ZINSER ROVING FRAMES.
FASTER – BECAUSE WE KNOW HOW.
Faster – because we know how

Welcome to the Zinser roving frame model family, the fastest and most productive roving frame technology for a broad application spectrum from fine to coarse. Finely differentiated levels of automation, from the manual entry-level model ZinserSpeed 5M and automatic models with the original RoWeMat to the highly automated linked solution, enable you to maximise your productivity and quality to suit your plant.

More than 3,900 Zinser roving frames installed worldwide provide daily proof of their marathon capacity, creating the basis for maximum efficiency in the ring spinning process. With Zinser, you increase your production, save on personnel and get more roving from valuable raw material, all at reduced spinning costs.

Now find out more about the Zinser family of roving frame models.
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More production
More quality
More flexibility
Fewer personnel
Less downtime
Less energy
Fewer raw materials
Fewer wearing parts
Lower space costs
Zinser roving frames
Faster – because we know how

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Increasing productivity

- First-class roving – quickly and reliably with the Zinser roving frame
- Four independent, direct drives via section motors
- Energy-optimised bobbin rail drive
- Energy-saving mode for suction and flyer table blowing system
- Energy-efficient travelling cleaner
- Reliable in case of power failure
- Perfect Schlafhorst bobbin engineering for a precise bobbin build and high flyer speeds
- Minimal lot-changing times, maximum flexibility
It won’t go faster

Achieve high productivity and save energy

Zinser roving frames with marathon capacity
Any company wanting to be the fastest under the tough conditions that long-term, round-the-clock operation imposes must provide the right prerequisites: accurate yet robust technology, an in-depth knowledge of bobbin engineering and an intelligent operating concept that guarantees speedy and correct machine settings and fast lot-changing every time.

Direct drives, intelligent control – for top performance and perfect bobbin engineering
Thanks to the intelligent EasySpin control system, you can achieve top speeds without roving breaks on the Zinser roving frame and still fully retain the material quality deployed. Using four independent drives, EasySpin performs dynamic synchronisation of the drafting system, the traverse of the bobbin rail, spindle rotation and flyer rotation, perfectly coordinated to the increase in bobbin diameter and the centrifugal forces associated with this. A precise bobbin build with uniform tension over the entire build is guaranteed.

The toothed belts for the flyer and spindles are driven directly, saving energy on the Zinser roving frame and reducing the noise level in your spinning mill. The standard mains power failure support system brings production to a controlled stop if a power outage occurs.

Up to 65 % less energy used
The suction system and flyer table blowing system use far less power when operating in the new energy-saving mode. Full power is only required briefly for the cleaning cycle. You can adjust the intervals to suit your needs and material. A travelling cleaner can be connected directly to the integrated interface without any additional suction system or additional energy consumption.

Energy-saving mode for suction and blowing system
Up to 65 % less energy used
Zinser quality technologies

- Ring spinning starts at the roving frame
- Maximum value enhancement from the drawframe sliver to the quality package
- Constant roving quality
- Universal application from fine to coarse
- Fast, reliable operation with EasySpin
- Central setting, constant, reproducible roving quality
- Networked quality and production management
The best start for the best yarn

Uniform roving tension

Produce perfect yarn quality for high-end textiles
A Zinser roving frame pays right off from the start. It has all the tools and technology to protect your valuable material: from the precise machine control system and leading Schlafhorst bobbin engineering to convenient, quality-assured operation, it is designed for top roving quality.

This is because we want you to achieve maximum value enhancement from the drawframe sliver via the roving, bobbin and package to the textile end product.

Precision at any angle
With a Zinser roving frame you meet your customers' highest standards. The drafting system and spinning geometry typical of Zinser has been perfected over decades and is demonstrated day after day on over 3,900 Zinser roving frames installed worldwide.

The roving runs at exactly the same angle into the flyer heads of the two flyer rows. That's good news for you: thanks to the uniform roving tension, you can work with higher productivity. Even better, there are no differences in count in the roving between the back and front row on the Zinser roving frame.

Constant roving quality

A gentle breeze for greater cleanliness
Small idea, big effect: the smart flyer table blowing system keeps the sensitive roving intake free of fibre fly with a steady, gentle air current. The result is clean roving without stirring up too much dust.

Constant yarn and bobbin quality thanks to fully reproducible production data
Your customers want to be able to rely on the agreed yarn and bobbin quality. That's why you can set and store all production data easily and centrally at the EasySpin touchscreen on the Zinser roving frame. You can thus reproduce any lot at any time with an identical roving quality.

Moreover, any number of lots can be stored on USB sticks and transferred from one Zinser roving frame to another.
The manual team player for your success

- ZinserSpeed 5M for manual doffing
- Entry to market-leading Zinser roving frame technology
- Also available as a fine yarn roving frame with 220 mm gauge
- Up to 208 spindles
- Universal application from fine to coarse
- Automatically assisted doffing for maximum efficiency
Accessing the high productivity levels of Zinser: the ZinserSpeed 5M manual roving frame

High productivity thanks to automatically assisted doffing

Smart support for speedier doffing: manual doffing with the ZinserSpeed 5M

Form follows function – every last detail of the ZinserSpeed 5M is geared to maximum productivity through reliable, time-saving operation. In manual doffing, for example: the bobbin rail is lowered to the perfect bottom position, while the bobbins are guided by a centre spindle in the flyer. The bobbins are thus entirely freely accessible when the bobbin rail is lowered, and your personnel can remove even the bobbins from the back row easily and without damaging them.

Roving separation, lowering of the bobbin rail into the doffing position, attachment of the roving and production start-up all take place automatically.

The ZinserSpeed 5M also as a fine yarn roving frame

Schlafhorst offers you the fast ZinserSpeed 5M roving frame also as a special variant with extra features for the efficient production of fine yarn.

- The 220 mm gauge saves space.
- The low construction height of the creel and additional transport rollers are gentle on the sliver. The ZinserSpeed 5M thus offers the best, most economical basis for the production of top-quality ring yarns.
Greater productivity with automation and a linked system solution

- 2 automatic models: Zinser 670 and Zinser 670 BigPac
- Zinser 670 and Zinser 670 BigPac with integrated automatic doffer
- Original RoWeMat – the most productive Zinser doffing technology
- Top roving quality
- Labour-saving
- Automation solutions from the roving frame to the winding machine
- Customised configuration
Independence from operating personnel with the original Zinser RoWeMat

Accessible, reliable, time-saving

Automation stages as required
The Zinser family of roving frame models offers you different degrees of automation. The two roving frames with automatic doffer, Zinser 670 and Zinser 670 BigPac, offer a considerable reduction in the personnel requirement and improve roving quality at the same time. Other optional expansion stages enable you to customise the automation perfectly to your operating sequences and thereby achieve additional effects in terms of productivity and quality.

Original Zinser RoWeMat for efficiency
The built-in automatic RoWeMat doffer – the Zinser original – is integrated into the machine so intelligently that it does not disrupt production. All components remain freely accessible before and after the doffing process. Storage of the full bobbins and empty tubes also takes place in the roving frame. The result is short doffing times and greater efficiency.

No waiting times when starting production
Doffing and restart are automatic. What’s more, no personnel are needed. The roving bobbins are stored in the machine, while production can continue without any delay.

Practical and flexible: bobbin removal
The full bobbins can be removed at any time between two doffing sequences. The roving bobbins are placed in the carriage at an optimal ergonomic working height or suspended directly in the roving bobbin transport system. You thus save your operators time, enabling them to be deployed more flexibly.
Additional, individually configurable automation options

- Individual automation stages for Zinser 670 and Zinser 670 BigPac to suit any spinning mill
- RoWeLift – automatic transfer station to the roving bobbin transport system
- Integrated automatic RoWeClean tube cleaning system for even greater productivity and independence from operating personnel
- RoWeStore – the integrated tube magazine that keeps production flowing
- Made-to-measure roving bobbin transport systems in every building
- Contactless, targeted conveying of the sensitive roving bobbins safeguards your yarn quality
Automatic production at the highest level

Configure labour-saving modules individually

Reduce manual handling further for more productivity and enhanced quality
Where automation was once only a subject for high-wage countries, it is increasingly becoming a general topic in spinning mills worldwide. Even in countries with a lower wage level it is becoming more and more difficult to recruit the necessary personnel. However, automation also improves quality, because much of the contact with the valuable roving that damages it and diminishes its quality is avoided. With Zinser’s automation modules for automatically doffed roving frames you can configure your roving production to make it even less dependent on personnel.

Transfer roving bobbins without contact and with assured quality using RoWeLift
With RoWeLift the roving bobbins enter the transport system contactlessly and without any risk of mix-up. Two bobbins or tubes are transferred simultaneously to the transport system. RoWeLift reduces the workload and safeguards the quality of the bobbins for downstream processing.

Clean tubes automatically and recycle raw materials separated by type – with RoWeClean
The integrated automatic tube cleaning system RoWeClean is efficient and saves on personnel. Roving residues are automatically removed from the tubes. They are sorted according to type and can be recycled, contributing to effective raw material utilisation.

Automatically separate malfunctioning tubes, eliminate downtimes with RoWeStore
Another individual automation option on the roving frame is the integrated empty tube magazine RoWeStore. Tubes that cannot be cleaned are automatically replaced with empty tubes by RoWeStore. Thus no uncleared tubes enter the machine and no stoppages occur in the filling process due to uncleaned tubes. The transfer process operates smoothly and without the need for personnel.
Technical data ZinserSpeed 5M

Machine length L in mm
L = 1,200 + X + 188

ZinserSpeed 5M

Application area
Staple fibres up to 63 mm

Raw materials
Cotton, viscose, manmade fibres and their blends

Spindles
24, 36, 48, 60, 72, 84, 96, 108, 120, 132, 144, 156, 168, 180, 192 (G = 260 mm)
32, 48, 64, 80, 96, 112, 128, 144, 160, 176, 192, 208 (G = 220 mm)

Flyer sizes
400 mm x 150 mm (16" x 6")
for G = 220 and 260
400 mm x 175 mm (16" x 7")
for G = 260

Flyer speed
max. 1,500 rpm

Gauge G
220 and 260 mm

Count range
At 16" x 6":
2,222 tex – 200 tex
(Nm 0.5 – 5.0)
(Ne 0.3 – 3.0)

At 16" x 7":
2,222 tex – 455 tex
(Nm 0.5 – 2.2)
(Ne 0.3 – 1.3)

Twist range
10 – 100 twists per metre
(0.25 – 2.54 twists per inch)

Draft range
3.0 – 15.8-fold

Drafting system
3-roller-2-apron drafting system or
4-roller-2-apron drafting system

Restriction
For numbers of spindles of 176 or 180: only for cotton

Options
Roving tension control
TensionControl
Individual roving detector
Plant Control System

<table>
<thead>
<tr>
<th>Gauge G</th>
<th>Can diameter</th>
<th>Machine width (W)</th>
</tr>
</thead>
<tbody>
<tr>
<td>260</td>
<td>20&quot; (500 mm)</td>
<td>Approx. 4,296 mm</td>
</tr>
<tr>
<td>260</td>
<td>24&quot; (600 mm)</td>
<td>Approx. 5,263 mm</td>
</tr>
<tr>
<td>220</td>
<td>20&quot; (500 mm)</td>
<td>Approx. 4,803 mm</td>
</tr>
<tr>
<td>220</td>
<td>24&quot; (600 mm)</td>
<td>Approx. 5,828 mm</td>
</tr>
</tbody>
</table>

Diagram shows a creel version for 260 mm gauge.

ZINSER ROVING FRAMES
Technical data Zinser 670

**Application area**
Staple fibres up to 63 mm

**Raw material grades**
Cotton, viscose, manmade fibres and their blends

**Spindles**
24, 36, 48, 60, 72, 84, 96, 108, 120, 132, 144, 156, 168, 180, 192

**Flyer sizes**
400 mm x 150 mm (16" x 6")
400 mm x 175 mm (16" x 7")

**Flyer speed**
max. 1,500 rpm

**Gauge**
260 mm

**Count range**
At 16" x 6":
2,222 tex – 200 tex
(Nm 0.5 – 5.0)
(Ne 0.3 – 3.0)
At 16" x 7":
2,222 tex – 455 tex
(Nm 0.5 – 2.2)
(Ne 0.3 – 1.3)

**Twist range**
10 – 100 twists per metre
(0.25 – 2.54 twists per inch)

**Draft range**
3.0 – 15.8-fold

**Drafting system**
3-roller-2-apron drafting system or
4-roller-2-apron drafting system

**Options**
RoWeLift
RoWeClean and RoWeStore
Roving tension control
TensionControl
Individual roving detector
Plant Control System

**Can diameter**
- 20" (500 mm) Approx. 4,651 mm
- 24" (600 mm) Approx. 5,620 mm

**Machine length L in mm**
- \( L_1 = 2,535 + X + 175 \) manual removal
- \( L_2 = 3,230 + X \) with RoWeLift
- \( L_3 = 3,680 + X \) with RoWeLift, RoWeClean and RoWeStore

**Machine width**
- 20" (500 mm) Approx. 4,651 mm
- 24" (600 mm) Approx. 5,620 mm

**X = No. of spindles x gauge**

For numbers of spindles above 180: only for cotton
Zinser 670 BigPac – the productivity turbo for coarse yarns

Up to 100 % higher bobbin weights

Just pack more on the bobbin
The Zinser 670 BigPac exceeds the limits of usual bobbin sizes and opens up new productivity potential for you, with bobbins that are twice the weight and extra-long winding lengths.

Fewer changes, more productivity
The thick BigPac bobbins weighing up to 4 kg in the 20” x 7” size cut the amount of handling required considerably. Productivity is increased due to less bobbin changes, both at the roving frame and on the ring spinning machine.

Ideal for denim spinning mills

Even less handling a certainty: the roving bobbin transport system for the BigPac
You achieve even greater productivity with an automatic roving bobbin transport system, which guarantees top quality and process reliability especially for the heavyweight BigPac bobbins. The greatest savings are attained with the fully automated solution. Here the workload for doffing, bobbin transport and bobbin change at the roving frame and on the ring spinning machine is reduced by nearly 80 %.

Up to 100 % higher bobbin weights

<table>
<thead>
<tr>
<th>Bobbin size</th>
<th>Bobbin weight kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>20” x 7”</td>
<td>4 kg</td>
</tr>
<tr>
<td>16” x 6”</td>
<td>2 kg</td>
</tr>
</tbody>
</table>

- Zinser 670 BigPac, 20” x 7”
- Roving frame, 16” x 6”
Technical data Zinser 670 BigPac

**Application area**
Staple fibres up to 63 mm

**Raw material grades**
Cotton, viscose, manmade fibres and their blends

**Spindles**
24, 36, 48, 60, 72, 84, 96, 108, 120, 132, 144

**Flyer size**
500 mm x 175 mm (20” x 7”)

**Flyer speed**
max. 1,000 rpm

**Gauge**
260 mm

**Count range**
2,222 tex – 455 tex 
(Nm 0.5 – 2.2) 
(No 0.3 – 1.3)

**Twist range**
10 – 100 twists per metre 
(0.25 – 2.54 twists per inch)

**Draft range**
3.0 – 15.8-fold

**Drafting system**
3-roller-2-apron drafting system or 4-roller-2-apron drafting system

**Options**
RoWeLift 
RoWeClean and RoWeStore 
Roving tension control 
TensionControl 
Individual roving detector 
Plant Control System

Schlafhorst’s quality management system complies with the requirements of EN ISO 9001.

**Can diameter**
20” (500 mm) Approx. 4,953 mm
24” (600 mm) Approx. 5,920 mm

Regarding this brochure: Research and development never stand still. This may mean that some statements about Zinser products have been rendered obsolete by technical progress. The illustrations are selected for informative content only. They may also include special equipment that does not form part of the standard specification.