

Compact spinning
Compacting solution COMPACT4

RIETER

COMPACT4

The universal compacting solution

Universal compacting
for superior yarn quality

COMPACT4

OUTSTANDING

ADVANTAGES

Uniform Suction at Every Position

Dedicated suction system and optimized inserts guarantee consistent compacting conditions along the full machine length

Improved Yarn Quality and Strength

Improved twist transfer enables lower twist multipliers while achieving uniform yarns with reduced hairiness and higher yarn strength

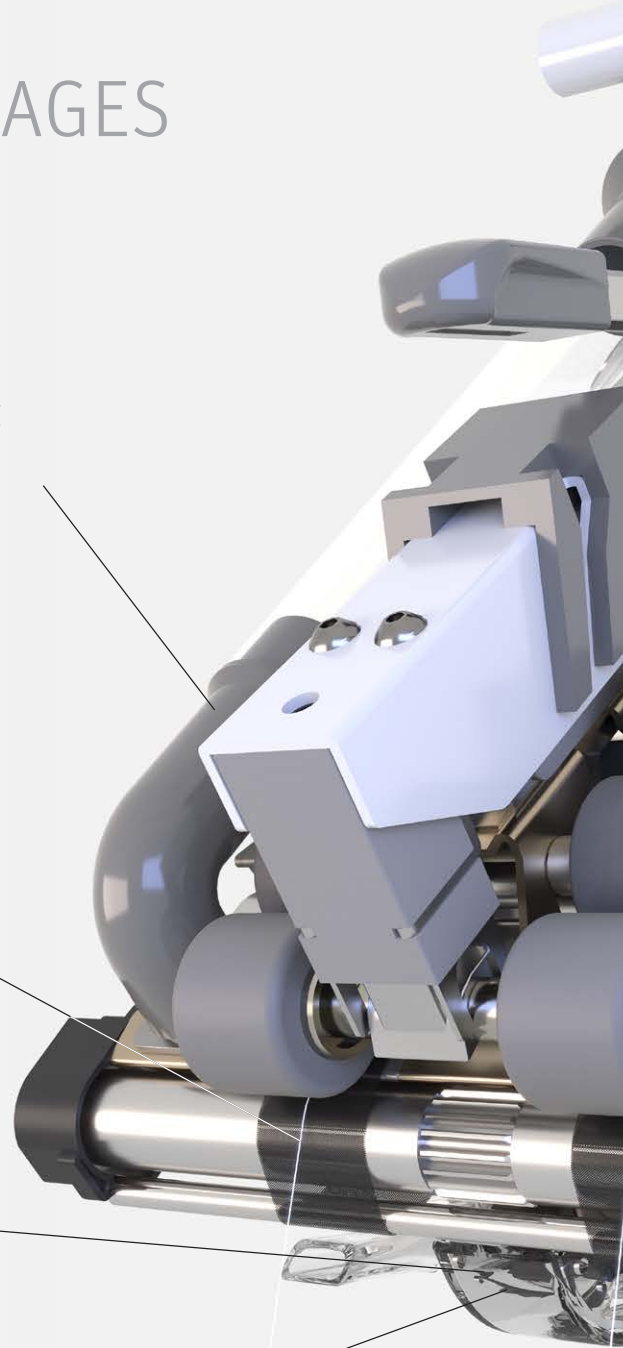
Effortless Operation and Long Service Life

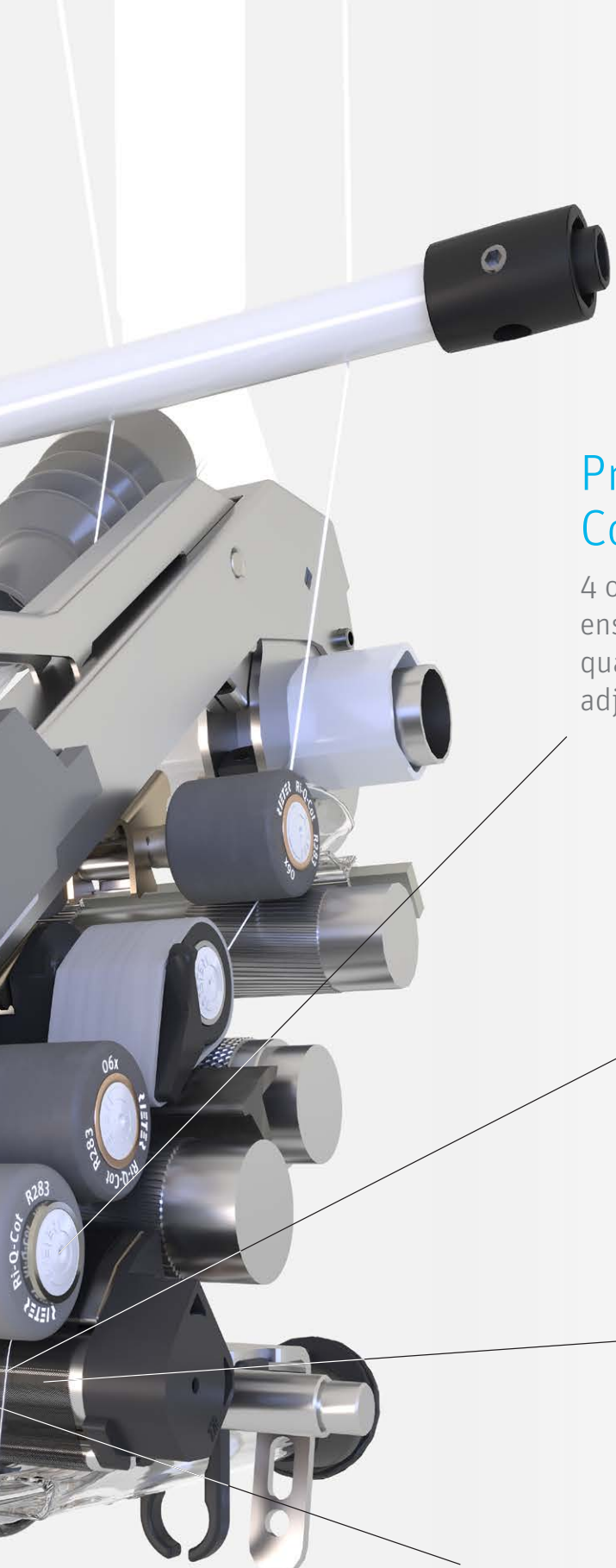
Precision-engineered carrier gear drive ensures smooth operation and extended gear lifetime

Improved Operator Safety

Closed gear cover prevents contact with moving parts and enhances safe daily operation

* Option





Precisely Controlled Compacting

4 over 4 compact spinning system ensures consistently high yarn quality, combined with individually adjustable 4th roller load

Maximum Flexibility for All Fiber and Yarn Types

Four clip variants cover the widest application range from Ne 16 to Ne 100 for CO, CV, PES and blends; for single, twin, slub* and core* yarns

Stable Drafting and Compacting Performance

Positively driven mesh aprons ensure constant fiber alignment and uniform compacting

Consistent Yarn Quality

Fine-tuned compacting angle and adapted spinning length ensure smooth fiber flow and ideal fiber orientation

G 38

COMPACT-SPINNING SOLUTION

Minimal Downtime

Built-in micro-dust cleaning enable long and interruption-free running

Retrofit-Ready System

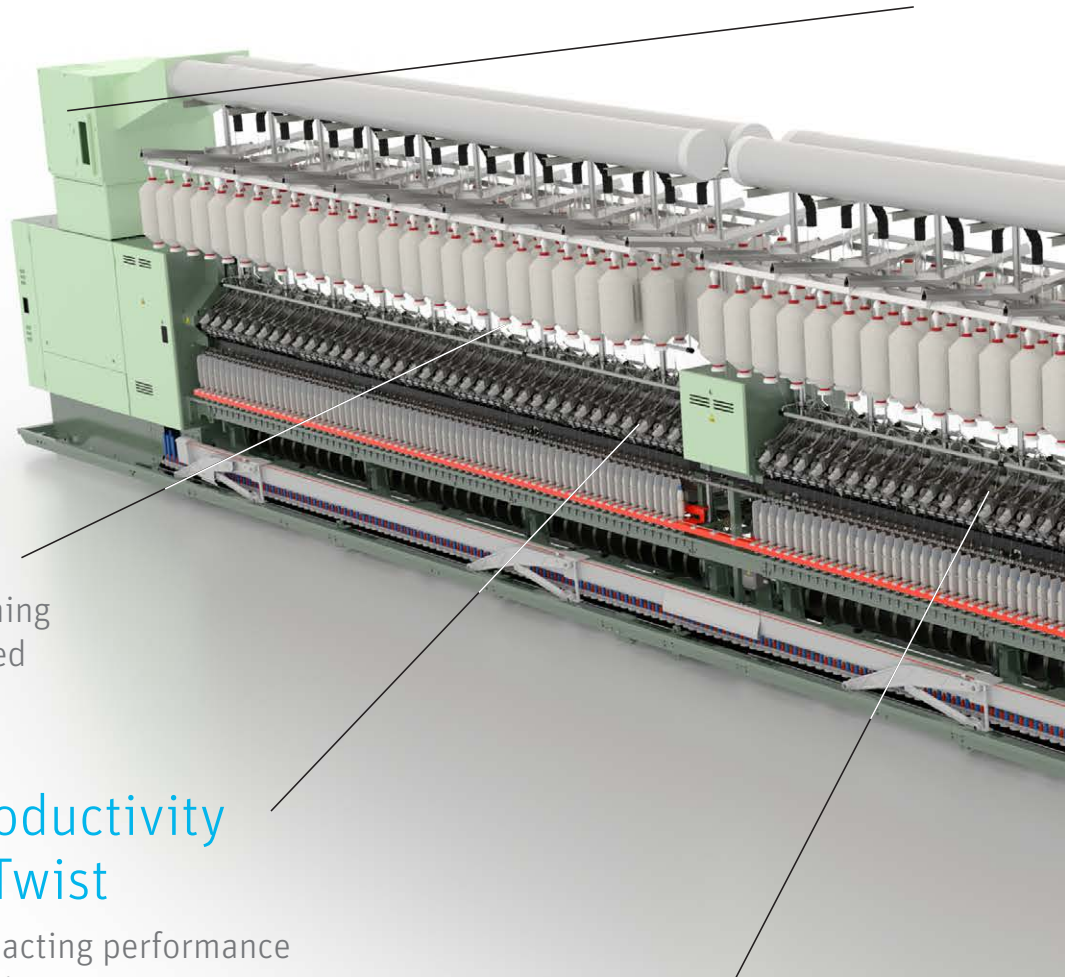
Existing Rieter ring spinning machines can be upgraded

High Productivity at Low Twist

Stable compacting performance enables maximum output even at reduced twist levels

Reliability Redefined

Innovative aerodynamic design ensures smooth, stable operation



Lowest Energy Consumption

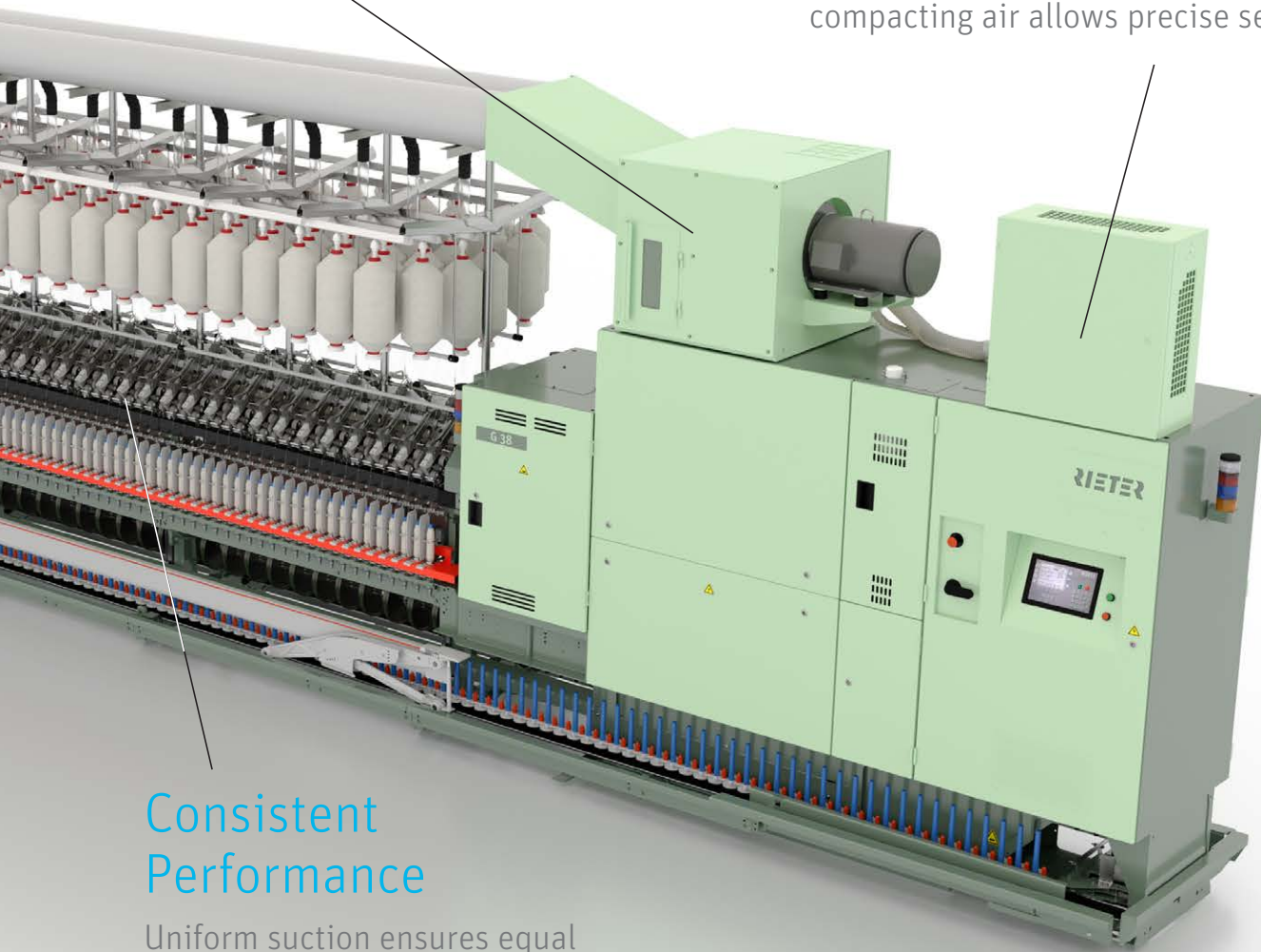
Double-sided suction and optimized airflow ensure exceptionally low energy demand

Easy Operation

Separate adjustment of pneumafil and compacting air allows precise setting

Consistent Performance

Uniform suction ensures equal compacting quality at every position



Compact-Spinning Technology for High Performance and Consistency

Reliable and efficient spinning for consistent yarn quality

COMPACT4 is a universal 4 over 4 compacting solution that can be installed on Rieter ring spinning machines. It enables consistently high-quality compact yarn for a wide application range.

The COMPACT4 system offers a precisely controlled compacting process for high performance, stable running and consistent results across all spinning positions.

The optimized spinning geometry forms the technological basis of the system. A fine-tuned compacting angle in the drafting zone, together with an adapted spinning length, ensures smooth fiber flow and improved fiber control. The optimized twist flow up to the nip enables spinning of yarns with low hairiness value and high yarn strength.



Positively driven mesh aprons and an optimized tension profile in the compacting zone create ideal fiber orientation, which ensures stable compacting.

Dedicated air-suction for compacting and optimized inserts provide consistent suction levels. For long machines, the double-sided suction concept ensures uniform compacting suction across the entire machine length – a key factor for a reliable compacting process and consistent yarn quality. This clearly differentiates COMPACT4 in the market.



The mechanical features are engineered for simplicity, reliability and safety. The covered carrier gear drive transfers motion to the fourth roller without requiring a motor or any adjustment. This uniqueness reduces gear-setting work, minimizes operator workload, guarantees operator safety and extends the lifetime of the carrier gear. The possibility of individual load adjustment of the fourth top roller ensures precise fiber control under all spinning conditions.

Low maintenance requirements and longer cleaning intervals enable uninterrupted running and very low downtime in daily mill operation.

Reliable and User-Friendly

Uninterrupted production

The COMPACT4 system is engineered to ensure continuous, disturbance-free compact spinning.

The reliable compacting process is supported by integrated micro-dust cleaning – unique in the market – eliminating manual cleaning effort and maintaining stable production conditions.

The optimized suction-nozzle airflow reduces maintenance frequency and supports consistently high running reliability.

Minimal downtime is achieved through an optimized slot design that enables long, uninterrupted production cycles.



Low operator effort, high operator safety



The COMPACT4 system ensures low operator effort and maximum safety through a series of user-focused design features.

The innovative nozzle design prevents choking and ensures stable running, reducing the need for operator intervention.

Independently adjustable suction for pneumafil and compacting simplify daily handling and allow easy parameter settings.

Application changes can be performed quickly thanks to the insert-clip system, enabling efficient adjustments to different yarn structures with minimal operator involvement.

Operator safety is maximized through the enclosed carrier gear design, creating a secure and ergonomic working environment.

High Quality for a Wide Range of Applications

Highest yarn quality

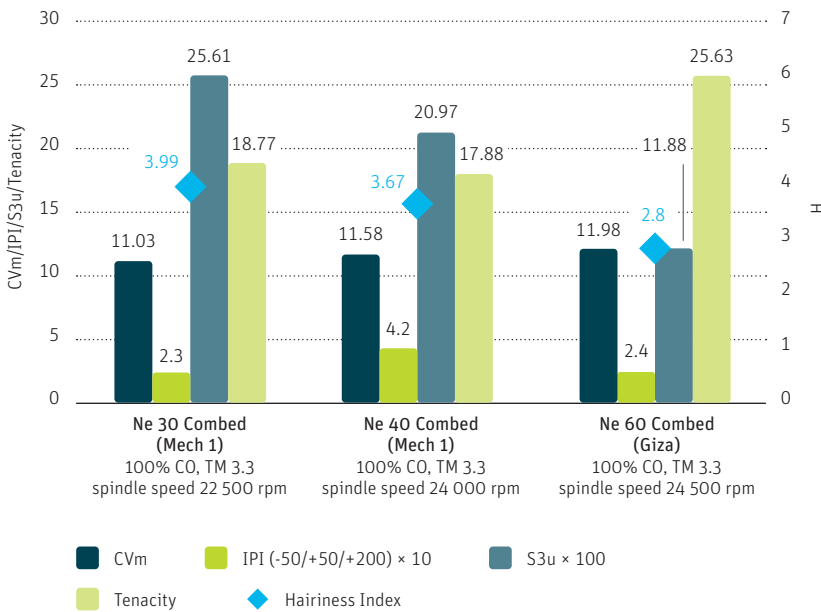
The COMPACT4 system ensures consistently superior yarn quality across all key performance parameters.

Uniform compacting, achieved through positively driven mesh aprons and optimized airflow in the compacting tubes, delivers exceptionally smooth yarn surfaces with significantly reduced hairiness. The stable compacting effect supports excellent uniformity of hairiness and highly balanced fiber orientation.

The system produces yarns with high strength, elongation and tenacity, while reduced twist levels enable the production of softer yarns without compromising quality.



COMPACT4 technology – Highest yarn quality



Low IPI values and stable CV% characteristics highlight the system’s ability to produce highly consistent yarns. This stability supports efficient downstream processing and ultimately results in outstanding fabric appearance.

Highest versatility and flexibility

The COMPACT4 system delivers exceptional versatility, covering the widest application range in the compact-spinning market.

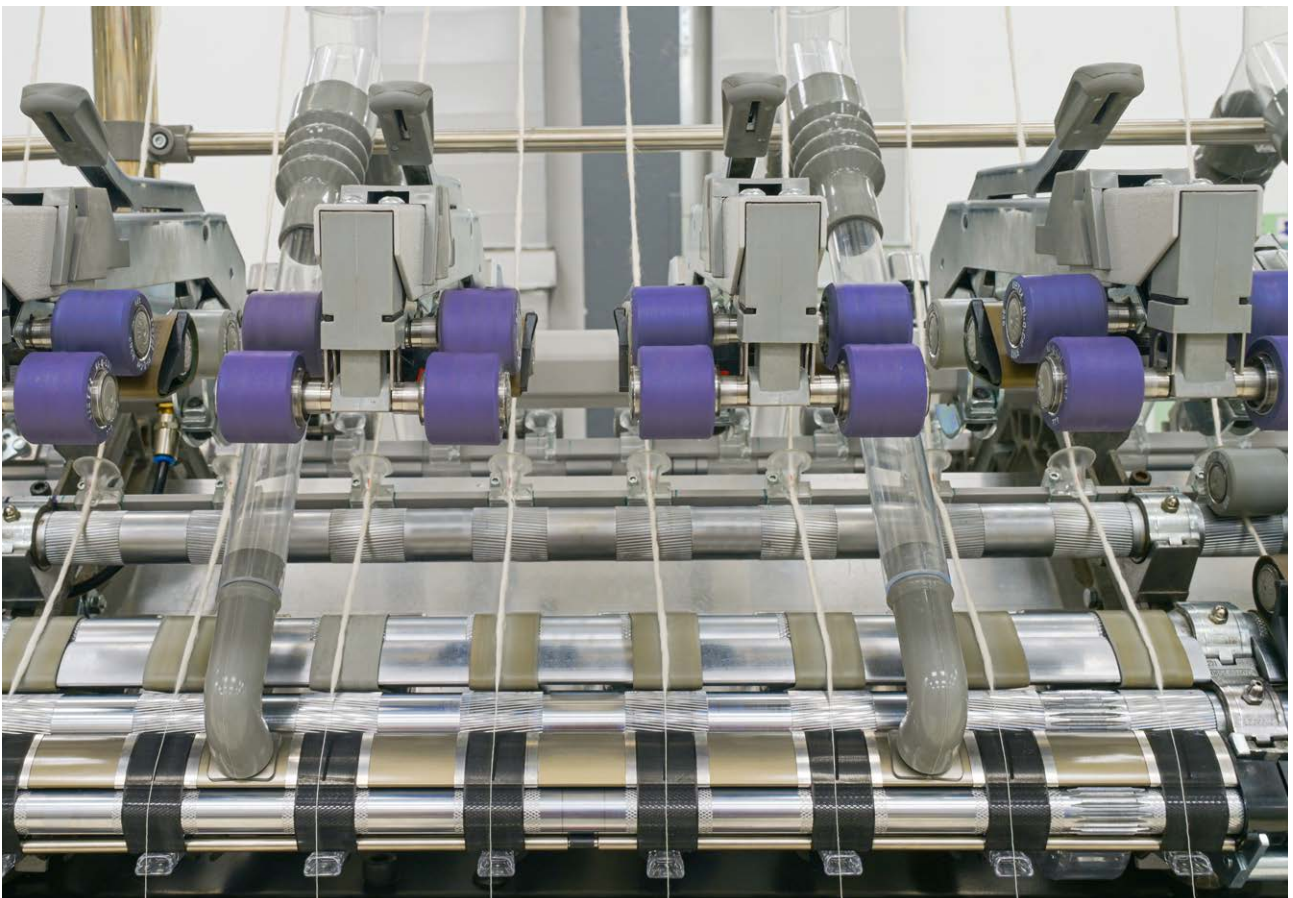
It produces carded and combed compact yarns of all common fiber types such as cotton, viscose, polyester and their blends. A broad count range from Ne 16 to Ne 100 ensures maximum flexibility in production planning.

Its unique design supports efficient spinning of single and twin yarns, while slub and core yarns can be integrated on request, ensuring reliable performance across diverse yarn types.

The aerodynamic compacting tube provides uniform suction for eight spindles. Four compact-insert clip designs are available for different application requirements.

Switching between yarn structures and counts is fast and straightforward thanks to the replaceable clip system. Each clip covers a wide application range, minimizing the need for frequent changes – for example, the “delta” clip supports Ne 16 to Ne 80 and coarser counts for cotton, viscose and polyester/cotton blends.

This flexible concept enables smooth transitions between yarn types with minimal downtime, supporting efficient production planning and high machine utilization.



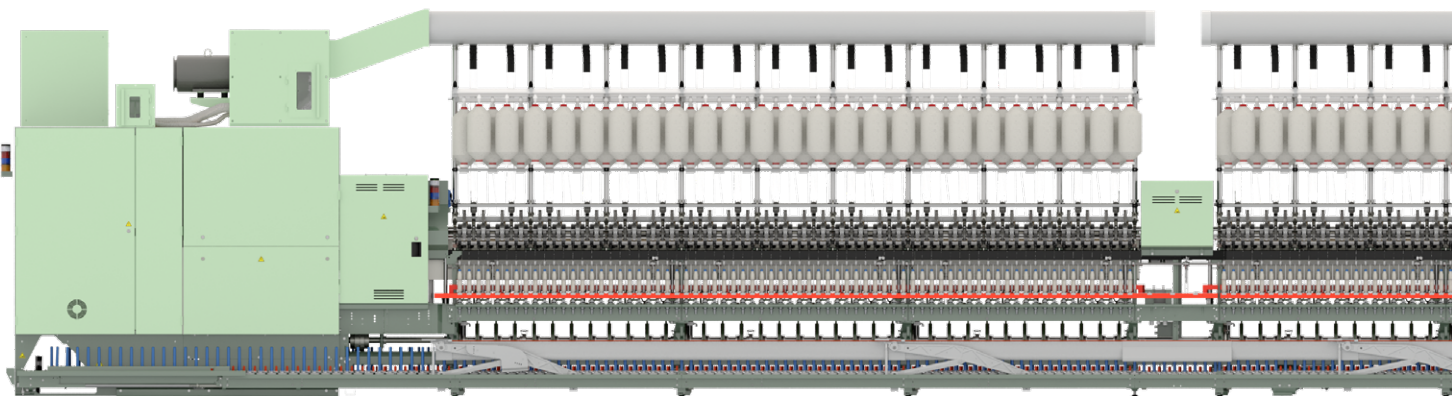
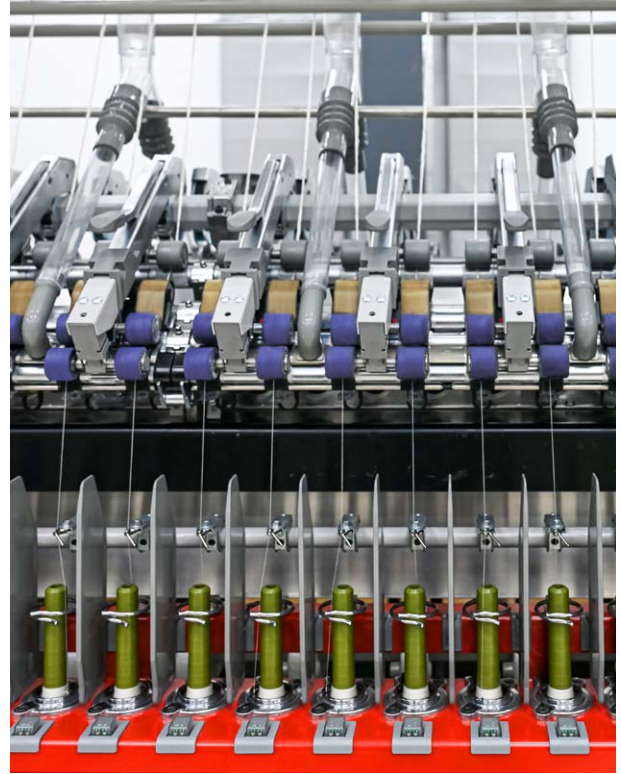
Low Energy Consumption, High Cost Efficiency

Energy and resource efficiency

The COMPACT4 system is designed for outstanding energy efficiency. Its optimized airflow-nozzle design ensures stable fiber control and uniform compacting at very low energy demand.

Independently adjustable suction for pneumafil and compacting allow precise setting of the suction parameters. In combination with the individual spindle monitoring ISM premium, the pneumafil suction can be optimized for both stable running behavior and minimal energy usage.

For long machines with more than 1 248 spindles, the unique double-sided compacting suction system ensures uniform airflow and the lowest possible energy consumption across the entire machine length.



Cost savings

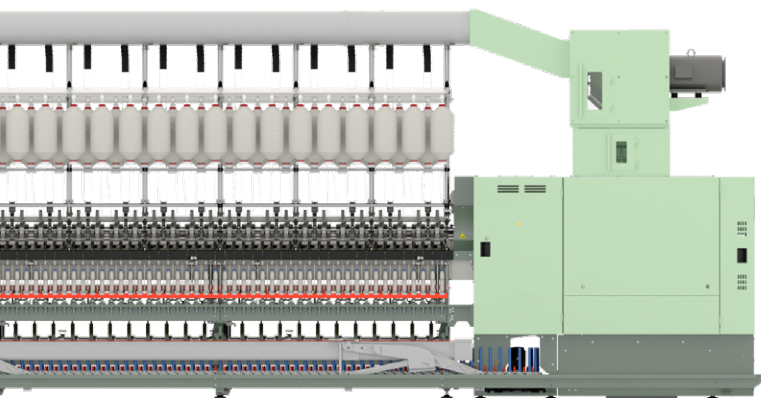
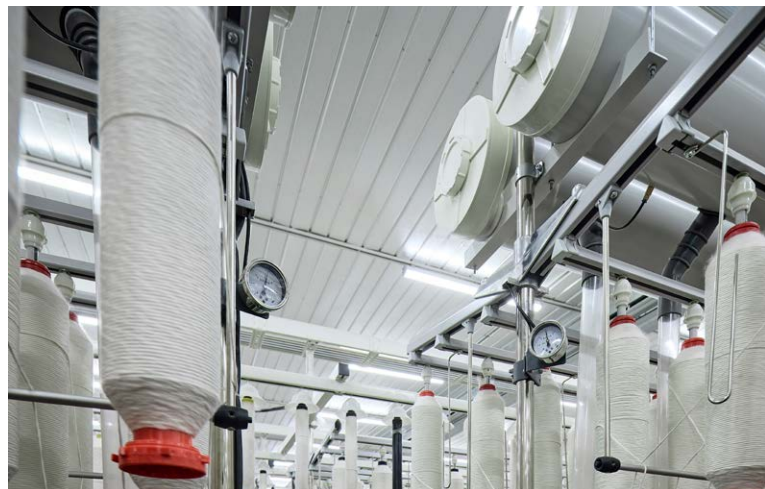
The COMPACT4 system enables compact spinning with maximum cost efficiency across all major cost categories.

Separate suction for pneumafil and compacting, combined with the double-sided suction system, reduces energy costs.

Lower twist levels can be applied without compromising yarn quality, generating further savings in energy costs.

Maintenance and spare-parts costs remain exceptionally low due to the use of wear-resistant components. The durable design considerably extends service and cleaning intervals, lowering maintenance effort and reducing operational expenses.

COMPACT4 can be retrofitted to Rieter ring spinning machines G 38 and earlier generations, allowing existing spinning mills to benefit from multiple advantages of the universal compacting system.



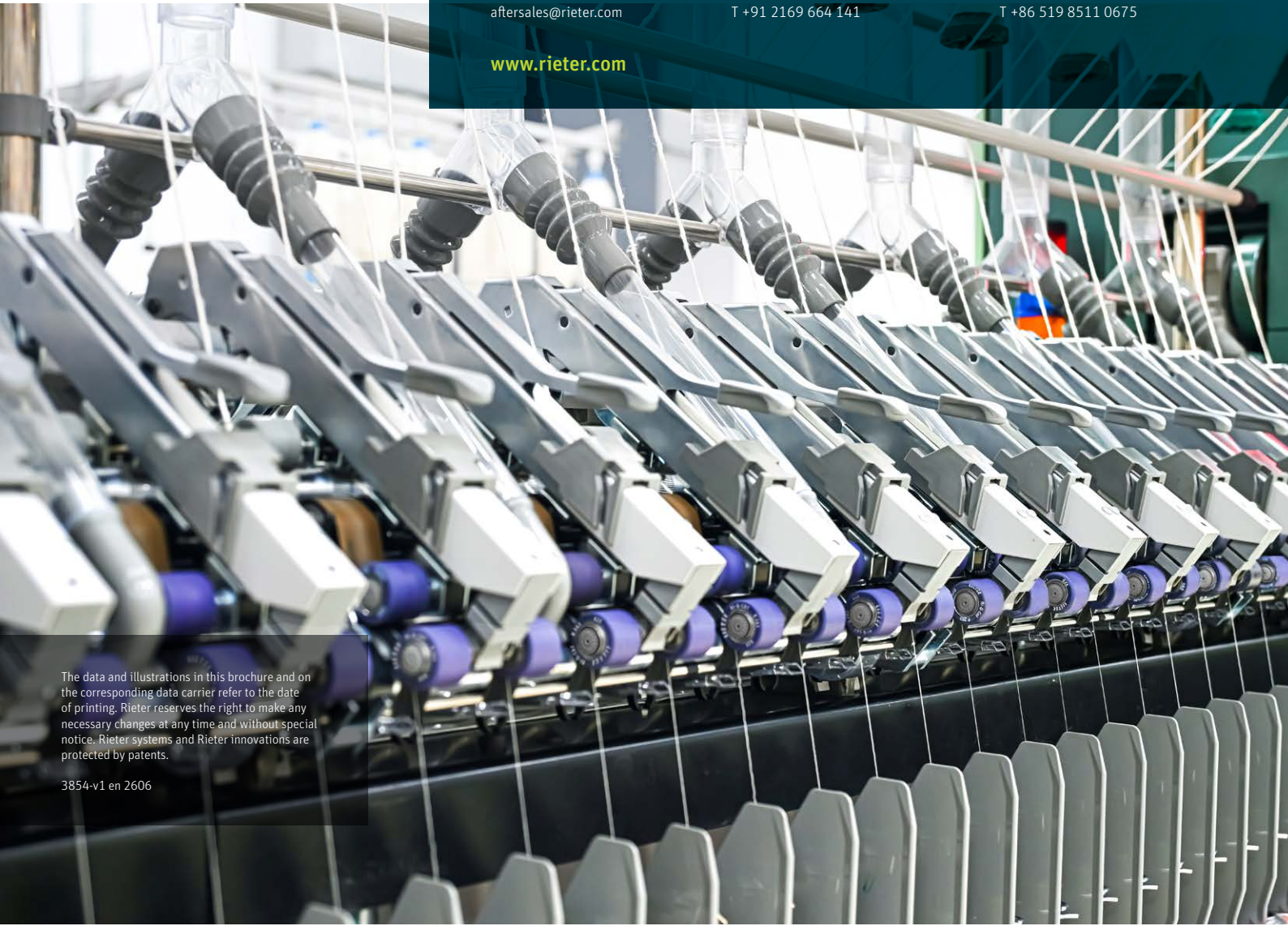


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