valuable production data each and every day. atmos.io consolidates this information and provides a comprehensive view of machines, processes, and locations. This allows manufacturers to respond more quickly, optimize their processes in a more targeted manner, and manage their production more consistently and efficiently.

With atmos.io, every machine in filament yarn production becomes part of a smart network. The platform consolidates isolated pieces of information into a central production overview and links production data to other enterprise systems, such as the ERP system.

"atmos.io is the digital backbone of modern production facilities. The platform provides real-time transparency and helps our customers manage processes more effectively and identify opportunities for optimization more quickly."

Ivan Gallo, Technology Manager Digital, Barmag



With atmos.io, all machines are intelligently connected, providing real-time transparency across the entire production process.

Digital workflows reduce the amount of manual work required in day-to-day operations. At the same time, discrepancies become apparent early on. Automated warning messages enable rapid responses, while data analysis helps identify the causes of quality discrepancies and reveals opportunities for improvement. Furthermore, atmos.io supports forward-looking maintenance strategies.

Transparency across machines and locations

Customizable dashboards clearly display the most important key performance indicators, from individual machines to a production network spanning multiple locations. Production teams and management thus have access to a shared, up-to-date database for making operational and strategic decisions.

Cross-location functions also make it easier to compare facilities and production lines. This makes it possible to identify successful adjustments and optimization measures more quickly and apply them to other areas.

Security integrated right from the start

Cybersecurity is an integral part of atmos.io's strategy. User authentication, clearly defined access rights, and ongoing software maintenance help ensure that machines, systems, and production data are reliably protected.

In developing the platform, Barmag also takes into account relevant European requirements such as the Cyber Resilience Act and the NIS 2 Directive.

Software lifecycle management and vulnerability monitoring help customers operate their connected systems securely and keep them up to date at all times.

Easier Handling. Stronger Processing.

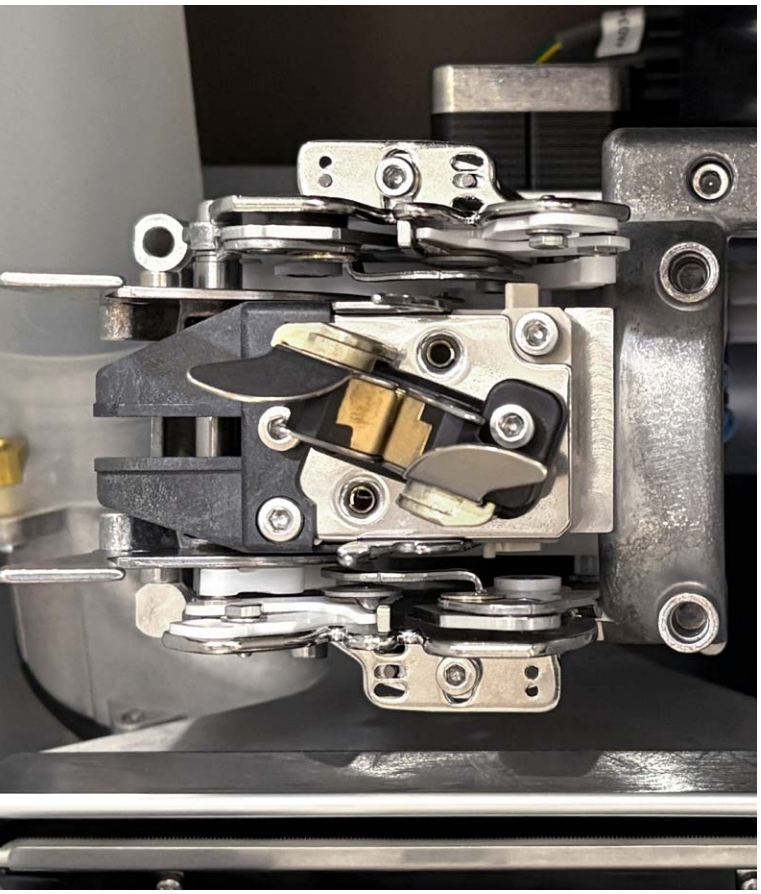
Autoconer X6 – Smartsplicer with a new design

The Smartsplicer of the Autoconer X6 presents itself in a new design. This further development improves accessibility, ergonomics, ease of maintenance, and process reliability, ensuring consistently high splice quality from one winding unit to the next.

Consistent splicing and winding quality are important quality criteria and are crucial for high productivity in downstream processing. Building on its proven technological foundation, the Smartsplicer used in the automatic winding machine has been systematically enhanced. The focus was on achieving even greater process stability and simplifying maintenance work.

A focus on ergonomics and easy maintenance

The more open design improves access to the Smartsplicer, reduces areas prone to dirt accumulation, and makes cleaning easier.



The optimized Smartsplicer: more convenience and safety for consistently high splice quality from winding unit to winding unit

At the same time, the new housing design simplifies handling during service and maintenance work: Depending on the technical configuration, the Smartsplicer is more than one kilogram lighter. Thus, the new design improves ergonomics and makes maintenance easier in day-to-day production.

Higher process reliability, consistent quality

The splicer feeder arm plays a crucial role in determining the quality of the splice. Its precise and reliable function ensures both high strength and a consistent, yarn-like appearance of the splice from one winding unit to the next. The redesigned Smartsplicer features a more robust design. The new stainless steel splicer feeder arm has a 33% greater material thickness and is securely fixed in position, providing significantly greater mechanical stability. This supports consistent splicing results and increases process reliability.

Delivering measurable benefits in day-to-day production

Long-term tests conducted at customer sites demonstrate the benefits of these design improvements. Even when machines are already operating at a very high performance level, small optimizations in the splicing process have a noticeable impact over longer production periods. In a customer application, the number of splice cuts was reduced by 17% and the number of repeater cycles by 12%. As a result, a higher percentage of splices meet the specified quality requirements on the first attempt. The improved reproducibility of the splicing process reduces quality-related downtimes and contributes to an average 1% increase in machine efficiency.

Retrofitting possible

The new design is available for the entire Smartsplicer family, as well as for open and closed prisms. Installed Autoconer X6 and Autoconer 6 machines can also be retrofitted, from the splicer feeder arm to a complete Smartsplicer upgrade.

Every Second Counts

Planned doffer maintenance protects productivity and extends machine life

Even a few extra seconds in every doffing cycle can add up to tons of lost production each year. Rieter's doffer maintenance package restores fast, reliable doffing, reduces unplanned interventions and helps ring and compact-spinning machines perform efficiently for longer.

The auto doffer plays a critical role in the efficiency of ring and compact-spinning machines. Over time, worn guiding profiles, gripper air leakages, misaligned peg trays, and other component wear can slow down or interrupt the doffing process.

Small delays, significant production losses

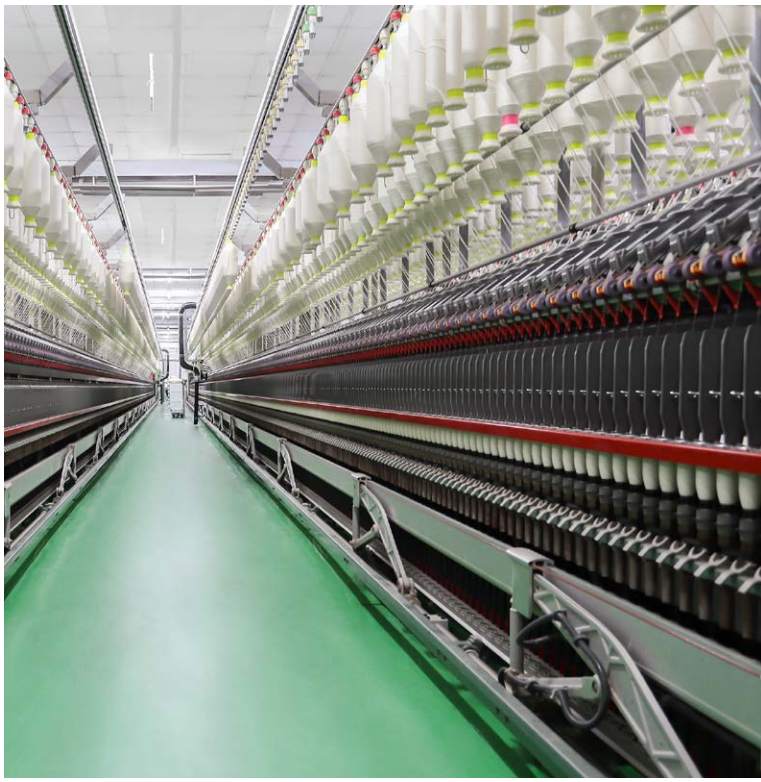
On a 1 200-spindle machine processing 100% cotton at yarn count Ne 30, extending the standard doffing cycle by only 30 seconds can reduce annual production by approximately 1.5 tons. Longer restart times and poorly formed cops can also increase waste and yarn breaks and impair winding performance.

Planned maintenance restores performance

The doffer maintenance package combines all critical wear components in one comprehensive maintenance solution. Replacing them restores original doffing performance and delivers clear benefits:

- consistent doffing cycle times,
- smooth doffing without manual intervention,
- higher machine efficiency and increased productivity and
- extended machine lifetime.

Rieter field experience shows that a complete doffer overhaul every eight years can extend productive machine life by several years. An enormous amount of installed packages worldwide demonstrate the reliability of this approach.



The doffer maintenance package is one of many Rieter after-sales solutions designed to maximize productivity and machine lifetime.

Maximize the value of installed assets

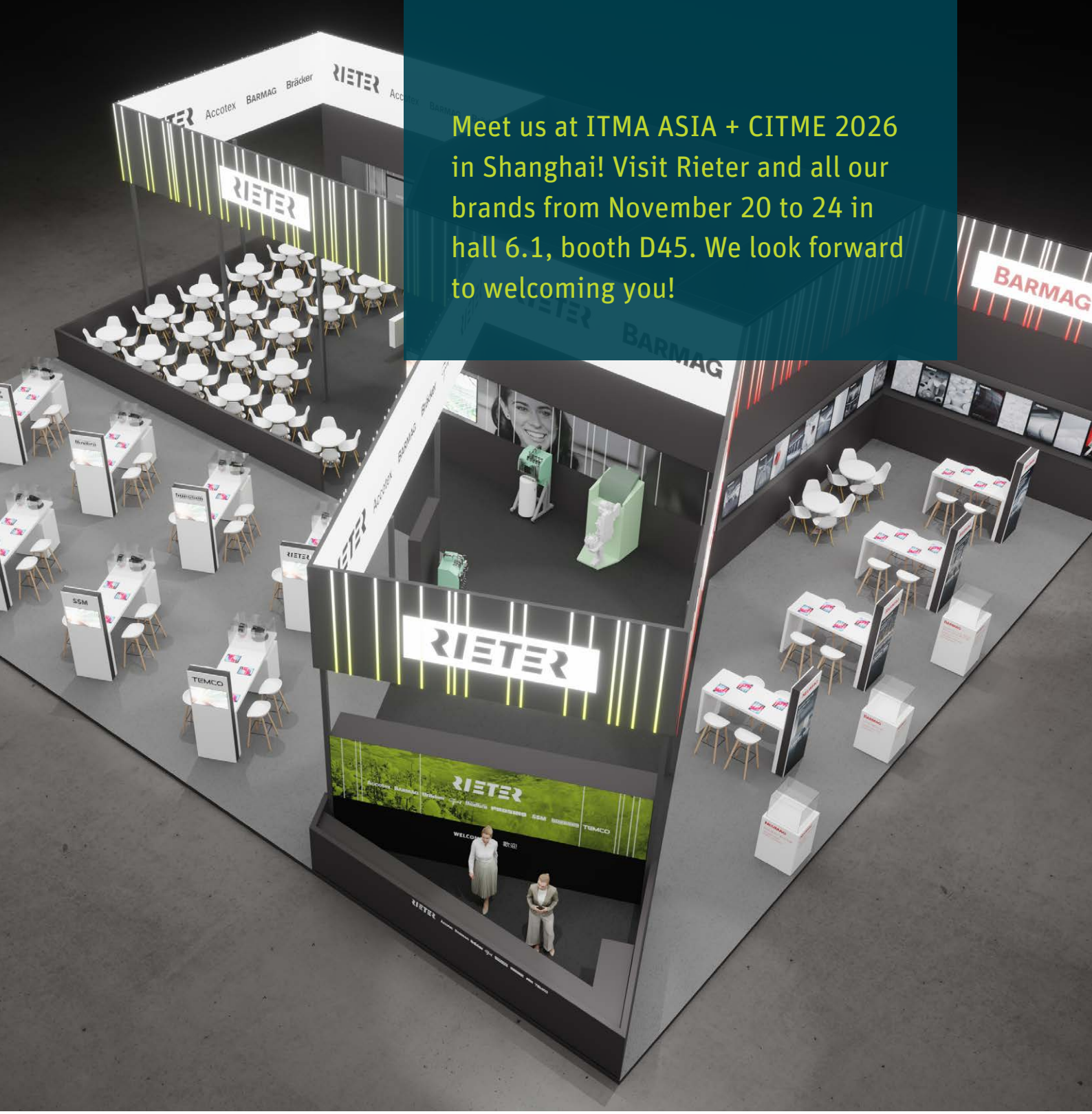
Reliable doffing supports predictable production, reduces unexpected stoppages and improves cop quality for the winding process. By addressing wear before it affects output, the doffer maintenance package avoids the hidden cost of gradually increasing cycle times and adds productive years to installed machines.

"After installing the doffer maintenance package, the doffing cycle time has remained consistent, resulting in improved machine efficiency and higher productivity. We now place greater emphasis on preventive maintenance to keep our machines operating at peak performance and to maximize their service life."

Tiago Peixoto, CEO,
Companhia Industrial Cataguases, Brazil

"Rieter's doffer kit solution and guiding arm refurbishment helps us increase production by 10%. It improves the working performance of the machine by reducing the operators' intervention significantly. That's why we implemented these refurbishment for all the 28 ring spinning machines G 33."

Mohammed Hanif, Managing Director,
Hanif Spinning Mills Ltd, Bangladesh



Rieter Ltd.
Klosterstrasse 20
CH-8406 Winterthur
T +41 52 208 7171
machines@rieter.com
aftersales@rieter.com

Rieter India Private Ltd.
Gat No. 768/2, Village Wing
Shindewadi-Bhor Road
Taluka Khandala, District Satara
IN-Maharashtra 412 801
T +91 2169 304 141

Rieter (China) Textile Instruments Co., Ltd.
390 West Hehai Road
Changzhou 213022, Jiangsu
P.R. China
T +86 519 8511 0675

www.rieter.com