SAURER.
Schlafhorst

ZINSERIMPACT 71.
GO NON-STOP –
WITH OUR SELF-CLEANING IMPACT FX.
–

EN

Go non-stop – with our self-cleaning Impact FX

Achieve your targets – with the ZinserImpact 71, the entry model to the most reliable and integrated compact spinning technology.

Impact FX is self-cleaning and consistently delivers full compact power at all times and at all spindles – without additional inspections or cleaning.

In addition, you benefit from the most reliable doffer in the world and reduced spinning costs.

Individual automation solutions from Schlafhorst – from roving frame to winding machine – reduce your reliance on personnel and increase your productivity.

Less downtime

Fewer personnel

More production

More flexibility

More quality

Fewer raw materials

Less energy

Fewer wearing parts

Less space costs

ZinserImpact 71
Basic equipment

1 1.200 spindles
Highly cost-effective
Page 8

2 Tangential belt drive
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4 Independent compact vacuum production system
Page 15

5 EasySpin for central parameters set-up and active dialogue
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6 Compact technology with optimal aerodynamics
Page 9, 15

7 Self-cleaning compact technology
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ZinserImpact 71 Options

8 Link to winding machine with CoWeMat 396 V

Page 13

9 CoWeMat 396 F, Stand-alone version with CoWeFeed

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10 Prepared for transport automation

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11 CoWeMat

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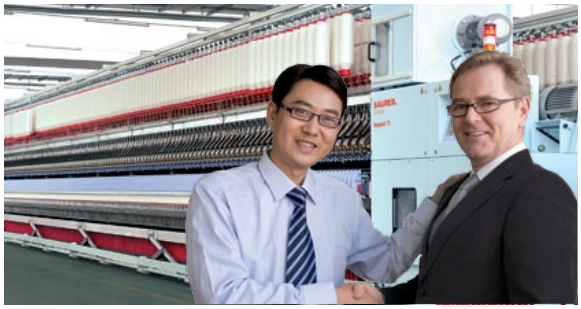
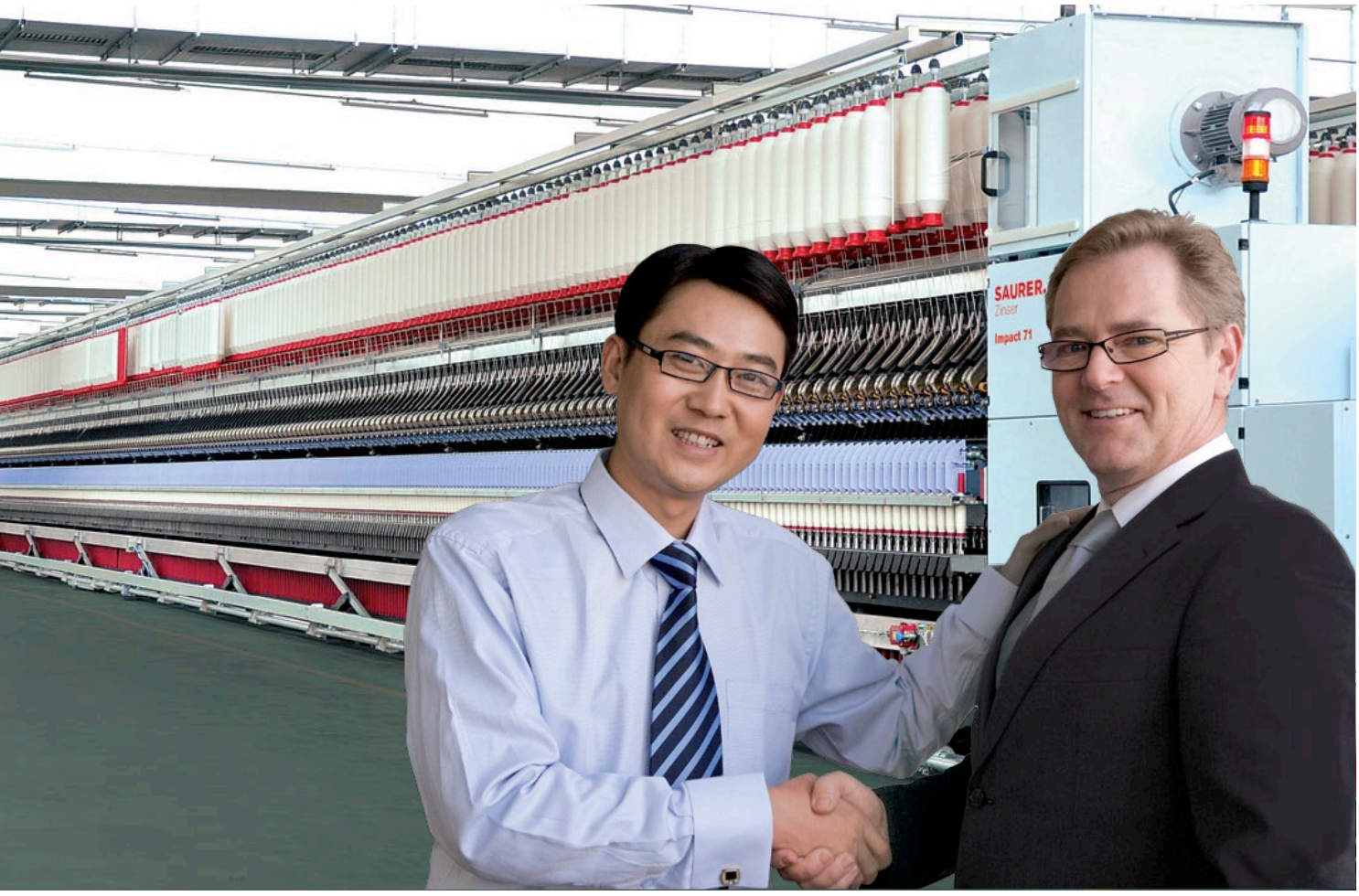
ZinserImpact 71
Go non-stop with our self-cleaning Impact FX



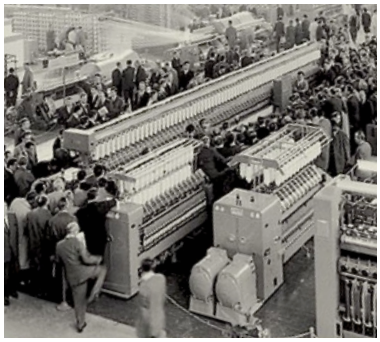
The reliability you need

- Traditional German reliability – already since 2002 in Asia
- Schlafhorst is your partner for business success – today and tomorrow



From us for you: Traditional German reliability

Our successful company – now with headquarters in Shanghai



For 100 years: German precision by Zinser

Pioneering inventions bear the name of Zinser. All with the same objective: to increase the business success of its customers by providing maximum reliability.

1914 Eugen Zinser receives the imperial patent for the first Zinser spindle in Berlin.

1967 Zinser invents the CoWeMat, the world's most reliable and sought-after automation technology to date.

1999 Zinser presents Impact FX, the only self-cleaning compact spinning technology in the global market.

2002 Schlafhorst, the market leader in spinning technology, establishes its own ultra-modern production facility in China.

2012 Opening of the new headquarters in Shanghai.

2013 Establishment of the new Saurer Group.

The reliability you need

Today Asia is at the heart of the textile industry – and we have our finger on the pulse! Schlafhorst has been in Asia already since 2002 to support the Asian textile industry with reliable technology during its dynamic growth. Quality, productivity and cost-effectiveness are decisive factors of success for your economic efficiency. We support you with European know-how, innovative power and process experience.

On the sure road to success – with Schlafhorst. We are the only company on the international market that offers trend-setting rotor spinning, ring spinning, compact spinning and winding machines from one single source for the important issues of our time: For the most efficient use of raw materials and resources. For reliable automation and greater productivity in keeping with pinpoint quality.

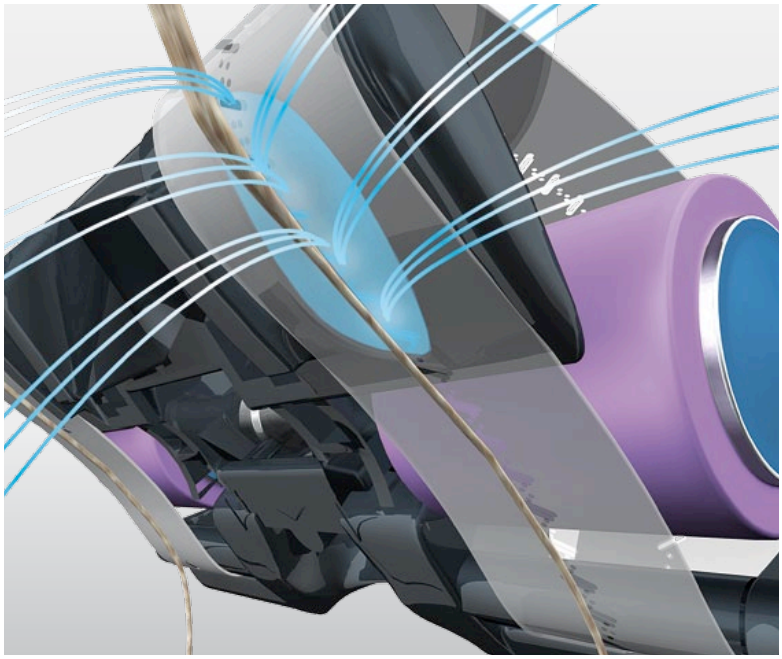
With our headquarters in Shanghai, the latest textile machinery plant in Suzhou and an extensive service network in all Asian countries, we are committed to working for your financial success.

Higher production with less personnel

- Peak productivity up to 1,200 spindles
- Impact FX – the only self-cleaning compact technology
- Highest speeds and lowest yarn break rates
- Less down time, less personnel
- CoWeMat, the doffer straight from the inventor – the only one with safety membrane
- Efficient automation solutions as stand-alone version and with linked systems

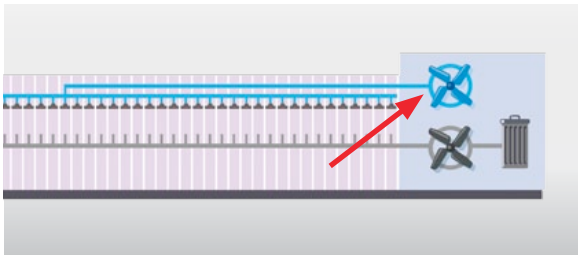
Only with Impact FX: No loss of compact power

The only self-cleaning compact system – no additional personnel required



Cleaning effect at deflection points eliminates clogging

Straight air duct prevents swirling and dirt deposits



Independent vacuum unit for constant compact power

Automatically productive, without additional personnel – in any climate!

Inspection rounds and machine down times? Not with Impact FX. The intelligent system automatically produces constant compact quality during long-time operation. The Impact FX demonstrates its superiority particularly under difficult climatic conditions.

Self-cleaning – without constant inspections and cleaning

Impact FX cannot get clogged; this is ensured by the clever fulling effect at the deflection point of the compact apron. Produce premium compact yarn non-stop and without additional personnel.

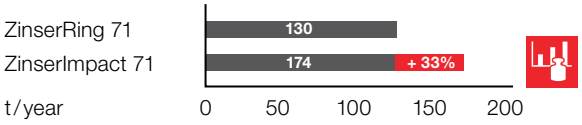
Clever technology for clever entrepreneurs

With the Impact FX, air flows through the system in a straight line. No corners, no dirt, no clogging – instead, simply a consistent compact quality achieved all on its own. The separately controlled vacuum unit automatically keeps the compact power at the selected setpoint. This eliminates the need for additional personnel for inspections and cleaning.

Ruling out human error

Machine elements do not have to be adjusted along the machine. Yarn break suction tubes with identical diameter reduce logistics, personnel costs and, above all, the likelihood of mix-ups.

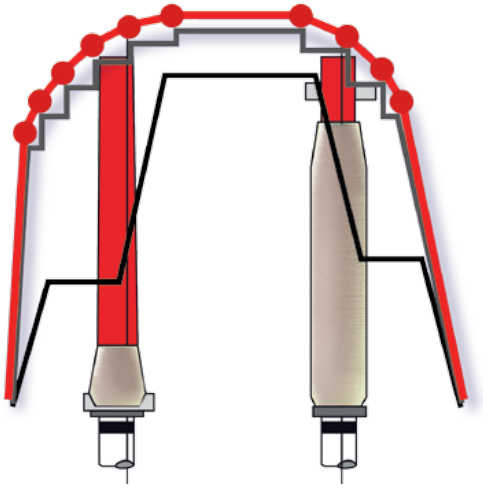
Up to 33% more production by reducing twist and increasing speed



Ne 40, combed cotton, 1,200 spindles/machine

More compact yarn at the end of each shift

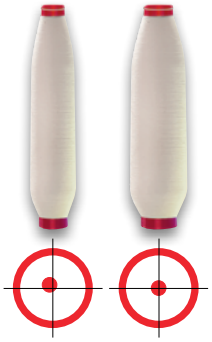
Less yarn breaks, more yarn



- Zinser – OptiStep 10-point spinning programme
- Machines with frequency inverter control
- Machines with PU control

Centerable rings

Others:
Poorly centred ring: low amount of yarn on bobbin, low speed, high yarn break ratio



Zinser:
Centred ring: more yarn on bobbin, maximum speed, less yarn breaks

Producing at the speed of Formula One – for your dynamic growth

Avoid non-producing spindles, reduce personnel requirement. The integrated software OptiStep allows you to automatically spin with cutting-edge technology at all times – without high yarn break rates. Only OptiStep has 10 control points. Thus, you operate at absolute maximum speed without yarn break during every phase of the bobbin travel. Your advantage:

– you can achieve a higher speed at the same yarn break rate or
– lower yarn break rates at same speed.

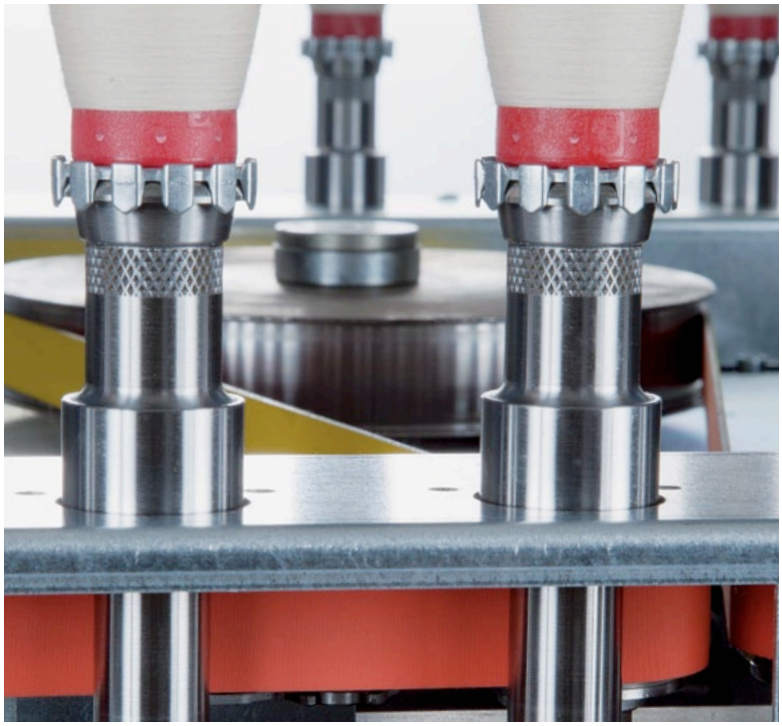
Productivity with cutting-edge technology

Complete major orders in record time! The ZinserImpact 71 is the most productive compact spinning machine of its class.

The centerable rings ensure stable running behaviour. Yarn tension remains constant. Not only do you get excellent compact yarn quality, thanks to low yarn break rates you can also spin faster. Another advantage is that each bobbin comprises considerably more yarn. All these advantages add up – you produce more yarn at the end of each shift.

More profitable spinning without interruptions

Maintenance-free tangential belt drive



Less time for maintenance, more time for production

Forget all about non-producing spindles because of missing tapes or continuous cleaning, for instance with 4-spindle tape drive. Our tangential belt is maintenance-free. The belt drive is enclosed, which keeps it tidy and reduces the cleaning effort. Changing a belt is not required very often and can be done as part of the regular maintenance programme. In contrast, 4-spindle tape drives need to have tapes replaced 2 to 3 times a week, which creates additional manpower requirements. Moreover, worn belts can block the knee brakes of other solutions - causing production loss.

Energy saving and crucial for quality

The low energy consumption is another advantage of the Zinser tangential belt drive. This is the results of the low number of deflection points, which ensures a straight-running belt without twists and a small belt surface - for less friction and minimal air turbulence.

The highly uniform surface of the belt is crucial for quality. The spindles are steadily driven in a gentle and completely vibration-free way. The advantage: the variation of the spindle speed is below 1 % with uniform yarn twist.

Operational reliability during power failure

Simply bridge power failures

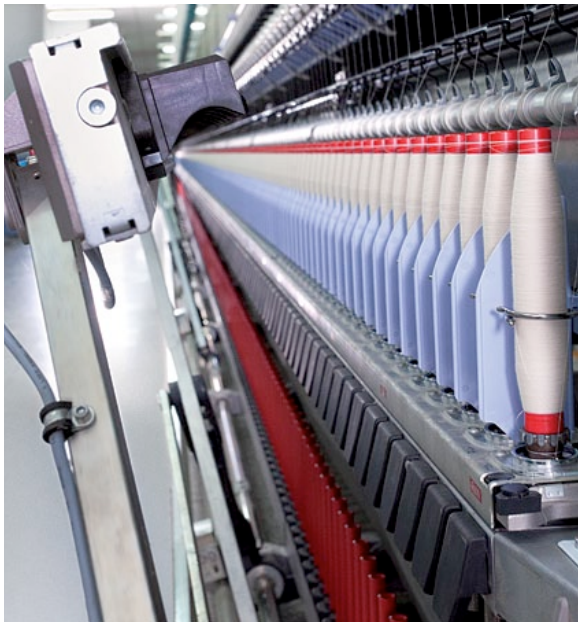
During short power failures up to 2 seconds, the Zinser Impact 71 simply continues to run, thanks to intelligent power failure protection. For this purpose, power supply and machine speed are permanently monitored and switched to generator operation in case of power failure.

Save additional personnel and eliminate expensive production loss

If the “critical time” is exceeded, the machine shuts down in a controlled manner. After the energy supply has been restored, the machine starts as usual and without any problems – without additional yarn breaks.

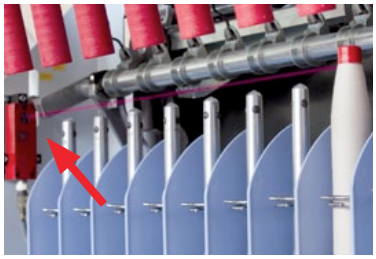
Not all doffing is the same – only CoWeMat features clever safety technology

Save up to 61% personnel with the original CoWeMat

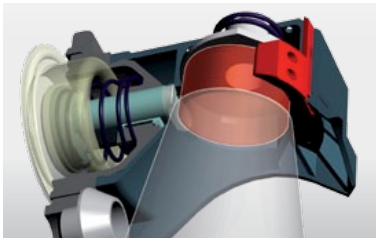


High-precision, stable technology - virtually no yarn breaks during start-up or machine stops

Cutting knife for disjoining course and high-tenacity yarns



Light barrier for monitoring automatic doffing



Safety membrane prevents doffer stops

Precision-controlled bobbin tray system; always accurate without readjustment

Only a reliable doffer saves personnel

There are plenty of doffers, but only one CoWeMat from Zinser. Invented in 1967, we have continuously improved it over 45 years. When it comes to the doffer, what really matters is that it actually works – permanently, day in and day out, for years without trouble, without checks. The CoWeMat is world-famous for this.

The marathon doffer – resulting from decades of hard development work by Zinser

Safety is of top priority to Zinser – because malfunctions cost money. To make the CoWeMat worry-free, it has become a true marvel of safety technology today. For your success!

Maximum protection against doffer downtime and machine stop

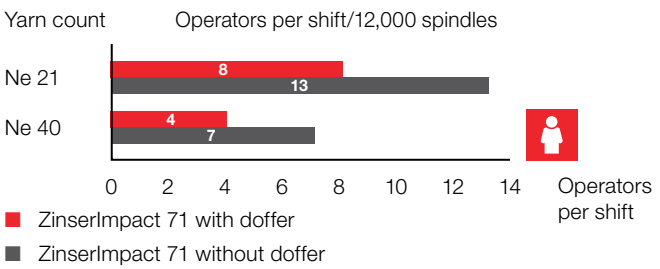
During doffing, it is nearly impossible to entirely avoid individual gripper malfunctions. With other doffers, this often results in the downtime of the whole machine. The CoWeMat works completely different.

Thanks to decoupled grippers with safety membrane and independent vacuum system, the CoWeMat continues to run, just like the entire machine.

No need for constant control

A light barrier monitors the smooth application flows of the doffing. In case of a malfunction, the machine shuts down automatically. This ensures reliable separation even of high-tenacity yarns. The Zinser BobbinTray system with precision drive ensures reliability without controls.

Up to 61% savings in personnel through automatic doffing



Automation that offers precision running and saves effort

Most reliable stand-alone solution

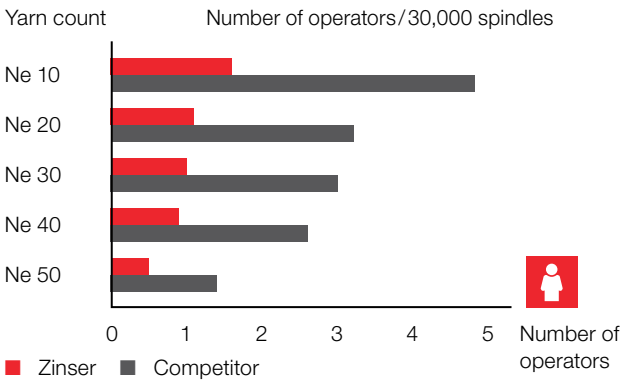
No need to sort tubes with CoWeFeed

All other stand-alone compact spinning machines with doffer require that the tubes are inserted in a special way, otherwise the doffer or the entire machine shuts down. A clever, typical Zinser technology saves you this trouble: the CoWeFeed.

Automatic and trouble-free, one filling is sufficient

The empty tubes are simply dumped into the CoWeFeed container – sorting is not required. CoWeFeed takes care of the rest, fully automatic and without problems. One filling is sufficient for a complete doffing cycle. Nothing would require less personnel or be more reliable!

Up to 66 % savings in personnel through CoWeFeed



Most efficient linked system

Reliable yarn quality, highest productivity, minimum personnel requirement

The ZinserImpact 71 can be integrated seamlessly with a complete automation solution, from roving frame to winding machine. A linked system is particularly profitable when producing large lots – by maximum space utilisation, optimal coordination of winding and spinning capacity, minimising personnel requirement, and increased yarn quality. As a result, efficiency is increased and production run times are reduced even more. The ZinserImpact 71 can be linked to all automatic winding machines.

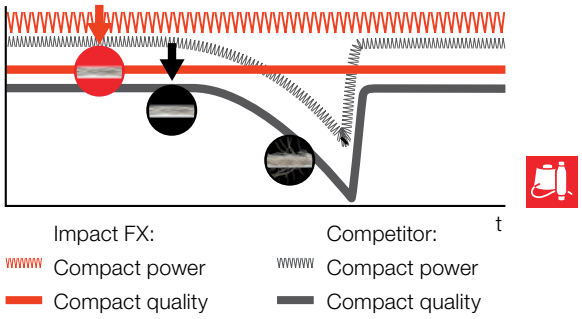
Achieving demanding growth targets with improved compact yarns

—

- Wide range of applications
- Impact FX – the most productive compact technology
- All-round protection for your quality
- Fast, reliable operation with EasySpin

The high quality standard is maintained!
Constant optimal yarn values without readjustment

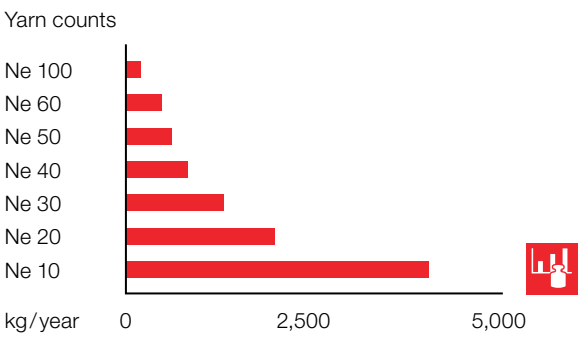
Constant compact power



Why the compact power must never drop

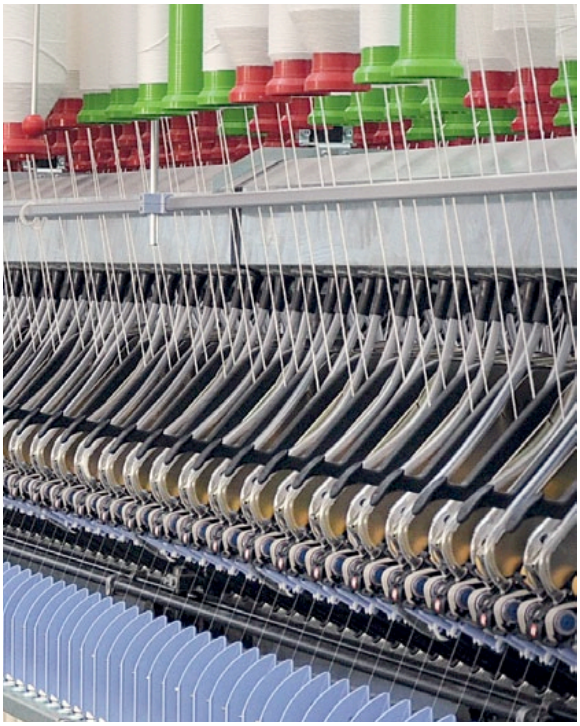
Textile professionals judge the quality of compact yarn by its low hairiness. To ensure this quality, an airflow is created during spinning to bind fibres into the yarn. The power of this airflow, i.e. the compact power, is crucial here. Only if the compact power is constant is it possible to continuously bind in the fibres. If the compact power drops, the spun yarn slowly and imperceptibly loses its compact characteristics. Impact FX protects you from compact power loss.

Up to 4,600 kg more production thanks to self-cleaning technology



with 1,200 spindles/machine

Safety drafting system



Precise observance of yarn count – without continuous readjustment

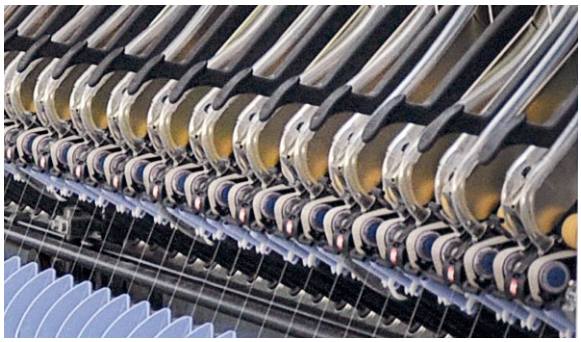
Constant yarn values are the basis of your success. The Zinser drafting system relies on high-quality precision technology that firmly maintains the correct setting and requires no readjustment.

Safety in the drafting system: mechanical load rules out quality risks

Our mechanical weighting arms ensure constant pressure on all spinning positions. Pneumatic loading arms frequently cause leaks, resulting in unnoticeable deterioration of yarn values. With the ZinserImpact 71, this is entirely eliminated.

Reliable quality technologies that support your economic growth

Software-supported quality



EasySpin – the control that supports your personnel

EasySpin is the most economical and reliable application software available in the spinning market – the high-end standard of Schlafhorst.

Images and symbols guide the operator to the right settings, quickly and precisely. Practical tips are found at every input screen. Illustrated messages provide targeted information about actions that are required. This allows your employees to quickly and reliably set the correct values for your yarns, and to spin at maximum machine performance at all times.

Constant twisting, clean yarn

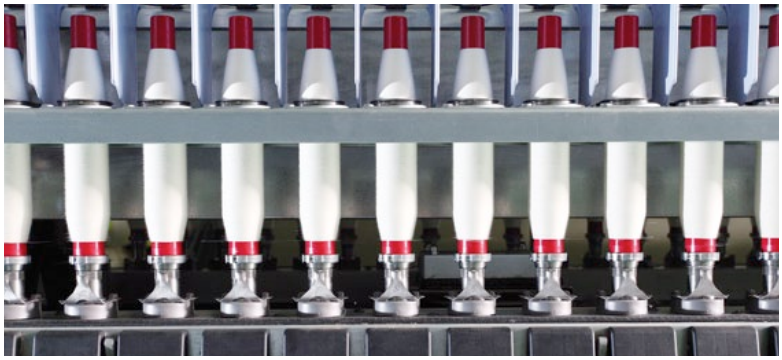
Minimum fibre fly, higher quality yarn

The Zinser tangential belt drive is enclosed, thus preventing air turbulences and accumulation of fibre fly. The yarn is free of foreign particles that otherwise could cause imperfections in the yarn.

Constant twist, constant profit

The uniform belt surface ensures synchronous spindle drive. All spindles produce yarn with exactly the same twist. In contrast to 4-spindle tape drive, the twist of the adjacent spindle is not influenced, even when slowing down spindles for yarn break repair.

Secure setting, secure yarn quality



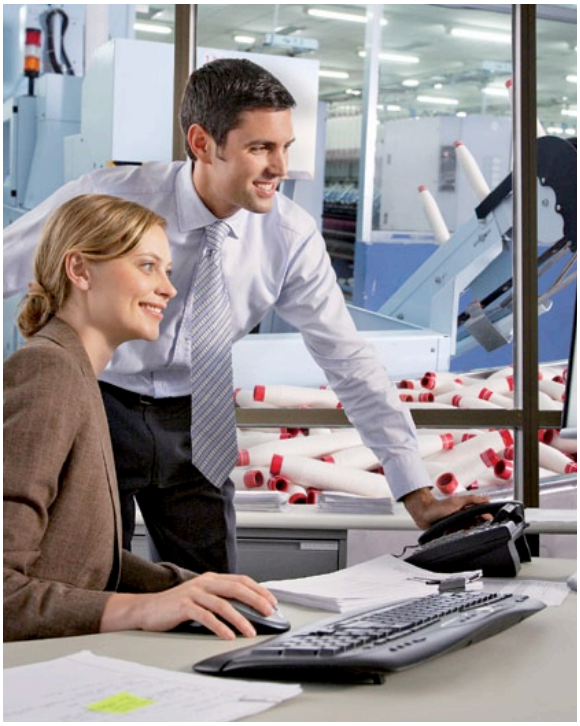
Guaranteed yarn quality without compromise

Opt for reliable quality, independent of personnel. All compact spinning parameters are set centrally with exact values in the user-friendly EasySpin software: self-explanatory, clear, with many illustrations and pictograms, in many languages.

Time-saving and reliable central settings – no need to switch hardware

Unreliable parameter settings performed by personnel, e.g. for mechanical control elements, are no longer needed. Simply transfer the data via USB stick to your other Zinser machines.

Central data management



Linked quality and production management

With the Plant Control System you are always up to date as to staff assignment and level of efficiency at which your system is currently operating.

Your Schlafhorst product lines are linked via a system network employing a central computer. All production and quality data are recorded on-line and are available at a mouse click as shift or production reports. With information prepared in detail, you optimise your operational application flows, thus increasing the economic success of your company.

Lower spinning costs

- Up to 6% raw material savings
- Up to 1,200 spindles
- Higher speeds due to precision design
- Energy-saving spindle drive
- Mechanical weighting arms without compressed air requirement
- Longer service lives of travellers, aprons and top rollers with OptiStart and OptiMove

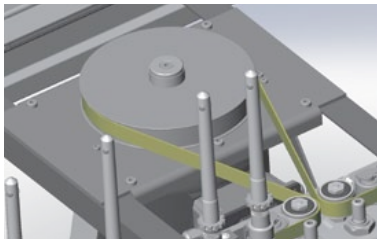
Reducing raw material costs, increasing overall economic efficiency

Numerous ways to save

Less twist, more kg yarn with Impact FX

Weighting arms that require no compressed air

Ring traveller running-in programme saves ring traveller costs



Energy-saving spindle drive

Optimal raw material efficiency

Decreasing costs per kg yarn

The ZinserImpact 71 provides you with numerous benefits:

– Higher production at same energy costs by reducing yarn twist with Impact FX
– Reduced personnel costs by eliminating inspection rounds and cleaning cycles with Impact FX
– Energy saving and low maintenance drive
– No compressed air required for weighting arms
– Reduced costs for ring travellers, aprons and top rollers through OptiStart and OptiMove.

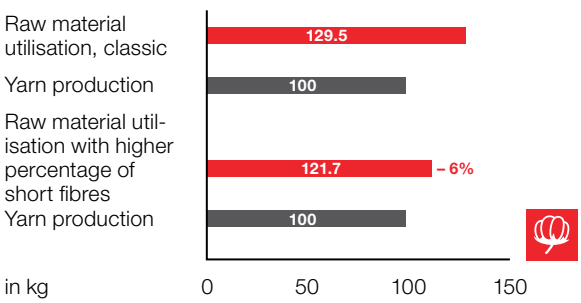
As you can see: Zinser is the best choice for your economically successful future.

For greater productivity and savings on raw materials

Lower the spinning limit for each raw material and make better use of the fibre substance. Using the same raw material, you can achieve higher spindle speeds or reduce the yarn twist in comparison to ring spinning. This enables you to increase your productivity.

Even cotton qualities with a higher percentage of short fibres result in good yarn values – with significant raw material savings. Depending on the system, Impact FX is able to process short fibres extremely well. You can also always respond quickly to raw material variations with Impact FX.

6% raw material saving with same yarn quality through higher percentage of short fibres

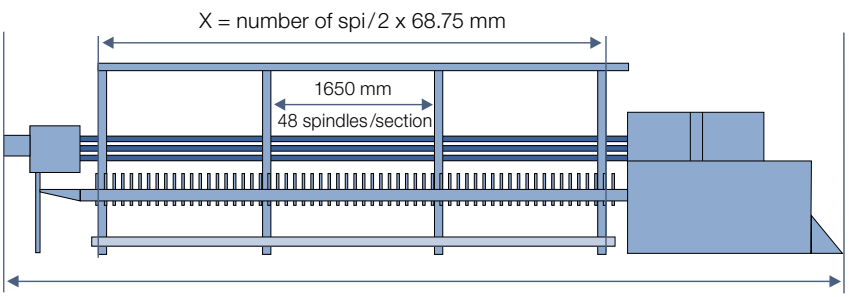


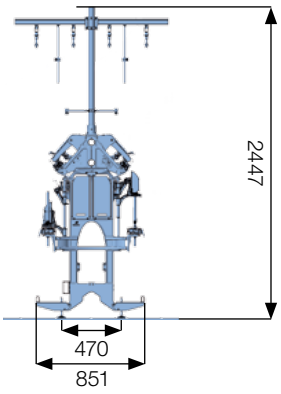
Schlafhorst – the competent partner for your successful system solution

—

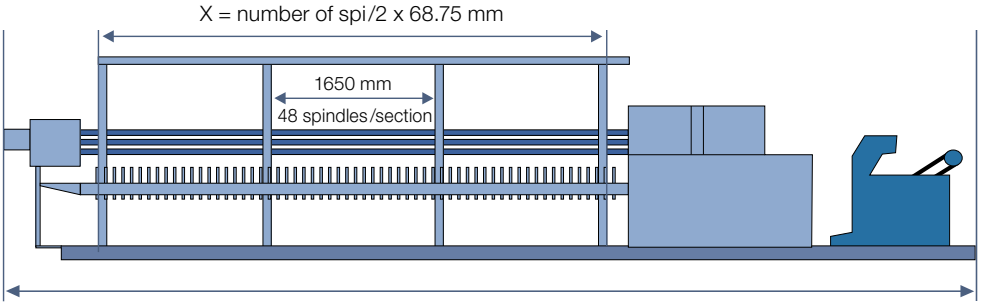
- Market and innovation leader in system solutions for the spinning mill
- Specialist for greater economic efficiency in ring spinning and compact spinning
- Customised technologies with greater energy efficiency, greater raw material flexibility and smarter automation
- Trusted service quality worldwide

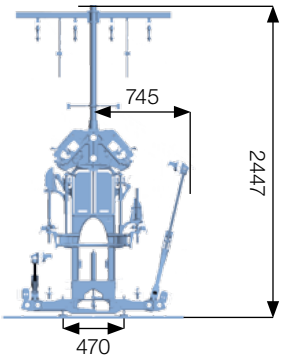
Technical data ZinserImpact 71





ZinserImpact 71 without CoWeMat	up to 576 spindles	L = 2,367 + X
	624 – 1,200 spindles	L = 3,443 + X
	Machine length L (mm)	





ZinserImpact 71 with CoWeMat 396 V, linked system	up to 576 spindles	L = 3,350 + X
	624 – 1,200 spindles	L = 3,771 + X
ZinserImpact 71 with CoWeMat 396 F, with CoWeFeed	up to 576 spindles	L = 5,296 + X
	624 – 1,200 spindles	L = 5,717 + X
	Machine length L (mm)	

Application range
Staple fibres up to 45 mm

Raw material qualities
Combed cotton, carded cotton, man-made fibres and their blends

Count range
Ne 10 –120

Draft range
15–85-fold

Gauge
68.75 mm

Tube length
180–230 mm

Ring diameter
36–48 mm (without CoWeMat)
36–45 mm (with CoWeMat)

Number of spindles
240–1,200

Spindle speed
25,000 rpm (mechanical)

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

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

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

Basic equipment

High-end features – standards of ZinserImpact 71
- EasySpin – graphic user interface
- OptiStart – running-in programme for ring travellers
- OptiStep – spinning programme
- SynchroDraft for long machines
- Balloon control rings
- Inverter drive
- Centerable rings
- Individual knee brakes for spindles
- Loop prevention function
- Automatic yarn guide tilting mechanism

Options

CoWeMat doffing device – easy add-on at any time possible!
- CoWeMat 396 F
  Stand-alone version with unsorted tube feeding CoWeFeed
- CoWeMat 396 V for linked systems to cone winders

Plant Control System
SiroSpun

Regarding this brochure
Our ongoing research and development efforts mean that some of the technical information provided here may have already been overtaken by advancements. The illustrations have been selected for their informative content. They may contain special equipment which is not included in the standard scope of supply.

368-641.072/Zinser/Ring/14-01/ZinserImpact 71/EN

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