

03 **PRODUCT NEWS** The new R 36: the longest semi-automated rotor spinning machine on the market 06 RSB-D 50 draw frame – a new dimension in productivity, quality and operation
19 20 years Com4® yarns – a success story 24 **AFTER SALES** New preventive maintenance packages – the parts you need, right when you need them



link

The customer magazine of Rieter

CONTENTS

PRODUCT NEWS

- 03 The new R 36: the longest semi-automated rotor spinning machine on the market
-
- 06 RSB-D 50 draw frame – A new dimension in productivity, quality and operation
-
- 10 SERV0trail – a must for efficient spinning mills
-
- 14 A 12 UNIfloc – the art of modern automatic bale opening
-
- 16 R 66 – easy data analysis optimizes productivity and guarantees quality
-
- 18 SPIDERweb makes economic decisions simpler
-
- 19 20 years Com4® yarns – a success story

GUEST ARTICLE

- 22 Secure quality with the right spinning cans

AFTER SALES

- 24 New preventive maintenance packages – the parts you need, right when you need them
-
- 26 Developing people's full potential

OUR CUSTOMERS

- 29 From our customers' point of view

RECYCLING

- 30 What happens to your clothes?
-

Cover:

The new A 12 UNIfloc is based on a completely new machine concept. It is easy to handle, very productive and flexible. .

Publisher:

Rieter

Editor-in-chief:

Anja Knick
Marketing

Copyright:

© 2017 Maschinenfabrik Rieter AG,
Klosterstrasse 20, CH-8406 Winterthur,
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 29

Address changes?

Please send your input to:
rieter-link@rieter.com

The New R 36: The Longest Semi-Automated Rotor Spinning Machine on the Market

The R 36 with the new S 36 spin box is a smart tool which enables users to reach excellent productivity in line with high yarn quality from a wide range of raw materials. The new optional function Automated Spinning-In (ASI) allows higher machine productivity due to rapid spinning start-up after a machine stop.

The new semi-automated R 36 rotor spinning machine with 600 spinning positions is already successfully running in the field (Fig. 1). The R 36 is a smart and economical solution for producing high quality yarns from Ne 2 to Ne 40 with state-of-the-art technology. With up to 600 spinning positions and maximum 200 m/min delivery speed, it stands for better yarn quality and higher productivity compared to its predecessor. The improved AMIspin and the new AMIspin-Pro technology secure excellent piecing quality. The optional AMIspin-Pro with new ASI function simplifies piecing and allows a rapid start-up of the machine after a power interruption by just pressing a button.

Highest productivity in its class

The longest 600 spinning unit semi-automated rotor machine provides maximum productivity in combination with modern, very energy efficient drives and frequency converters. Thanks to the latest spinning technology with the S 36 spin box and the resulting perfect spinning stability, a rotor speed of 120 000 rpm can easily be applied. The delivery speed of 200 m/min for full machine length is supported by electronically controlled yarn traverses.

Reduced energy consumption

In addition to innovations in spinning and piecing technology, latest technology of motor manufacturers for energy saving was applied to update the drive concept. Compared to older machine models, the more energy efficient main drives reduce the energy consumption per kg of yarn by up to 10 %.

Benefits for all applications

The R 36 achieves high productivity, lower energy consumption and good quality with all rotor yarn applications. Customers additionally profit from the following advantages:

- Quality Spinning-In (QSI) allows a rapid start-up after power failure with 100 % AMIspin piecing quality, and that with all applications. The yarn ends to be pieced can be optimally prepared during the machine downtime. This standard function offers additional power saving during the machine start-up.



Fig. 1 After first installations of the R 36, including the longest machine with 600 rotors, repeat orders were placed immediately.

- Even at maximum speed, perfect package quality during piecing is guaranteed. To this end, the R 36 is equipped with an electronically regulated loop compensator that takes up the surplus feed yarn at the moment of piecing.
- Machine operation is made easy and intuitive by the graphic touch screen. Graphic visualization helps with setting the quality channels for the proven Q 10 quality sensor.

Better evenness and increased yarn strength

Thanks to improved spinning technology the new S 36 spin box is able to handle an extraordinarily wide range of materials and yarn counts from Ne 2 to Ne 40. The economic advantage of the semi-automated rotor spinning technology is intensified by greater flexibility in terms of raw material selection.

The S 36 spin box ensures optimized fiber flow to the newly designed rotors (Fig. 2). In doing so, sensitive fiber opening is retained which leads to excellent raw material yield and brings benefits in yarn quality and spinning stability. The gentle opening and the innovative fiber guidance are the basis for fewer yarn imperfections, increased yarn strength and perfect evenness (Fig. 3).

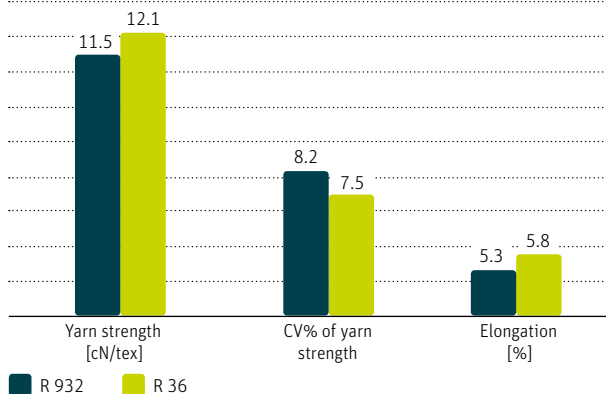
The raw materials to be processed range from high quality raw fibers and man-made fibers to blends from waste and regenerated fibers. The R 36 is the most efficient answer to the current market requirements – spinning of cotton,



Fig. 2 The modernized S 36 spin box ensures higher yarn strength and fewer imperfections.

Yarn quality in comparison

100 % cotton waste, Ne 20, rotor diameter 33 mm, rotor speed 105 000 rpm, delivery speed 112 m/min.



Blend of recycled low-quality fibers and 5-10 % man-made fibers, Ne 8, rotor diameter 41 mm, rotor speed 55 000 rpm, delivery speed 110 m/min.

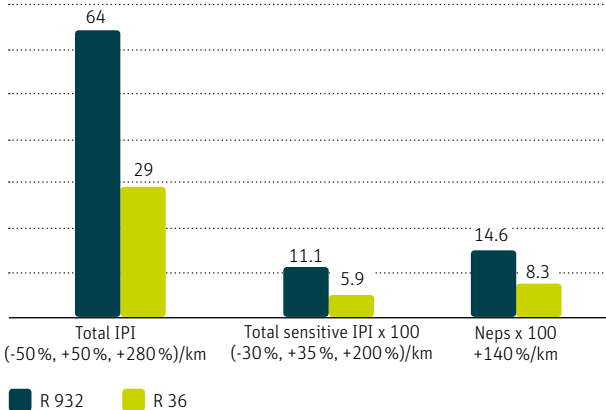


Fig. 3 The higher yarn strength and the lower imperfections confirm the improved technology of the R 36.

waste materials, viscose, polyester, and recycled fibers and their blends. Special applications, like wool, linen and linen blends, are also fully covered.

Excellent and easy piecing with AMIspin

AMIspin continues to ensure optimal piecing at consistently high quality. The individual motor for sliver feed ensures that only undamaged fibers are used for piecings. For feeding optimal fiber mass, the controls profit from Rieter know-how of the fully automatic machine.

The operators have long since enjoyed the simplicity of the AMIspin piecing process, thanks to which the spinning positions can continue to create excellent yarn piecings in the shortest time possible.

Even easier and more uniform piecing with AMIspin-Pro

As a new option, the R 36 is available with the AMIspin-Pro function using a single delivery drive for the take-off (Fig. 4). AMIspin-Pro adds a further AMIspin advantage by means of more precise, intelligent controlling of the piecing process. This provides more uniform piecing strength. The manual handling of the yarn for piecing became even easier with this option, increasing the success rate.



Fig. 4 AMIspin is the system for excellent piecing quality. With the optional AMIspin-Pro technology, even better quality with easier handling is possible.

The new option AMIspin-Pro includes the new function ASI (Automated Spinning-In). This allows a rapid machine restart after a power failure. A simple push of a button is enough to get the machine up and running again.

Renowned, successful machine concept

In addition to the innovations mentioned, all the known outstanding advantages of the Rieter concept for semi-automated rotor spinning machines have been adopted by the R 36:

- Low machine height and ergonomic accessibility for easy and time saving machine operation.
- Full flexibility with totally independent machine sides.
- Yarn quality control using the modern Q 10 sensor concept.

This secures the outstanding position of the R 36 with its well-known sturdy machine concept for easiest and cost saving operation and maintenance.


Initial reactions from the field

The first R 36 machines are already operating in various spinning mills. The feedback given by these spinning mills in India, China and other Asian countries, as well in Europe and America, is very positive:

- Yarns from waste and recycled fibers achieve better yarn strength and fewer imperfections with the R 36 when compared to other spinning machines.
- The longest R 36 with 600 spinning units is in full production. The customer, who also has experience with competitor machines, is going to order more R 36.
- A customer manufacturing Ne 20 yarns from cotton waste on the R 36 was able to save 10 % energy per kg of yarn compared to its R 923 model.
- Denim yarn produced on the R 36 for the local Indian market is used by one weaver. He prefers this yarn from our customer to the yarns from competitor rotor spinning machines. ASI makes it easier for the customer to deal with frequent power failures. This customer has also placed another order.

71-101 ●

Karel Boněk
Product Management Rotor Spinning
Machines & Systems
karel.bonek@rieter.com



RSB-D 50 Draw Frame – A New Dimension in Productivity, Quality and Operation

The new single-head draw frame generation is characterized by its performance: productivity increase of up to 33 %, reduced energy costs, quicker lot change at outstanding sliver quality and easy, intuitive operation.

In the fall of 2016, Rieter introduced the new RSB-D 50 single-head draw frame for the first time to a global audience at the exhibitions ITMA Asia in China and ITME in India (Fig. 1). The new draw frame generation excels with a multitude of innovative solutions. These reduce costs, increase the quality and simplify operation and maintenance.

Energy saving drive concept ECOrized with 25 % fewer belts

With the patented drive concept ECOrized, 25 % of the belts and drive elements as well as the differential gear are saved compared to the previous model. Two servo-motors drive the drafting system. Unique features are the frequency-

controlled drive for the suction and the individual drive for the coiler. The new drive solution for the coiler leads to straight belt tracking and a far longer lifetime (Fig. 2). The quiet machine is evidence of the low abrasion.

Lower electricity costs per year

The new drive solution generates yearly savings of approximately Euro 1 000 for each RSB-D 50. If the saving over the lifetime of the machine is compared with the investment, a very attractive ratio results.



Fig. 1 RSB-D 50 draw frame – highest productivity with 1 200 m/min delivery speed.



Fig.2 The servomotor for the coiler allows rapid optimization of the speed.

As a standard feature, the draw frames are now equipped with integrated energy measuring. Should a significantly increased power consumption occur, preventive maintenance can be carried out and a breakdown of the machine thus avoided.

Even tougher with power fluctuations

With a short power fluctuation, the control voltage is supplied from the drive converter. This energy store can compensate short-term voltage interruptions and reductions. The draw frame keeps running. With longer interruptions, the draw frame with active autoleveling shuts down in a controlled manner. The web remains in the threaded condition and allows a rapid restart.

Further optimized drafting system engineering

Conventional sliver guides in front of the drafting unit are often wrongly adjusted. The most frequent fault is noncentral guidance of the sliver. The new, patented sliver guide guarantees central guidance of the sliver at all times and therefore consistent sliver quality (Fig. 3). The web width is reproducible and is set by simple swivelling of the guide elements. Additional fiber guides in the main drafting field prevent lateral slipping of the edge fibers. Fewer disturbing faults in the yarn are the result. Furthermore, the top roller bearings are permanently lubricated and run at a lower temperature.

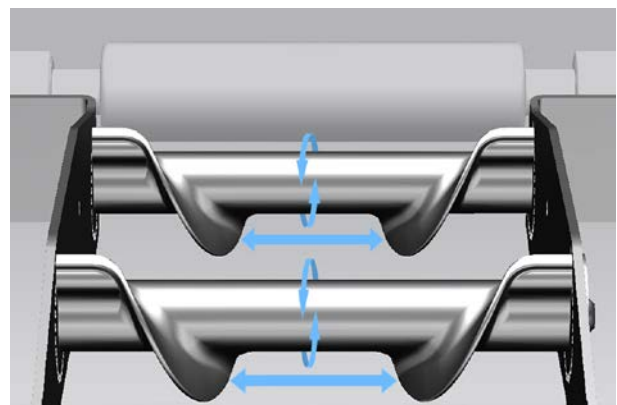


Fig.3 Patented sliver guide for consistent and reproducible quality.

When processing fibers with high fiber-fiber friction, as is the case with man-made fibers, active sliver separation is necessary for a trouble-free can change. To achieve this, the motors of the autoleveler drafting system create a thin place, which is transported below the coiler and deliberately breaks at can change.

CLEANcoil and CLEANcoil-PES coilers for precise sliver coiling

CLEANcoil is the standard coiler for all fiber materials and therefore offers maximal flexibility. The spiral coiling tube ensures coiling which is free of drafting faults, even at high delivery speeds. A honeycomb structure on the coiler underside reliably prevents deposits.

PRODUCT NEWS

For the processing of 100 % polyester, the latest development CLEANcoil-PES (Fig. 4) with a new type of coating offers unique advantages in coiling. Even with critical polyester fibers, the cleaning cycle can be extended by at least 100 %. This also leads to more consistent sliver and yarn quality (Fig.5).

Up to 33 % higher productivity at equal or better yarn quality

The SB-D 50 draw frame without leveling and the RSB-D 50 autoleveler draw frame produce, in practice, at a delivery speed of up to 1 200 m/min. Depending on the fiber material, up to 33 % higher speeds in comparison to the previous model are possible.



Fig.4 CLEANcoil-PES: the coiler for 100 % Polyester fibers.



Fig.5 Precise coiling of Polyester slivers thanks to CLEANcoil-PES coiler.

The following is an example of a customer who processes combed cotton. The RSB-D 50 is operating at 650 m/min, the previous model RSB-D 45 at 480 m/min. Despite far higher delivery speed, the sliver quality values of the RSB-D 50 achieve an equally good level (Fig. 6). The yarn count Ne 30 shows equal or even slightly better quality. In the nine-week long-term test, the mean values of the disturbing faults on the RSB-D 50 are also remarkable. Compared to the RSB-D 45, that already achieves very good quality values, the Classimat values could be improved by 13 % and the winder cuts by 8 %.

Sliver and yarn quality

100 % combed cotton, 29 mm, 4.2 mic., Ne 30, ring yarn

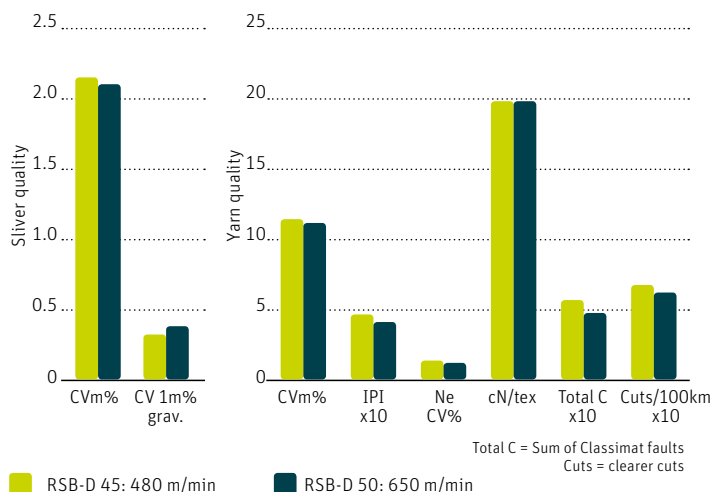


Fig. 6 With significantly higher production, the RSB-D 50 achieves very good sliver and yarn quality.

Touch display and LED displays for intuitive operation

The SB-D 50 and RSB-D 50 use the latest control generation as well as a colored touch display with a high resolution. This allows intuitive and easy operator guidance (Fig. 7).

Clear indications are of decisive importance for the operator when it concerns efficient working. Here, LEDs, that are visible from afar and provide information on the condition of the draw frame, help (Fig. 8). They simplify the operator's work immensely. By means of the USB interface, the data is quickly and easily transferred to other machines. Connection to the Rieter mill control system SPIDERweb is possible as a standard feature.

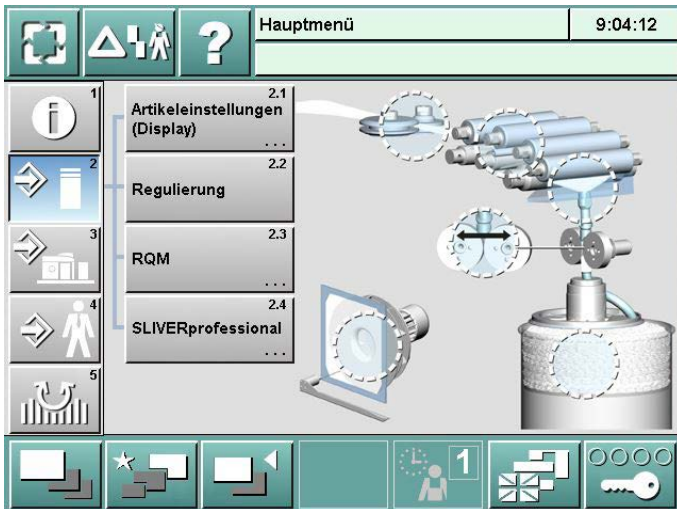


Fig. 7 Easy operation: touching the selected fields leads directly to the required menu item.



Fig. 8 LEDs visible from afar allow the operators to work efficiently.

Technological know-how in the machine display

Frequent personnel changes or shortage of specialists are increasing problems for spinning mills. Rieter offers the remedy with setting recommendations that appear directly on the machine display. The basis is the well-known SLIVERprofessional expert system which is now integrated in the machine display. It provides valuable technological support. This unique tool offers setting recommendations for the entire machine, after the raw material data has been entered. These can be transmitted as a data record onto other machines. In addition, SLIVERprofessional assists with the analysis of spectrogram faults such as periods and draft waves. In this way, faults are rapidly corrected and the availability of the machine is increased.

Assembly on or recessed into the floor

The SB- and RSB-D 50 allow, as previously, assembly on the floor. This makes very flexible positioning possible. A new option is to install the machine recessed into the floor. This means, the transfer height of the can on the empty can magazine is lower and thus more convenient. The full cans are pushed out directly onto the spinning mill floor.

Proven advantages of the RSB-D 45 are retained

The RSB-D 50 keeps unique features of the previous model which are all patented. Here is a selection:

- Effective suction by automatically lifting clearer lips on the top rollers
- CLEANtube for sliver coiling without trash accumulations – for cotton applications
- Sensor for exact first sliver coils, even with can plates that are too low.

With the RSB-D 50 and SB-D 50, Rieter sets another milestone in draw frame engineering for the benefit of our customers. Once more, the saying prevalent amongst mill managers „Buy an RSB and you can sleep peacefully“, applies.

71-102 ●

Jürgen Müller

Head Product Group Draw Frames
Machines & Systems
juergen.mueller@rieter.com



SERVOrail – A Must for Efficient Spinning Mills

The transport system for roving bobbins offers all customers a tailor-made solution. It is maintenance-free and ensures high yarn quality and consistently good machine efficiency. Personnel savings of up to 30 % are possible.



Fig.1 SERVOrail roving bobbin transport system – for efficient and quality-conscious spinning mills.



The modular roving bobbin transport system SERVOrail offers the best possible material flow between the roving frame and ring respectively compact spinning machines (Fig.1). It fulfills the most diverse customer requirements, thanks to various levels of automation. The functional system design and the modular combination of the SERVOrail installation enable several levels and buildings to be linked.

Optimized personnel requirement

Whether manual or fully-automatic variants – SERVOrail simplifies roving bobbin handling, reduces personnel requirements and consequently the production costs. The well thought-out bobbin transport shortens servicing paths for the operator. The ring spinning machines integrated into the circuit are working at optimal capacity. Above all, with fully automatic solutions and short cop runtimes of the ring spinning machine, the savings are substantial. A customer with a 16 320 spindle mill and coarse yarn can save up to 30 % ring spinning personnel (Fig.2).

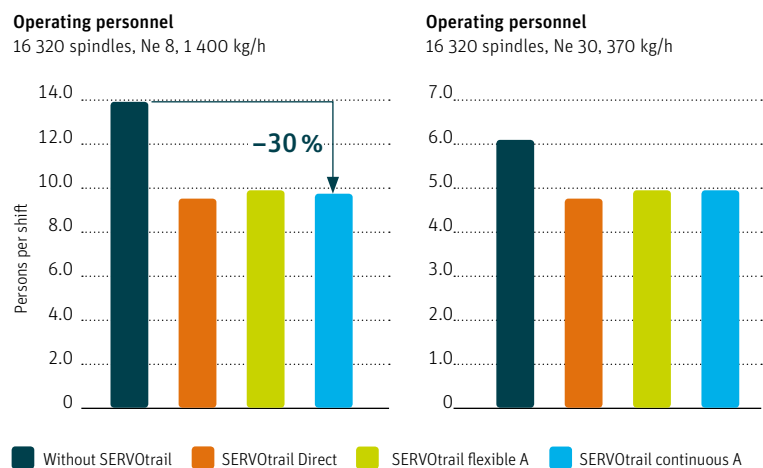


Fig. 2 With large mills and coarse yarn counts, personnel savings of up to 30 % in the ring spinning sector are possible.

SERVOrail – the flexible and modular roving bobbin transport system

In the product brochure, the various systems are explained in detail.

Scan the QR code and take a look at the brochure.
<http://q-r.to/bakr82> (Document, 4 MB)





Fig. 3 Perfect, contact-free bobbin transport ensures consistent quality.

Guaranteed yarn quality

The SERVOrail system transports the bobbins suspended. The outer, sensitive layer of the roving bobbins therefore remains unaffected (Fig.3).

When processing different assortments, a clear distinction is made and the appropriate spinning machine correctly allocated. Controlled intermediate storage by the transport system ensures that the bobbins remain clean and dust-free. Chaotic spaces congested with bobbin trolleys and dust-covered bobbins are thus a thing of the past. Full roving bobbins are always available and the roving is supplied to the ring spinning machine in reliable quality and perfect condition.

Well considered, maintenance-free concept

Soiling, one of the greatest challenges in the spinning mill, is resolved with the SERVOrail system by open, maintenance-free track profiles. These precisely manufactured aluminium profiles have tilted sliding surfaces (Fig. 4). That has the advantage that no dust or dirt can adhere and cleaning is not necessary. The traveling cleaner on the ring spinning machine supports the cleanliness of tracks and trains. The downtimes required for cleaning work are minimized and maintenance costs decrease.

Proven, stable components and the simple design make SERVOrail a reliable and long-lasting system.

The right solution for every customer

Every spinning mill has its own individual requirements. Rieter offers its customers a modular transport system, that permits customized solutions due to its high level of flexibility. The following systems are available, with various degrees of automation for flexible and continuous requirements.

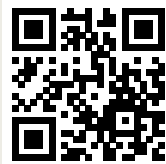
SERVOTrail Direct

– the fully-automatic, flexible solution

The fully automatic version fulfills the most stringent customer requirements. The trains with the bobbins run directly into the creel of the ring spinning machine.

Scan the QR code and look at the animation.

<http://q-r.to/bakr9q>
(Animation)



SERVOTrail Flexible

– the wide-ranging solution

For spinning mills processing various assortments. Roving frames and ring spinning machines are infinitely integrable.

Scan the QR code and look at the animation.

<https://q-r.to/baksxk>
(Animation)



SERVOTrail Continuous

– the continuous bobbin transport

For spinning mills with unchanging assortment. The bobbin trains move continuously at a speed of 10 m/min between the ring spinning machines.

Scan the QR code and look at the animation.

<http://q-r.to/baksy0>
(Animation)

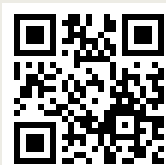


Fig. 4 The tilted sliding surfaces of the aluminium profile prevent soiling and are thus maintenance-free.

Productivity increases

The SERVOTrail bobbin transport system combines many advantages: planning security, the optimal use of resources, a strict process sequence and guaranteed yarn quality. The permanent availability of full roving bobbins on the ring spinning machine makes a decisive contribution to increasing machine efficiency and productivity.

71-103 ●

Anne Eckerle
Project Engineer
Machines & Systems
anne.eckerle@rieter.com



A 12 UNIfloc – The Art of Modern Automatic Bale Opening

The A 12 UNIfloc is an extremely robust and stable new development with a previously unrealized machine concept. The machine has been newly designed from scratch and offers the customer high productivity, flexibility and easy handling.

In 1978, Rieter revolutionized the principle of automatic bale opening and thus the blowroom process with the A 1 UNIfloc. Then, for the first time, bales were processed from above with a take-off unit mounted on a mobile tower. Since then, Rieter has successively developed this machine in line with market requirements. The new A 12 UNIfloc sets new standards in terms of performance, stable construction, modern safety technology and energy efficiency (Fig. 1).

Solid and maintenance-friendly

The construction basis for the A 12 is the „monocoque“ design. This was developed for the aircraft industry to allow a light, robust and torsion-free construction. This method was also used to build the cockpit of the Formula 1 vehicles, to reliably protect the pilot.

The new, innovative construction with the A 12 UNIfloc is especially shown by the self-supporting construction of the tower and the take-off unit. In comparison to the previous generation, the number of individual parts has been massively reduced, as no profiles and covers are necessary. The focus was on a robust, maintenance-friendly machine designed for highest production.

Bale profiling – innovative bale scanning

With the new design of the A 12, a new control technique has been realized. Alongside the new servo-drive concept, it also includes an innovative and efficient „bale profiling“. The take-off unit determines the bale height and bale condition by means of scanning force measurement. This allows rapid equalization of the bale laydown.



Fig. 1 A 12 UNIfloc – the modern and efficient method of opening bales.



Fig. 2 High production after bale group change thanks to patented bale scanning.

Quick changeover with multi-assortment operation.

The UNIfloc with innovative bale scanning (Fig. 2) rapidly achieves high production after changing to a new bale group. With 2 000 kg/h line production, it reliably supplies the cards.

Furthermore, the multi-assortment operation provides flexibility by processing up to three different assortments simultaneously. In cotton processing, the VARIOset function on all Rieter cleaning machines allows a maximal raw material yield to be achieved, as every assortment is allocated an optimal machine setting. Therefore, the subsequent B 12 UNIClean pre-cleaner is automatically adjusted via VARIOset to the properties of the material type being fed.

Energy efficiency with the latest drive technology

To fulfill the strictest energy standards, drives belonging to the highest efficiency class are used. The future-oriented drive concept of the A 12 has been systematically developed on torque-controlled servomotors. A servo unit with the latest technology enables energy to be recovered. So, for example, the brake power which is generated during reversal of the take-off roller is fed back into the electricity grid. A further refinement that makes the A 12 UNIfloc extremely energy-efficient.

Safety is prioritized

With the design of the new model, personal safety has been given high priority. Especially with the 2D scanner, significant progress has been achieved in terms of safety standards. The 2D scanner is immune to external influences such

as temperature and air currents and immediately recognizes when a person enters the danger area. Additional mechanical devices secure the working area of the A 12 UNIfloc.

By measuring of the volume flow rate, the process is monitored and congestion of the machine is prevented. In this way, all prerequisites for safe and smooth production are complied with.

Microtufts – the basis for good cleaning

The interplay between the scanning force measurement and the patented wobble disc take-off roller with 312 double teeth ensures a continuous extraction to small, uniform fiber tufts, the so-called microtufts (Fig. 3). Opening bales to microtufts is the basis for effective cleaning and dedusting by the subsequent blowroom process.



Fig. 3 Gentle, continuous extraction of the microtufts - thanks to patented wobble disc take-off roller.

The new A 12 is the absolute highlight and innovation in the technology of automatic bale opening and offers Rieter quality right from the start of the production process.


71-104 ●

Fig. 4 The video shows the new UNIfloc A 12 in mill operation.

<http://q-r.to/bakZ86>
(Video)



Uwe Nick
Product Manager Blowroom / Card
Machines & Systems
uwe.nick@rieter.com



R 66 – Easy Data Analysis Optimizes Productivity and Guarantees Quality

The new software for the R 66 rotor spinning machine makes the daily work for the operators and the managers easier. They can retrieve and analyze important data directly on the machine display. Where necessary, productivity or quality-improving measures can be immediately implemented.

The new standard software of the R 66 simplifies data analysis and is very easy to use (Fig. 1). Reports on the condition of the machine are structured so that irregular data are quickly recognized. The following reports are retrievable:

- Production report for the entire machine, the individual spinning units and the messages from the yarn clearer
- Machine event history, recorded events and interventions for the entire machine and the individual spinning units.

Production report up to individual spinning unit

Should a spinning unit not reach the previously defined production, this is clearly visible in the shift report. In the spinning units overview, this spinning unit is identified in color (Fig. 2). Definition of the limits is freely selectable, depending on the circumstances. Problematic spinning units, so-called "off standard positions", can be precisely localized and optimized, as they mostly cause quality

problems or losses in production. That makes possible an efficient deployment of maintenance staff and ensures constantly high productivity and quality.

All events and interventions are retrievable

The machine records all events and interventions, including alerts, in a machine event report. This information is shown with a numerical code and a brief text. Via filter functions, component-specific information can be selectively retrieved here. This very quickly gives the maintenance staff an overview of the machine condition and they can systematically intervene, carry out maintenance work or, where possible, even quickly correct faults.

Effective analysis on the display

Interesting is the linking of both items of information directly on the machine display. From the machine event report for a spinning unit, a direct switch to the production report for the spinning unit can be made. This allows a quick, precise and effective fault analysis.

Evaluation on the PC is also possible

The new software allows two procedures: the familiar work on the machine display and alternatively the temporary storage of all data on a USB stick. The data can subsequently be evaluated on the PC. For the machine report, the units demanding special attention can be selected in both ways. If several Rieter machines are available, preferably Rieter's SPIDERweb mill control system can be used to evaluate the data.



Fig. 1 Data can be easily analyzed and faults found quickly. Immediate measures ensure productivity and quality.

	Eff. [%]	Prod. [g]	Prod. [km]	running [min]	natural breaks	yarn faults	missing sliver	operator calls	piecing cuts
Exceeds limit	0	0	300	300	6	2	0	2	0
Average	98.2	1419.9	71.7	71.7	1.3	0.9	0.0	0.4	0.0
Limit	70	300	100	400	5	10	5	5	5
SU Nr.	Eff. [%]	Prod. [g]	Prod. [km]	running [min]	natural breaks	yarn faults	missing sliver	operator calls	piecing cuts
29	90.6	1309	66.14	66.14	16	3	1	2	0
107	95.3	1378	69.62	69.62	5	2	0	2	1
211	77.8	1123	56.78	56.78	0	21	0	1	0
227	89.3	1290	65.18	65.18	0	13	0	2	0
229	94.3	1364	68.86	68.86	8	2	0	0	0
267	85.4	1235	62.37	62.37	7	2	0	8	1
407	94.5	1364	68.99	68.99	5	8	0	0	0
545	97.7	1411	71.31	71.31	5	2	0	0	0

Fig. 2 An example of a production report: all the spinning units (SU) are listed, where their values deviate from the limits. The limits and the value deviations are shown in red.

In the same way, data on error diagnostics can be downloaded. Where necessary, the list of events and interventions on the machine can be sent by email to the Rieter specialists together with a log file. Experts can localize faults rapidly and specifically and propose solutions.

More effect yarn options

Users of VARIOspin, who design effect yarns with the E-Profi program from Amsler, profit with the new software from an extended scope for design creativity. Compared to the very expensive, classical mechanical systems for creating effect yarns, now up to 360 slubs per minute can be produced on an R 60 or R 66. For certain applications, effects are possible with peaks look like being very short in the finished product. The fabric appearance in knits or wovens is thus in some cases close to that of a fancy ring yarn.

Conversion can be of interest

Customers who have tested the software confirm its easy handling. The clearly structured display and the feasible evaluations have proved to be valuable for everyday work.

The rapid situation analysis, including the support of the Rieter experts, allows a precise maintenance assignment and fast correction of incidents. That ensures a high level of productivity and a consistent quality.

71-105 ●

Stephan Weidner-Bohnenberger
 Head Product Management Rotor Spinning
 Machines & Systems
 stephan.weidner-bohnenberger@rieter.com



SPIDERweb Makes Economic Decisions Simpler

SPIDERweb is a comprehensive spinning mill monitoring and control system. It simplifies economically important decisions. Well over 250 customers in fifty countries are using SPIDERweb on more than 12 000 machines.



Fig. 1 At the right time the right decision – SPIDERweb assists in the analysis of quality and production data.

SPIDERweb is the only spinning mill monitoring and control system available on the market. It integrates all processes in a spinning mill, all machine generations as well as all four spinning technologies from the fiber to the yarn. The system facilitates the making of economically sound decisions concerning the whole spinning mill operation. For 20 years, Rieter has been in the field worldwide with SPIDERweb. The experience gained continues to flow into the further development of the system.

Fault summary / Event history

All events and faults relevant to the production process are displayed in the logbook table and can be sorted by using code, time of occurrence or duration. No other mill control system offers such exact fault identification. Problem areas are identified fast and accurately and tasks can be prioritized. This saves time and enables high productivity for every individual machine and therefore the entire spinning mill.

Quality data

A number of machine-integrated sensors are used by SPIDERweb, including the online quality monitor sensor for the draw frame, the yarn clearer sensor for rotor and air-jet spinning processes, and the ISM (Individual Spindle Monitoring) sensors for ring and compact spinning machines. The Quality Manager can, at any time, retrieve the quality data recorded online and presented graphically.

Individualized reports

Longstanding expertise acquired by Rieter backs the SPIDERweb diagrams and tables. They can be very easily adapted to meet individual needs. Visual representations of important machine data can save a lot of time and help in making quick decisions (Fig. 1).

SPIDERweb, equipped with various modules, fulfills the individual requirements of the spinning mill:

- Mobile alert for quick action
- Energy monitoring for optimized consumption
- Quality control for consistent yarn properties
- Climate monitoring for optimal production
- Assistant modules - integrated expertise for rapid analyses.

SPIDERweb provides competence in intelligent control of the spinning mill and increases economic viability in spinning.

71-106 ●

Huijuan Zhang

Product Management Systems
Machines & Systems
huijuan.zhang@rieter.com



Nitin Patil

Head Product Management Systems
Machines & Systems
nitin.patil@rieter.com



20 Years Com4® Yarns – A Success Story

In 1997, the Com4® trademark was born. At the time, Com4® stood for yarn produced on Rieter's compact spinning machine. Today, Com4® stands for the yarns spun on the four Rieter end spinning systems. In between lie 20 exciting years. Learn more about the historical origin and the background of the yarn brand in the interview with Anja Knick, who is responsible for the Com4® yarns.

Link Editor (E): Anja Knick, what led to the creation of this brand?

Anja Knick (AK): In the 90s Rieter developed the so-called compact spinning technology based on the ring spinning machine. The decisive difference to ring spinning is the compacting of the fibers after the drafting process. The fibers are stretched using vacuum and pressed together densely, or in other words, compacted. If the fibers subsequently enter the twisting process, far more fiber ends are integrated into the yarn than in „normal“ ring spinning.

A yarn is created with completely new properties such as extremely low hairiness and very high tenacity. The economic advantages in downstream processing are also huge. It quickly became obvious: this special yarn needs a special name. And so the Com4® brand (pronounced „Comfor“) was created.

E: At the beginning, did Com4® only stand for compact yarn?

AK: Yes, that's right. It even went so far that the spinning mills spoke of Com4® yarn when they meant compact yarn. From the start, we supported our customers with comprehensive marketing measures. One was the awarding of licenses. Customers with Rieter compact spinning machines could apply to use the brand and were given support for the marketing of their products.

E: Who were the first licensees?

AK: Some of the first licenses went to Turkey to Topkapi, India to Nahar Spinning Mills or Portugal to Somelos Fios. Very soon the brand was present around the globe.

E: And what does Com4® stand for today?

AK: With the launch of the air-jet spinning machine, Rieter became the only supplier of all four spinning technologies: ring spinning, compact spinning, rotor spinning and air-jet spinning. And they all produce yarn with high quality. That was the reason to extend the existing brand strategy and to use Com4® for the yarns produced on all four Rieter end spinning machines. To this end, the logo was supplemented with the appropriate abbreviation of the spinning technology (Fig. 1).

E: The changeover was certainly not so easy.

AK: Yes, you're correct. As already mentioned, there were textile producers who said Com4® and meant compact yarn. That is good for the brand but a challenge for the transition.

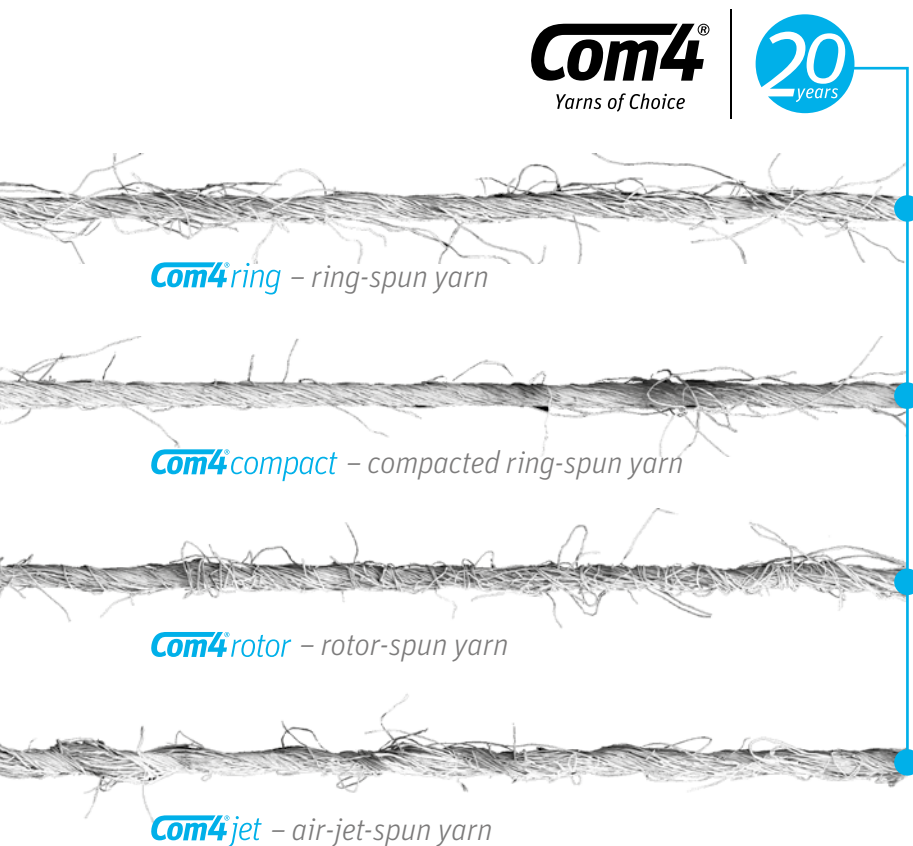


Fig. 1 The four Com4® yarns and their typical yarn structures.

PRODUCT NEWS

A clear brand strategy was needed. One of the measures we then decided on was to give each yarn a face. The four models pictured here stand for the four yarns and for typical apparel from the four yarns (Fig. 2).

E: What is then so special about the Com4® yarns?

AK: I'd like our licensees to speak for themselves. On the next page are two statements, from Indorama and the Nahar Group. Many more opinions are expressed in our special print issued on the occasion of our 20-year jubilee (Fig. 3).



Fig. 3 Our customers have a clear opinion about the Com4® yarns. See for yourself.

<http://q-r.to/bakZ1T>
(Document, 1.7 MB)



Fig. 2 Every model stands for one of the four Com4® yarns - left to right: compact yarn, rotor yarn, ring yarn, air-jet yarn.



Mr. Anupam Agrawal, Director Spun Yarns, Indorama, Indonesia:

“Com4®ring, Com4®compact, Com4®rotor and Com4®jet, the yarns spun on Rieter machines, are the best choice for me and my customers.”

E: Can every Rieter customer call his yarn Com4® now?

AK: No. Various requirements are conditions of use. They include the condition that the spinning mill must produce good and consistent yarn quality and maintain the machines according to Rieter recommendations. Rieter specialists from various areas decide on the awarding of a license. It is awarded for three years and must then be renewed. Today, over 160 licenses have been awarded to more than 130 customers.

E: How does Rieter support its licensees?

AK: With a lot of marketing measures. For several years, we have had a Com4® stand at yarn and fabric exhibitions in Paris, Shanghai and Mumbai. We specifically target yarn traders, weavers, knitters and downstream processors to demonstrate the advantages of the four yarns and to promote our licensees.

Great interest is also being shown in our yarn seminars. In the seminars, we supply know-how on yarn spinning, their further processing and the special characteristics of the end products. The comparison of the four yarns is unique and a highlight for the yarn traders and downstream processors.

E: What is the future outlook for Com4® yarns?

AK: Exciting. In the short term, there will be no new spinning technologies in the original sense. But efforts will continue permanently to extend the yarn application areas, enhance quality and also improve productivity. In particular, the potential of the rather „newer“ air-spun yarn Com4®jet is still not fully exploited. Interesting findings repeatedly emerge, which make expansion of the yarn application area and new products possible.


71-107 ●



Mr. Dinesh Oswal, Managing Director, Nahar Group, India:

“Com4®compact is a must for my customers. They don’t accept any compromises in compacted ring-spun yarns.”

Joachim Maier
 Head Marketing
 Machines & Systems
 joachim.maier@rieter.com



Secure Quality with the Right Spinning Cans

Rimtex is a leading worldwide manufacturer of cans for the spinning mill. They work closely with spinning mills to improve sliver handling through the innovative design of their can models. Cans are often considered to be a simple accessory or sliver container. They are, however, one of the most significant „details“ in a spinning mill.



Fig. 1 Rimtex cans guarantee an accurate sliver coiling and a faultless sliver take-off.

How can it be, that two spinning mills with same machines, the same fiber material and the same count, produce different yarn quality? The answer is the handling of the sliver resp. the spinning cans.

The distance from the top sliver layer in the can to the take-off roller has a great impact on the drafting of the sliver (Fig. 1). Faulty drafts and thus thin places in the sliver can result. A thin place of 2 cm in the sliver leads to a thin place of about 20 cm in the roving and subsequently to a thin place of about 6 m length in the yarn.

In downstream processing, warp thread breaks can occur on the weaving machine or weak places in the fabric can be caused, which may break during further processing. This was shown in a Rimtex study in which the effects of different take-off heights were tested while keeping all other variables stable.

Correct sliver handling and its advantages

Optimal sliver handling allows a high level of efficiency with a simultaneous reduction of the piecing cycles and piecing time. Neps, thick and thin places as well as hairiness of the sliver can be reduced. Further benefits of correct sliver handling:

- Best prerequisites for perfect sliver piecing.
- Avoidance of sliver damage that can occur when the sliver rubs on the sides of the can, making a piecing necessary.
- Prevention of overloaded cans which could create thin places.
- Uniform sliver coiling through synchronic movement of the can and sliver deposit of the machine, as well as uniform removal of the sliver from the can.
- Ensuring an anti-static environment with sliver piecing reduces the influence on the hairiness.

The rule of thumb for spinning

Combed or carded cotton, or polyester – good yarn quality demands correct sliver handling.

A spinning mill should therefore have three sets of cans, one each for combed cotton, carded cotton and synthetic fibers – and these for all main processes such as carding, combing and roving production.

There are several types and models available depending on the requirements for counts and fiber or quality parameters resp. the spinning mill budget. For quality-conscious spinning mills, Rimtex offers two new can types.

UCC – Utility Combination Can - the solution

The UCC can system can be used for all yarn counts and fiber types such as combed cotton, carded cotton or synthetic. It has a combined spring mechanism with three different types of springs (Fig. 2). These can, depending on the sliver type, be combined and installed as instructed while handling the sliver in such a way that the required criteria is optimally met. An effective and user friendly solution which saves inventory and space. The tested and practice-proven cans are available for ring, rotor and air-jet spinning machines. Rimtex is the first company to have introduced this innovative concept to the market.

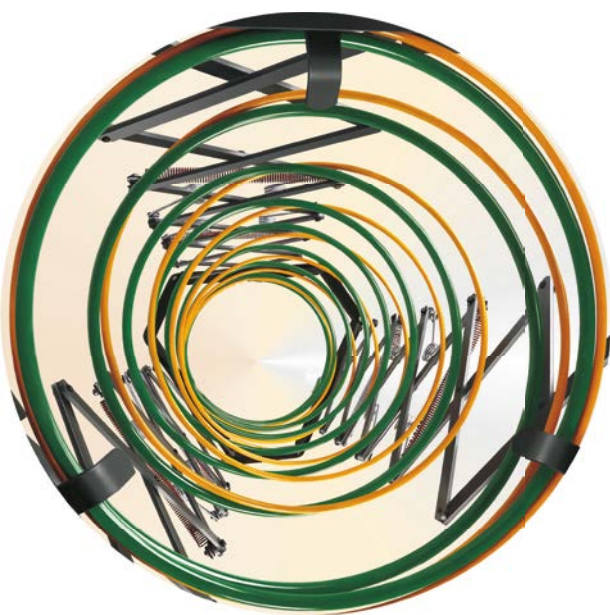


Fig. 2 The spring system of the UCC can developed by Rimtex – a can for all yarn counts and fiber types.



Fig. 3 Rimtex offers the optimal can for every customer requirement.

„We are very satisfied users of the Rimtex cans and guarantee a very good quality level with very consistent Classimat values for our high-end customers.“

R. Srikanth, Technical Head, PT. Indorama Synthetics Tbk, Indonesia

ASH cans (Assured Sliver Handling) – for quality-conscious spinning mills

The ASH spinning cans ensure top quality in sliver handling. The high-grade model was constructed so that faults in sliver formation are reliably avoided and the very good sliver quality is retained. The sliver coiling, storing and take-off is executed most sensitively, maintaining total sliver regularity throughout.

The anti-static can body ensures zero fiber migration and thus minimizes yarn hairiness. Special springs assure practically frictionless movement of the can table without tilting. It already responds to a weight of 50 g. Spinning cans are therefore not just simple sliver containers but an important quality criterium for spinning mills with high-end customers.

71-108 ●

Gaurav Parmar
Head of International Business
Rimtex Group of Industries
India



New Preventive Maintenance Packages – the Parts You Need, Right When You Need Them

Rieter is strengthening its service offering by implementing preventive maintenance packages for use in overhauls of Rieter machines. This new solution ensures customers can order the parts in one package, right when they need them.

Fiercely competitive market conditions mean that yarn producers have to minimize production stops. One planned maintenance overhaul operation is then less costly than several small urgent production stoppages. Rieter now offers preventive maintenance packages for overhauls of Rieter machines to help producers stay one step ahead of competition by maximizing uptime.

Best original quality at lower costs

The best original quality of parts supplied by Rieter is nothing new. Rieter preventive maintenance packages provide the same original quality parts with considerably lower costs than if each were purchased individually.

Through these packages, customers benefit from Rieter's strong industry expertise in three main areas:

- Maximum uptime – one planned overhaul operation instead of several small production stops for maintenance.
- Best original quality – supplied by Rieter.
- Cost savings – considerably lower costs when acquiring the parts as a package.

Fig. 1a Example of some parts included in the preventive maintenance package for UNIfloc A 11.



Fig. 1b Example of some parts included in the preventive maintenance package for the ring and compact spinning doffing systems.

A preventive approach

Rieter machines are renowned for their outstanding performance. But even the best equipment needs replacement parts now and then. Over the years, our specialists have analyzed Rieter's equipment from A to Z and identified several performance-critical parts to be replaced over a certain period of time (Fig. 1a, 1b).

This enables customers to easily plan ahead their preventive maintenance. Parts included in preventive maintenance packages are customized to each specific machine configuration and customer needs.

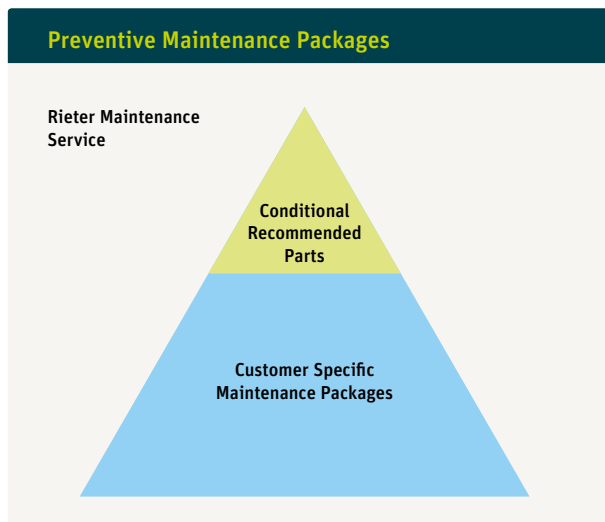


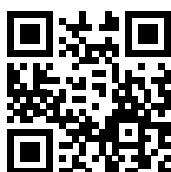
Fig. 2 Rieter offers a modular approach to preventive maintenance, customized to customers' needs.

The preventive maintenance package is a modular offering which consists of:

- A customer specific maintenance package including all the necessary parts to reduce downtime to a minimum.
- Conditional recommended parts to further complete your maintenance package and reach maximum uptime.
- Maintenance service, available upon request, with Rieter specialists installing the preventive maintenance package and performing the necessary settings (Fig. 2).

The preventive maintenance packages are available for a wide range of Rieter machines and continuously extended to further machines to meet customer needs worldwide.


71-109 ●



Please find here more information about original Rieter parts.

<http://q-r.to/bakr4U>
(Website)

Marc Simmen
Product Manager
Upgrades and Conversions
After Sales
marc.simmen@rieter.com



Developing People's Full Potential

A company's most valuable asset is its employees. Besides the fact that training improves the level of people's skills, it also makes people more motivated to contribute to a company's goals. When equipping a mill with the best machines, adequate training of its staff will ensure a higher return of investment.



Fig. 1 Hands-on training at Embee's facility in Indonesia.

PT. Embee Plumbon Textiles of Cirebon in West Java, Indonesia, produces a wide range of yarns using ring, rotor and air-jet spinning technology. Since the initial success after acquiring its first Rieter air-jet spinning machines seven years ago, Embee has continued to equip its mill with Rieter machines to capture trends in the market and stay competitive.

To enable Embee's staff to efficiently operate Rieter machines and maximize performance, Rieter specialists developed a series of tailor-made solutions including training. The training was built up to meet the company's needs for specific machine training on combers, draw frames and air-jets, as well as a refresher training and question-and-answer sessions to facilitate the learning process (Fig. 1).

Embee now runs its spinning mill to its full potential due to Rieter's flexibility, unique know-how of the four spinning systems and a strong collaboration. With a total of eight training over the past seven years, Rieter is proud to contribute to the success of its customers. Through continuous training, Embee is capable of meeting the challenges of today and tomorrow.

"Lack of proper training can turn a very good machine into failure."

"I agree with Rieter that continuous training is very important for success of a new machine/ technology. Lack of proper training can turn a very good machine into failure. One of the reasons our Rieter air-jet machines are successful at Embee is because of Rieter's continuous training." Mr. Poonia, Mill Manager, PT. Embee Plumbon Textiles.

The impact of training

The idea that a skilled workforce is a prerequisite to a strong and competitive business has become commonplace. Recent trends confirm this statement and Rieter has seen a growing demand for training. Companies and even governments have embraced the training journey to support and improve their competitiveness and maintain a leading position in the textile industry.

Today, it is clear that everything a company management spends on training its personnel is a profitable investment. To give a concrete example, machine efficiency has proven to increase by 1.2 % after investing in people’s skills to maintain the machines. The manufacturing cost was consequently reduced by 0.054 CHF/kg (Fig. 2).

In addition, over the years the scope of training has broadened. Training evolved from providing conventional routine maintenance to improving quality, optimizing productivity, increasing safety and much more to support business goals. For many companies, training became vital to continue to grow.

Overall cost comparison – trained versus untrained personnel

100 % cotton combed, Ne 60, ring yarn 520 kg/h

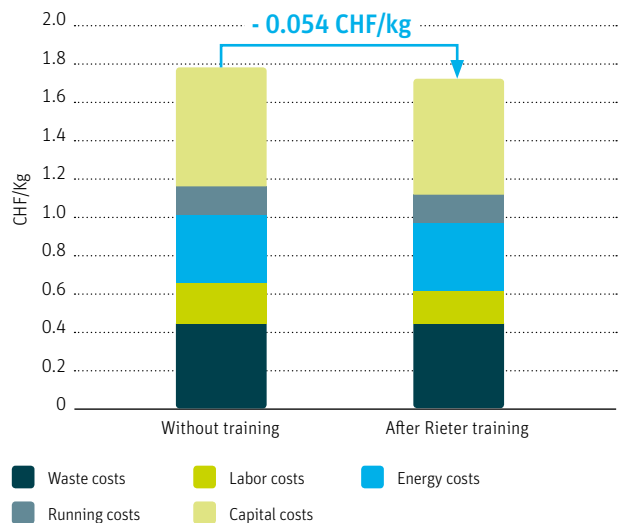


Fig. 2 Based on a Turkish customer case study, the training of personnel results in an overall saving of 0.054 CHF/kg.



Fig. 3 Rieter’s new training center in Tashkent, Uzbekistan.

AFTER SALES

Training Per Machine Type	Training Per Course Focus			
	Ensure Sustainable Production		Maximize Your Mill Performance	
	Machine Performance 	Electrics, Mechanics and Maintenance 	Production and Quality Optimization 	Mill Management 
Blowroom	●	●	●	●
Card	●	●	●	●
Draw frame	●	●	●	●
OMEGAlap, SERVOlap & comber	●	●	●	●
Roving frame, ring and compact spinning machine	●	●	●	●
Rotor spinning machine	●	●	●	●
Air-Jet spinning machine	●	●	●	●

Fig. 4 A modular training concept.

Training will enable people to perform their tasks in a better way and it will also equip them with the skills needed to face tomorrow's challenges and keep up with the industry changes. As trends and technologies become even more relevant than before, putting the right training plan in place will ensure your business to stay at the forefront of your industry.

Creating value through knowledge sharing

Rieter has been providing training for its customers for more than 30 years. Starting with one training center in Winterthur, Switzerland, Rieter's footprint now includes five training centers worldwide. The latest training center was inaugurated in Tashkent, Uzbekistan in November 2016 (Fig. 3). The number of training provided by Rieter has been growing steadily. Over the past five years, Rieter has seen an increase of its worldwide training by over 60 %.


Rieter has now moved towards a new value-based training concept to better support customers with their challenges. While the different spinning equipment types (from fiber preparation to end spinning) are still at the core of Rieter's training program, the new approach focuses on how to ensure sustainable production through machine performance

training as well as through electrics, mechanics and maintenance training. Production and quality optimization as well as mill management to maximize mill performance are other examples of value-based training (Fig. 4).

Thanks to Rieter's teams of experienced trainers, customers benefit from more than 100 years of know-how in the textile industry. Because each mill is unique, they design, on-demand, the right training for each customer. Training can be provided in one of Rieter's training centers or directly at the customer's mill.

71-110 ●

Manfred Meier
Air-Jet and Draw Frame
Training Manager
After Sales
manfred.meier@rieter.com



From Our Customers' Point of View

Rieter customers worldwide spin high-quality yarn.
Read what our customers have to say about it.



"We feel that compact yarn Com4®compact is the future of comprehensive fabric quality and Rieter compact spinning machine is having very high reliability for making consistent quality for years together with least cost incurring for manufacturing."

V. K. Jain
Executive Director

Sagar Manufacturers Pvt. Ltd.
E-2/4, Arera Colony
Opp. Habibganj Railway Station
Bhopal - 462016 (M.P.)
Phone: +91 755 2460107/08
Fax: +91 755 4077097/98
www.thesagar.in



"High strength, high evenness, low hairiness and low pilling in Rieter Com4®jet yarn are the advantages for who wants more! Moving at the speed of technology and being inspired by Rieter Com4®jet yarn which is smart choice, our customers can discover the world of textiles and be in touch with tomorrow."

Alireza Irannejad
Managing Director

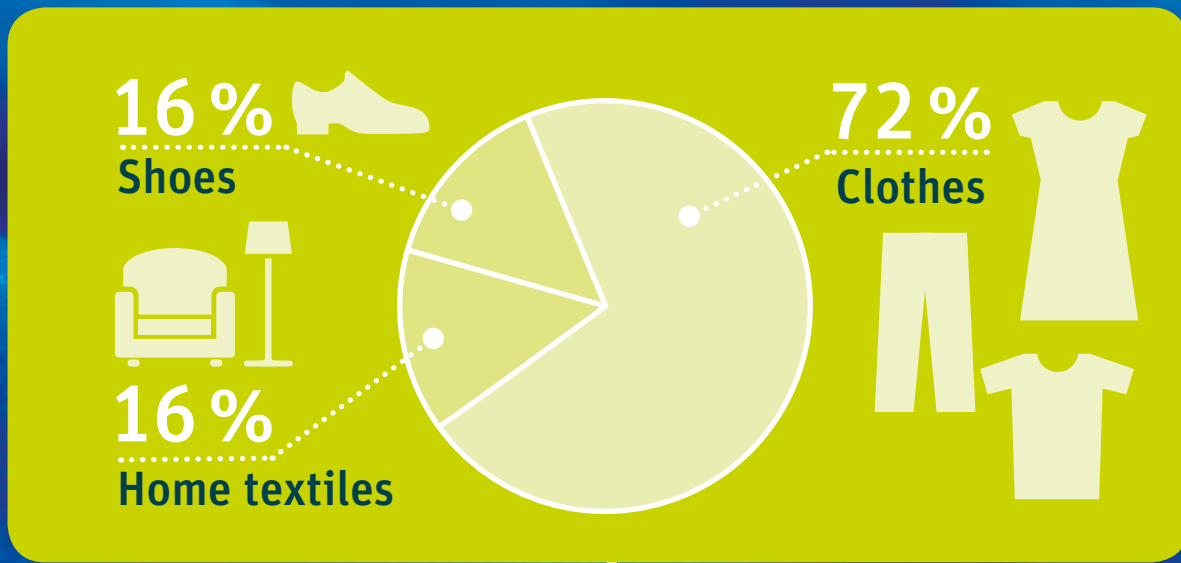
Nikoonassaj Co.
Montazerieh Industrial Zone
Ghadery Street, Vilashahr
Esfahan, Iran
Phone: +98 31 42290290
Fax: +98 31 42290236
www.nikoonassaj.com



What Happens to Your Clothes?

In Germany a person buys on average 26 kilograms of clothes per year. One item of clothing has a lifetime of approx. 3 years. What happens with textiles which end up in used clothing collections?





Wool

**Polyester
Polypropylene**

**Buttons
Zippers**

**Remaining
waste**

**Car
insulation**

Seat filling

**Car insulation
& construction
sector**

Agro-textiles

Reuse

Link is a good source of information

In August, a good 2 000 readers of the customer magazine Link were called on to assess the quality of the magazine. Readers from 50 different countries took part. Many thanks.

The result is very gratifying. The Link is seen as a high-quality source of information with an interesting selection of topics.

Survey participants took part in a draw. And these are the three main winners:

Zafar Iqbal
A A Textiles Ltd.,Pakistan

Jorge Brito
Tauro Textil SA, Mexico

Ahmed Aqeel
Hantex, Pakistan

Congratulations!



Rieter Machine Works Ltd.
Klosterstrasse 20
CH-8406 Winterthur
T +41 52 208 7171
F +41 52 208 8320
sales.sys@rieter.com
parts.sys@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
F +91 2169 304 226

**Rieter (China)
Textile Instruments Co., Ltd.
Shanghai Branch**
Unit B-1, 6F, Building A,
Synnex International Park
1068 West Tianshan Road
CN-Shanghai 200335
T +86 21 6037 3333
F +86 21 6037 3399

link

www.rieter.com

Drawing of the winners: Anna Nykvist, Communication Manager RAS and Reto Thom Head Sales RMS.