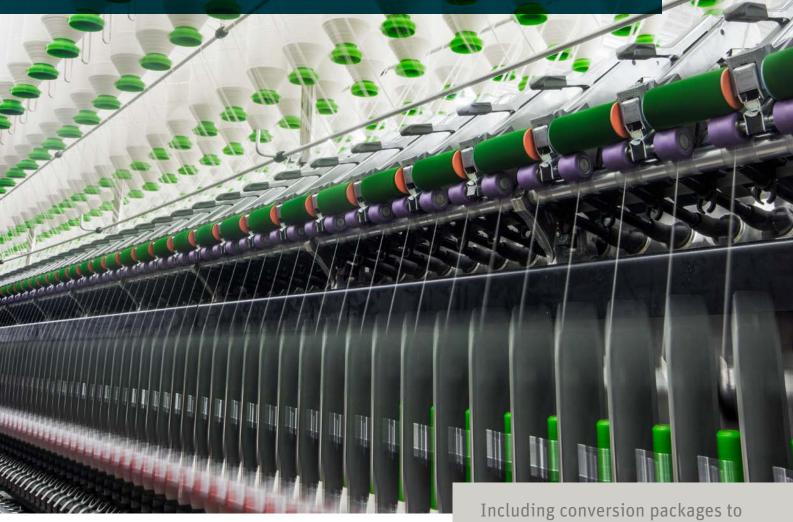
Rieter After Sales Man-made fibers and blends



# Fit for Man-Made Fibers and Blends

Transform your equipment to process man-made fibers



boost customers' competitiveness

# Transforming Cotton-Spinning Equipment for Man-Made Fibers and Blends Processing

In the recent years, the textile industry has witnessed a continuous increase in the use of man-made fibers. Clothing companies are embracing man-made fibers and yarn manufacturers are looking at converting their machines to remain in the game. Rieter After Sales provides special packages to transform existing equipment to today's needs.

#### **Integrated solutions**

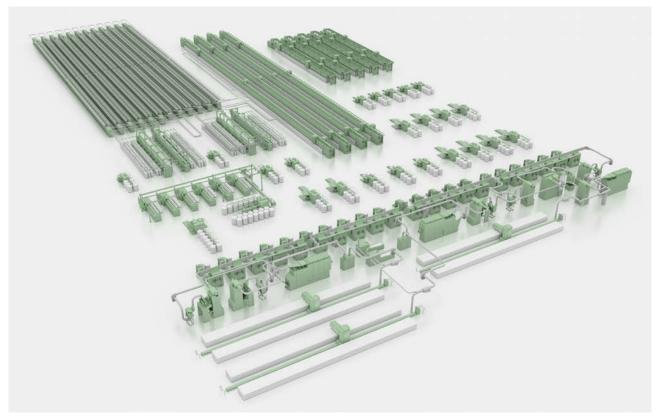
Rieter After Sales offers basic conversion packages to upgrade existing mills for all production steps: from fiber preparation to end spinning. It also provides advanced conversion packages to further boost customers' competitiveness through quality, lifetime and productivity optimization.

#### BASIC CONVERSION PACKAGE

All parts needed to convert your existing mill equipment to process man-made fibers and blends, from fiber preparation to end spinning.

#### ADVANCED CONVERSION PACKAGE

Innovative parts and packages to further optimize yarn quality, improve lifetime of parts and maximize production output.



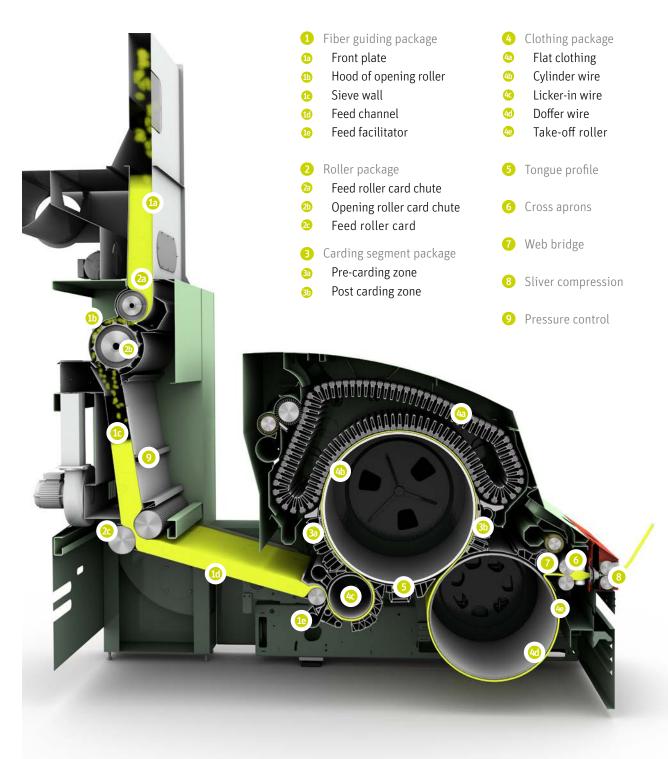
Rieter provides unique solutions to convert your spinning mill to process man-made fibers and blends



#### CARD

# A Complete Transformation to Process Man-Made Fibers and Blends

#### Overview



# Fiber guiding package

#### Description

Made of specially stainless steel coated sheet, the fiber guiding components allow a smooth flow of the man-made fibers over the plate. It includes the following parts:

- Front plate
- Hood of opening roller
- Sieve wall
- Feed channel
- Feed facilitator

#### Compatibility



#### Advantages

- Smooth running performance
- Good material infeed

Upgrade	C 60	C 70	C 72	C 75	Package
Fiber guiding package	Х	Х	Х	Х	Basic

# 2 Roller package

#### Description

Thanks to specific coatings and surface designs, the various rollers ensure a better opening of the man-made fibers. The following are included in the package:

- Feed roller card chute
- Opening roller card chute
- Feed roller card

#### Advantages

- Less downtime thanks to reduced lapping
- Reduced imperfections in the yarns
- Optimum yarn quality through gentle opening of fibers



Upgrade	C 60	C 70	C 72	C 75	Package
Roller package	Х	Х	Х	Х	Advanced

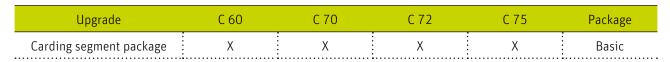


The carding segment package allows the fast adjustments of settings for all raw materials, leading to a better quality at the lowest waste extraction level. It includes elements to equip the pre- and post-carding zones.

#### Advantages

• Better parallelism of the fibers for an optimum quality

#### Compatibility



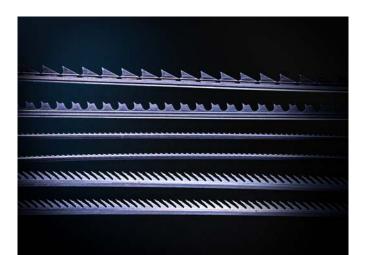
## 4 Clothing package

#### Description

For the correct wire selection, Rieter offers more than 205 different cylinder wires, 124 doffer wires and 129 licker-In wires to customise for the best performance and highest quality.

#### Advantages

- High nep removal
- Reduction of thin and thick places in the yarnHigh performance over the entire lifetime of
- the wire
- Extended wire lifetime



Upgrade	C 60	C 70	C 72	C 75	Package
Clothing package	Х	Х	Х	Х	Basic

# 5 Tongue profile

#### Description

The profile allows more time for the fibers to pass over the doffer, which results in a more sustainable transfer from the cylinder to the doffer. Thanks to better fiber delivery, speed can be increased and the quality of the sliver improved.



#### Advantages

• Less overuse of fibers leading to better quality

#### Compatibility

Upgrade	C 60	C 70	C 72	C 75	Package
Tongue profile	Х	Х	Х	Х	Basic



#### Description

The special cross aprons for processing man-made fibers and blends bring the web to the centre and forwards it to the disc roller. The Rieter cross aprons are made of a special material to avoid static charges.



#### Advantages

• Less machine downtime thanks to reduced maintenance requirements

Upgrade	C 60	C 70	C 72	C 75	Package
Cross aprons	Х	Х	Х	Х	Basic



The web bridge (patent pending) can, in the shortest possible time, be removed, cleaned and reinstalled. If there is an appropriate replacement component in the spinning mill, the downtime can be reduced to a few minutes. The web bridge allows a perfect, uniform web and ensures continuous operation of the card. Thick places are substantially reduced.



#### Advantages

- Cleaning maintenance time reduced by 90%
- Quality improvement of the yarn by avoiding thick places
- Productivity increase thanks to shorter planned machine downtime

#### Compatibility

Upgrade	C 60	C 70	Package
Web bridge	Х	Х	Advanced
Upgrade	C 72		C 75
Web bridge	Already ins	talled A	Iready installed

# 8 Sliver compression

#### Description

The sliver compression, with stepped rollers on the card delivery, leads to up to 20% higher can content therefore less can changes and better running performance.

#### Advantages

- Up to 20% higher can content
- Better running performance
- Lower production costs

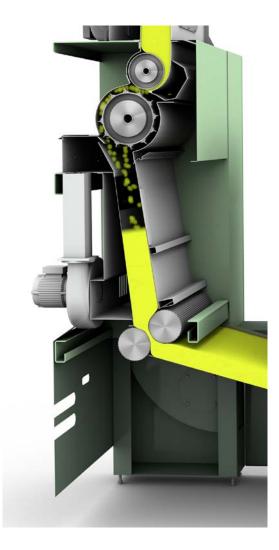


Upgrade	C 60	C 70	C 72	C 75	Package
Sliver compression	Х	Х	Х	Х	Basic

# 9 Pressure control

#### Description

The patented pressure control in the card chute replaces the classical light barrier control. It provides a precise batt weight at the card feed, taking into account the raw materials and their characteristics.



#### Advantages

- More consistent material density
- Fluctuations in the CV value reduced by 70%
- Easy adjustment of fiber weight on the control panel
- Optimized inlet geometry of the fiber to the licker-in
- More uniform fiber band before the licker-in
- Easy implementation of settings to all cards
- Reduced pollution in the inlet region, by blowing out fine fibers

Upgrade	C 60	C 70	Package
Pressure control	Х	Х	Advanced

Upgrade	C 72	C 75
Pressure control	Already installed	Already installed



# Draw Frame

#### DRAW FRAME

# A Complete Transformation to Process Man-Made Fibers and Blends

#### Overview

- 1 Sliver guide
- 2 Feed funnel
- **3** Scanning discs
- 4 Drive pulley
- 5 CLEANcoil-PES



Web and sliver funnel

8 SOFTcut

6





The sliver guide has a wider inner diameter to allow processing of voluminous man-made fibers.

#### Advantages

• Trouble-free running behaviour, especially with voluminous man-made fibers



#### Compatibility

Upgrade	RSB-D 30	RSB-D 35	RSB-D 40	RSB-D 45	RSB-D 50	RSB-D 26	Package
Sliver guide	Х	Х	Х	Х	Х	Х	Basic
Upgrade	SB-D 10	SB-D 15	SB-D 40	SB-D 45	SB-D 50	SB-D 26	Package
Sliver guide	Х	Х	Х	Х	Х	Х	Basic



#### Description

The feed funnel by Rieter optimises the scanning process for voluminous man-made fibers.

#### Advantages

• Less overuse of fibers leading to better quality



Upgrade	RSB-D 30	RSB-D 35	RSB-D 40	RSB-D 45	RSB-D 50	RSB-D 26	Package
Feed funnel	Х	Х					Basic
Upgrade	SB-D 10	SB-D 15	SB-D 40	SB-D 45	SB-D 50	SB-D 26	Package
Feed funnel							



The scanning discs are available in different sizes for the process of voluminous man-made fibers.

#### Advantages

• Perfect scanning result, even on voluminous sliver



#### Compatibility

Upgrade	RSB-D 30	RSB-D 35	RSB-D 40	RSB-D 45	RSB-D 50	RSB-D 26	Package
Scanning discs	Х	Х	Х	Х	Х	Х	Basic
Upgrade	SB-D 10	SB-D 15	SB-D 40	SB-D 45	SB-D 50	SB-D 26	Package
Scanning discs			•			:	•



#### Description

Due to different processing speeds with manmade fibers against e.g. cotton, it is necessary to drive the main motor with the appropriate drive pulley.

#### Advantages

• Optimized processing speed with the correct drive speed on the main motor



Upgrade	RSB-D 30	RSB-D 35	RSB-D 40	RSB-D 45	RSB-D 50	RSB-D 26	Package
Drive pulley	Х	Х	Х				Basic
Upgrade	SB-D 10	SB-D 15	SB-D 40	SB-D 45	SB-D 50	SB-D 26	Package
Drive pulley	Х	Х	Х	• • •	• • •	• • •	Basic

# **5** CLEANcoil-PES

#### Description

Thanks to its unique surface coating, the CLEANcoil-PES reduces the finishing agent deposits on the underside of the coiler in case of processing 100% PES fibers.

#### Advantages

- Extension of the cleaning cycle by at least 100%, depending on the polyester fiber used
- Virtually trouble-free running of the sliver in the subsequent process
- Higher can content amounts
- More stable yarn quality

#### Compatibility



Upgrade	RSB-D 30	RSB-D 35	RSB-D 40	RSB-D 45	RSB-D 50	RSB-D 26	Package
CLEANcoil-PES	Х	Х	Х	Х	Х	Х	Advanced
Upgrade	SB-D 10	SB-D 15	SB-D 40	SB-D 45	SB-D 50	SB-D 26	Package
CLEANcoil-PES	Х	Х	Х	Х	Х	Х	Advanced

# 6 Web and sliver funnel

#### Description

The web and sliver funnels feature an optimized inner diameter to allow the proper processing of heavy and bulky material.

#### Advantages

• Blocking-free running behavior



#### Compatibility

Upgrade	RSB-D 30	RSB-D 35	RSB-D 40	RSB-D 45	RSB-D 50	RSB-D 26	Package
Web and sliver funnel	Х*	Х*	Х	Х	Х	Х	Basic
Upgrade	SB-D 10	SB-D 15	SB-D 40	SB-D 45	SB-D 50	SB-D 26	Package
Web and sliver funnel	Х*	Х*	Х	Х	Х	Х	Basic

\* only when combined with the upgrade SWIVELplate EVO



Specially designed for man-made fiber processing, this top roller benefits from optimized hardness on cot material. In addition, its large diameter keeps the formation of laps at a very low level.

#### Advantages

• Improved quality of the yarn



#### Compatibility

Upgrade	RSB-D 30	RSB-D 35	RSB-D 40	RSB-D 45	RSB-D 50	RSB-D 26	Package
Top roller	Х	Х	Х	Х	Х	Х	Basic
Upgrade	SB-D 10	SB-D 15	SB-D 40	SB-D 45	SB-D 50	SB-D 26	Package
Top roller	Х	Х	Х	Х	Х	Х	Basic

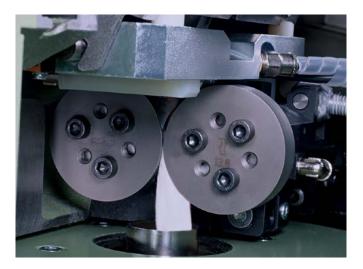


#### Description

When processing man-made fibers, active sliver separation is necessary for a trouble-free can change. The SOFTcut or a mechanical cutting tool is available for this task, depending on the machine type.

#### Advantages

- Trouble-free can changing
- Virtually no maintenance required



#### Compatibility

Upgrade	RSB-D 30	RSB-D 35	RSB-D 40	RSB-D 45	RSB-D 50	RSB-D 26	Package
SOFTcut	Х*	Х					Basic
Upgrade	SB-D 10	SB-D 15	SB-D 40	SB-D 45	SB-D 50	SB-D 26	Package
SOFTcut	Х*	Х					Basic
	••••••	••••••	••••••	••••••	••••••	••••••••••••••••••	

\* Mechanical sliver separation only



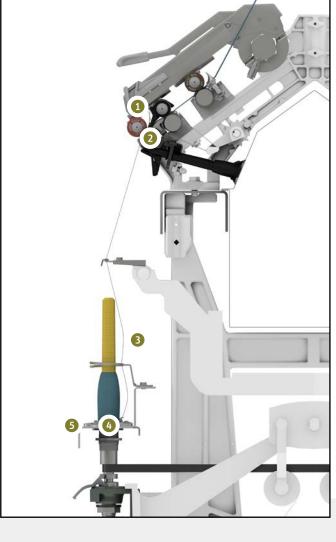


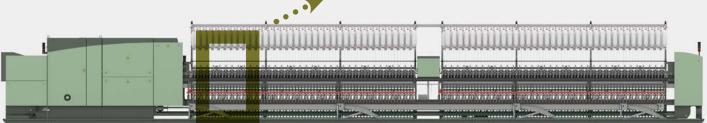
#### RING AND COMPACT SPINNING

# A Complete Transformation to Process Man-Made Fibers and Blends

#### Overview

- 1 Q-package
- 2 Bottom roller
- 3 Reinforced separator
- 4 SERVOgrip MMF/Lycra
- **5** Rings and travellers







Rieter has developed a special Q-package to increase the yarn quality of man-made fibers and blends, providing high adjustment flexibility.

#### Advantages

- Reduced imperfections
- Improved quality

#### Compatibility



Upgrade	G 32	G 33	G 35	G 36	G 37	G 38	Package
Q-package	Х	Х	Х	Х	Х	Х	Advanced
Upgrade	K 42	K 44	K 45	K 46	K 47	K 48	Package
Q-package	Х	Х	Х	Х	Х	Х	Advanced

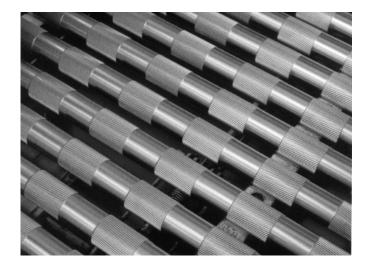


#### Description

With a diameter of 30 mm instead of the regular 27, the bottom roller by Rieter counteracts the build-up of fiber lap, especially with long fibers.

#### Advantages

- Reduced build-up of fiber lapping
- Higher productivity



#### Compatibility

Upgrade	G 32	G 33	G 35	G 36	G 37	G 38	Package
Bottom roller	Х*		•	Х*	Х	Х	Advanced
Upgrade	K 42	K 44	K 45	K 46	K 47	K 48	Package
Bottom roller				•		:	

\* Needs to be clarified based on machine execution



The man-made fiber reinforced separator benefits from a metal enforced front side to prevent high wear.

#### Advantages

- Tremendous increase of lifetime
- Improved yarn quality thanks to reduced yarn breaks

#### Compatibility



Upgrade	G 32	G 33	G 35	G 36	G 37	G 38	Package
Reinforced separator	Х	Х	Х	Х	Х	Х	Basic
Upgrade	K 42	K 44	K 45	K 46	K 47	K 48	Package
Reinforced separator	Х	Х	Х	Х	Х	Х	Basic

## 4 SERVOgrip MMF/Lycra

#### Description

For yarns of high strength (MMF), the SERVOgrip can be used to reliably cut off the thread during the doffing process. It is also necessary for the doffing of core yarns (Lycra).

#### Advantages

- Secure yarn separation by a cut during doffing
- Fewer problems during doffing process thus more productivity
- Additional cleaning is unnecessary
- Safe cutting of core yarn and therefore less manual cutting necessary



Upgrade	G 32	G 33	G 35	G 36	G 37	G 38	Package
SERVOgrip, MMF/Lycra	Х	Х	Х	Х	Х	Х	Basic
Upgrade	K 42	K 44	K 45	K 46	K 47	K 48	Package
SERVOgrip, MMF/Lycra	Х	Х	Х	Х	Х	Х	Basic

# **5** Rings and travellers

#### Description

For the correct rings and travellers, Rieter offers, under the brand Bräcker, specific components for the best performance and highest quality.

#### Advantages

- Increase in speed and production
- Higher stability in traveller running
- Reduction of yarn breaks
- Consistent and improved yarn quality

Upgrade	G 32	G 33	G 35	G 36	G 37	G 38	Package
Rings and travellers	Х	Х	Х	Х	Х	Х	Basic
Upgrade	K 42	K 44	K 45	K 46	K 47	K 48	Package
Rings and travellers	Х	Х	Х	Х	Х	Х	Basic



# Automatic Rotor Spinning

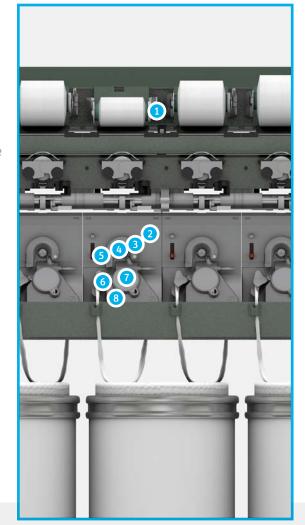
#### AUTOMATIC ROTOR SPINNING

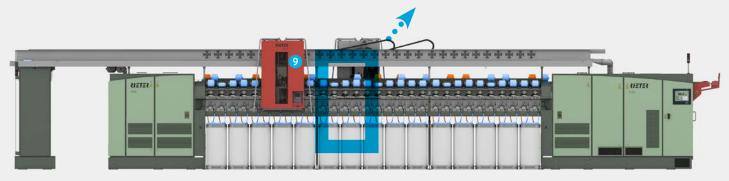
# A Complete Transformation to Process Man-Made Fibers and Blends

#### Overview

- 1 Friction lining with CLIP
- 2 ANTIstatic support discs
- 3 Rotor
- 4 Nozzle
- 5 SPEEDpass

- 6 CHANNELpass
- Opening roller
- Clip-on/clip opening roller
- 8 Housing pot
- 9 EVO rotor cleaning package





# 1 Friction lining with CLIP

#### Description

The patented friction lining with CLIP has been designed to replace the endless liner without dismantling the winding shaft.

#### Advantages

- Time saving of up to 75%
- No fitting tools needed
- No wax residue accumulation on the running surface, resulting in consistent density of the bobbins and fewer loose sites of the last windings

#### Compatibility

|--|--|--|--|

Upgrade	R 1	R 20	R 40	R 60	R 66	Package
Friction lining with CLIP	Х	Х	Х	Х	Х	Advanced

# **2** ANTIstatic support discs

#### Description

These unique patented support discs with electrostatic discharge avoid deposits on the rotor shaft.

#### Advantages

- Reduced cleaning maintenance by up to 25% assuming a rotor speed of 120 000 rpm
- Longer service life thanks to grooved profile
- Minimized rotor vibration



Upgrade	R 1	R 20	R 40	R 60	R 66	Package
ANTIstatic support discs	Х	Х	Х	Х	Х	Advanced



Rieter offers a variety of quality rotors with different coatings and shapes which influence positively yarn quality, ends-down rates, ability for piecing, acceleration and breaking time and of course energy consumption.

#### Advantages

- Increased lifetime
- Improved yarn quality
- Reduced end-down rates

#### Compatibility



Upgrade	R 1	R 20	R 40	R 60	R 66	Package
Rotors	Х	Х	Х	Х	Х	Basic



#### Description

Numerous designs of nozzles are available to offer adaptation to the raw material and end use of the yarn. In particular, the MIMA ceramic nozzles allow best yarn values for polyester fibers in weaving applications.

#### Advantages

- Outstanding yarn quality combined with excellent spinning stability
- Long service life due to special materials and designs of the nozzle surface
- State-of-the-art material technology for optimum spinning conditions



Upgrade	R 1	R 20	R 40	R 60	R 66	Package
Nozzles	Х	Х	Х	Х	Х	Basic



The SPEEDpass directly connects to the exhaust air duct, accelerates and cleans the fiber flow.

#### Advantages

- Improved running performance and yarn values
- Increased airflow without high underpressure
- Good fiber flow
- Enhanced extraction of dust

#### Compatibility

Upgrade	R 1	R 20	R 40	R 60	R 66	Package
SPEEDpass			Х	Х	Х	Advanced



#### Description

Different patented CHANNELpasses for cotton, polyester and viscose adapt the box ideally to the fiber material. They allow the optimal transition from the opening roller in the fiber guide channel.

#### Advantages

- Optimal fiber flow
- Better IPI values and ends-down rates



#### Compatibility

Upgrade	R 1	R 20	R 40	R 60	R 66	Package
CHANNELpass				Х*	Х*	Advanced

\* Complete exchange of the opening unit mandatory





The opening roller has a special toothed surface, designed specifically for man-made fibers and blends processing.

#### Advantages

- Increase yarn quality
- Reduced finishing agent deposits
- Gentle fiber opening

#### Compatibility



Upgrade	R 1	R 20	R 40	R 60	R 66	Package
Opening roller	Х	Х	Х	Х	Х	Basic

# Clip-on/clip opening roller

#### Description

The clip-on and clip opening rollers feature a patented clip replacement system which allows a quick replacement of the wear and tear parts.

#### Advantages

- No tool required to replace the wear and tear parts thanks to a quick clip system
- Maintenance time shortened by up to 80%
- Reduced downtime of machines



Upgrade	R 1	R 20	R 40	R 60	R 66	Package
Clip-on opening roller	Х	Х				Advanced
Upgrade	R 1	R 20	R 40	R 60	R 66	Package
Clip opening roller			Х	Х	Х	Advanced

# 8 Housing pot

#### Description

Thanks to an optimized fiber flow window of 16 mm, the housing pot is ideally suited for man-made fiber processing.

#### Advantages

Better yarn quality and less imperfections



#### Compatibility

Upgrade	R 1	R 20	R 40	R 60	R 66	Package
Housing pot	Х	Х				Basic

# 9 EVO rotor cleaning package

#### Description

The EVO rotor cleaning package includes a rotor cleaning unit and a kinematic positioning of the cleaning head. The rotor cleaning unit is able to adjust the scrapper to the rotor groove automatically. This allows a better cleaning, especially for rotor grooves that are often contaminated with solidified deposits which can only be removed manually.

Thanks to its kinematics, jammed errors are limited during the positioning of the cleaning head.

#### Advantages

- Reduced yarn faults moiré by up to 90% thanks to the cleaning head
- Increased compressed air for improved rotor cleaning
- Higher machine efficiency by up to 0.5% through kinematics



#### Compatibility

Upgrade	R 1	R 20	R 40	R 60	R 66	Package
EVO rotor cleaning package			Х	Х*	Х*	Advanced

\* Machine already equipped with kinematic movement

# R 37

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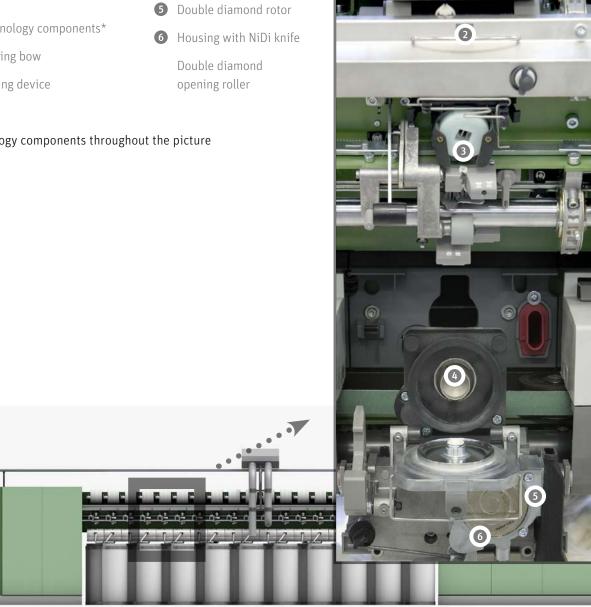
Semi-Automatic Rotor Spinning

#### SEMI-AUTOMATIC ROTOR SPINNING

# A Complete Transformation to Process Man-Made Fibers and Blends

#### Overview

- 1 6 Technology components\* 2 Guiding bow 8 Waxing device 4
- \* Technology components throughout the picture



## 1 Technology components

#### Description

Rieter provides a series of technology components from rotors and opening rollers to nozzles and segments, which decisively influence running properties and yarn quality in rotor spinning. Many variants are available based on the machine type.

#### Advantages

• Best component selection based on customer's requirements

#### Compatibility

|--|

Upgrade	BT 902-5	BT/R 923	BT 924	R 35	R 36	Package
Technology components	Х	Х	Х	Х	Х	Basic



#### Description

The guiding bow by Rieter reduces occurrences of cuts as well as yarn hairiness. The replaceable bow allows easy and quick maintenance.

#### Advantages

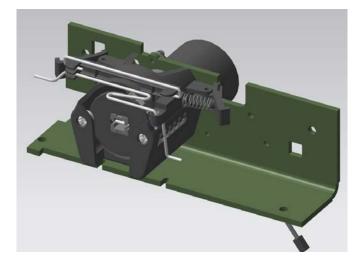
- Stable yarn quality
- Reduced maintenance cost by single bow replacement



Upgrade	BT 902-5	BT/R 923	BT 924	R 35	R 36	Package
Guiding bow		Х	Х			Advanced



Thanks to the waxing device, the yarn benefits from better prepared surfaces, less hairiness and fewer breakages in the downstream weaving.



#### Advantages

- Less hairiness
- Lower friction value of yarn
- Special character for knitting
- Individual drive of waxing block (in case of ends down)

#### Compatibility

Upgrade	BT 902-5	BT/R 923	BT 924	R 35	R 36	Package
Waxing device		Х		Х	Х	Advanced



4 Double diamond rotor

#### Description

The double diamond coating on the rotor spindle prolongs its lifetime, even when processing aggressive fibers.

#### Advantages

- · Reduced premature wear and tear
- Lifetime up to 80% longer compared to standard diamond



Upgrade	BT 902-5	BT/R 923	BT 924	R 35	R 36	Package
Double diamond rotor		Х	Х	Х	Х	Advanced

# **5** Housing with NiDi knife Description

The nickel diamond (NiDi) coating of the knife provides a longer lifetime.

#### Advantages

- Reduced premature wear and tear
- Reduced maintenance and production cost thank to longer running cycle



#### Compatibility

Upgrade	BT 902-5	BT/R 923	BT 924	R 35	R 36	Package
Housing with NiDi knife	Х	Х	Х			Advanced



#### Description

Thanks to its double diamond coating, this opening roller extends its lifetime even when processing aggressive fibers.

#### Advantages

- Reduced premature wear and tear
- Lifetime up to 80 % longer compared to standard diamond



Upgrade	BT 902-5	BT/R 923	BT 924	R 35	R 36	Package
Double diamond opening roller	- - - -	Х	Х	Х	Х	Advanced

