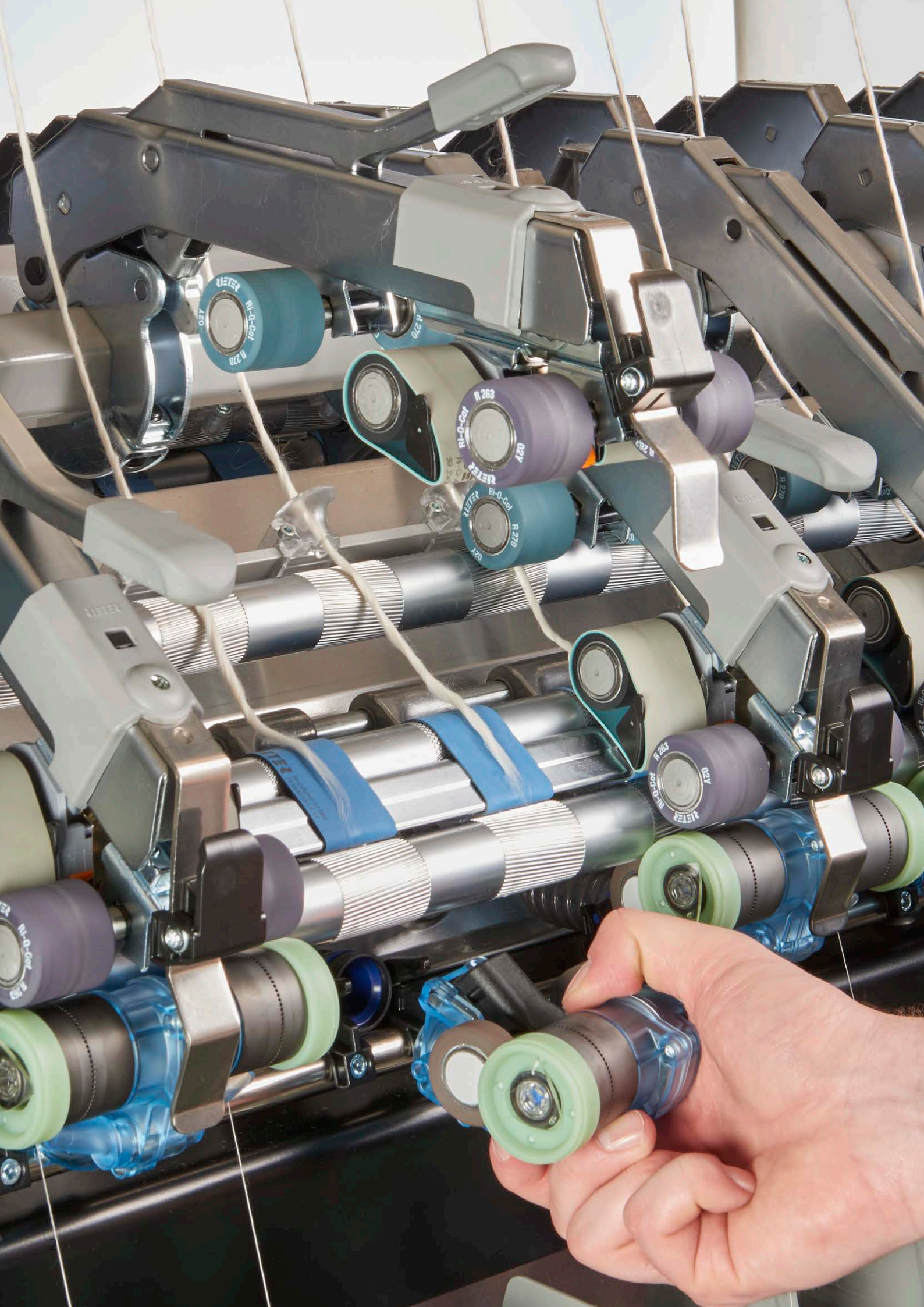


Ring and Compact-Spinning Maintenance Packages

Ensuring high productivity and consistent yarn quality



Restoring original
machine performance



A close-up photograph of a spinning machine, showing various components like bobbins, spindles, and threads. A person's hand is visible at the bottom of the frame, interacting with the machine. The background is a dark teal color with a subtle pattern of the machine's components.

Machine Maintenance Packages

Three essential services to restore performance

Regular and precise maintenance is essential for stable and efficient machine operation. It protects the investment, prevents unexpected breakdowns and keeps yarn quality consistent. While maintenance appears to be an additional cost, it prevents far higher expenses caused by unplanned stoppages, rising energy consumption and premature wear. Effective maintenance improves machine performance and extends machine lifetime, helping spinning mills maintain profitability.

Rieter maintenance packages for ring and compact-spinning machines provide a structured preventive approach.

They combine:

- **maintenance kits** with essential wear-and-tear, consumables and technology parts,
- **precision onsite repair and calibration** of key electrical and mechanical components and
- **professional installation** by certified Rieter service engineers.

These three essential services help spinning mills achieve:

- consistent yarn quality,
- reduced downtime,
- improved machine efficiency and
- longer machine lifetime.

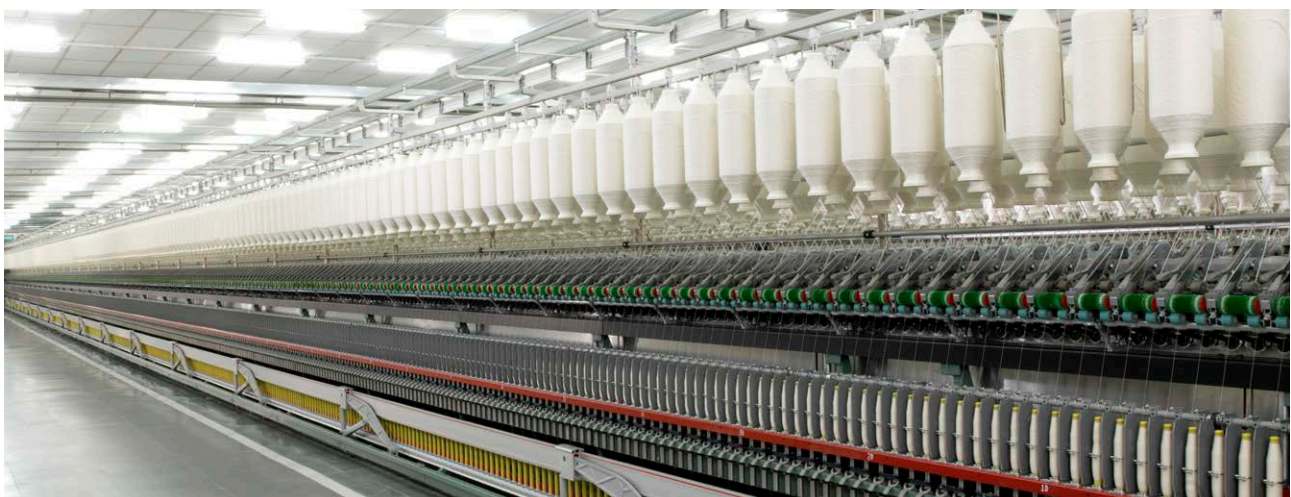
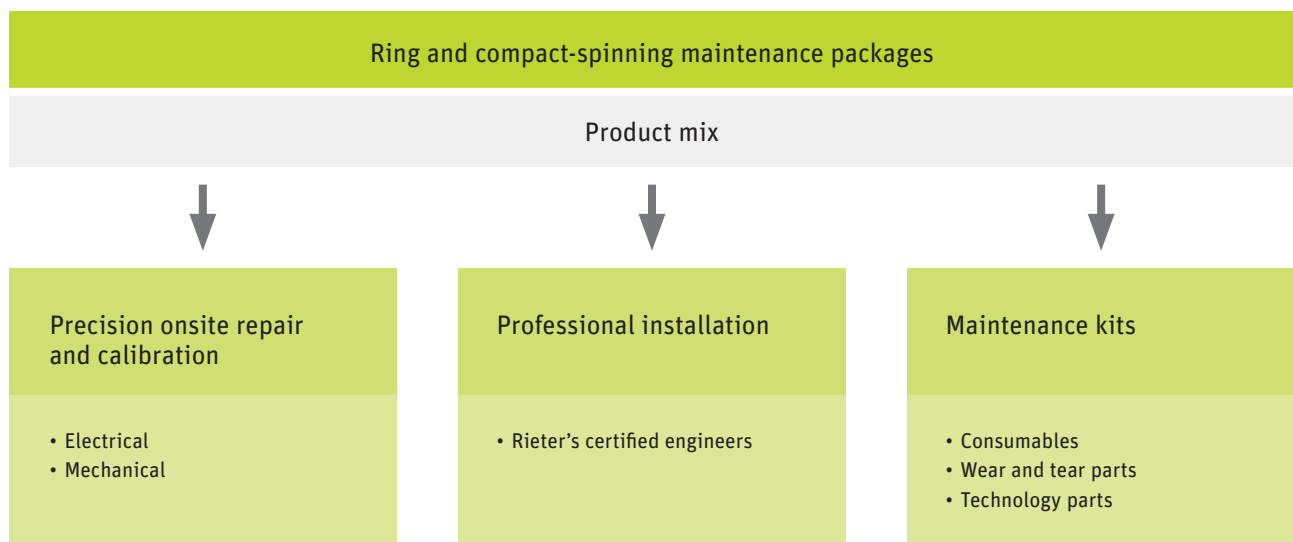
Machine maintenance packages therefore contribute directly to higher productivity and improved profitability.

Ring and Compact-Spinning Maintenance for Long-Term Performance

Maximizing value through optimized maintenance investment

Irregular maintenance of ring and compact-spinning machines often leads to inconsistent yarn quality, unstable machine behavior, higher energy usage and unplanned stoppages. Missing know-how or limited maintenance expertise can further increase the risk of extended downtime and rising operating costs.

With a strong understanding of customer challenges, Rieter has developed a best-in-class combination of maintenance services for ring and compact-spinning models to keep machines operating at their highest level. The machine maintenance packages provide complete peace of mind by combining maintenance kits, precision onsite repair and calibration and professional installation by a Rieter service engineer to ensure reliable performance, longer machine life and improved efficiency.



Customer benefits



Productivity

- reduced machine stoppages
- higher machine utilization
- stable and consistent production



Quality

- consistent yarn quality
- reduced variation and faults
- improved downstream performance



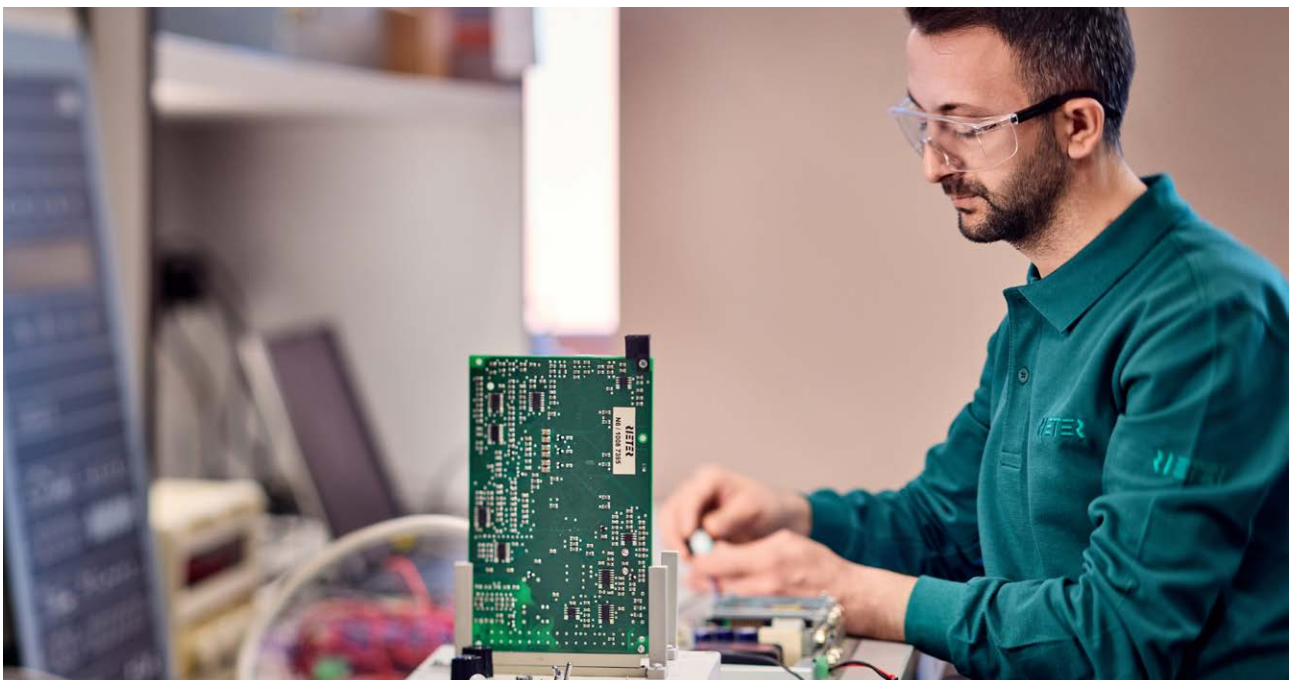
Energy and cost

- optimized energy and compressed air consumption
- lower total maintenance cost
- improved raw material utilization



Lifetime and reliability

- extended machine lifetime
- improved component reliability
- reduced risk of unexpected failures



Precision On-Site Electrical and Mechanical Repairs for Ring and Compact-Spinning Machine

The performance of ring and compact-spinning machines depends on the precise functioning of electronic systems and mechanical components. Key elements such as frequency converters, main motors, ring rail motors and guiding arm parts play a crucial role in ensuring consistent yarn quality and stable machine operation. Over time, these components are subject to wear and performance variations, influenced by operating hours, environmental conditions and maintenance practices that vary across mills.

To address these challenges, Rieter offers comprehensive on-site repair services as part of the ring and compact-spinning maintenance package. These services are designed to restore machine performance, improve reliability and prevent unexpected failures, ensuring continuous and efficient operation.

Rieter's on-site repair scope covers both electronic and mechanical systems, including frequency converters, operating panels, display units, drafting gearbox, ring rail gearbox, guiding arm refurbishment, suction drum refurbishment for compact-spinning machines etc. These elements are essential for precise machine control and consistent performance. The repair process involves the refurbishment of key assemblies through the replacement of essential parts. All replacements are carried out directly at the customer's site, ensuring that worn or performance-critical components are addressed immediately. This targeted approach reduces the risk of unexpected breakdowns and enhances overall machine reliability.



Electrical on-site repairs of frequency converters for ring and compact-spinning machines



Mechanical on-site repair kit for guiding arm for ring and compact-spinning machines

Professional Installation

Professional installation activities are carried out by Rieter's certified engineers, who bring in-depth machine expertise and application know-how to ensure accurate maintenance and long-term machine performance.

Professional installation includes:

Installation service

Rieter service technicians with many years of field experience ensure the correct installation and trouble-free commissioning of the machines.

On-site project management

On-site project management provides the right support at the right time through Rieter specialists who handle a wide variety of demanding projects.

Performance optimization

Performance optimization services boost productivity, enhance quality and unlock the full potential of people and machines while reducing key operational costs.



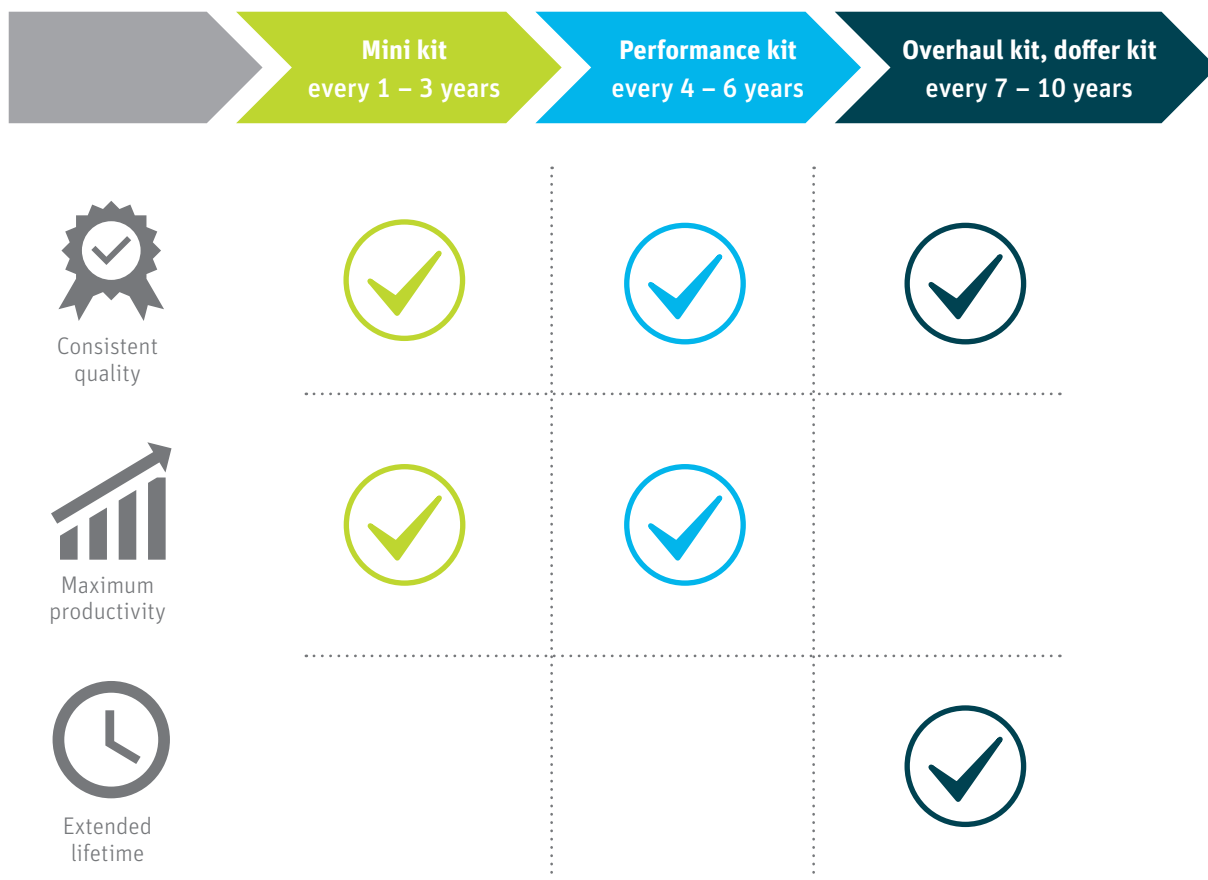
Maintenance Kits

A structured and simple approach

Maintenance budgets are tight and machine downtimes are costly. Rieter’s modular maintenance concept enables spinning mills to follow a structured and simple maintenance approach throughout the product lifecycle. It supports budget planning and prevents extended machine downtime. The maintenance kits contain key spare parts with a high impact on machine performance and lifetime. Replacing these parts at the same time improves machine performance and reduces conversion costs. Regular maintenance ensures the key functionality of each machine and prevents costly repairs in the long term. The maintenance kits comprise:

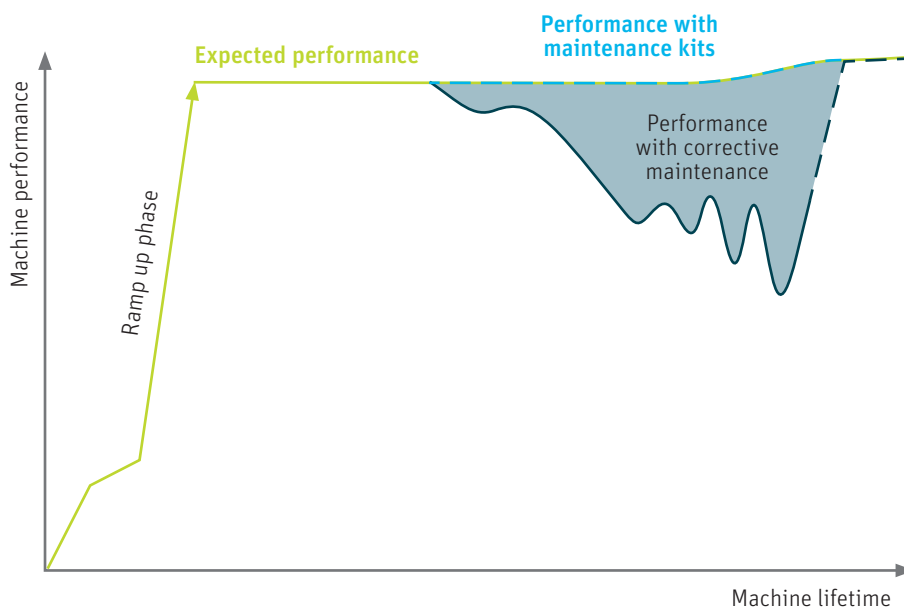
- mini kit
- performance kit
- overhaul kit
- doffer kit

Maintenance concept and benefits



Maintenance is key to success

After several years of operation, the parts of a new machine begin to wear and machine performance declines. Corrective maintenance can keep the machine running, but not to the expected or original level. Apart from reduced quality, the amount of sliver and yarn breaks increases, resulting in more manual labor and therefore overhead.



- Expected performance
 - the newly installed machine operates at full efficiency

- - - Performance with corrective maintenance
 - production loss due to wearing/breaking parts and increased machine downtime
 - quality loss
 - money loss until expensive machine overhaul brings performance back on track

- - - Performance with maintenance kits
 - constant productivity and quality
 - plannable maintenance = minimum downtime

Overview of Ring and Compact-Spinning Maintenance Kits

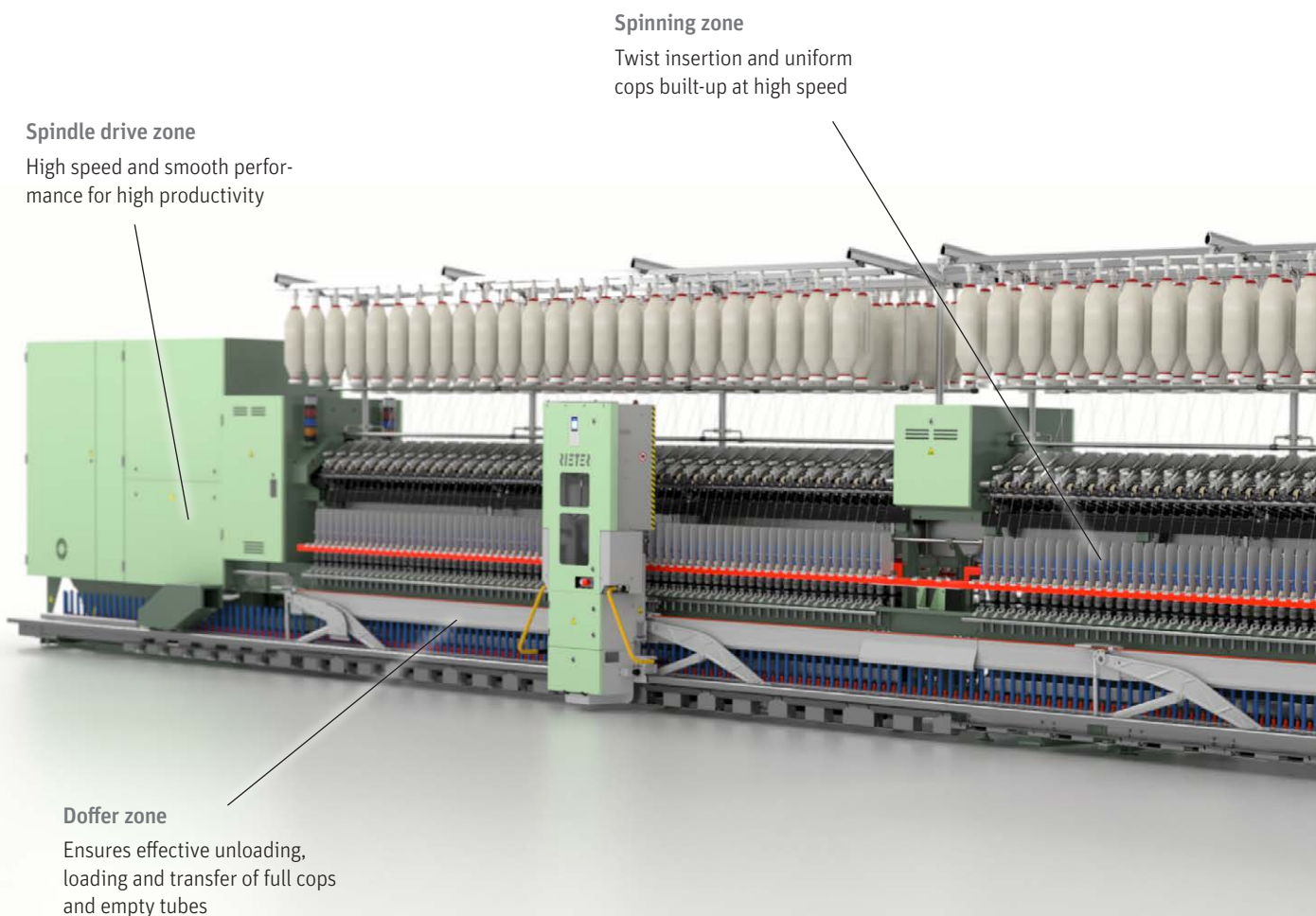
Restoring original machine performance with maintenance kits

Consistent yarn quality, improved performance, extended machine lifetime

Rieter ring and compact-spinning machines serve as the final and most critical stage of yarn production. They perform three essential roles simultaneously: drafting the roving to the desired yarn fineness, twisting them to provide strength, and winding the finished yarn onto tubes.

Its importance lies in its versatility and quality. It can process almost any fiber, producing the global benchmark for yarn strength and other quality parameters. The mill's profitability and capacity are directly measured by the efficiency of its ring spinning machines.

Maintaining the ring and compact-spinning machine is essential to ensure consistent yarn quality as well as high machine productivity. Machines should run at maximum efficiency and ensure availability while requiring minimal maintenance.



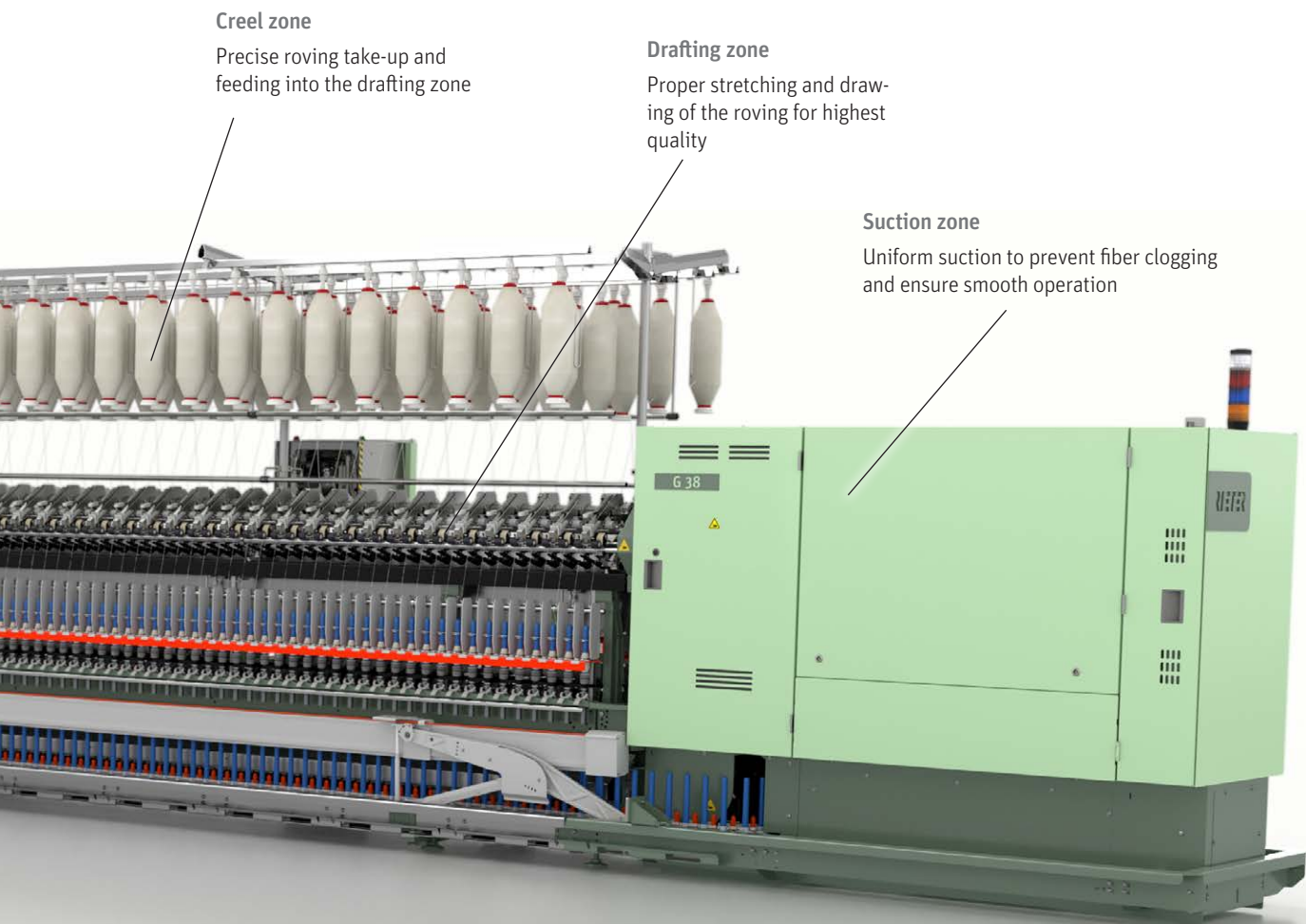
Spindle drive zone
High speed and smooth performance for high productivity

Spinning zone
Twist insertion and uniform cops built-up at high speed

Doffer zone
Ensures effective unloading, loading and transfer of full cops and empty tubes

These are the most important benefits that can be achieved by following proper maintenance:

- extended lifetime of the machine,
- enhanced machine performance in terms of productivity and output quality,
- reduced machine downtime,
- reduced issues and increased downstream machine productivity,
- improved reliability of the components,
- saved energy and
- enhanced safety.



Ring and Compact-Spinning Mini Kit

Supports higher and consistent yarn quality



A mini kit consists mostly of components with fiber contact and a lifetime of approximately one to three years – depending on the raw material, operating parameters and general maintenance schedule.

The aim of the ring and compact-spinning mini kit is to improve the quality of the yarn as well as the productivity of the machine. While the compact-spinning elements in the drafting zone help ensure efficient compacting, the felt, sealing and filter screen play a key role in effective suction during yarn breaks.

The mini kit covers the most important zones of the ring and compact-spinning machines: drafting, doffer, spindle and suction zone where the quality and productivity is defined by the proper functioning of the critical elements.

Ring and compact-spinning mini kit key parts:

- compact-spinning elements,
- gripper membrane,
- spring clip,
- toothed belt,
- spindle lock,
- felts,
- filter screen,
- sealing and
- bearing

Changing the parts together will result in a reduction of reduced yarn faults, lesser yarn breaks and good fiber loss. The reduction of machine downtime is an additional benefit.



Customer benefits



Productivity

- reduced yarn breaks
- increased winding productivity



Quality

- reduced yarn faults
- reduced variations from spinning position to spinning position



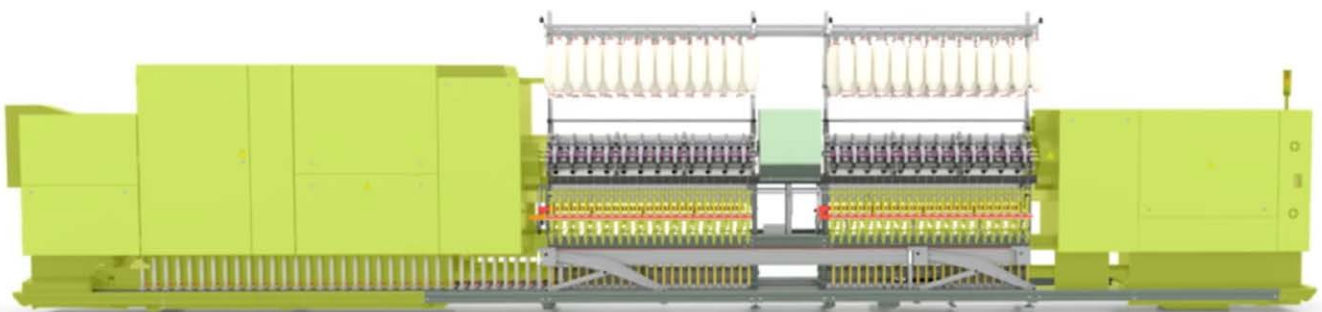
Lifetime

- extended machine and parts lifetime

Compatibility and installation

The ring and compact-spinning mini kit is accompanied by an instruction manual and Rieter's recommendations on the parts that need replacement. This kit is compatible with the models G 312, G 32, G 33, G 35, G 36, G 37, G 38, K 42, K 44, K 441, K 45, K 46, K 47 and K 48.

The ring and compact-spinning mini kit can be ordered via Rieter sales managers, Rieter agents or by using Rieter Webshop. The installation time required is four to five hours and it can be done by the customers' trained technicians.



Ring and Compact-Spinning Performance Kit

Improved machine efficiency and utilization



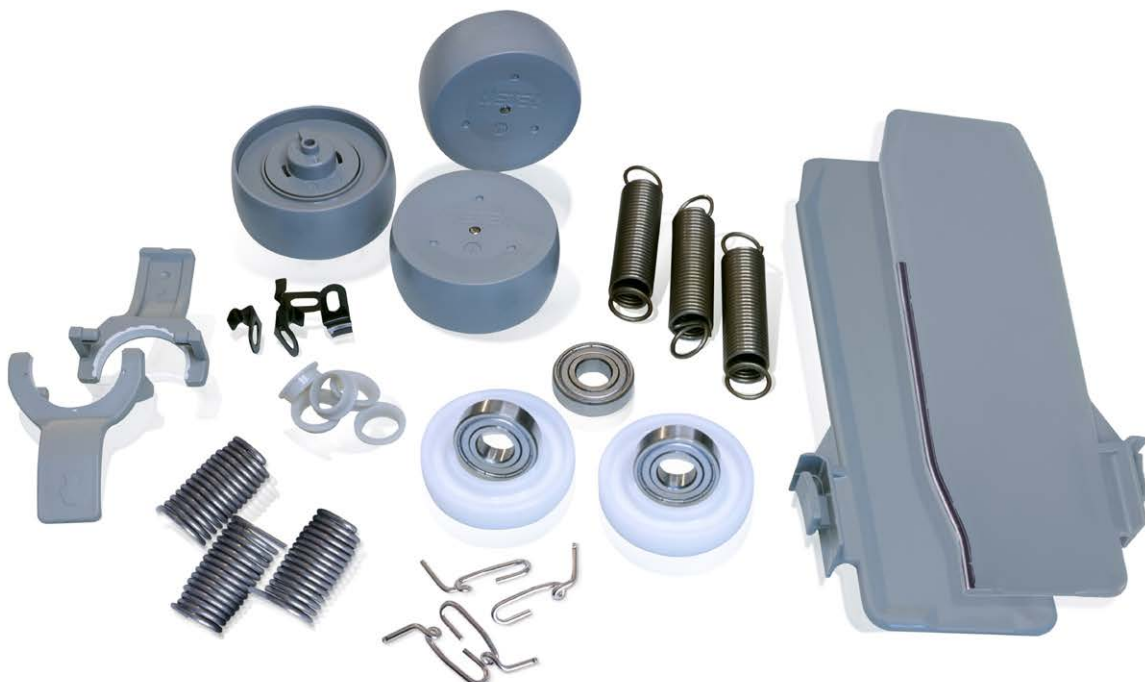
The performance kit is designed to ensure trouble-free performance of the machine over the next four to six years. This kit consists of technology parts that are in direct fiber contact and supporting parts but provide the structural frame to ensure the uninterrupted operation of all parts that are in contact with fiber. Some of the key parts contributing to less yarn breaks are tape tension roller, yarn guide, separator and traveller cleaner, which ensure the yarn production is not disturbed. Changing the parts of the performance kit can be planned alongside the regular machine maintenance schedule. This minimizes machine downtime and maximizes productivity.

The performance kit not only helps to improve quality but also to maintain optimum productivity. The performance kit also helps to ensure low energy consumption and maintain a safe working environment.

Supporting the ring and compact-spinning machine with a performance kit can help to not only improve the productivity, but also minimize the yarn breaks at the winding machine.

Ring and compact-spinning performance kit key parts:

- tension spring,
- tape tension roller,
- torsion spring,
- spindle brake,
- separator,
- traveler cleaner,
- roller,
- ball bearing and
- yarn guide



Customer benefits



Productivity

- reduced yarn breaks
- increased productivity on winding machine



Quality

- reduced yarn imperfections
- reduced yarn hairness CV%



Energy

- reduced energy consumption



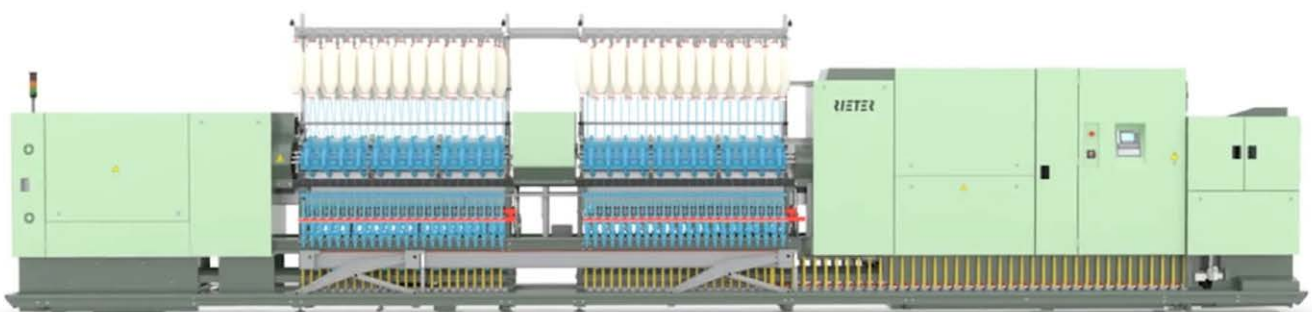
Lifetime

- extended machine and parts lifetime

Compatibility and installation

The ring and compact-spinning performance kit is accompanied by an instruction manual and Rieter's recommendations on the parts that need replacement. This kit is compatible with the models G 312, G 32, G 33, G 35, G 36, G 37, G 38, K 42, K 44, K 441, K 45, K 46, K 47 and K 48.

The ring and compact-spinning performance kit can be ordered via Rieter sales managers, Rieter agents or by using Rieter Webshop. The installation time required is four to five hours and it can be done by the customers' trained technicians during the regular maintenance to minimize machine downtime.



Ring and Compact-Spinning Overhaul Kit

Increased lifetime of the components and the machine



The key task of the ring and compact-spinning machine is to obtain a uniform yarn through perfect drafting action and imparting necessary twist based on the requirement. To achieve this it is essential to maintain a high level of precision and synchronization of the critical drive elements.

The ring and compact-spinning overhaul kit includes key components to ensure high machine efficiency. The components that contribute to production are replaced to ensure that the machine is ready for the next decade of operation.

All the drive belts, metal couplings, cam ring, tension bearing, pneumatic cylinder included in the kit are important as they prevent friction, heat generation and ultimately, the wear and tear of parts. Components like the package holder help to reduce classimat faults in the yarn by proper feeding of the rovings into the drafting zone. This kit is perfect for revamping the machine to its original productivity and quality.

While many parts related to drive and movable moving components have a lifetime of around eight years they are subject to wear and tear and require replacement.

Ring and compact-spinning overhaul kit key parts:

- needle roller bearing,
- tension bearing,
- package holder,
- sliding piece,
- feeding hub,
- drive pulley complete,
- cam ring,
- pneumatic cylinder and
- ring rail drive belt

Since the ring and compact-spinning machine is the last machine in the process that decides the yarn production output replacing those parts on a regular basis contributes significantly to mills profitability.



Customer benefits



Productivity

- reduced yarn break
- increased winding productivity



Quality

- consistent yarn quality
- reduced yarn CVb%
- efficient suction and reduced chokings



Energy

- reduced energy consumption



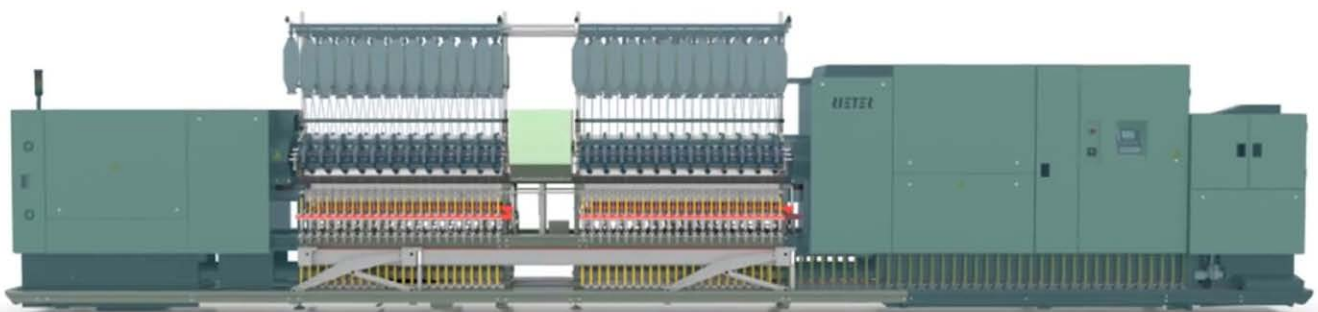
Lifetime

- extended machine and parts lifetime

Compatibility and installation

The ring and compact-spinning overhaul kit is accompanied by an instruction manual and Rieter's recommendations on the parts that need replacement. This kit is compatible with the models G 312, G 32, G 33, G 35, G 36, G 37, G 38, K 42, K 44, K 441, K 45, K 46, K 47 and K 48.

The ring spinning overhaul kit can be ordered via Rieter sales managers, Rieter agents or by using Rieter Webshop. The installation time required is eight to ten hours and it can be done by two trained customers' technicians during the regular maintenance to minimize machine downtime.



Ring and Compact-Spinning Doffer Kit

Improving key areas with high-quality components

The doffer maintenance kit offers various benefits. First, the doffing cycle time remains consistent. Due to the fast and reliable doffing, the machine runs sustainably and efficiently. Second, the doffer maintenance kit enhances the machine lifetime and increases productivity. Thanks to the pre-assembled parts the installation time is reduced. Furthermore, it eliminates air leakages resulting in reduced energy consumption. The doffer maintenance kit consists of the following main components:



1. Wheel complete 2. Traction strip 3. Guiding profile 4. Guiding profile head 5. Covering profile SERVODisc* 6. Profile support 7. Slide ring 8. Seal 9. Tappet 10. Carrier 11. Fasteners 12. Pressure spring 13. Clamping 14. Pressure switch fix 15. Gripper complete 16. Transfer module 17. Cup spring 18. Spacer block

* Covering profile SERVODisc will be offered only for specific machine model

Maintenance helps increasing machine lifetime

Rieter field data has shown that a complete doffer maintenance every eight years can extend machine lifetime by several years. To extend machine lifetime and save money in the end, Rieter recommends to conduct regularly and repeatedly all the necessary maintenance activities such as lubricating, cleaning, re-setting and checking of parts. All tasks and time intervals can be found in the instruction manual. The doffer maintenance kit was designed to deliver highest performance levels for ring and compact-spinning machines. It impacts the gripper zone, the SERVODisc zone and the ROBOLoad or link zone.

In the gripper zone, economical doffing ensures high efficiency. New grippers are enabling error-free operational speed during the inflating and deflating cycle. Compressed air is

supplied via new seals for a reliable doffing cycle time. In the servo disc zone, the cop transport system SERVODisc works using peg trays that are clipped into a conveyor belt. This allows the tubes and cops to be precisely positioned. The SERVODisc belt, the SERVODisc guiding profiles, bottom carriers and tappets are replaced to enable the SERVODisc to work more efficiently. In the ROBOLoad or link zone, the SERVODisc reliably transfers the full cops via the tube loader ROBOLoad to a trolley or to the winding machine. The SERVODisc guiding profiles, the SERVODisc drive belt pulleys and other auxiliary parts are replaced to support the winding process.

Rieter's service and manufacturing spans across the world and responds quickly to customer needs and request.

Proactive Maintenance with Ring and Compact-Spinning Maintenance Kits

Rieter offers ring and compact-spinning maintenance kits to replace worn-out parts, ensuring the machine continues to run smoothly. These kits can be installed during regular maintenance schedules. The maintenance kits help minimize machine downtime and restore the machine’s original performance. In addition, customers can avoid costly repairs and extend the lifetime of their machines. This enables the machines to operate at the desired speed while consistently maintaining yarn quality.

Regular maintenance is the key to success

Well-established machine-maintenance program is indispensable for the success and sustainability of modern businesses. By investing in regular and systematic machine maintenance, customers can enjoy the benefits of increased operational efficiency, reduced conversion costs and improved quality. It also contributes to a safer and more efficient working environment.

Compatibility overview

Ring spinning machines		Compact-spinning machines	
G 38	■ ■ ■	K 48	■ ■ ■
G 37	■ ■ ■	K 47	■ ■ ■
G 36	■ ■ ■	K 46	■ ■ ■
G 35	■ ■ ■	K 45	■ ■ ■
G 33	■ ■ ■	K 441	■ ■ ■
G 32	■ ■ ■	K 44	■ ■ ■
G 312	■ ■ ■	K 42	■ ■ ■

- Mini kit
- Performance kit
- Overhaul kit and doffer kit

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 664 141

**Rieter (China) Textile
Instruments Co., Ltd.**

390 West Hehai Road
Changzhou 213022, Jiangsu
P.R. China
T +86 519 8511 0675

www.rieter.com

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