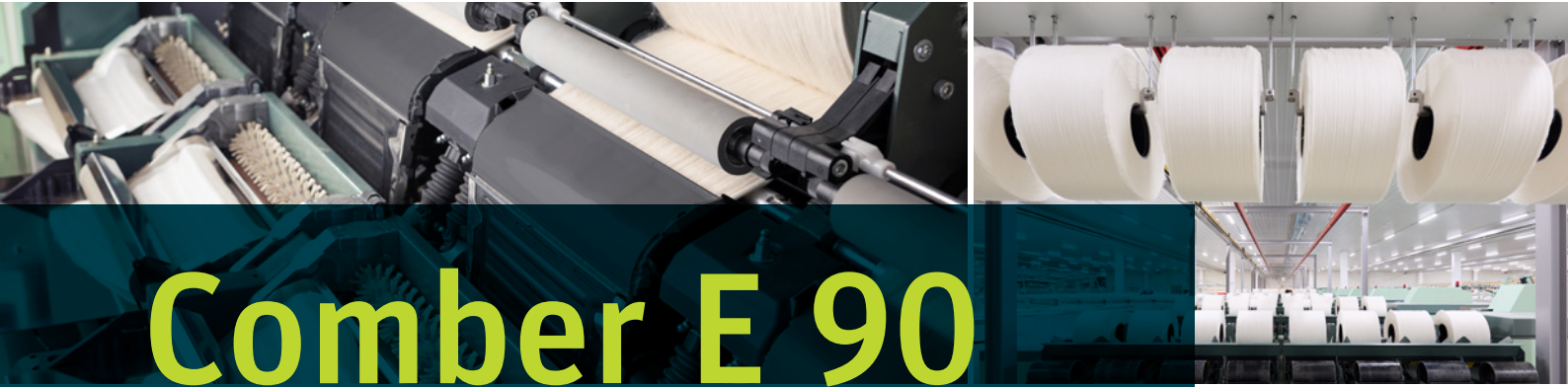


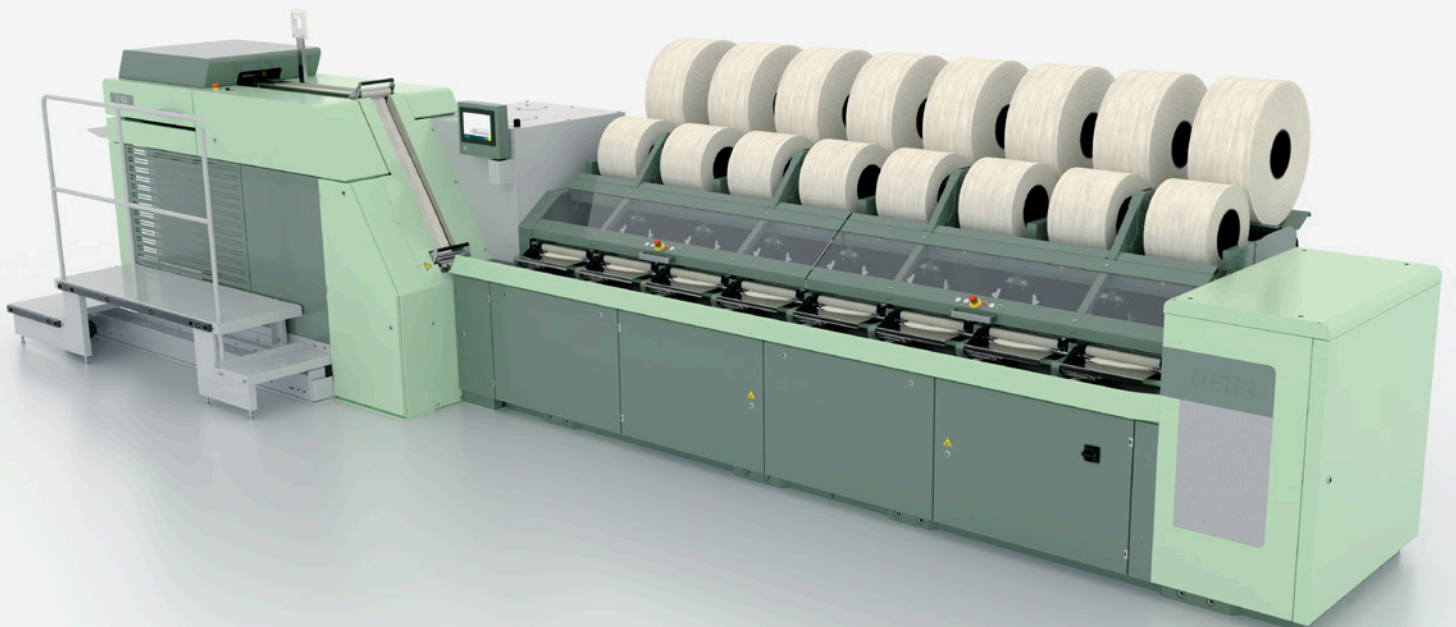
Spinning preparation
Comber E 90

RIETER



Comber E 90

High-performance comber E 90 with ROBOlap option



Highest sliver quality,
economically produced



E 90

The E 90 is equipped with new technology components that significantly increase the range of applications for the top comb and circular comb.

A close-up photograph of a vintage typewriter. The focus is on the paper carriage and the roll of paper. The typewriter has a dark green or teal body. The paper is white and appears to be a roll of continuous paper. The background is blurred, showing other parts of the typewriter.

Maximum
Flexibility in
All Applications

Highest Sliver and Yarn Quality



E90



The sophisticated, proven draw frame technology ensures consistently optimized sliver evenness, while simplifying the feed-in of the material significantly.



The comber E 90 produces up to 100 kilograms of combed sliver per hour. The high combing speed and the stable running behavior of the machine enable this extremely high standard of production.

A photograph of a paper mill production line. The scene is filled with large rolls of paper being processed by machinery. The machinery is primarily green and white. In the foreground, a large roll of paper is being moved by a worker. The background shows more rolls and machinery stretching into the distance under bright industrial lighting.

Outstanding Yield

E 90

E

90

OUTSTANDING

ADVANTAGES

Perfect Sliver Quality Thanks to Integrated Rieter Draw Frame Technology

Monitored reliably by the Rieter Quality
Monitor (RQM)

Highly Versatile

Consistently delivering the
best quality in its class:
from yarns with low noil
extraction to fine yarns in
a class of their own

Unique Drive and Control Concept

Adjustments to different
requirements are easily feasible



Lowest Production Costs per Kilogram of Combed Sliver

Highest level of productivity and raw material utilization, as well as economical energy consumption

Consistent Sliver Weight

Controlled lap drive for consistent combing conditions

Highest Level of Productivity on the Market

Up to 100 kilograms of combed sliver per hour at a rate of 600 nips per minute

Reliable Automation

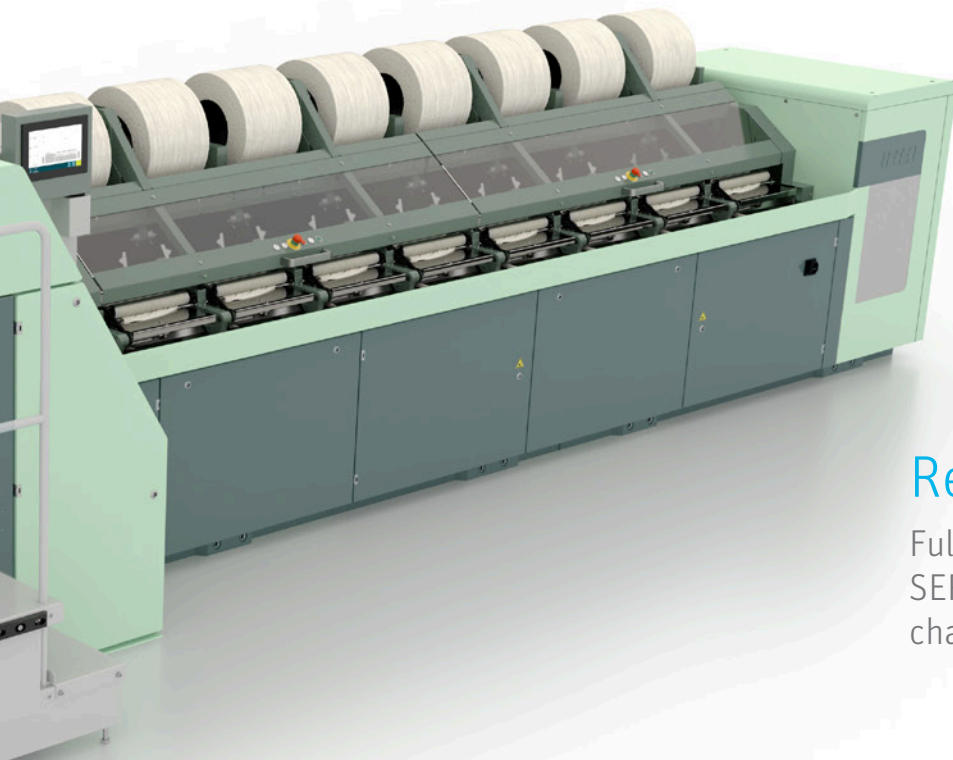
Fully automated lap transport with SERVOLap, plus fully automated lap change thanks to ROBOlap

Top Sliver Quality with Gentle Fiber Treatment

Technology components developed by Rieter ensure optimally coordinated combing movements

Efficient Management of Costs and Quality

ESSENTIAL – Rieter Digital Spinning Suite provides information on machine performance, quality and energy efficiency



Maximum Flexibility in All Applications

Adaption to all requirements made easy

State of the art Human Machine Interface

The latest Human Machine Interface is allowing the operator to adapt the machine settings rapidly to changing market requirements. Thus, the operation of the machine is intuitive.

The parameters can be changed quickly and easily on the operating unit and the created settings can be saved as a recipe, which can then be replicated to other machines

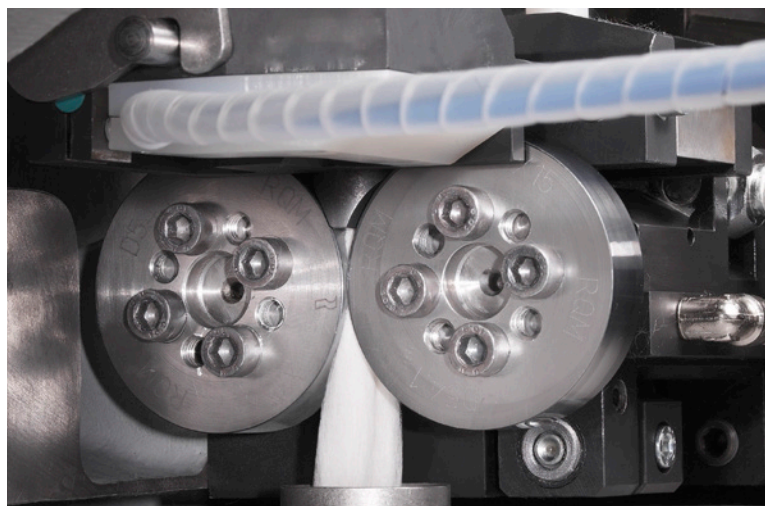
via USB. Furthermore, the connection of the interface to ESSENTIAL, Rieter's all-in-one mill management system, is highly recommended and ready to explore for our customers. It connects the entire spinning mill machinery, including auxiliary machines from other suppliers – allowing owners, managers, and operators to manage, monitor, and maintain spinning mills with one click.



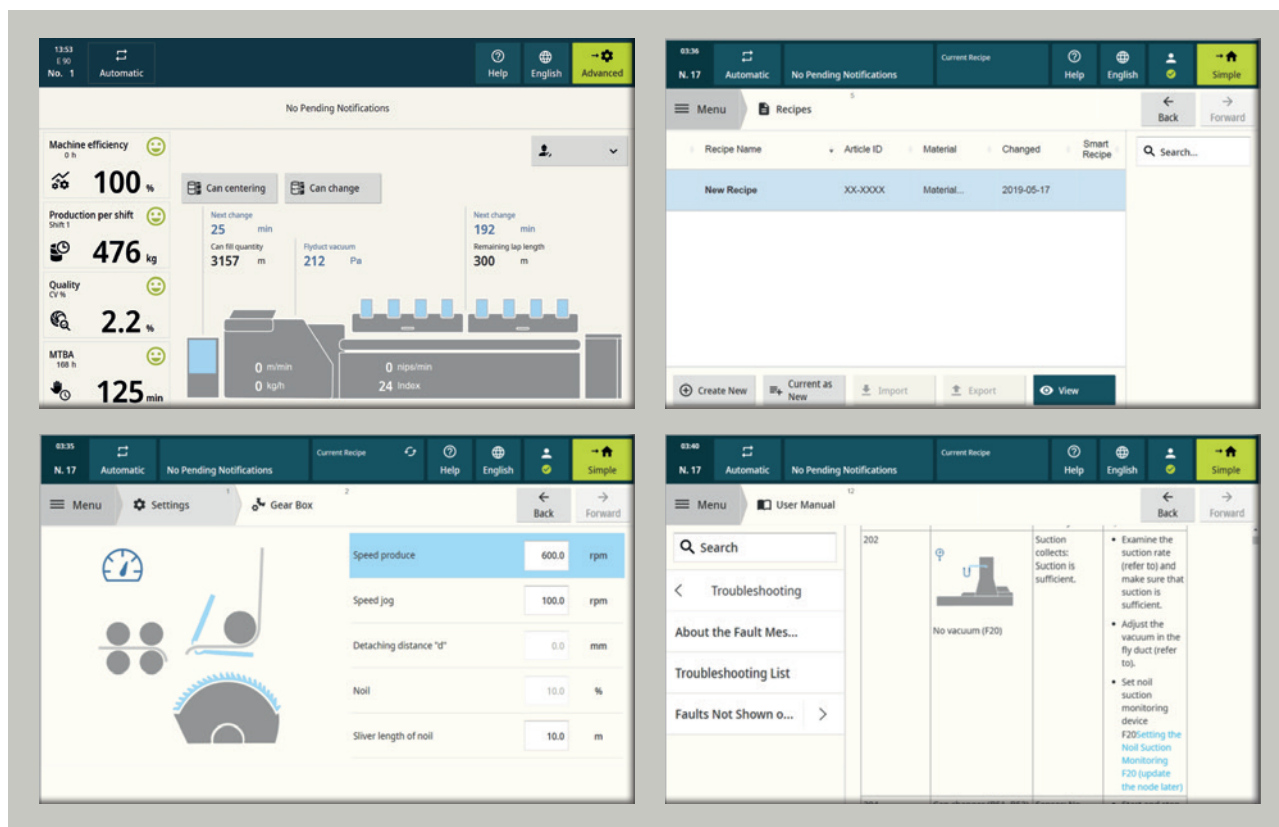
The interface makes it convenient to adjust the machine settings

Rieter Quality Monitor RQM

The optional Rieter Quality Monitor RQM module is proven to ensure professional data for consistent sliver quality. The RQM delivers exact real-time information about the sliver quality and, as a result, deviations in sliver weight and irregularities can be detected at a very early stage. Together with the new Human Machine Interface and various setting options directly on the display, it has never been easier to adapt settings on the comber. The E 90 concept encourages to make use of the easy change of machine settings to find the optimal process adapted to the properties of the raw material. The possibility to quickly react to a detected variation in sliver quality supports to consistently produce the sliver quality demanded by your customers.



The RQM ensures consistent sliver quality



Examples of the state of the art Human Machine Interface

Highest Sliver and Yarn Quality

The E 90 fulfills all needs

Consistent sliver weight and evenness

The proven Rieter draw frame technology is now fully integrated in the E 90. The sophisticated, proven draw frame technology ensures consistently optimized sliver evenness, while simplifying the feed-in of the material significantly. The E 90 is equipped with a controlled lap drive as standard. This ensures consistent combing conditions and therefore a constant sliver weight.



Integrated Rieter draw frame technology

Top yarn quality with gentle fiber treatment

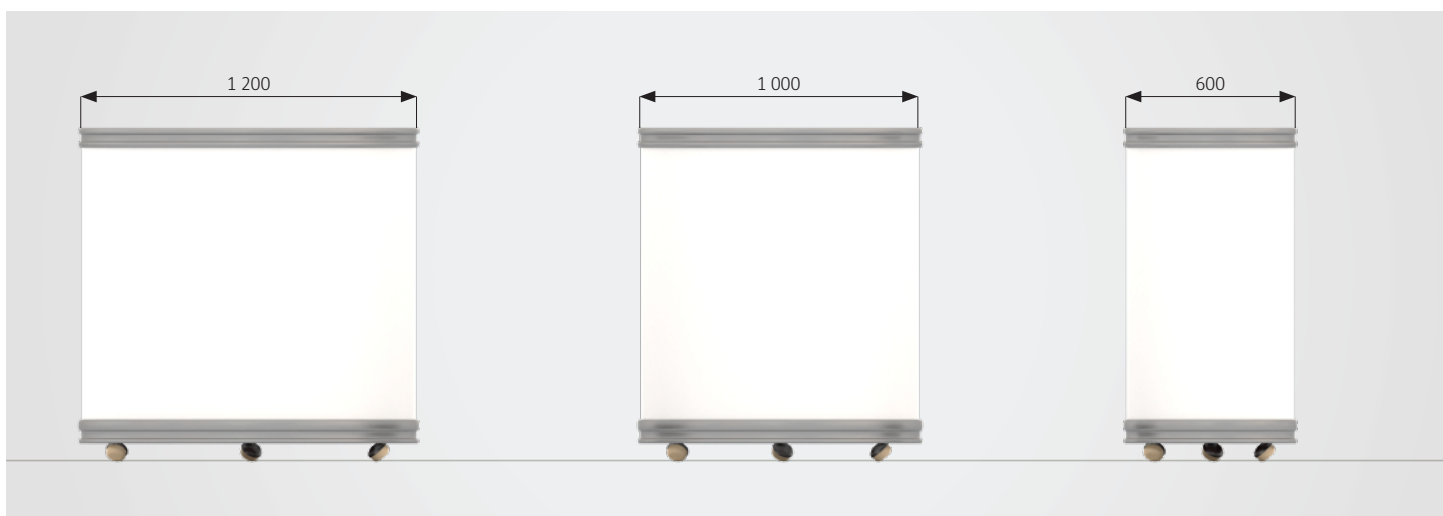
The gentle and controlled fiber treatment is achieved by optimally coordinated combing movements and the technology elements developed by Rieter. The E 90 works with significantly less vibration, even at top speed. The result is a consistently high yarn quality.



Optimized combing movement and geometry leads to highest sliver quality

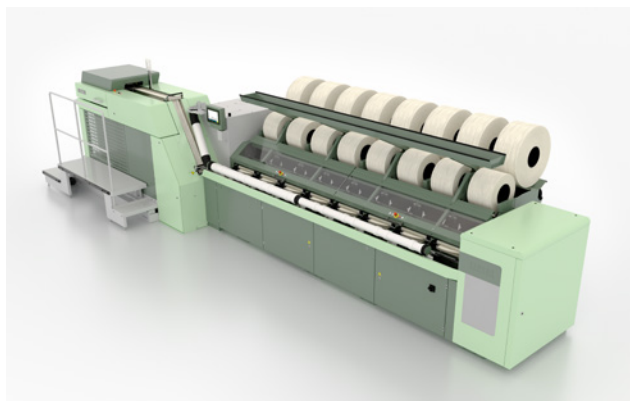
Option for 1 200 mm can diameter

The E 90 offers a choice of three different can sizes – 600, 1 000 and 1 200 mm diameter. With a sliver capacity of up to 90 kg, the 1 200 mm can is able to run twice as long as the 600 mm can. This results in reduced operator effort, as fewer can changes are required.



Unique sliver suction device

The new sliver suction device is available as an option for the E 90 and is characterized by less downtime and less maintenance compared to the previous model. With this new device, the combed sliver is extracted at each comb head, reducing the stress on the fibers.



The new sliver suction device of the E 90

Highly versatile application range

Once adjusted to the raw material and the quality to be produced, the E 90 keeps remains stable in its settings, resulting in a predictable quality and lower maintenance efforts. At the same time, if a change of settings is required, it is possible to precisely adjust the parameters without deviations between the combing heads. No matter if for high or medium quality applications, the E 90 is adjustable to meeting exactly your requirements.

Outstanding Yield

Highest comber speed for superior production

Up to 100 kilograms of combed sliver per hour

The comber E 90 produces up to 100 kilograms of combed sliver per hour. It achieves the highest level of productivity available on the market. The high combing speed of 600 nips per minute, as well as the stable and fault-free running behavior of the machine, enable this extremely high standard of production.



The E 90 achieves the highest level of productivity on the market

Lowest production costs

The highest levels of productivity and raw material utilization, as well as economical energy consumption, result in extremely low production costs per kilogram of combed sliver. The new drive concept consumes up to 40% less energy than individually driven combing heads. The new machine layout allows a 11% closer machine placement compared to the previous model. The refined can change and lap change systems enable reliable and highly efficient operation of the machine – even for cans with a diameter of 1 200 mm.



The new machine layout allows a 11% closer machine placement

Fully Automated Lap Change with ROBOLap

Innovations based on pioneering technology



The lap change and batt piecing system ROBOLap

Proven automation for Rieter combing system

The lap change and batt piecing system ROBOLap – developed by Rieter and proven and refined for decades enables maximum machine efficiency when used together with the fully automated lap transport system SERVOLap. At the same time, a consistently high sliver and yarn quality is ensured and a saving of 60% in operating personnel can be achieved.

Retrofit option for E 90

Since the new comber E 90 stands for a flexible machine concept, the ROBOLap system is retrofittable. Different to its predecessor models, both E 90 versions (with and without ROBOLap option) share the same machine basis, which makes a later upgrade to the ROBO version possible.



ROBOLap

Comber E 90 with ROBOLap
Automatic batt piecing

Scan the QR code for more information
<https://l.ead.me/bcpAZk>

Predictable production by independence from manual lap changes

It is crucial that the lap change and batt piecing is conducted quickly after one set of laps on a comber runs out. Facing a shortage of skilled operators, the advantages of ROBOLap become even more important. The ROBOLap – especially in combination with the Transportsystem SERVOLap – achieves a predictable production of the combing line.

Lap Transport Made Easy

Cutting-edge solutions simplify the lap transport

Fully automated transport system SERVOLap E 26

The SERVOLap E 26 transport system carries out a fully automated lap transport, a system uniquely available at Rieter. This guarantees the uninterrupted transport of eight laps simultaneously from the combing preparation machine to the comber. The return transport of the tubes to the combing preparation machine is also fully automated. The involvement from any operator is not required at any stage, making the process consistent and cost efficient. The SERVOLap E 26 can operate both ROBOLap combers and combers without a fully automated lap piecing system. The combination of the comber E 90 with the SERVOLap E 26 is state of the art and currently the most modern, fully automatic combing system on the market.

Benefits of the SERVOLap E 26:

- Gentle lap transport
- No operating expenses
- No waiting periods on the comber
- Increased efficiency of the comber

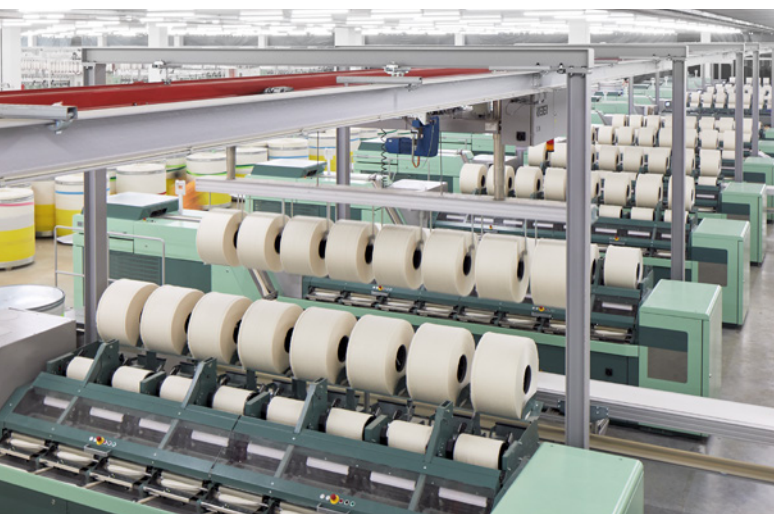
Semi-automated lap transport SERVOTrolley E 17

The SERVOTrolley E 17 is a semi-automated lap transport system to transport four laps and four tubes. The loading of the laps on the combing preparation machine takes place automatically whereas the displacement and positioning to the combing machine is done manually by the operator. The piecing process of the lap batt and the re-starting of the comber is fully automated by the ROBO lap system.

The SERVOTrolley E 17 system also serves the comber E 90 without ROBOLap option.

Benefits of the SERVOTrolley E 17:

- Easy handling
- Automatic loading and unloading of laps



Layout example of the transport system SERVOLap E 26



SERVOTrolley E 17 with automatic lap loading

ESSENTIAL – Rieter Digital Spinning Suite

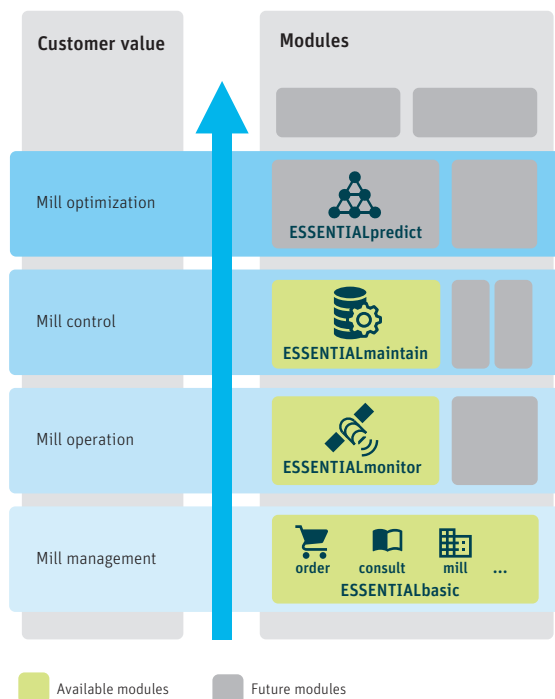
Rieter’s all-in-one mill management system

ESSENTIAL brings digitization into the spinning mill. The Rieter Digital Spinning Suite analyzes data of the entire spinning mill immediately, which helps the spinning mill’s management to make fast decisions.

The Individual Spindle Monitoring (ISM) system collects all necessary data and makes it available for ESSENTIAL. ESSENTIAL then provides meaningful key performance indicators and visualizes improvements for the entire spinning process.

With comprehensive and clearly arranged digital analytics, this spinning mill management system supports the management in order to strengthen the expertise of spinning mill staff, eliminate inefficiencies, and optimize costs.

ESSENTIAL is a modular system. The spinning mill can be gradually digitized. ESSENTIALbasic, the starter package of the Rieter Digital Spinning Suite, is available free of charge for all Rieter customers.



Animation about the comber E 90



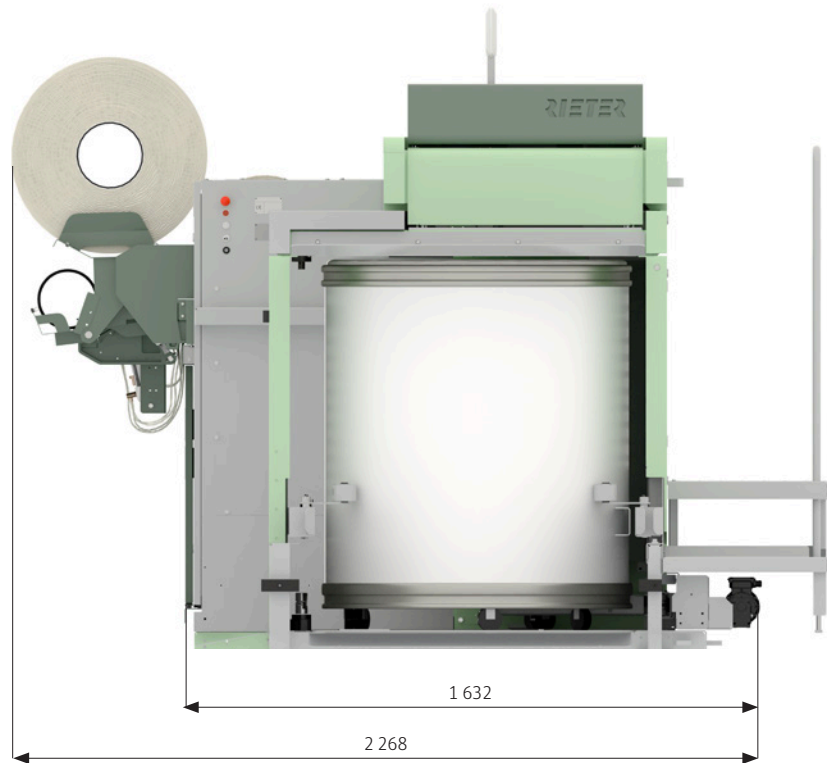
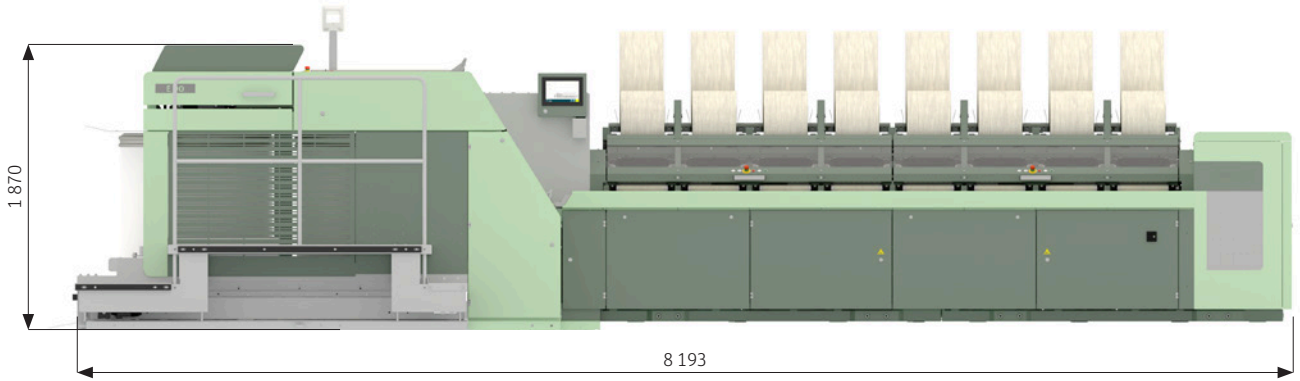
E 90

High-performance comber E 90 with ROBOlap option

Scan the QR code for more information
<https://l.lead.me/bckmIu>

Machine Data

Comber E 90 with DUC1000



Technological data		
	E 90 with ROBOLap	E 90 without ROBOLap
Raw material, commercial staple	1 - 1½ (- 1 ⅞) inches	
Batt weight	(60) 64-80 g/m	
Laps		
Weight max.	21 kg	25 kg
Diameter max.	550 mm	650 mm
Width	300 mm	
Noil extraction	8 - 25%	
Doubling	8	
Draft	10.9 - 26-fold	
Sliverweight at delivery	3 - 6 ktex	
Max. production	100 kg/h	97 kg/h

Machine data	
Type of feed	Forward and backward feeding
Feed distance moved per cycle	4.3/4.7/4.95/5.2/5.55/5.9
Ri-Q-Comb circular comb	i505 flex-d40/i705 flex-d40
Ri-Q-Top comb	2026, 2030, 2035, 2040
Drafting system	4 over 3 with pressure bar
Reserve cans	1 or 2 (for 600 mm cans)
Can diameter	600 mm, 24 inches/1 000 mm, 40 inches/1 200 mm (no inch can available)
Can height with castors	1 200 mm, 48 inches
Machine distance with SERVOTrolley	3 000 mm (with DUC600)
Machine distance with SERVOLap	2 800 mm (with DUC600)
Lap transport system	SERVOTrolley E 17 (semi-automated) SERVOLap E 26 (fully automated)
Suction	Central suction system (upwards and downwards)

Technical data	
Max. nips per minute	600
Frequency	50 Hz/60 Hz
Installed power	5.5 kW (main motor) 11.12 kW (total)
Power consumption	5 kWh @ 550 rpm
Compressed air requirements	0.4 m ³ /h @ 7 bar

Options
Advanced energy monitoring
Sliver suction device for flock blending
Advanced sliver quality monitoring (RQM)
ESSENTIAL
ROBOLap retrofittable



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