Automation SERVOtrail





## **OUTSTANDING**

## **ADVANTAGES**

## Reduced Personnel Requirement

Automated bobbin transport and easy, ergonomic handling

## High Machine Efficiency

Permanent availability of the full roving bobbins on the ring spinning machine

## **Guaranteed Roving Quality**

Contact-free material transport from the roving frame to the ring spinning machine

## Management of Different Assortments

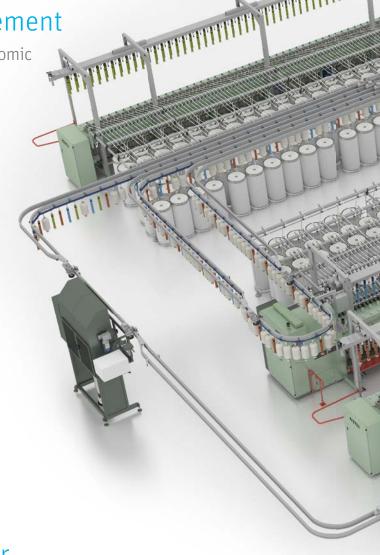
Controlled allocation of several assortments

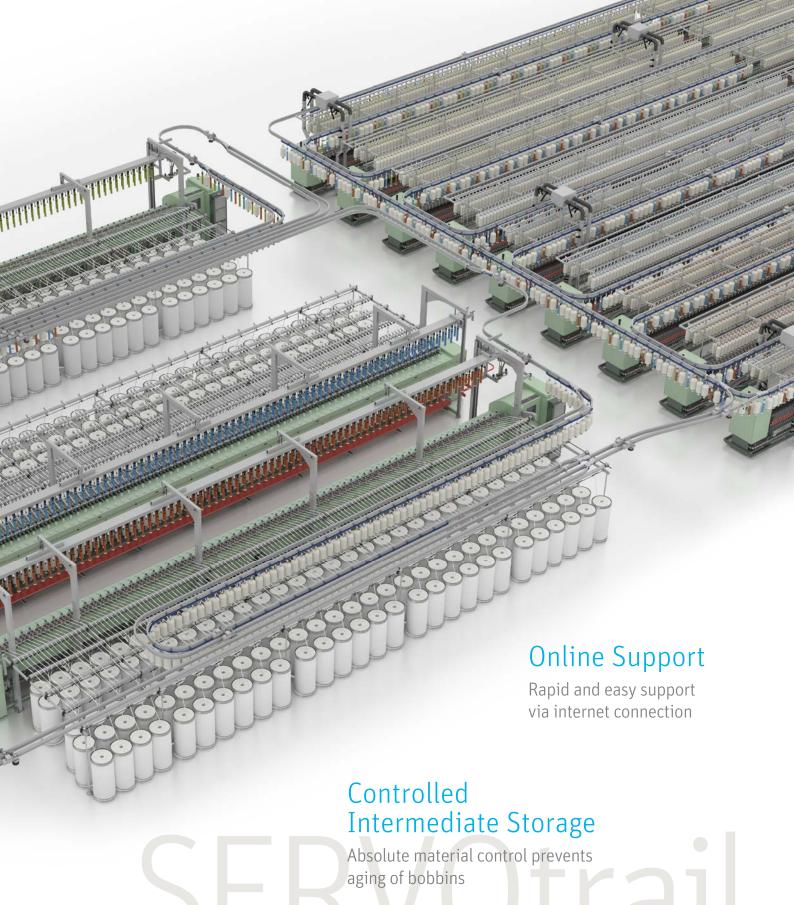
## Flexible and Modular Bobbin Transport System

Space-saving, customized systems for all customer requirements

## Manual and Fully Automated Solutions

Various levels of automation including bobbin stripper





Low-Maintenance and Long-Lasting System

Proven, stable components and simple design

# Customized Systems for All Customer Requirements

#### Various levels of automation

The modular roving bobbin transport system SERVOtrail offers the optimal material flow between the roving frames and the ring or compact-spinning machines. It reduces personnel requirements, increases machine efficiency, and ensures excellent roving quality. Customers can choose from several technical variants and levels of automation. Different assortments can be managed flexibly as the roving bobbins are assigned to the corresponding ring or compact-spinning machine in a targeted manner. SERVOtrail saves space, reduces the distance that operators are required to travel, and ensures that the spinning machines are freely accessible.

#### SERVOtrail Direct

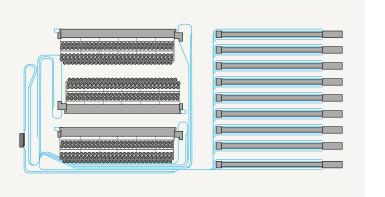
The fully automatic version – SERVOtrail Direct – fulfills the most stringent customer requirements. The trains with the bobbins run from the fully automatic roving frame directly into the bobbin creel of the ring spinning machine and replace the conventional creel. They are automatically positioned above the ring spinning machine. Spinning takes place directly from the bobbin trains, which saves repositioning of the roving bobbins.

With spinning of different assortments, transport of the roving bobbins to the correspondingly assigned ring spinning machines is guaranteed.

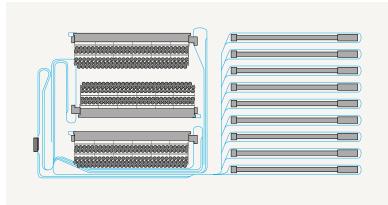
SERVOtrail Direct is also particularly suitable for large bobbin sizes of 7 in/2.7 kg.

#### SERVOtrail Flexible

The two most important variants of SERVOtrail Flexible are: Flexible A, the automatic system for automatic roving frames, and Flexible M, the manual system for manual roving frames. There are also semi-automatic solutions. SERVOtrail Flexible is primarily suitable for spinning mills that process various assortments. The system is designed in such a way that an unlimited number of roving frames and ring spinning machines can be integrated. In addition, every roving frame can also supply every ring spinning machine with roving bobbins. Manual or automatic bobbin strippers can be implemented.



In the fully automatic and flexible SERVOtrail Direct system, the trains act as bobbin creels

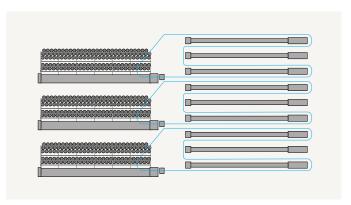


The extremely flexible SERVOtrail Flexible system uses each roving frame to supply every ring or compact-spinning machine

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#### SERVOtrail Circuit

For spinning mills with a mainly unchanging assortment, the most cost-effective SERVOtrail Circuit variants are a suitable solution. These are available as automatic or manual systems. Through the fixed circuits with one roving frame and three or four ring spinning machines, the Circuit systems offer very simple handling for spinning mills.



The SERVOtrail Circuit is the simple solution for unchanging assortments

## Solutions to Suit Any Customer Requirement

### Overview of the most important versions

	Direct	Flexible		Circuit	
Technical data	Direct	A	М	Α	М
One circuit for roving frames and ring spinning machines				Х	Х
Roving frame with automatic doffer	Χ	Х		X	
Max. number of roving frames to be connected per system	unlimited	unlimited	unlimited	1	2 – 3
Max. number of ring spinning machines to be connected per system	unlimited	unlimited	unlimited	3 – 4	3 – 4
In one system, each roving frame can supply every ring spinning machine	Х	Х	Х	Х	
Supply to all ring spinning machines, even during maintenance on a roving frame	х	х	х	Х	
Rapid roving bobbin transport (15 m/min) along the ring spinning machines	х	Х		Х	
Number of trains per roving frame	2	1 – 4	2		
Number of trains per ring spinning machine	16	1 – 2	2 – 4		
Suitable for coarse yarn counts	Х	Х	Х	Х	
Suitable for fine yarn counts	Х	Х	Х	Х	Х

A – automatic doffing on the roving frame

M – manual doffing on the roving frame

## Expansion of the SERVOtrail Family

The modular roving bobbin transport system



#### Various solutions

Depending on the customer's requirements, Rieter's SER-VOtrail offering can provide new open and closed rail systems. The open rail system is the right choice for customers who value maintenance-free solutions.

The closed rail system is for customers who prefer chain systems or battery-powered systems. Both systems are characterized by proven, simple and stable components.



#### Matching drives

Various new technical variants of drives are also available. Rieter offers its customers battery drives, chain drives, and friction wheel drives.

With SERVOtrail Direct and Flexible, friction wheels or battery trains drive the bobbin trains.

With SERVOtrail Circuit, chain drives and friction wheel drives are available.

#### Straightforward help if problems occur

Thanks to online support, should a technical problem occur with the automatic system, help can be obtained easily via an Internet connection.

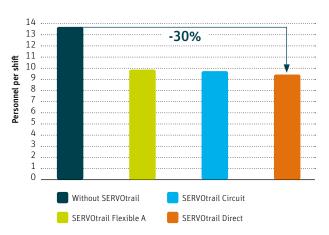
## Simplified Handling of Roving Bobbins

#### Contact-free material transport

#### Reduced personnel requirement

Whether manual or fully automatic versions – the SERVOtrail transport system simplifies roving bobbin handling and therefore reduces the personnel requirement and the production costs. Especially with fully automatic solutions and the manufacture of coarse yarns, the savings are substantial. A plant with 16 320 spindles and coarse yarns can save up to 30% ring spinning operating personnel as a result. At the same time, the workload of the operating personnel is reduced by the ergonomic roving bobbin handling.

Operating personnel 16 320 spindles, Ne 8, 1 400 kg/h



#### Guaranteed roving quality

Roving produced on the roving frame is a sensitive intermediate product that is very vulnerable to external influences. If the roving is incorrectly treated or is kept too long in intermediate storage, damage and soiling will occur. Horizontal transport, uncontrolled intermediate storage and any kind of contact will damage the roving and cause quality deterioration. These materialize in a reduced machine efficiency and also negatively affect the yarn quality. The contact-free roving bobbin transport ensures high machine efficiency and a consistently good roving quality.



