Spinning the full range.

Welcome to the Zinser 72XL – the new generation of ring and compact spinning machines from Saurer Zinser. Powerful technology for large producers with the new benefit of maximum flexibility for all applications.

With super-long, more powerful drives and the highest consistency in quality thanks to the new FlexiDrive central drive for super-long machines. With energy-saving technologies such as TwinSuction, with Impact FX self-cleaning compact technology, with numerous personnel-saving details and customised automation.

Zinser 72XL – economical and straightforward state-of-the-art technology that can do more, performs better and consumes less resources than ever before.
Zinser 72XL for a comprehensive application spectrum

FlexiDrive – Space-saving central drive

1. TwinSuction
2. OptiSuction
3. FlexiDrive
4. Independent compacting vacuum system
5. EasySpin
6. FancyDraft
7. Energy-efficient drive technology
8. High Speed spindles
9. CoWeMat
10. BobbinTray

Standard | Option
Impact FX is self-cleaning

Fast lot changing thanks to central setting
Benefit from the ZinserRing 72XL and the ZinserImpact 72XL: outstanding energy efficiency and economy, maximum raw material utilisation, minimal reliance on operators, incomparable yarn quality, individual automation and service performance. The E³-seal guarantees you state-of-the-art technology that can do more, performs better and consumes less resources than ever before.

**Highlights**

- Reduction of up to 66% in energy consumption for suction
- Constant yarn quality on long machines thanks to FlexiDrive
- Maximum productivity/m² thanks to optimal space utilisation
- Top compact quality thanks to self-cleaning Impact FX technology
- Optimum raw material utilisation with adjustable Impact FX compacting
- Lowest personnel requirements and lowest logistics costs
E³ – Triple added value

We aim to provide our customers with innovative products that make a difference in their production and profitability. The passion for our products drives our innovation. By focusing on our customers’ requirements and combined with Saurer’s philosophy of innovation and sustainability, triple added value has been created.

Energy

Save up to 66% energy for suction
- Highest speeds thanks to powerful drive motors with low energy consumption
- Low energy costs thanks to TwinSuction and OptiSuction
- Energy monitoring for maximum cost transparency

Economics

More productivity with 2,016 spindles
- Constant yarn quality thanks to the new FlexiDrive central drive
- Maximum productivity for commodity and specialist applications
- More productivity per m²
- Optimal spinning geometry

Ergonomics

Reduced handling and maintenance input
- Simple, intuitive operation through EasySpin
- Self-cleaning Impact FX technology
- Zero Underwinding eliminates wharve cleaning
- Made-to-measure automation

Save up to 66% energy with Zinser TwinSuction and OptiSuction

<table>
<thead>
<tr>
<th>Machine</th>
<th>Energy Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinser 351</td>
<td>13%</td>
</tr>
<tr>
<td>Zinser 351 with OptiSuction</td>
<td>-66%</td>
</tr>
<tr>
<td>Zinser 72XL with TwinSuction and OptiSuction</td>
<td>-66%</td>
</tr>
</tbody>
</table>

Up to 20% more production through a reduction in twist

<table>
<thead>
<tr>
<th>Machine</th>
<th>T/year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinser 72XL</td>
<td>272</td>
</tr>
<tr>
<td>Zinser Impact 72XL</td>
<td>328</td>
</tr>
</tbody>
</table>

ZinserRing 72XL: economical machine length

<table>
<thead>
<tr>
<th>Machine</th>
<th>Machine Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competition</td>
<td>500 mm</td>
</tr>
<tr>
<td>ZinserRing 72XL</td>
<td>500 mm</td>
</tr>
</tbody>
</table>

Basis: 1,824 spindles, linked system
Top-quality yarns in a comprehensive range

- Best performance for large producers
- Improved efficiency, reduced spinning costs
- Optimum use of space thanks to identical machine lengths with different gauges
- React fast and flexibly to market requirements
- Widest range of applications – ring and compact yarns from fine to coarse for nearly all fibre types and blends
- Expand your product portfolio with fancy yarns, core yarns, dual core yarns, technical yarns and siro plied yarns
Best performance for large producers

The new generation of top-class ring spinning
Produce your large orders faster, better and more efficiently than ever before. The Zinser 72XL with its reliable, fast and intelligent technology enables you to produce more kg of yarn per shift. Whether the lot changes are few or frequent, your production is permanently high for nearly all raw materials and applications. With the new FlexiDrive central drive, you can also spin in super length with the highest speeds, guaranteed yarn quality and a low thread break rate.

Reduced spinning costs
From energy-optimised suction to compact technology resource-saving – the Zinser 72XL technology concept achieves a high level of resource efficiency. Super length, energy-saving technologies, smart automation and raw material flexibility make large orders just as profitable as specialist applications.

Flexibility as you need it: gauges, tubes, rings
The Zinser 72XL offers two gauges, 68.75 mm and 75 mm. Machines with different gauges are available in the same machine length for optimum building utilisation and reduction of air-conditioning costs.

Depending on the application, you can choose the movable or fixed balloon control ring, tube lengths of up to 260 mm and ring diameters of up to 54 mm.
Worthwhile not only for commodity applications

Full flexibility for all markets
With the Zinser 72XL, you can spin ring and compact yarns from fine to coarse with nearly all fibre types and blends. All markets and applications are open to you with fancy yarns, core yarns, dual core yarns, technical yarns and siro plied yarns.

Fast lot changes, reproducible yarn qualities
The ServoDraft electronic drafting system drive makes lot changing quick and easy. FancyDraft can also be used to quickly change to fancy yarns at short notice. You can save the lot data centrally on EasySpin – for reproducible results.

Perfect fancy yarn structures without moiré effect
Zinser FancyDraft does not require any adjustment for separate effects. The desired effect in the woven or knitted fabric is generated by smart linking of effect thicknesses and length ranges, eliminating the moiré effect.

Fancy yarns 100% reproducible
With FancyDraft, you can produce a wide variety of fashionable fancy yarns quickly and easily, without any additional equipment. The MultiCount and MultiTwist effect functions can also be combined. With FancyDraft Professional, you can define 16 effects and up to 6,000 lines per repeat. The optimised FancyDesigner software enables 100% reproducible effects.
Spin compact yarns with any yarn characteristics
Impact FX offers you flexibility in the choice of compact characteristics for outstanding yarn qualities with optimal, uniform yarn values. The low level of hairiness, greater strength and elongation exert a noticeably positive influence on downstream processing and on the end product, giving you a clear edge over your competitors.

Special yarns for diverse applications
With SiroSpun you produce siro plied yarns of a unique yarn character. CoreSpun enables you to spin hard and soft core yarns on the Zinser 72XL. SiroSpun and CoreSpun can also be combined, and you can even expand your product range at a later stage without any problems. With the Zinser 72XL you are best prepared for upcoming fashion trends.
Efficiency for all markets

- Significantly reduce spinning costs
- Consistent quality and up to 22% space savings for super-long machines thanks to the FlexiDrive central drive
- High-speed spinning over the entire bobbin build with OptiStep and precision components
- Produce more with the self-cleaning Impact FX compact technology
Profitability on 2,016 spindles

Take full advantage of super length
Only the Zinser 72XL features the cutting-edge FlexiDrive central drive for super-long machines – integrated into the machine to save space. This means that your valuable production area is not wasted on drives, but used for productive spindles. This saves you up to 22% of the production area with 2,016 spindles. For more output per square meter with constant yarn quality and minimal yarn break rates.

Your production costs fall by up to 11% compared with a ring spinning installation with 1,200 spindles.

Reliable efficiency in every length
Constant yarn values and maximum production reliability: the drafting system is extremely accurate, and the greater diameter of the middle bottom rollers increases their resistance to torsion forces. Mechanical weighting arms ensure constant pressure on all spinning positions.

Perfect spinning geometry for high-speed spinning
The Zinser 72XL is a byword for perfect spinning geometry, perfectly coordinated to any tube length. This is the ideal prerequisite for superb running properties and high-quality yarn. Benefit from top speeds and top results.

ZinserRing 72XL with 2,016 spindles: production costs cut by up to 11%

![Graph showing production costs reduction](image)

Relative to a complete installation with 30,000 spindles (roving frame, ring spinning machine, winding machine)
Ne 30, carded cotton

ZinserRing 72XL with 2,016 spindles: up to 22% less space required

![Diagram showing space reduction](image)

15 ring spinning machines with 2,016 spindles, 5 roving frames, 15 winding machines
25 ring spinning machines with 1,200 spindles, 7 roving frames, 25 winding machines
High speed and durability

ServoDraft: quick, central, precise
The ServoDraft electronic drafting system drive renders mechanical settings of the total draft superfluous: your staff set the spinning parameters centrally at EasySpin. The machine control system checks the values before they are used. Monitoring and control are performed by sensor technology, ensuring consistent yarn quality and extremely low yarn break rates.

Spin at the optimum level with OptiStep
Maximum speeds over the entire build of the bobbin: thanks to the Zinser OptiStep 10-point program, the main spinning speeds are ideally aligned with the technological spinning limit. You achieve top productivity in every phase. The traveller service life is also extended.

Higher productivity with OptiStart
Ring travellers last longer if they are run properly. This is achieved extremely easily and entirely automatically with OptiStart and the traveller running-in button in EasySpin. The traveller service life is significantly increased, as is the life of the spinning rings.

Zinser OptiStep 10-point spinning program for higher productivity.
Produce more, save raw materials

Impact FX compact technology: greater production through self-cleaning and adjustability
Gain up to 2,600 kg more production solely by the elimination of cleaning intervals. Impact FX does not require staff inspection rounds. There is no imperceptibly loss of compacting power and no production downtimes due to cleaning.

Increased production with Impact FX
Impact FX settings can be set variably for maximum efficiency and raw material utilisation. Compact spinning with the ZinserImpact 72XL facilitates an increase of up to 20% in production by reducing the twist.

Economical use of raw materials
The ZinserImpact 72XL is particularly good at processing short fibres. Even cotton grades with a higher proportion of short fibres yield good yarn values. You benefit from a 6% raw material saving and produce significantly more resource-efficient.

Always 100% compacting power
Thanks to an independent vacuum system and self-cleaning aprons, you always spin at 100% compacting power – with constant quality.

Up to 2,600 kg more production with self-cleaning technology

<table>
<thead>
<tr>
<th>Yarn counts</th>
<th>kg/year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ne 100</td>
<td>0</td>
</tr>
<tr>
<td>Ne 60</td>
<td>1,500</td>
</tr>
<tr>
<td>Ne 40</td>
<td>3,000</td>
</tr>
<tr>
<td>Ne 30</td>
<td>0</td>
</tr>
</tbody>
</table>

| Ne 100 | 0 |
| Ne 60  | 1,500 |
| Ne 40  | 3,000 |
| Ne 30  | 0 |

With 2,016 spindles/machine

Independent compacting vacuum system
Save up to 66% energy for suction

- Energy saving thanks to unique both-end suction with TwinSuction
- Save additional energy with OptiSuction
- Powerful motor and drive technology
- High Speed spindles for a low energy requirement
Innovative suction

Zinser TwinSuction and OptiSuction save up to 66% energy
On the Zinser 72XL, the suction system is installed at both ends of the machine instead of just one – maximum efficiency thanks to Zinser TwinSuction! Measure the energy saving in practice and benefit on a daily basis from this innovative yarn break suction system.

Save up to 66% energy with Zinser TwinSuction and OptiSuction

Energy saving thanks to OptiSuction
OptiSuction, the sensor-monitored yarn break suction system, always provides exactly the vacuum level required, no matter how full the filter box is. The target value is set at the EasySpin touchscreen. The vacuum is always adjusted optimally to the raw material and yarn count.

Energy saving with Zinser OptiSuction
The most economical drive

Smart drive technology equals energy efficiency
The Zinser tangential belt drive generates an impressively low level of friction and minimal air resistance. The low number of deflection points, straight path of the belt without any twists and comparatively small belt surface see to that. The Zinser drive belt has ¼ less area compared with the 4-spindle belt drives of rival machines. In total these design advantages yield a considerable energy saving.

Your yarn quality is enhanced too. Due to the highly uniform surface of the belt, the spindles are always driven free of vibration. Your advantage: the variation in spindle speed for Zinser is less than 1%, ensuring that the yarn twist is always constant.

Energy Monitoring
The Energy Monitoring feature enables your staff to track your machine’s energy consumption online for the first time via EasySpin. No time-consuming energy measurement is required and production can be optimised in terms of power used. Time, resource and staff savings thanks to integrated online measurement.

No additional cooling circuit necessary
The new energy-efficient high-performance motors are precisely designed for the required power and do not heat up. Costly energy is converted to speed, not to heat.

Power drives with low energy consumption
High speeds on 2,016 spindles and full flexibility in the use of raw materials: with up to 110 kW of installed power and an outstanding spindle ratio per motor, the Zinser 72XL always offers the best performance – for all raw materials with outstanding energy efficiency.
Energy savings all the way down the line thanks to Zinser High Speed spindles
The high-precision spindles also make a substantial contribution to the high energy efficiency of the Zinser 72XL: their energy requirement is impressively low and they achieve optimal conversion of the drive energy.
Spin top speeds with absolutely smooth running – for the ultimate in economical yarn production.

Exploit productivity potential to the full
The precise and highly stable bearing technology of Zinser spindles ensures absolute running smoothness at top speeds. Less maintenance is required and the spindles have a long service life.
Save on staff and servicing

- Reduced operating times thanks to easy handling at EasySpin
- Minimum handling required due to low-maintenance tangential belt and self-cleaning Impact FX compacting system
- Minimal servicing input with the CoWeMat, the most process-reliable doffer
- Up to 66% savings on personnel with CoWeFeed
- Reduced handling complexity with Zero Underwinding
- Production secured even in the event of a power failure
Efficient technology

Everything centrally at a glance with EasySpin
Your operators can set all the key spinning parameters and machine components such as the spindle drive, FancyDraft and CoWeMat centrally at the ergonomic EasySpin touchscreen.
Operating times, running times and setting errors are reduced by a simple operating concept and easy to understand input assistance. Parameters can be optimised quickly and easily and quality is automatically guaranteed. Simply transfer your proven quality parameters to other machines by USB stick.

Low-maintenance tangential belt
The multi-motor single tangential belt drive is virtually maintenance-free because the belt change can be carried out as part of regular general machine maintenance to save time.
It is enclosed and the belt surface area is very small. That is why it does not generate any air turbulence in the machine unlike the pulley shaft of a 4 spindle belt drive for example. The staff costs for cleaning are minimal as a result.

Low-maintenance Impact FX compact technology
The compacting unit of the ZinserImpact 72XL is self-cleaning, thanks to the intelligent fulling effect at the deflection points of the apron. Your advantage: no clogging, no cleaning effort.
Only Impact FX offers this process reliability and thus highly efficient compact yarn production.
Operator’s workload reduced

Maximum efficiency with the original CoWeMat
The most reliable doffer in the world has an impressive doffing time of under two minutes and well-developed reliability standards. On other machines, minor malfunctions quickly cripple the machine. Not with Zinser: if a gripper malfunctions, the CoWeMat and the machine continue running. An independent vacuum supply, releasable grippers and a light barrier guarantee a secure doffing sequence.

Even for high-strength yarns
A light barrier monitors the smooth doffing flow. In case of a malfunction, the machine shuts down automatically. Even high-strength yarns are separated reliably.

BobbinTray for contactless transport
BobbinTray, the automatic bobbin transport with precision drive, handles your valuable yarn gently and transports it entirely contactlessly. Your spinning mill requires even fewer staff and your high yarn quality is fully safeguarded.
Prevents underwound ends without subsequent cleaning
Spindles with the Zero Underwinding concept prevent underwound yarn ends. For precise functionality during the complete spinning cycle – no wharve cleaning is required.

CoWeFeed: automatic tube sorting
Only Zinser’s self-sorting tube feed CoWeFeed saves so much time and personnel. Your operators simply tip the empty tubes into the feed container – they are sorted smoothly and automatically. You save up to 66% labour.

Production secured even in the event of a power failure
The Zinser 72XL has an automatic failsafe system for power outages. The machine bridges brief power outages autonomously without any stoppage in production. If the power is down for longer, the machine shuts down in a controlled manner and subsequently starts up without any malfunctions. Your advantage: no unnecessary yarn breaks, less operator input.

Up to 66% savings on personnel with CoWeFeed

<table>
<thead>
<tr>
<th>Yarn count</th>
<th>Number of operators/30,000 spindles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ne 10</td>
<td></td>
</tr>
<tr>
<td>Ne 20</td>
<td></td>
</tr>
<tr>
<td>Ne 30</td>
<td></td>
</tr>
<tr>
<td>Ne 40</td>
<td></td>
</tr>
<tr>
<td>Ne 50</td>
<td></td>
</tr>
</tbody>
</table>

![Graph showing savings on personnel with CoWeFeed.](image)
Spinning success with Zinser and Schlafhorst

- System suppliers Zinser and Schlafhorst – automation solutions from roving frame to winding machine
- Flexible doffing automation with the stand-alone solution or maximum efficiency with linked systems
- Zinser Autoflow systems for made-to-measure roving transport automation
- Networked quality and production management with Individual Spindle Monitoring, Roving Stop and POC
- Customer support
Economy

State-of-the-art linked solutions
Any conventional winding machine on the market can be connected to your Zinser 72XL. Contactless bobbin transport with BobbinTray is recommended in particular for large lots and super-long machines, for reduced staff and space costs and the best yarn quality.

Steaming in linked systems
For certain yarn qualities, the bobbins need to be steamed prior to the winding process. A continuous steaming process between the ring spinning machine and the winding machine additionally reduces production throughput times. Zinser ring spinning machines have the optimum interface for available systems.

Zinser Autoflow systems for made-to-measure roving transport automation
The Zinser Autoflow system offers automation solutions tailored to your budget and spinning mill layout. Your processes are less dependent on staff, faster and error-free, from the roving frame to the winding machine. Other advantages: 100% reliable yarn quality thanks to contactless transport, optimal coast-down and the lowest yarn break rates.
Quality management

Production monitoring with Individual Spindle Monitoring and Roving Stop
As an interlinked system, the individual spindle monitoring and the automatic roving stop monitor your production on an ongoing basis. A smart auxiliary guidance system for optical yarn break detection optimises the workplace on the Zinser 72XL. Your benefits: you conserve material, avoid lapping and increase your efficiency rating.

The entire spinning installation at a glance
The Plant Operation Center (POC) shows you the levels of productivity and efficiency at which your entire installation is currently operating, from the roving frame via the ring spinning machine to the winding machine. These are the best conditions for optimising your mill sequences and increasing your economic success.
Customer Support

SUN – SERVICE UNLIMITED
With SUN – SERVICE UNLIMITED Saurer establishes new service standards for the entire textile value chain. SUN is a bundle of differentiated services that add real value to Saurer machinery throughout its entire life cycle. Highly trained staff accompanied by state-of-the-art tools improve our customers’ daily business in a flexible and individual way. We provide the owners of Saurer machinery with innovative products and best services to improve production and profitability.

With SUN – SERVICE UNLIMITED
Saurer sets the benchmarks in:

- Consulting
- Installation
- Know-how Transfer
- Original Parts
- Maintenance and Repair
- Updates and Upgrades

SECOS 2.0

A strong tool, a strong partner
With SECOS 2.0 Saurer is providing its customers with an efficient tool for optimising the operation of machines and equipment. With its second generation, SECOS enables a significant increase in efficiency for processes concerning the maintenance, care, modernisation and procurement of original parts.

With the latest generation of the online portal Saurer underlines its service leadership in textile machinery engineering. Years of experience in online customer service combined with state-of-the-art IT and an innovative user interface produce a number of appealing customer benefits. Users of SECOS 2.0 are given access to all the necessary information for running their product portfolios.

From operating and service documentation to original parts catalogues, up to e-learning modules and knowledge databases – all of it precisely tailored to their machinery and needs.
ZinserRing 72XL technical data

Range of application
Staple fibres up to 54 mm

Raw material qualities
Combed cotton, carded cotton, viscose, manmade fibres and their blends

Count range for 100% cotton
Ne 7 – 160

Optional
up to Ne 260

Count range for manmade fibres and blends
Ne 15 – 80 (others on request)

Draft range
15 – 85 fold

Spindle gauge
68.75 mm, 75 mm

<table>
<thead>
<tr>
<th>Gauge (mm)</th>
<th>Max. no. of spindles</th>
<th>No. of spindles per section</th>
<th>No. of spindles per motor</th>
<th>Standard</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>68.75</td>
<td>2,016 *</td>
<td>48</td>
<td>120</td>
<td>96</td>
<td></td>
</tr>
<tr>
<td>75</td>
<td>1,848 **</td>
<td>44</td>
<td>110</td>
<td>88</td>
<td></td>
</tr>
</tbody>
</table>

* FlexiDrive central drive > 1,440 spindles
** FlexiDrive central drive > 1,408 spindles

Tube length
180 – 260 mm

Ring diameter
36 – 54 mm

Spindle speed
25,000 rpm (mechanical)

Bottom roller diameter
27 – 30.5 – 27 [mm]

Top roller diameter
30 – 25 – 30 [mm]

Electrical parameters
400 V (+/- 10 %)
440 V (+/- 10 %)
50 or 60 Hz

Basic specification

High-performance functions – standard equipment of ZinserRing 72XL
- EasySpin – graphical user interface
- OptiStart – traveller running-in program
- OptiStep – spinning program
- ServoDraft – electronic drafting system drive
- CoWeMat – doffing device
- Movable balloon control ring for tube length 220 – 260 mm (Gauge 75 mm)
- Inverter drive
- Installed power: 75, 90 or 110 kW (depending on number of spindles)
- Centreable rings
- Individual knee brakes for spindles
- Loop prevention function
- Motor-driven opening of yarn guides
- OptiSuction – yarn break suction system
- Zero Underwinding
- Linked version – interface with winding machine

Options
- FancyDraft
- FancyDesigner
- SiroSpun
- CoreSpun
- Combination SiroSpun and CoreSpun
- Roving Stop
- Individual Spindle Monitoring
- Movable balloon control ring for tube length 180 – 230 mm (Gauge 68.75 mm)
- Stand-alone version with CoWeFeed (self-oriented tube feed)
- Energy Monitoring
- Plant Operation Center

ZINSER 72XL
ZinserImpact 72XL technical data

Range of application
Staple fibres up to 50 mm

Raw material qualities
Combed cotton, carded cotton, viscose, manmade fibres and their blends

Count range for 100% cotton
Ne 7 – 160

Optional
up to Ne 260

Count range for manmade fibres and blends
Ne 15 – 80 (others on request)

Draft range
15 – 85 fold

Spindle gauge
68.75 mm, 75 mm

Tube length
180 – 260 mm

Ring diameter
36 – 54 mm

Spindle speed
25,000 rpm (mechanical)

Bottom roller diameter
27 – 30.5 – 27 – 27 [mm]

Top roller diameter
28 – 25 – 28 – 26 [mm]

Electrical parameters
400 V (+ / – 10 %)
440 V (+ / – 10 %)
50 or 60 Hz

Basic specification

High-performance functions – standard equipment of ZinserImpact 72XL
- EasySpin – graphical user interface
- OptiStart – traveller running-in program
- OptiStep – spinning program
- ServoDraft – electronic drafting system drive
- CoWeMat – doffing device
- Movable balloon control ring for tube length 220 – 260 mm (Gauge 75 mm)
- Inverter drive
- Installed power: 75, 90 or 110 kW (depending on number of spindles)
- Centreable rings
- Individual knee brakes for spindles
- Loop prevention function
- Motor-driven opening of yarn guides
- OptiSuction – yarn break suction system
- Zero Underwinding
- Linked version – interface with winding machine

Options
- FancyDraft
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- Energy Monitoring
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Regarding this brochure
Research and development never stand still. This may mean that some statements about Zinser products are obsolete due to technical progress. The illustrations are selected for informative content only. They may contain special equipment which is not included in the standard scope of supply.

ZINSER 72XL
Our quality management system complies with the requirements of EN ISO 9001.