Comber Maintenance Packages

Ensuring high productivity and consistent sliver quality

Restoring original machine performance


RIETER
Closing the Loop
for Good

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 comber 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.

Comber Maintenance for Long-Term Performance

Maximizing value through optimized maintenance investment

Irregular maintenance of combers 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 comber 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.

Comber maintenance packages

Product mix

Precision onsite repair and calibration	Professional installation	Maintenance kits
• Electrical • Mechanical	• Rieter's certified engineers	• Consumables • Wear and tear parts • Technology parts

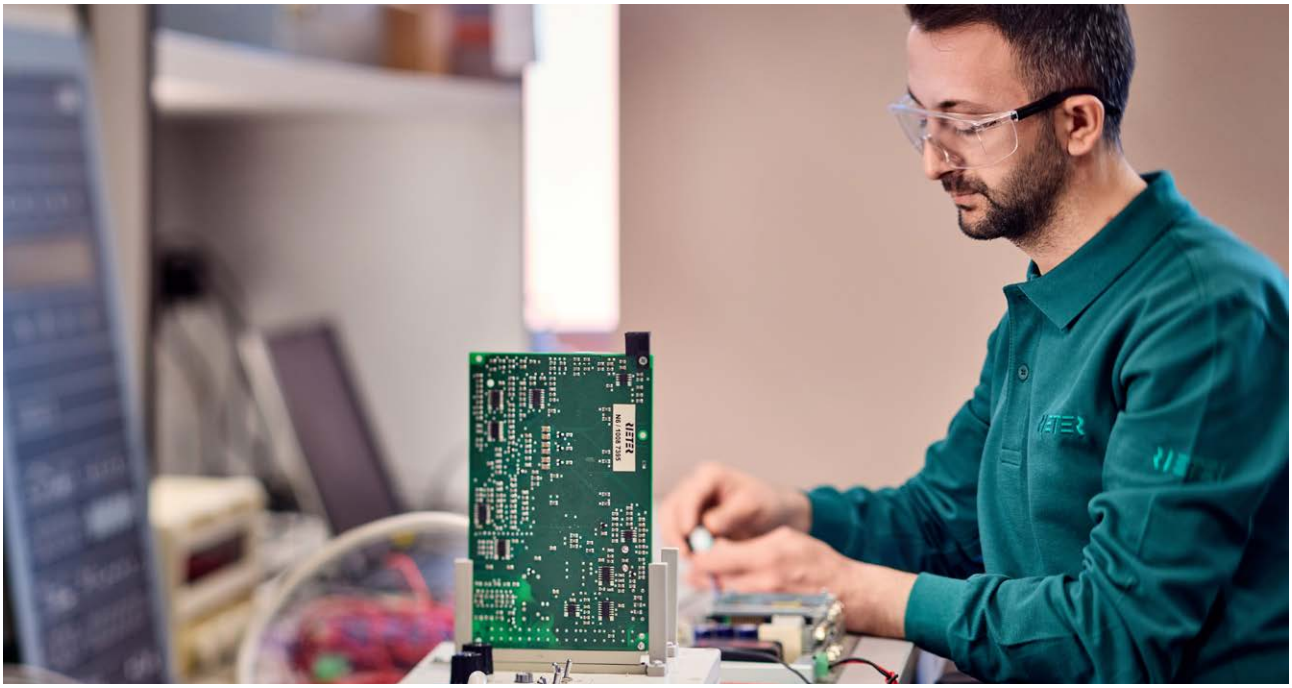
Customer benefits

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

Quality
- consistent sliver and 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 Comber

The performance of combers depends on the precise functioning of electronic systems and mechanical components. Key elements such as operating units, main motor, coiler plate, coiler step motor, sensors and drive systems play a crucial role in ensuring consistent sliver 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 comber 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 components. 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 technological wear and tear 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 repair of operating panel

Mechanical repairs of the comber coiler unit

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

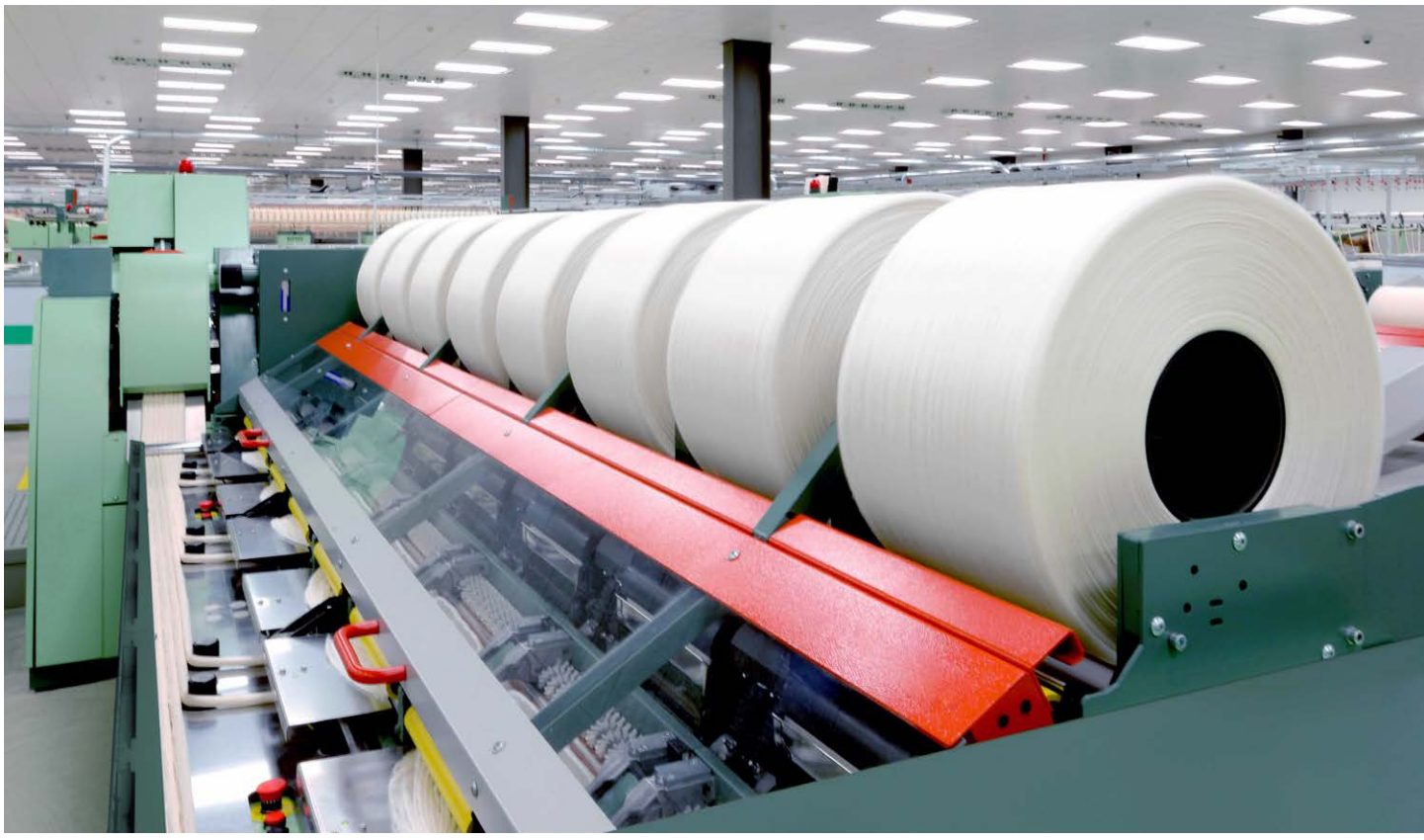
Rieter service technicians with many years of field experience ensure the correct installation and trouble-free commissioning of the machines.

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.



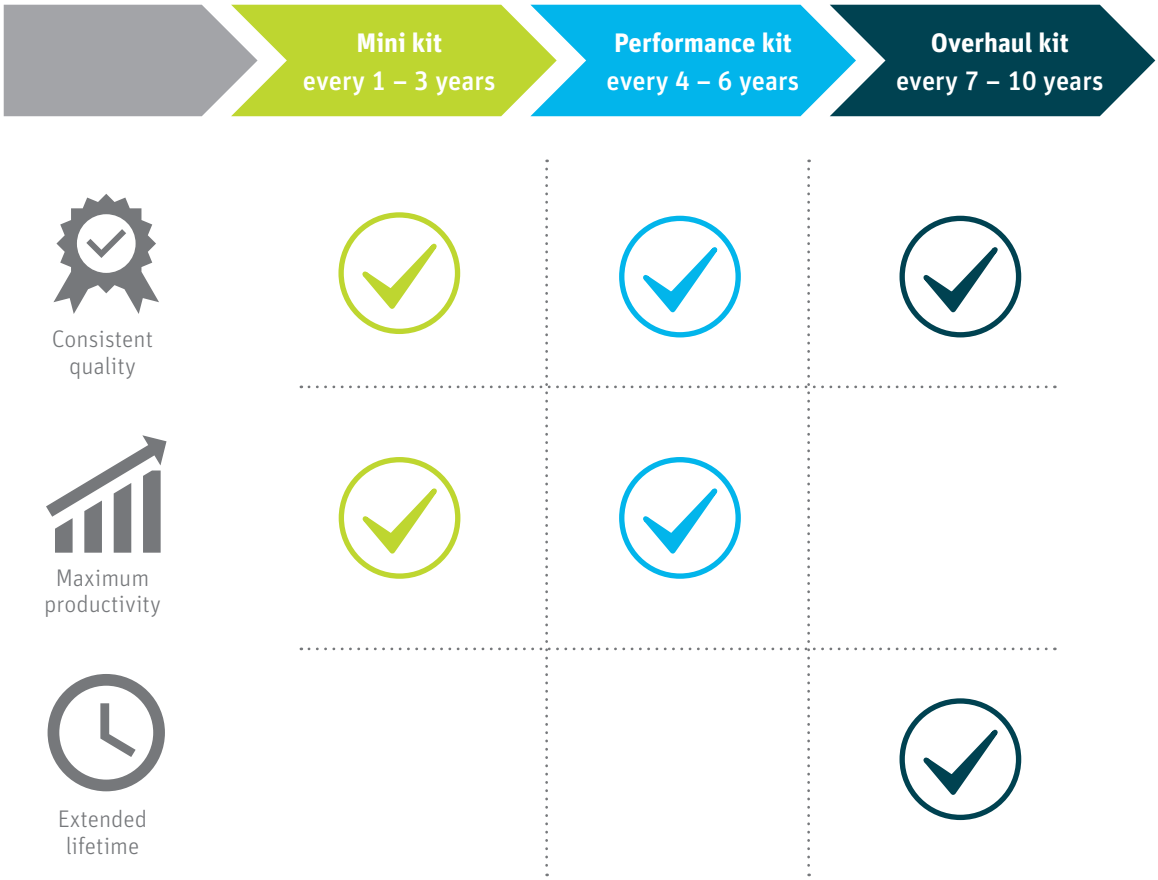
Maintenance Kits

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.

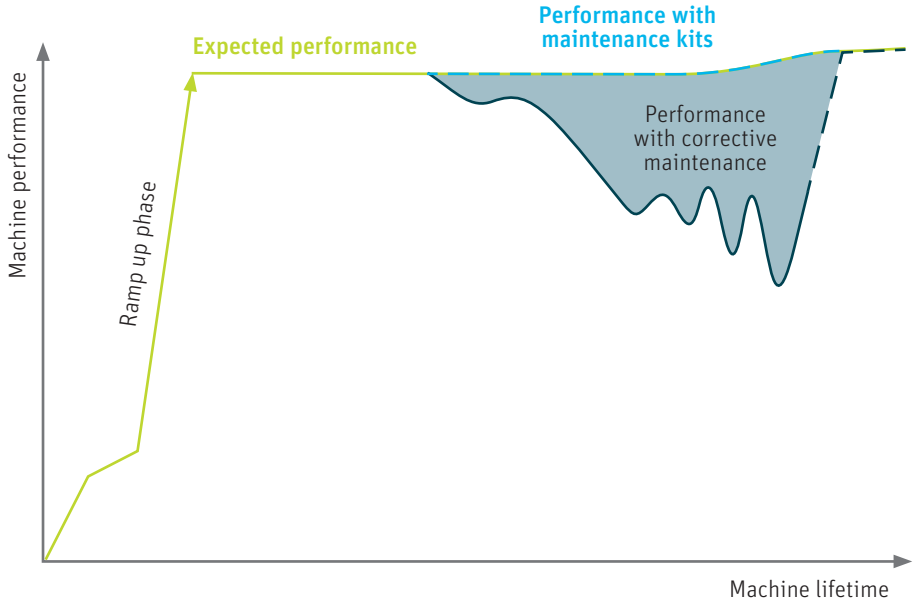
The maintenance kits comprise:
- mini kit
- performance kit
- overhaul kit

Maintenance concept and benefits



Maintenance is key to success

After several years of operation, the parts of a 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

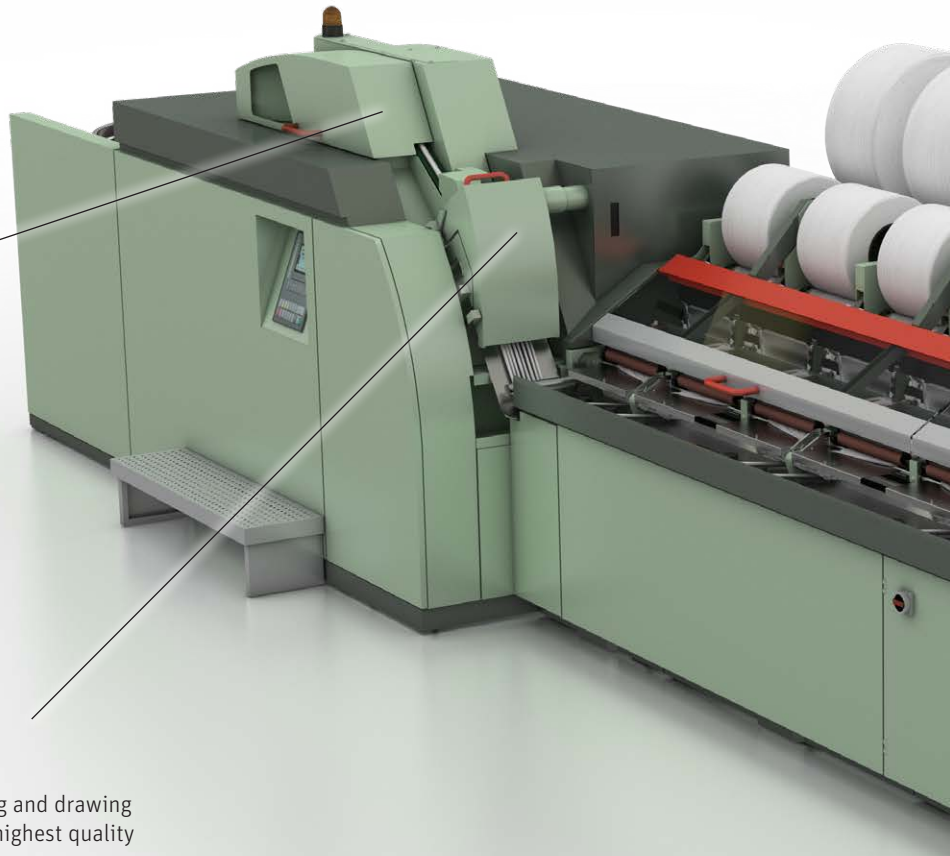
Overview of Comber Maintenance Kits

Restoring original machine performance with maintenance kits

Consistent sliver quality and improved performance of downstream machines

The comber plays a vital role in producing a clean sliver with fewer short fibers and impurities, and with fibers that are mostly straightened and parallel. It helps in removing the short fibers below a pre-selected length so that the spinner is able to produce finer or better quality of yarn. This process results in a smoother, stronger and more lustrous yarn.

Maintaining the comber is essential to ensure consistently high sliver and yarn quality, as well as high machine productivity. Machines should run at maximum efficiency and availability while requiring minimal maintenance.



Delivery zone

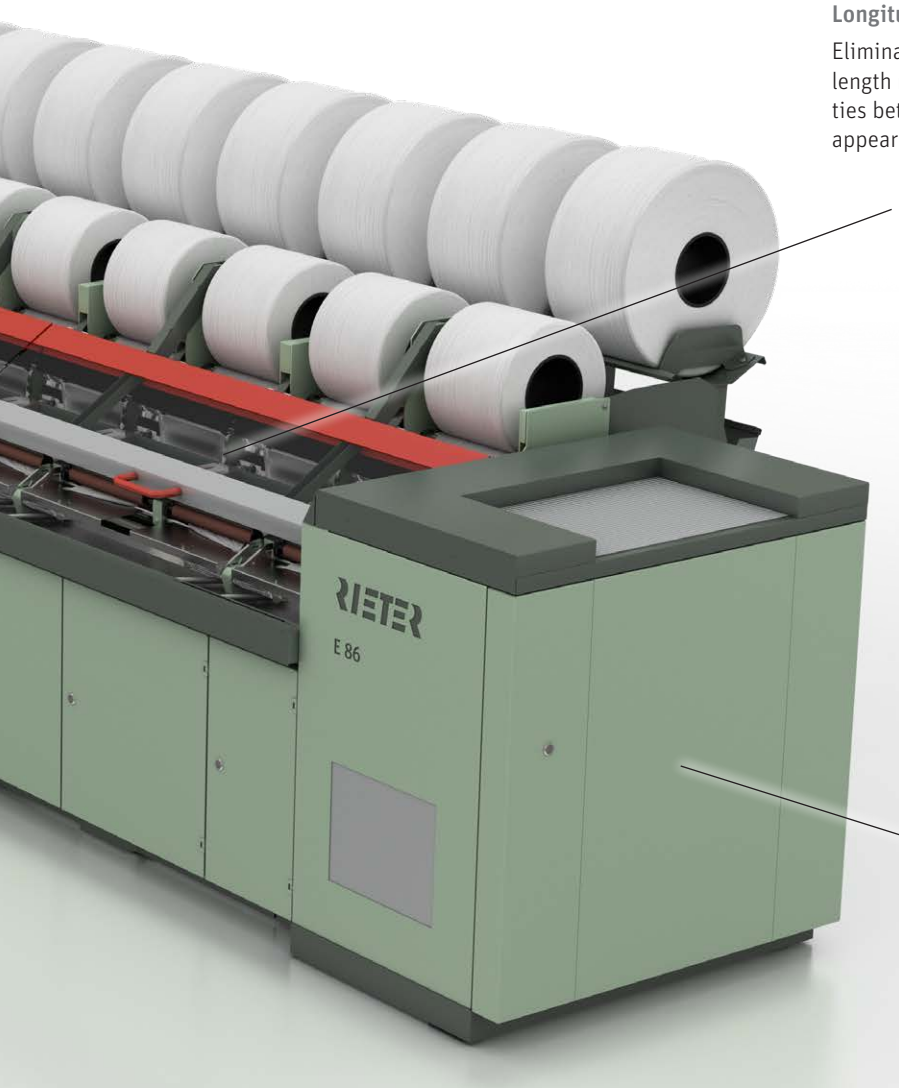
Perfect calendaring and coiling of the sliver to the can

Drafting zone

Proper stretching and drawing of the sliver for highest quality

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.



Longitudinal section

Elimination of short fibers, improvement of fiber length regularity, removal of neps and impurities between fibers to improve yarn quality and appearance

Driving section

Effective transmission to the driving elements

Comber Mini Kit

Achieving optimal productivity with high quality sliver for spinning

Daily maintenance	**Mini kit every 1 – 3 years**	Performance kit every 4 – 6 years	Overhaul kit every 7 – 10 years

The comber mini kit is a comprehensive solution designed to enhance the sliver quality and productivity. It includes key technological and consumable components from the longitudinal section and drafting zone with a lifespan of one to three years, depending on operating conditions and maintenance schedules. The kit features the circular comb brush and the detaching roller brush for effective cleaning and consistent fiber processing. The detaching roller cots helps for precise web guidance to ensure uniform output and the wipers in the drafting will maintain a dust-free environment by proper removal of microdust. The roller membranes stabilize top roller loading to ensure even pressure and alignment.

Additional components such as flat and toothed belts, bellow cylinders, longitudinal section auxiliary parts and gas pressure springs contribute to efficient power transfer, precise sliver cuts, stable combing action and improved machine accessibility. Replacing these components together minimizes spectrogram faults, classimat faults and good fiber loss, while reducing machine downtime and enhancing overall machine efficiency to deliver high-quality sliver.

Comber mini kit key parts:

- circular comb brush and detaching roller brush,
- detaching roller cots,
- wipers (longitudinal and drafting section),
- roller membranes,
- all flat belts, toothed belts and sliver-carrying belts,
- bellow cylinder,
- longitudinal section auxiliary parts and
- gas pressure springs

Customer benefits

Productivity
- reduced lapping due to better fiber guidance
- minimized web breaks

Quality
- eliminated good fiber loss
- achieved clean fleece edges and clean sliver
- improved sliver uniformity

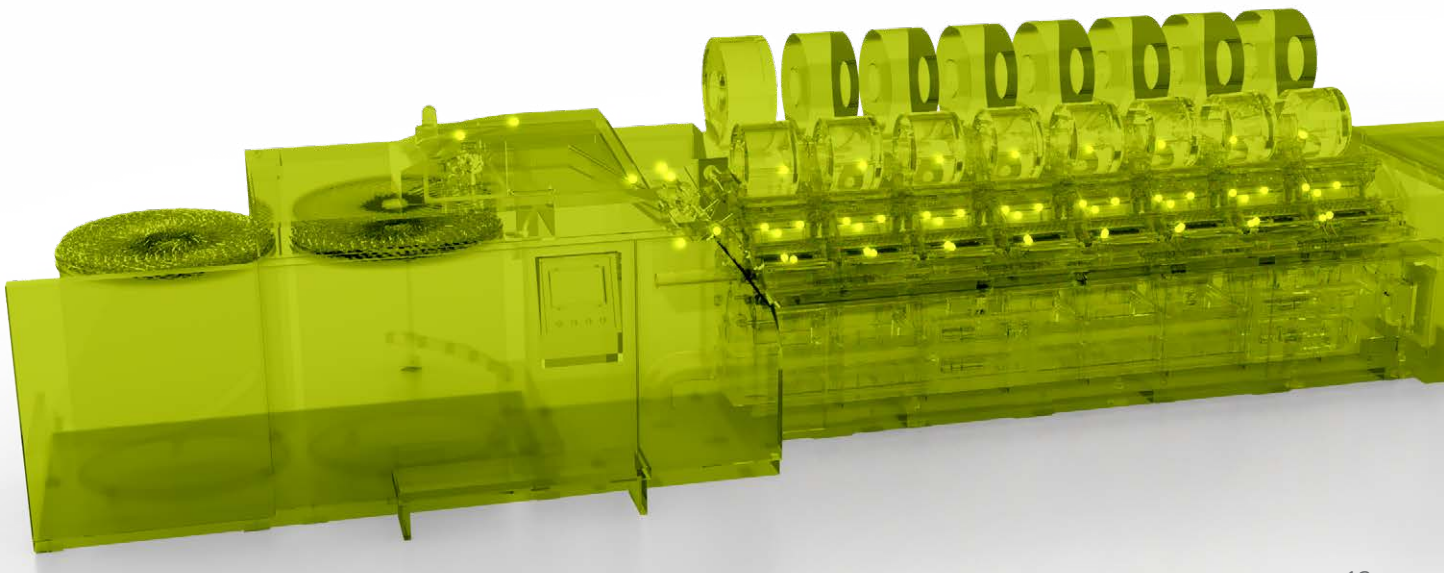
Energy
- lower energy consumption due to less slippages of driven elements

Lifetime
- extended machine and parts lifetime

Compatibility and installation

The comber mini kit is accompanied by an instruction manual and Rieter's recommendations on the parts that need replacement. This kit is compatible with the E 65, E 66, E 75, E 76, E 80 and E 86.

The comber mini kit can be ordered via Rieter sales managers, Rieter agents or by using Rieter Webshop. The installation time required is eight hours and it can be done by the customers' trained technicians.



Comber Performance Kit

Improved machine efficiency and utilization

Daily maintenance | Mini kit every 1 – 3 years | **Performance kit every 4 – 6 years** | Overhaul kit every 7 – 10 years

The performance kit is designed to deliver trouble-free operation, enhancing machine efficiency and utilization. This kit includes components for the longitudinal section, the drafting zone and the coiler zone with a lifespan of four to six years, ensuring reliable performance and reduced downtime. Key components such as the needle roller bushing and press saddle enable smooth rotation and secure holding of detaching rollers, which improves overall quality by reducing imperfections and enhancing yarn realization.

The top comb bed and comb carrier with wedge ensure proper fixation of the top comb, significantly enhancing neps removal efficiency and overall yarn quality. Components like the pressure cylinder retainer, driving roller and bearing bushing maintain precise loading of drafting rollers and ensure effective handling of combed silver, at the same time preventing silver overflow. The press pin and springs play a crucial role in the delivery table's operation, contributing to increased productivity.

Comber performance kit key parts:

- needle roller bushing complete and press saddle,
- top comb bed, comb carrier with wedge,
- pressure saddles,
- pressure cylinder retainer, driving roller, bearing bushing complete,
- press pin short and long with springs,
- chain complete and
- main motor brake

The chain complete facilitates seamless power transmission to the coiler, adapting to load variations based on can sizes. The brake mechanism ensures precise machine stoppage at the 24 index, enhancing the safety of critical technological components. Together, these components not only improve the quality and consistency of sliver output but also support operational efficiency, sustainability, and safety. This integrated solution ensures optimal machine performance and long-term production viability

Customer benefits

Productivity
- reduced web cuts and table stops
- minimized fiber lapping
- less web slips and sliver overflow in the drafting area

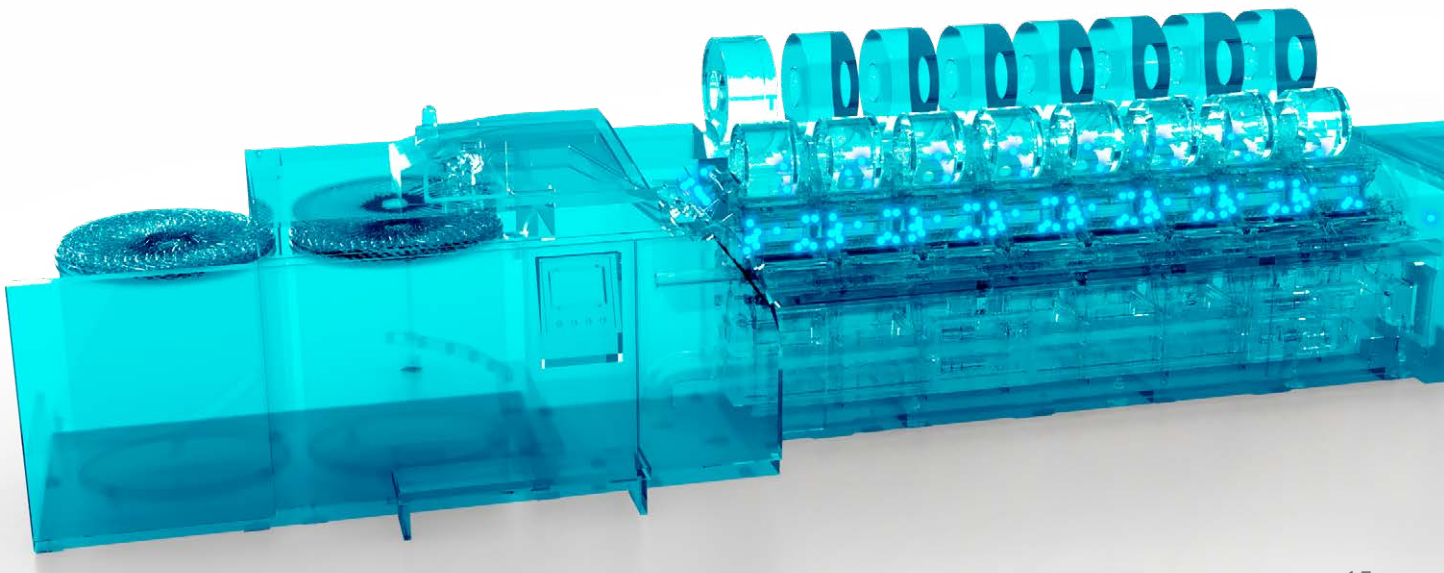
Quality
- reduced classimat faults and imperfections
- improved nep removal efficiency and yarn realization
- increased sliver uniformity

Lifetime
- extended machine and parts lifetime

Compatibility and installation

The comber performance kit is accompanied by an instruction manual and Rieter's recommendations on the parts that need replacement. This kit is compatible with the E 65, E 66, E 75, E 76, E 80 and E 86.

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



Comber Overhaul Kit

Prepare the machine for the next decade

Daily maintenance | Mini kit every 1 – 3 years | Performance kit every 4 – 6 years | **Overhaul kit every 7 – 10 years**

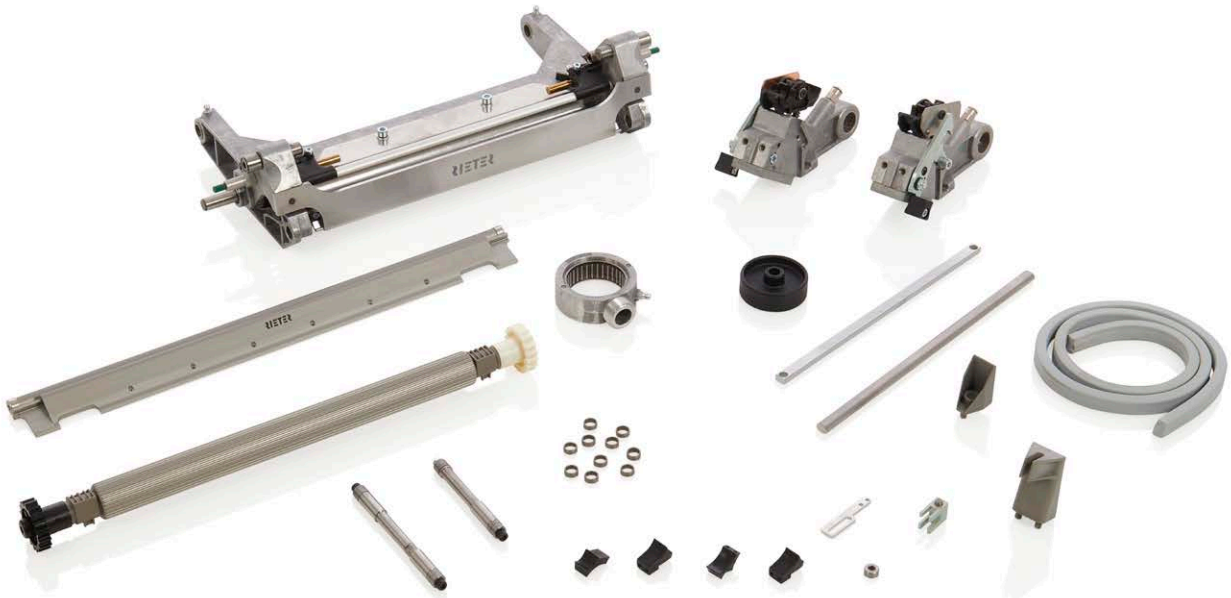
The comber overhaul kit is designed to ensure superior machine performance, contributing to both quality and production efficiency. This comprehensive kit equips your machine for the next decade of reliable operation, with critical components from the drive section, the longitudinal section and the drafting zone that enhance stability, accuracy and productivity. Key elements like the guiding segment complete and stationary comb support enable smooth detaching and comb functions, ensuring quality output with minimal sliver weight and noil variations. The stud front support improves nipper accuracy, providing a stable setup and extending component life. Additionally, the feeding cylinder complete offers excellent grip for web drawing, improving productivity and ensuring consistent output. The inclusion of a pressure bar further enhances sliver uniformity, minimizing issues such as sliver unevenness and hairiness.

Supporting components like the nipper complete and spring assembly ensure precise fiber handling, reducing web cuts and maintaining consistent fiber grip for optimal quality and productivity. The pressure plunger enhances detaching roller performance, while the ball catch prevents web misfeeds, ensuring smooth and reliable machine operation. These meticulously engineered parts work in harmony to improve fiber quality, boost machine reliability, and minimize downtime, sustaining high performance in core operations.

Comber overhaul kit key parts:

- guiding segment complete R and L,
- stationary comb support complete,
- feeding cylinder complete,
- nipper complete,
- support bearing complete,
- spring assembly,
- pressure bar 12 × 8 × 292,
- ball catch and
- stud front support

The comber overhaul kit helps to extend the machine's lifespan while preserving its original performance standards. The kit also offers the flexibility to select the required nipper quantity, enabling to customize it to meet your specific operational needs.



Customer benefits

Productivity
- reduced web cuts and table stops
- eliminated detaching roller lapping
- effective coiling of slivers

Quality
- improved removal of short fibers
- reduced sliver weight variations and unevenness
- enhanced nep removal efficiency

Energy
- ensured consistently low energy consumption

Lifetime
- extended machine and parts lifetime

Compatibility and installation

The comber overhaul kit is accompanied by an instruction manual and Rieter's recommendations on the parts that need replacement. This kit is compatible with the E 65, E 66, E 75, E 76, E 80 and E 86.

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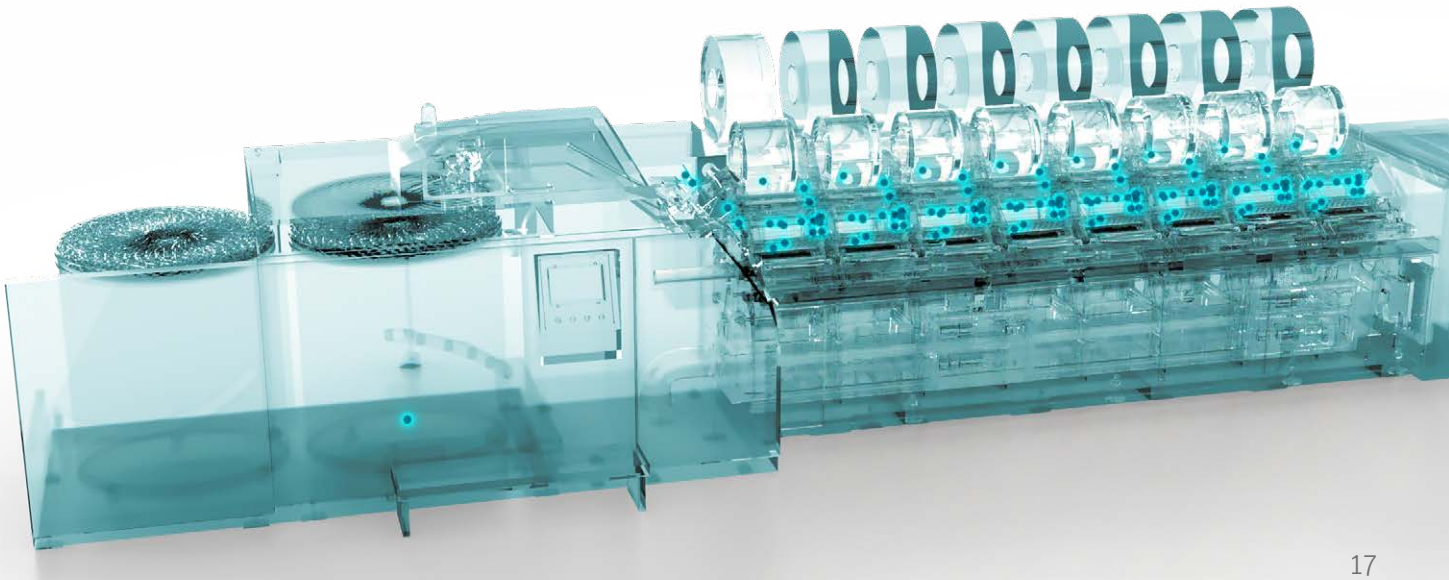


Proactive Maintenance with Comber Maintenance Kits

Rieter offers comber 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 sliver quality.

The chart below shows an overview of the key components of each maintenance kit.

Key parts per kit and their impact

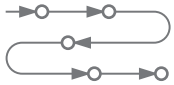
	Mini kit every 1 – 3 years	Performance kit every 4 – 6 years	Overhaul kit every 7 – 10 years
Productivity	• cleaning brushes • detaching roller coats • wipers (longitudinal drafting section) • roller membranes	• needle roller bushing complete • pressure cylinder retainer • top comb bed • comb carrier with wedge	• stationary comb support complete • feeding cylinder complete • guiding segments • nipper complete
Quality	• all flat belts and toothed belts • bellow cylinder	• roller • press pin short & long with springs • bearing bushing complete • chain complete	• support bearing complete • spring assembly • pressure bar
Lifetime		• main motor brake • bearing bushing complete	• stud front support 119/M6 • stud front support 89/M6

Regular maintenance is the key to success

Well-established machine maintenance 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.

Impact parameters of each kit onto parts and process indicators

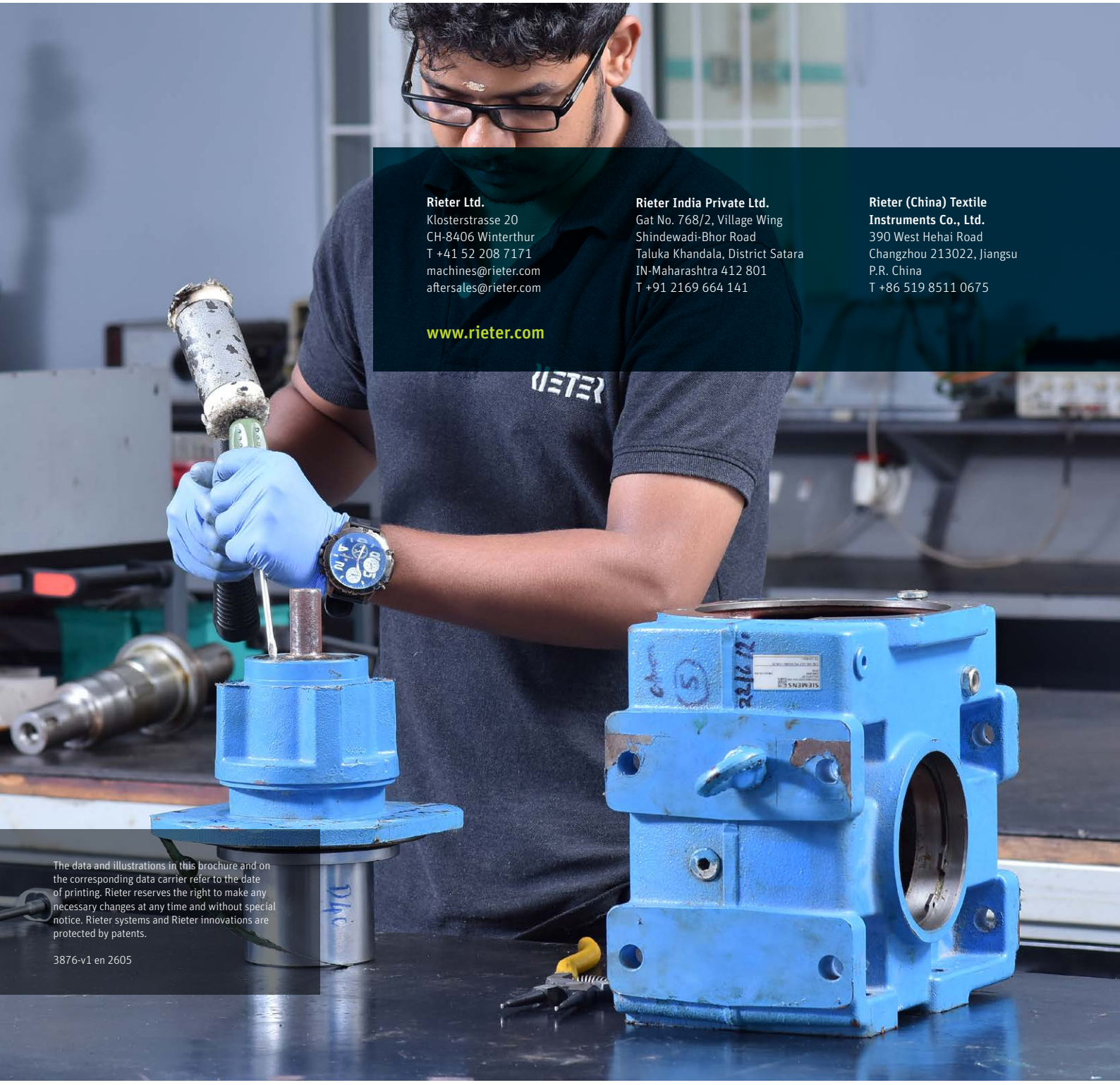
The table outlines the key process and machine-related indicators that support the selection of appropriate maintenance kits over time. By monitoring these parameters, mills can identify performance deviations, wear patterns and efficiency losses at different stages of machine life. Each kit is aligned with specific operating conditions and maintenance needs.

	Mini kit every 1 – 3 years	Performance kit every 4 – 6 years	Overhaul kit every 7 – 10 years
 Process related	• poor web appearance • more table stops • lapping on drafting rollers • increases classimat faults • more short thick faults • poor yarn realization	• poor web appearance • more table stops • increased classimat faults • short thick faults • poor yarn realization • poor feeding • increased lapping	• poor web appearance • more table stops • increased classimat faults • short thick faults • poor feeding and yarn realization • increased lapping
 Machine related	• worn-out wipers and belts • poor feeding • noise of driving belt	• feed roller play inside the nipper • machine stoppages	• feed roller play inside the nipper • top comb play • detaching roller play and improper loading

Compatibility overview

E 86	■■■
E 80	■■■
E 76	■■■
E 75	■■■
E 66	■■■
E 65	■■■

- Mini kit
- Performance kit
- Overhaul kit



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