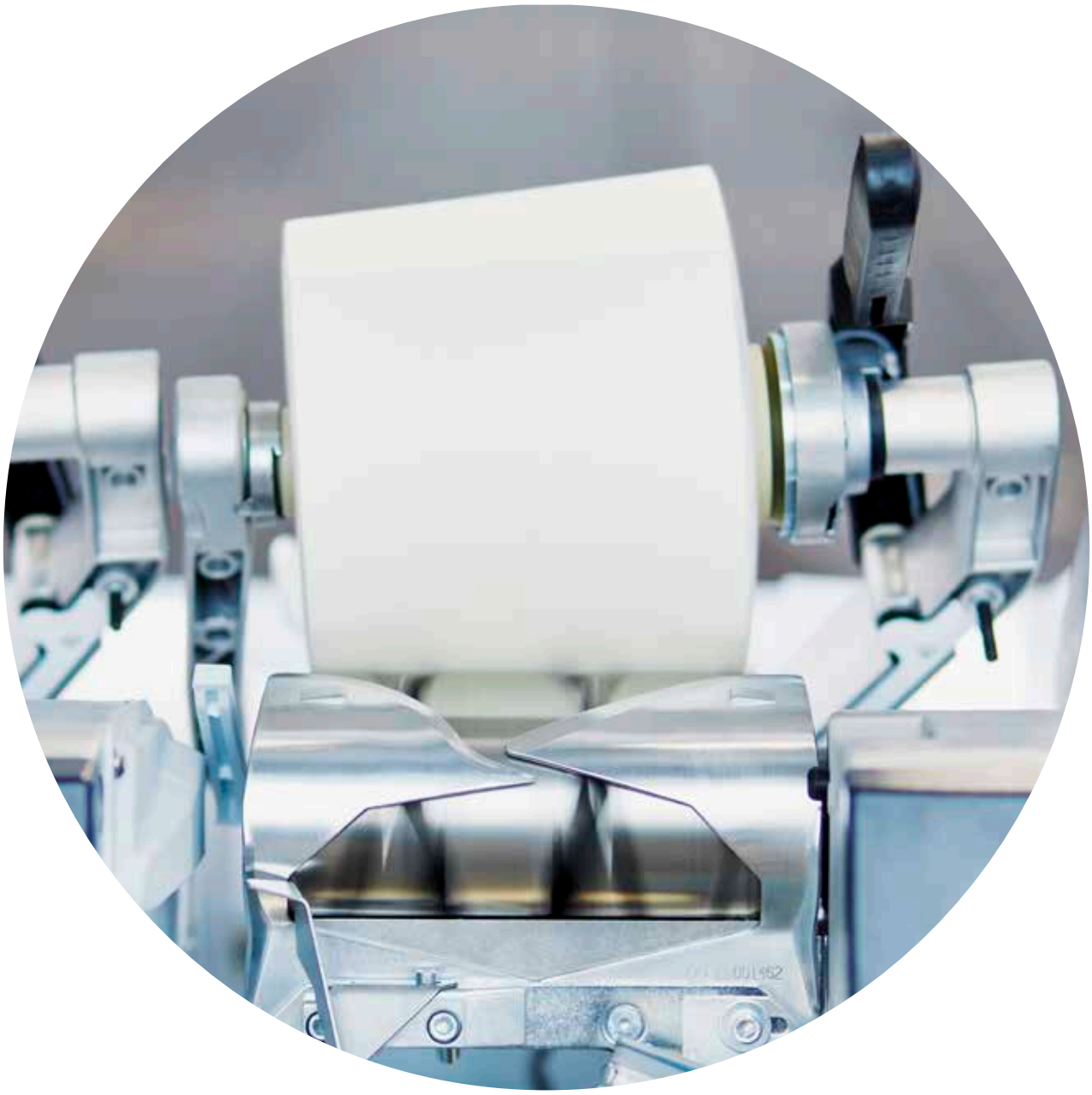
SAURER.



Be original.

Autoconer

EN

Zinser Systems offer a wide range of specialised ring-spinning solutions from bale to package. Starting from the blow room and carding, Zinser Systems is designed to ensure the excellent processing of fibres. Efficient ring-spinning machinery combined with intelligent winding machinery guarantee high yarn quality.

E^3: optimising energy, economics and ergonomics, adding intelligence. With our customers' needs always top of mind, E^3 forms the basis of our design philosophy.

Contents

Highlights

→ High efficiency – Intelligent Bobbin Cloud material flow based on RFID

→ Secure and fast bobbin supply – Unique 9+1 bobbin feed principle for type RM

→ Minimum energy consumption – Power on demand vacuum system

→ Minimum personnel workload – Autocalibration functions

→ Ergonomic package and tube handling – Doffer X-Change with intelligent functions

→ Online quality monitoring – Direct link with integrated SPID

→ Quality packages – FX technology and SmartSplicer family

E³ Energy Economics Ergonomics

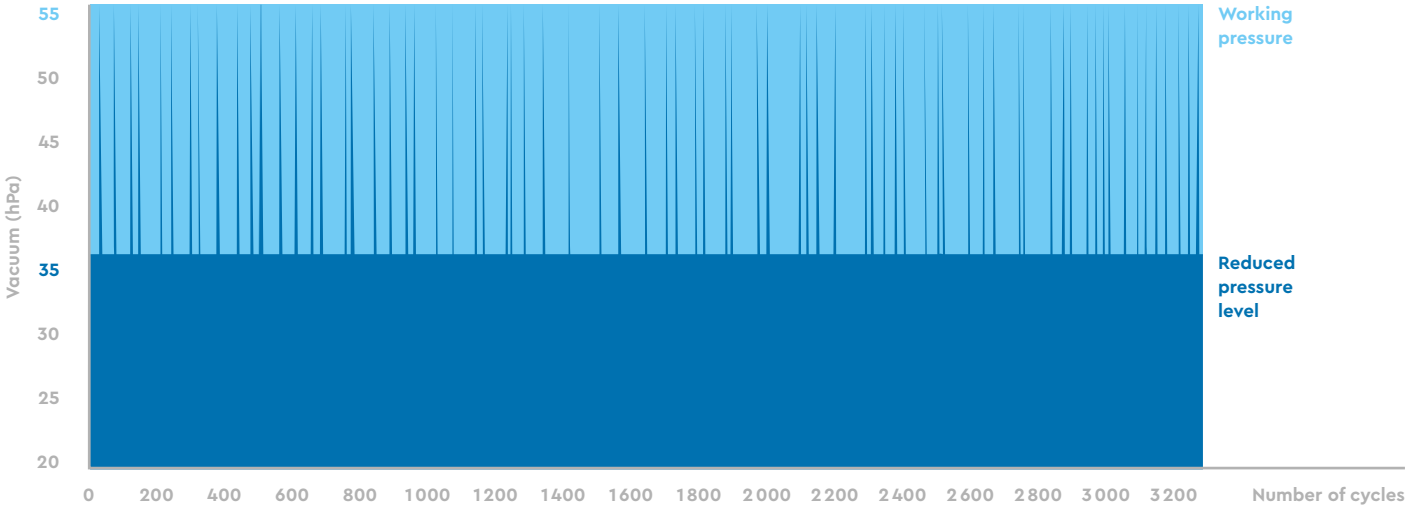
Energy
Up to 20 % less energy
- → Vacuum control Power on demand
- → Aerodynamic, flow-optimised design
- → Minimum compressed air consumption with adjustable MultiJet

Economics
Up to 6 % more productivity
- → High efficiency in winding with LaunchControl, SmartCycle, SmartJet
- → Best productivity/m² with 96 winding units
- → Most flexible and intelligent material flow

Ergonomics
Simple, safe handling
- → Energy Monitoring
- → Intermediate package storage as standard
- → Intelligent automation

E³: our product promises
With our customers' needs always top of mind, we ensure that our products deliver optimised energy consumption, economics and ergonomics, with a focus on intelligence. This E³ principle forms the basis of our design philosophy. Our passion for textile machinery drives us to manufacture innovative products that add value to our clients' businesses.

Secure, smart and thrifty vacuum supply (Practise sample: type D, 70 winding units)



Suction system without vacuum control/increased energy consumption (100 % of cycles with working pressure)

Suction system with vacuum control Power on demand (97.5 % success with reduced vacuum, only 2.5 % of the cycles with working pressure)

Automation 4.0.

- → Revolutionary Bobbin Cloud material flow system with RFID technology
- → Industry 4.0 SmartTray system for complete, intelligent material tracking
- → Non-stop production through decentralised bobbin and tube processing
- → Maximum cycle rate flexibility for every machine length
- → Tailor-made automation solutions for optimised efficiency and targeted reduction of personnel workload
- → Direct link with SPID as standard equipment
- → Efficient package handling thanks to intelligent doffer and intermediate storage

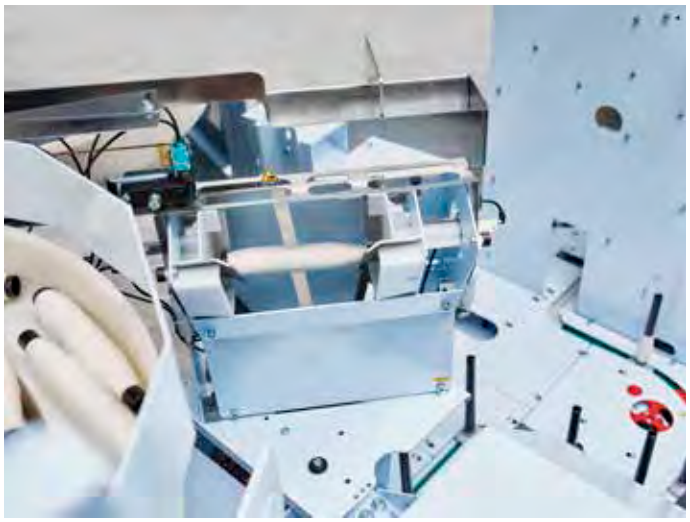
Bobbin Cloud – the material flow revolution

RFID technology as standard
The Bobbin Cloud is the Industry 4.0 material flow system. With a decentralised design and intelligent belt transport system and RFID control of all bobbins and tubes, the Bobbin Cloud guarantees maximum process reliability at all times.

Intelligent SmartTrays
Benefit from intelligent bobbin and tube logistics with complete material tracking. RFID chips turn pegtrays into SmartTrays. The material flow knows the position and status of all bobbins and tubes. RFID is the basis for intelligent lot changes and direct quality monitoring of the bobbins.

All winding units always in action
Winding units simply collect the next bobbin from the Bobbin Cloud. The material flows where it is needed. The Autoconer winds continuously with maximum productivity – even on super-long machines.

Circuit as an intelligent storage line
The material flows in an intelligent circuit. The SmartTrays run to the processing aggregates and winding units under RFID control without detours. No separate storage lines and path variations are necessary. There are no backlogs that reduce the productivity of aggregates/winding units, as in other material flow systems. The entire circuit can be used as a storage area; RFID ensures intelligent distribution and targeted assignments of SmartTrays.

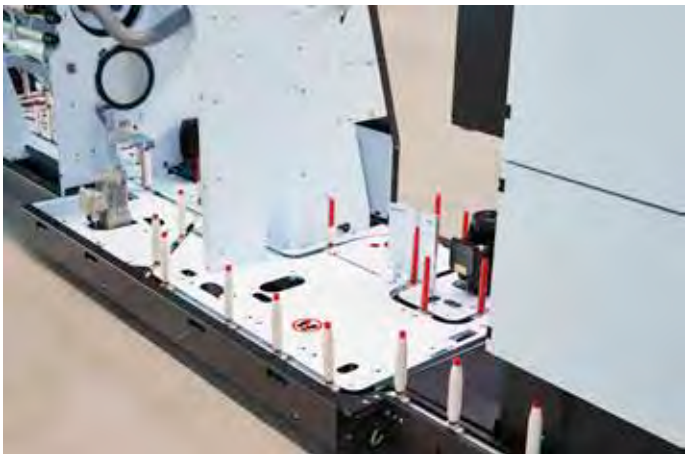


Standalone solution: type D

Flexible integration
The Autoconer type D is a flexible stand-alone solution. Spatially independent, it can be integrated into any spinning plant layout, ensuring flexibility and reducing staff workload. The bobbins are fed into the RFID-controlled material flow via the flat circular conveyor.

More productive with Bobbin Cloud
Storage line extensions in the feed area, highest cycle rates, configuration for optimised production and decentralised arrangement of all aggregates create material flow and process reliability even with changing throughput rates and long machines.

Q-Package: the profit plus (optional)
Thanks to the Q-Package and RFID technology, you can process any lot size with more profit. They handle all feed changes individually, intelligently, quickly and flexibly. In addition, alarm bobbins are ejected into the clearly marked manual preparation area, so they cannot be overlooked by the personnel. The winding unit does not wait for manual processing with a "red-yellow light".

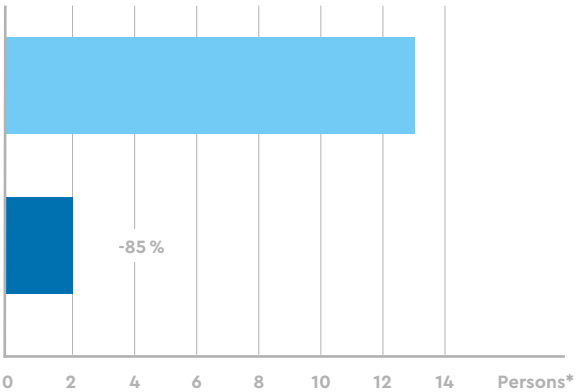


Direct link: type V

Maximum profitability
The fully automatic link solution makes you independent of the availability and performance of your personnel. The capacities of the spinning and winding machine are precisely matched to each other. High-speed production without intermediate storage of material. Low logistics costs. Top quality. Maximum profitability.

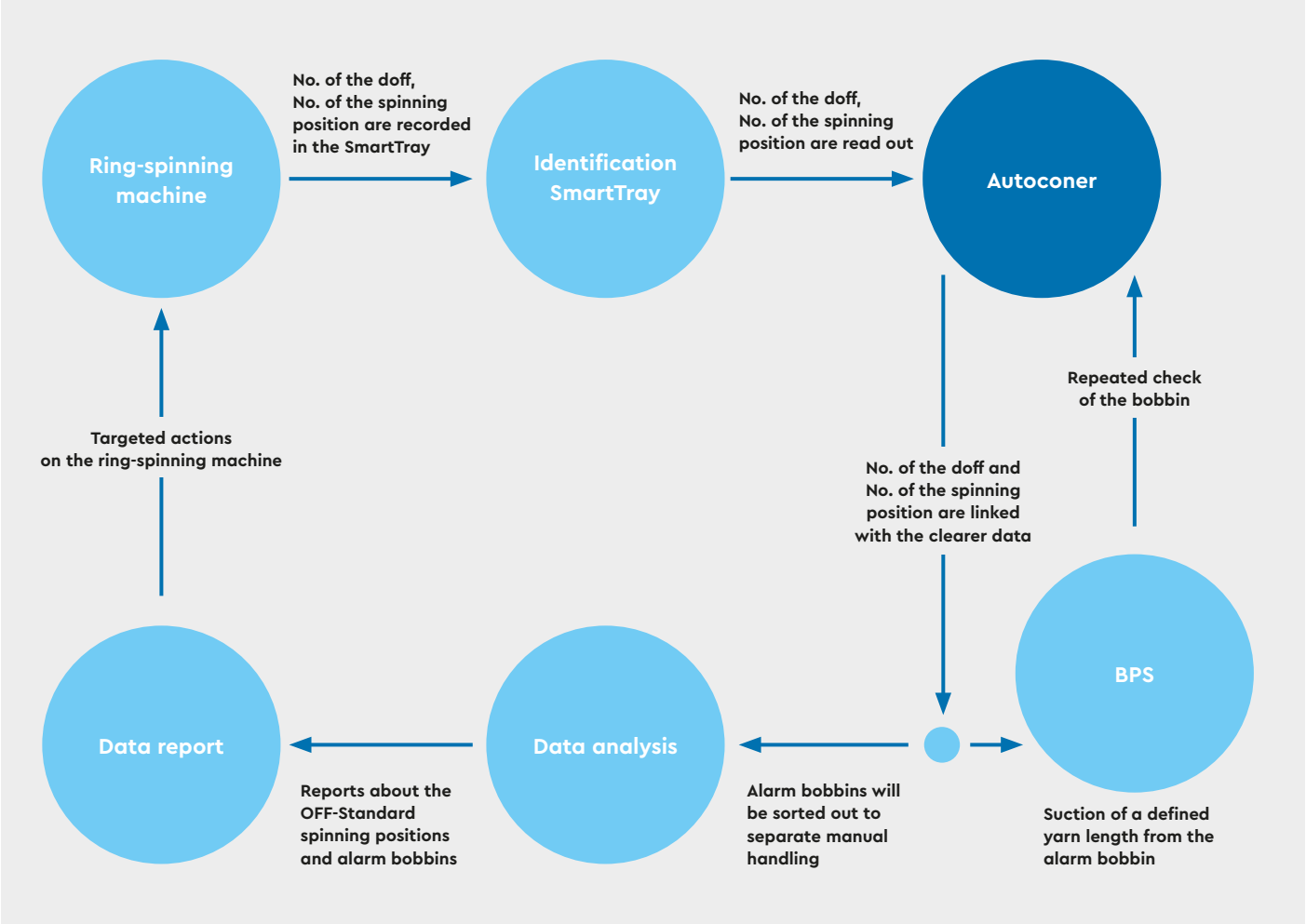
Direct link to ring-spinning machine
Thanks to RFID technology, the new direct link is made in a space-saving and reliable process without the need for a transfer station. Bobbins and tubes circulate on SmartTrays in the closed process system of ring-spinning and winding machines under intelligent control. That also means: more productivity per square metre. More process reliability.

Link Autoconer type V: up to 85 % less personnel
(Staff requirements for the winding department)



*Staff without assistants

- Stand-alone system: 20 RSM (each 1 200 spindles) and 6 type RM (each 60 spindles)
- Link system: 20 RSM (each 1 200 spindles) and 20 type V (each 20 spindles)



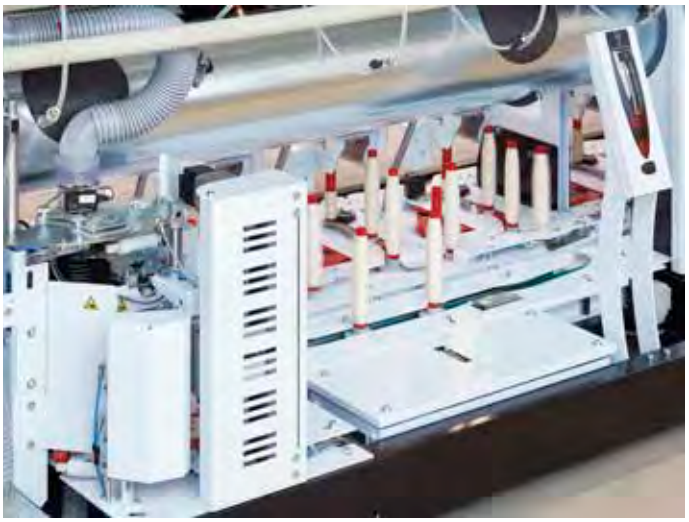
SPID: consistent quality control
The Spindle Identification System (SPID) records the quality data for all bobbins online. Alarm bobbins in which the clearer detects a fault alarm (e.g. yarn count alarm) are reliably removed from the material cycle.

All other yarn quality criteria (e.g. foreign fibres, short defects, neps, etc.) are analysed to determine whether they are within the individually adjustable quality limits. Thanks to precise fault diagnosis and assignment to the ring spindle, the exact identification of faulty ring spindles is ensured. Your personnel can intervene in a targeted and timely manner, so SPID enables you to keep an eye on the continuous development of your quality at all times. 100 % efficiency for 100 % quality.

Your individual link solution
Whether direct link or underfloor link: Saurer creates an individual solution for you, suitable for your requirements and your ring-spinning machines.

Round magazine can be integrated (optional)
Integrate several type RM winding units into your linked system and benefit from maximum flexibility.

Ring spinning from one source
Zinser Systems offers you solutions for the entire ring-spinning process. Whether single machine or linked system: spinning mills across the globe have been putting their trust in Saurer for decades. Perfectly coordinated pre-spinning, spinning and winding processes as well as the most efficient production are your guarantee of success.



Material flow: decentralised and intelligent

Unique reliability in material feed
With Vario Reserve, the Autoconer varies the number of reserve bobbins to compensate for material flow fluctuations. If a winding unit should nevertheless be temporarily at risk of being under-supplied, Bobbin Sharing is activated automatically: the neighbouring winding unit immediately releases a bobbin, allowing production to continue without any stoppage or interruption. And High Speed Feeding brings the bobbins to the winding units at maximum speed, controlled by sensors.

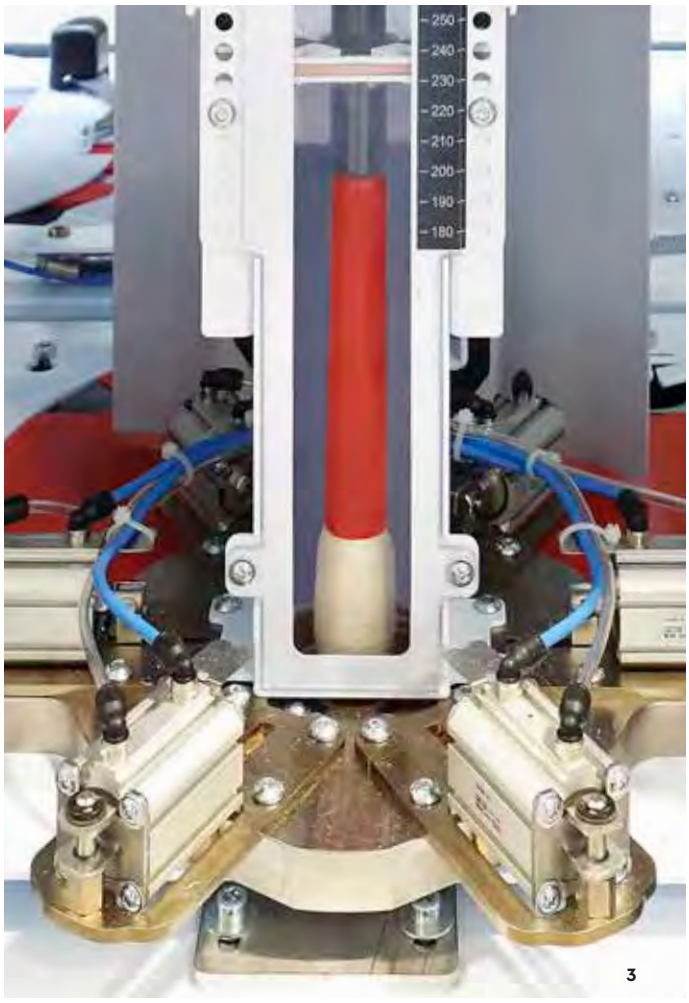
Space-saving infrastructure
The tube transport does not require space-consuming storage lines. To avoid jams, empty tubes that have not been cleared are simply fed back into the Bobbin Cloud and intelligently passed through.

High-speed bobbin preparation
Depending on the machine length and capacity requirement, several bobbin preparation stations can be arranged decentralised along the bobbin feed.

As with the pit stop in Formula 1, the unprepared bobbins move into the space-saving stations located outside the circuit. Immediately after processing, they filter into the bobbin feed again. Each preparation station can supply any winding unit; there is no fixed winding unit assignment. Productivity non-stop.


1


2



3

Tube inspector
The tube inspector for the targeted control of SmartTrays after the winding process comes with proven mechanical operation and, as a new optional feature, as optical tube inspector with infrared technology. Its advantages: colour contrasts between yarn and tube are not necessary, reliable single yarn and "stocking" detection, highest cycle rates, contactless control non-stop.

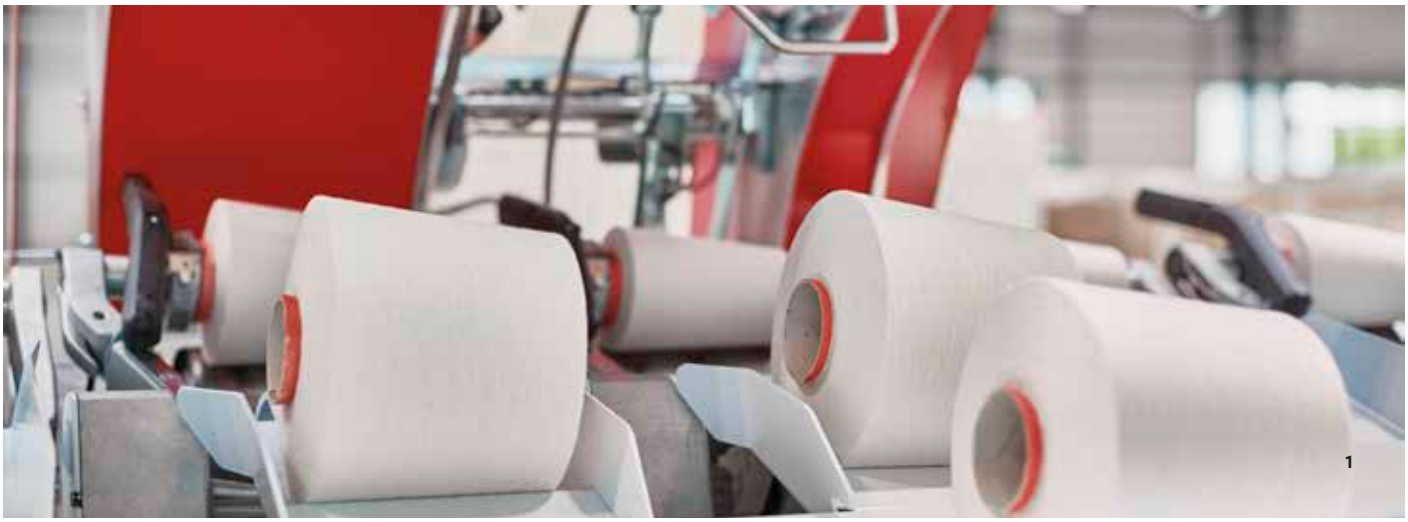
Bobbin-tube extractor for automatic lot changes (optional)
The bobbin-tube extractor on the Autoconer type D removes empty tubes, takes unprepared bobbins out of the material flow and separates tubes and piece bobbins into separate containers. It also enables a fully automatic feed change without manual intervention.

Tube stripper (optional)
The new tube cleaning system is more powerful while at the same time working more gently. It is space-saving, easily accessible and easily retrofitted at the rear of the machine.

1 Optic tube inspector (optional)
2 Mechanic tube inspector
3 Tube stripper (optional)

Manual feed: type RM

Maximum flexibility: super productive
The type RM combines flexible material allocation in manual operation with unparalleled productivity at 96 winding units. The bobbins are manually inserted into the round magazine in an ergonomic working position. The 9+1 feed principle ensures maximum productivity.



Intelligent package and tube handling

X-Change: doffing in record time
X-Change doffs all common package and tube formats within a very short time (Multitube handling), with intelligent advance request mode, travel optimisation, a high travel speed (43 m⁄min) and 10-second doffing time.
Your advantage: maximum doffer capacity, minimum manual effort.

A clever concept: the Empty tube strategy
If the tube magazine of a winding unit is empty, X-Change automatically fetches an empty tube of the same format from a neighbouring magazine and starts package doffing straight away. Cut waiting times and speed up production!

Learning capability and intelligent handling
During initial application X-Change "learns" the shape and structure of the tubes and how best to grip it. It remembers this upon renewed presentation. The doffer does this automatically.
Resume production faster than ever!

Tube Check (optional)
Thanks to Multitube handling, the X-Change doffer doffs all common package formats nimbly by itself. From now on, it will also take on intelligent additional tasks: it detects tubes that aren't round by laser sensor and removes them independently prior to starting winding. The packages are always securely held in the cradle for top package quality.

New intermediate package storage
The combination of doffer and new intermediate package storage offers further optimisation potential for doffing and clearing the finished packages. Thanks to the intermediate storage of 2 finished packages and lot-by-lot clearing, it is possible to vary production, doffing and personnel capacity, allowing it to be maximised and optimally coordinated.

1 Intermediate package storage
2 Tube Check (optional)
3 Doffer with Multitube handling

Autoconer quality packages.

→ **Autoconer quality packages – Benchmark for commodity and high-end applications**

→ **Easy handling and better quality with the optimised splicing system and the SmartSplicer family**

→ **More functions, simpler operation in the updated FX series**

→ **High-end winding technology PreciFX – Package formats for optimised downstream processing**

First-class package quality

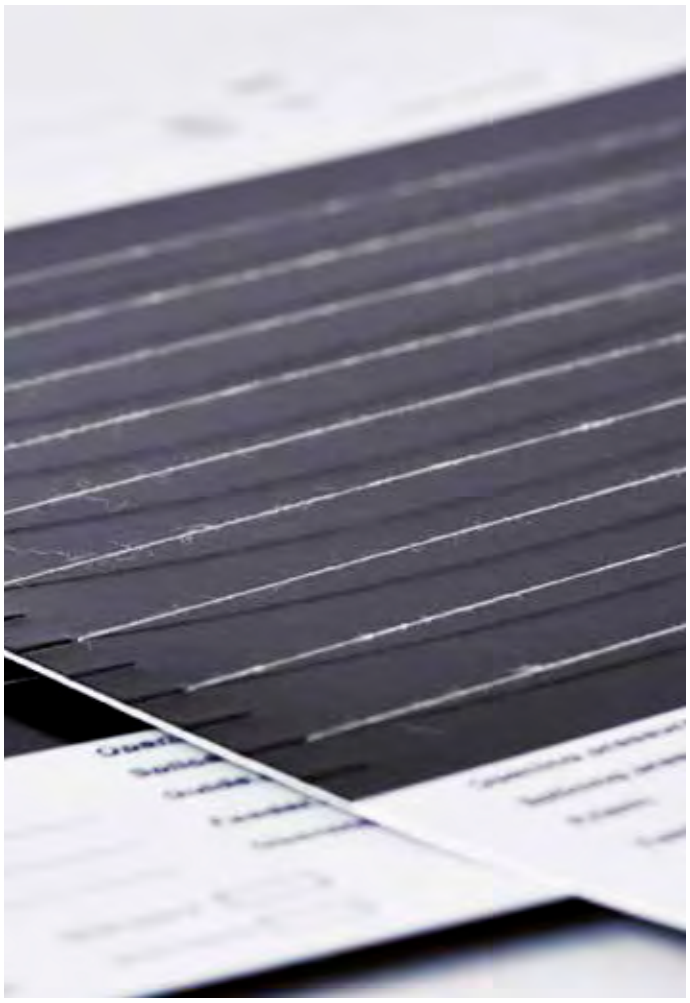
Perfect internal package build
- Further improved electronic anti-patterning of the latest generation
- Secure yarn guiding, yarn displacement with Eco-Drum-Drive System
- LaunchControl (non-slip acceleration)
- Actively controlled yarn trap to safely avoid winding of loose, wound-in yarn residues
- Precisely measured yarn lengths
- Cradle compensation

Process-oriented external package format
- Manufacture of any package format
  - Cylindrical to tapered up to 5°57'
  - Traverse 3", 4", 5", 6"
- Large diameter of up to 326 mm

Uniform density
- Yarn tension control for uniform package density as interaction of TensionControl, unwinding accelerator, yarn tensioner
- Cradle compensation

Excellent yarn quality
- Gentle yarn guiding thanks to straight yarn path with few deflection and well positioned yarn guiding elements
- Waxing unit for satisfactorily waxed yarns, now resource-saving

Reliable quality assurance
- Quality Cut power failure circuit (lifting of the package, no pattern zones or damage to surface of the package)
- Central setting of winding and splicing parameters for absolute uniformity and reproducibility
- Autocalibration e.g. of suction tube and splicer feeder arm
- Quality-assured monitoring of wound yarn length/diameter
- Drum lap detection, Quality Guard
- Sensor monitoring of yarn path and winding process



Smarter splicing

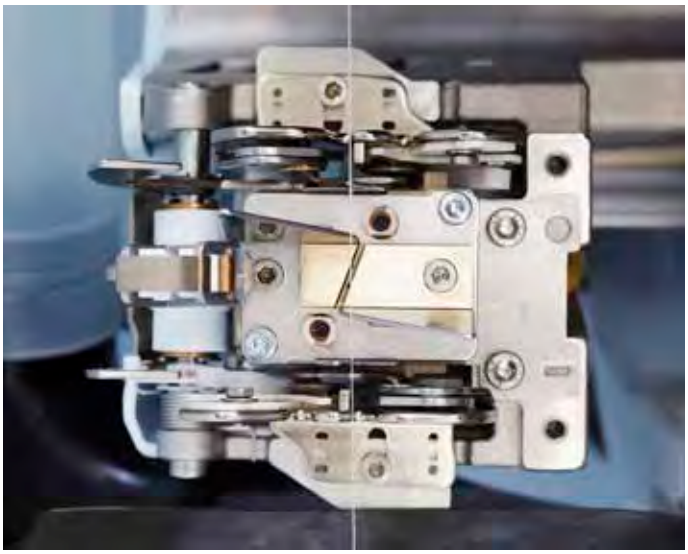
Simply the best
With the SmartSplicer family the Autoconer sets the benchmark for easiest handling and impressive quality in every application. The new smart functions reduce the operator's workload and automatically ensure top splicing quality.

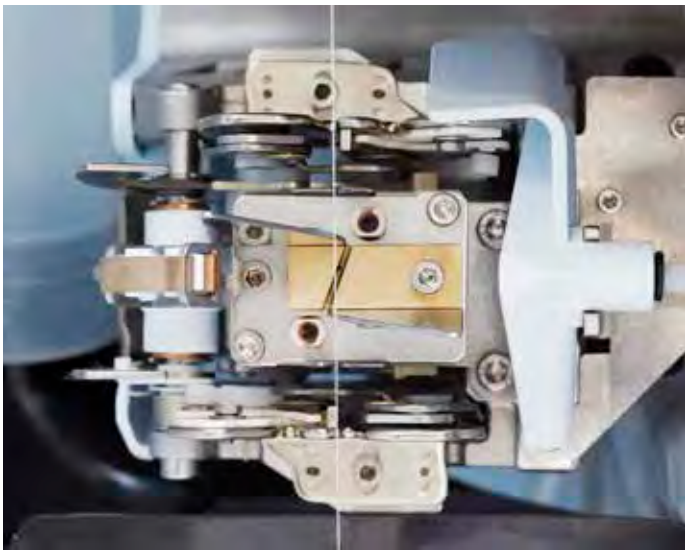
Simply the best in:
- Appearance identical to the yarn
- Maximum strength
- Outstanding dyeing results
- Profitable downstream processing

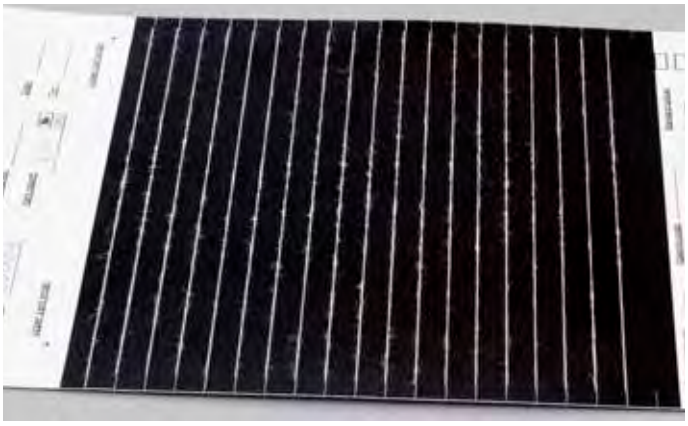
Intelligence inside
With just a few clicks you have centrally set all splicing parameters. The intelligent autocalibration of the splicer feeder arm ensures your splicing quality day after day. Preconfigured, optimally adapted splicing components in the Quick-Change Unit minimise your setup effort. Your splicer comes ready for use, and with ceramic shears as standard.

For all applications
Splice all common yarns with the SmartSplicer. For special applications choose the Injection, Thermo or Elasto models. Your splicer comes ready for use, and with ceramic shears as standard.

Ongoing development of the splice technology ensures right aggregates for every market requirement: universal splice elements covering a wide range of applications or specific splicing elements for special yarn structures.



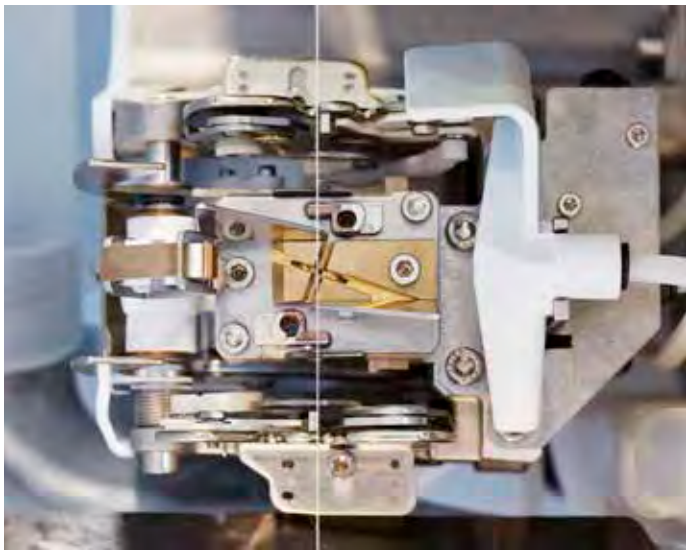




SmartSplicer family

SmartSplicer
For all common standard yarns, compact yarns and blended yarns. Ease of handling and short, reliable splicing cycles make the more advanced pneumatic SmartSplicer a winner.
- Standard yarns CO, blends
- Compact yarns CO, blends
- PES, viscose, blends

SmartSplicer Injection
The splicing air is enriched with moisture by a metering valve. This is set simply and centrally at the Informator. For greater strength and an improved appearance.
- CO yarns, compact yarns
- Denim yarns
- Linen yarns
- OE yarns
- Plied yarns



SmartSplicer Thermo
For wool and wool blends the splicing air can be heated incrementally. Just select the temperature centrally at the Informator.
- Wool yarns, also with elastic content
- Wool blends, also with elastic content
- Synthetic yarns, also with elastic content

SmartSplicer Elasto
Cycle sequence for elastic core yarns, easily selectable centrally at the Informator. The combination Elasto/Thermo or Elasto/Injection is also recommended.
- Elastic core yarns
- Dual core yarns (Elasto/Injection)

Gentle yarn handling

Efficient waxing unit
Waxes S- and Z-yarns perfectly and gently without handling, always in the optimal range in combination with Autotense FX. The waxing unit is highly efficient: 30 % less waste wax with secured waxing application thanks to wax roll monitoring by sensor.

Perfection due to straight yarn path
The optimised yarn path and functional arrangement of the aggregates protect the yarn and guarantee the highest process security at all times: the splicer sits below the clearer for automatic splice checking. The waxing unit is located above this so that no wax particles soil the clearer optics.

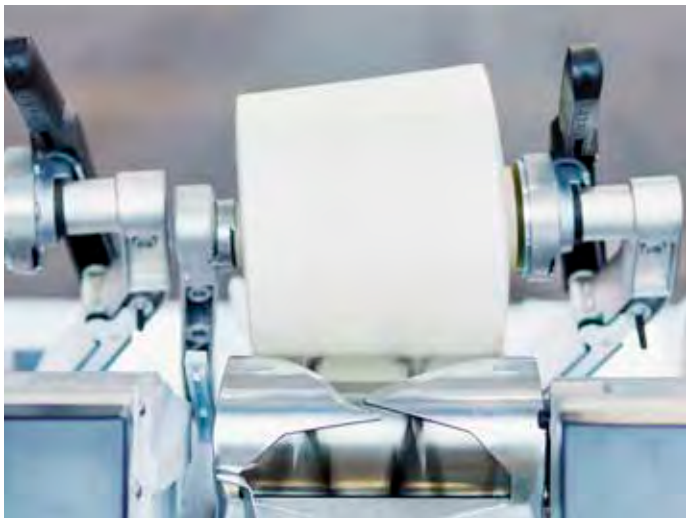
Special drums for abrasive yarns (optional)
The Autoconer is also ideally equipped for recycled yarns. An optional coating of the drums ensures protection against wear for particularly abrasive, aggressive yarns – such as recycled PET. You benefit from a long service life of your drums, for gentle and safe yarn displacement.

Quality assurance in detail

Autocalibration:
on the safe side, package for package
The splicer feeder arm and the suction tube for upper yarn pick-up are self-calibrating. Everything is thus set correctly round the clock – no manual checks are required. You profit from absolute production reliability and optimally reproducible package quality.

Quality Cut:
safe in case of power failure
In case of a power failure, Quality Cut prevents uncleared yarn from being wound onto your package, avoiding wound-in yarn ends and run-out patterns.

Reliable downstream processing:
the active yarn trap
The active yarn trap effectively sucks in loose yarn ends and dirt during winding – for even more process and quality assurance in downstream processing. Its aerodynamic design and targeted switching on and off during the winding and cycling process guarantee reliable function.



Premium drum winding

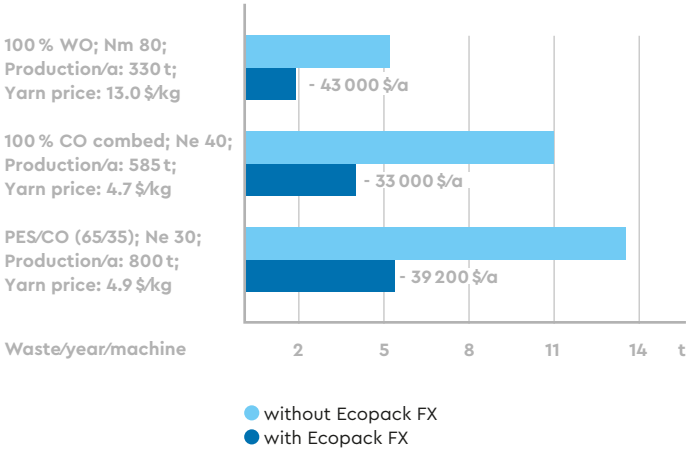
Autotense FX with Variotense FX (optional)
Autotense FX adjusts the yarn tension to exactly the required level: a sensor measures the yarn tension continuously at each winding unit, and the tensioner readjusts it in fractions of a second. The integrated Variotense FX function ensures virtually straight flanks on packages with elastic yarns. For best package density results with pinpoint accuracy.

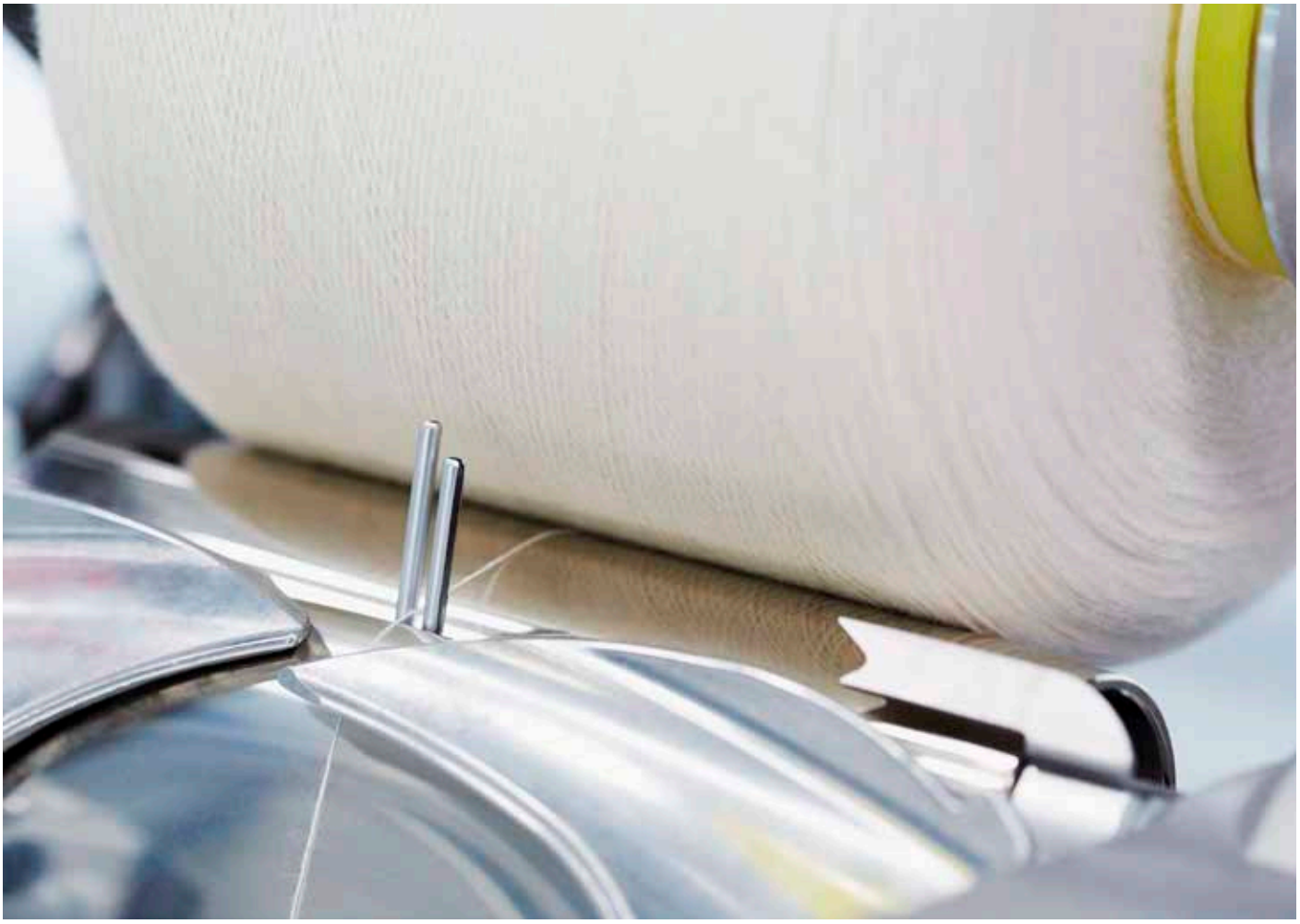
Propack FX including Variopack FX (optional)
Propack FX avoids critical pattern zones before they develop. Variopack FX ensures straight flanks on packages with elastic yarn. For packages with superb dyeing and unwinding characteristics.

Additional benefit of Propack FX: higher cradle contact pressure when starting up winding – for increased productivity.

Work more profitably with Ecopack FX (optional)
Produce quality packages of precisely the length ordered by your customer with Ecopack FX, contactless optical precision length measurement: with a length deviation of < 1 %. Your customer will cut yarn waste massively and work considerably more profitably.

Ecopack FX: reduction of yarn waste





PreciFX

Winding without compromise
Produce optimised package designs flexibly and individually for any application with PreciFX. Increase efficiency in downstream processing by several per cent. Cut logistics and process costs. PreciFX: a powerful competitive boost for you and your customers (optional).

Easy to operate
No hardware limits. Define process-optimised winding properties. Set the appropriate winding parameters at the Informator in the minimum of time. Take advantage of proven sample recipes. Digital yarn displacement sets no limits: for more efficient production.

Longlife package (optional)
A special package for higher resistance to wear is available for processing abrasive yarns.

Process-optimised package design

Cost-effective downstream processing
Produce perfect, pattern-free packages for every process with maximum reproducibility and minimum set-up and adjustment effort:

- Packages with a high packing density for warping, weaving, twisting, knitting
- Packages with low density and round flanks for the dyeing mill
- Special biconical packages or packages with a filling function for best unwinding behaviour

Made to measure with high-end technology
More than 37 000 winding units are already being used worldwide for made-to-measure winding: with the digital PreciFX displacement technology, the pioneer for digital yarn displacement from bobbin to package. Produce packages on your Autoconer with the features that discerning customers expect. Stand out from the competition!

Resource-saving, economic winding.

- → Up to 20 % less energy
- → Powerful and economical drive technology
- → Resource-saving winding for economical use of valuable yarn
- → Energy-efficient cleaning
- → Up to 6 % higher productivity
- → Maximum use of space with machines up to 96 winding units
- → Fast and secure bobbin feed
- → High-speed winding process and with innovative winding technology

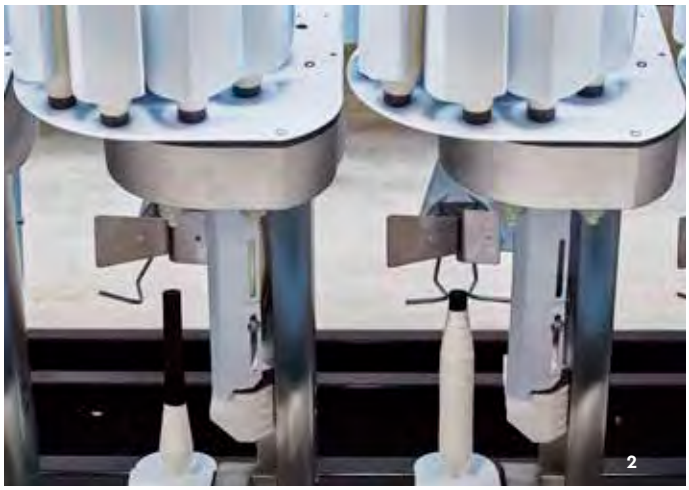
Energy efficiency

Optimised aerodynamics
Circular cross-sections in suction channels, an innovative surface structure and other flow optimisations minimise air resistance. No valuable energy is wasted on the Autoconer, which produces more profitably than ever before.

Powerful and economical drive technology
Whether Eco-Drum-Drive, suction system motor, frequency converter or belt drives – the Autoconer drives convert energy into performance particularly efficiently. High-quality and economical motors of the latest generation achieve higher efficiencies and produce with permanent energy savings.

Energy Monitoring (optional)
Check the current energy and compressed air consumption per kilogram of yarn online on the Energy Monitoring display. Analyse the stored consumption data and make your production even more energy-efficient.

Vacuum control Power on demand
Wind with an absolutely low vacuum level. The suction system automatically regulates between energy-saving standby mode and higher vacuum for reliable yarn pick-up.



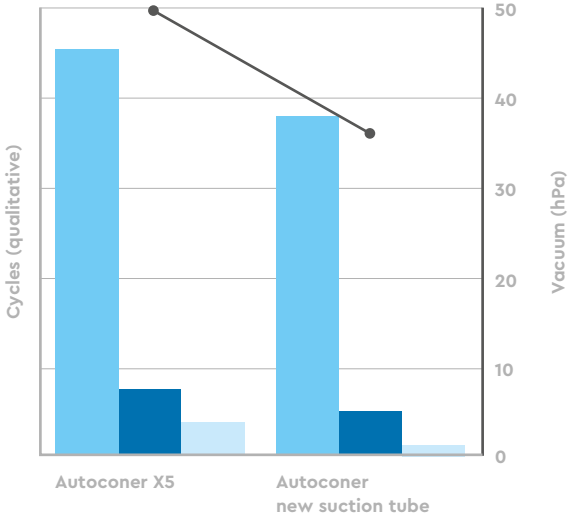
Less yarn waste

Reliable upper yarn pick-up
The perfect interplay for upper yarn pick-up without damaging the yarn: the intelligent upper yarn sensor, the aerodynamically optimised suction nozzle with a special surface finish and SmartCycle with its intelligent cycling sequence. SmartJet in the doffer rounds off the automated, efficient upper yarn search. Only the Autoconer offers this complete solution.

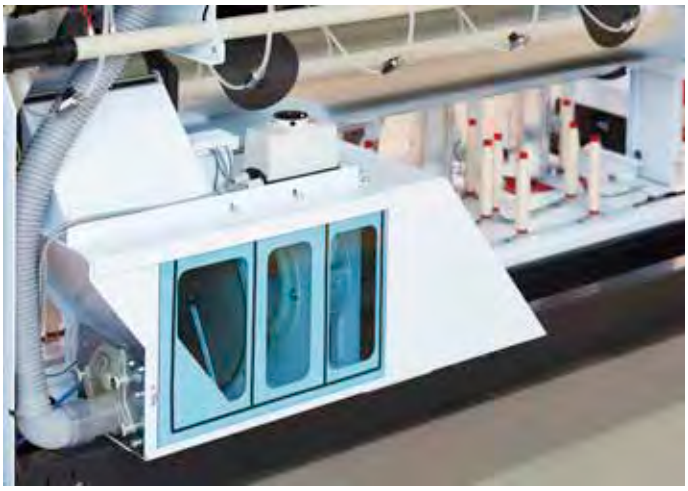
Massive yarn savings
Ecopack FX (optional) guarantees precisely measured yarn lengths and thus minimises yarn residues in downstream processing. The lower yarn sensor and snarl preventer minimise yarn waste during cycling. Yarn and dust residues are collected separately: for the recycling of valuable yarn resources.

The Autoconer with all its aggregates and functional processes is consistently designed for economical and frugal use of valuable yarn resources.

High upper yarn pick-up reliability with energy-saving vacuum



1 SmartJet
2 Snarl preventer
3 Upper yarn sensor
4 SmartCycle with suction tube



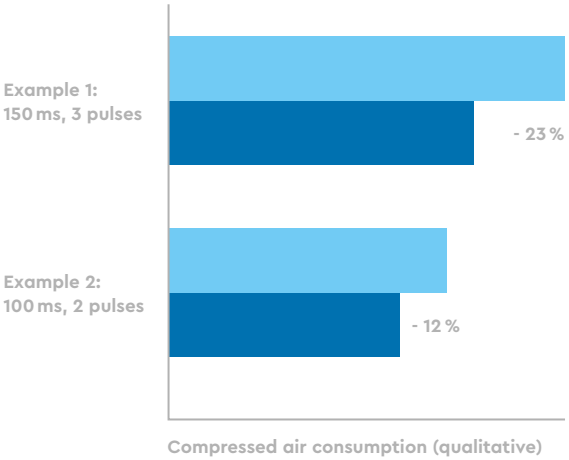
Energy-saving cleaning

MultiJet: lower compressed air consumption
Reduce compressed air consumption noticeably. Set the frequency and intensity of the blowing pulses for cleaning the winding unit according to your requirements: centrally at the Informator. This enables you to control consumption individually and save valuable compressed air.

Optimised dust removal system
The Autoconer bobbin dust removal system has been designed to be more aerodynamically efficient. One module can now keep 24 winding units clean, i.e. 20 % more than before. An increase in efficiency that speaks for itself.

Newly developed travelling cleaner
Saurer's engineers have completely overhauled the travelling cleaner of the Autoconer. Thanks to an aerodynamically intelligent design, compressed air is precisely directed to the critical points and thus better exploited. You benefit from increased efficiency through more effective drive and low energy consumption.

Reduction in compressed air consumption with MultiJet



Autoconer X5 – MultiJet active on every cycle
Autoconer – MultiJet active on every 2nd cycle

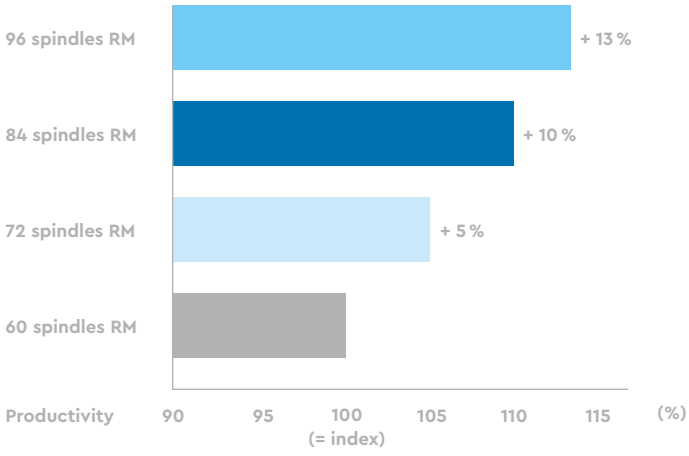
Up to 96 winding units

Type RM: productive round magazine
The circular magazine performs the bobbin change quickly and reliably – with the unique 9 + 1 principle and optimised creeling mandrel design.

Types D and V: 100 % supply to winding units
On the automated Autoconer models, you benefit from highly productive, intelligent material flow technologies and processing aggregates with the highest cycle rates: the bobbins are distributed rapidly to all winding units as required. Maximise your production!

More kilograms per square meter
When planning your plants, make maximum use of the space for the required production capacity. Simply wind more kilograms on the same area. Long machines (up to 96 winding units) mean that the layout can be organised to yield the highest productivity.

Higher productivity/m²



Winding technology for maximum production output

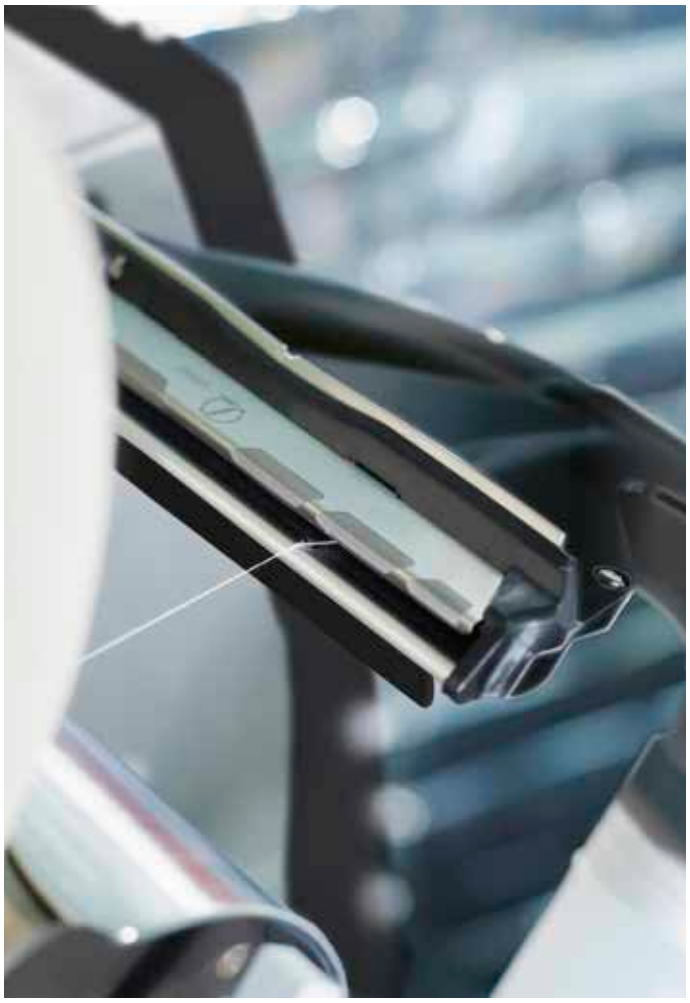
More productive in principle
The winding process of the Autoconer is optimised for maximum performance. Short cycle times, maximum acceleration, short braking, efficient yarn search, reliable material supply, intelligent, precisely coordinated technologies increase your productivity.

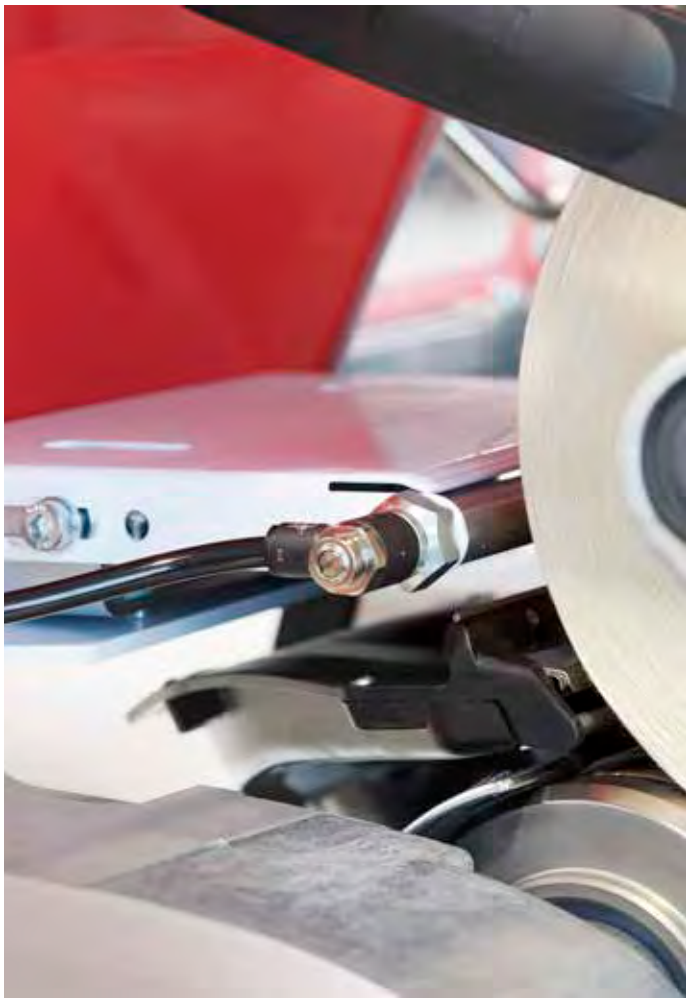
Eco-Drum-Drive System
More performance, less consumption
Reduced energy costs, formidable performance: the innovative Eco-Drum-Drive System with energy-efficient bearing technology makes it possible. Unproductive downtimes are cut practically to zero. You produce more per shift.

Yarn tension control for highest added value
The combination of unwinding accelerator and effective yarn tensioning systems (TensionControl, Autotense FX) ensures uniform yarn unwinding over the entire bobbin. More added value through fewer tension breaks. Always wind at the technological speed limit.

LaunchControl: faster to high speed
With LaunchControl, the Autoconer accelerates to maximum speed faster than before – automatically and without slippage. And the additional contact pressure generated by Propack FX (optional) will get you production off to an even quicker start.

High-speed anti-patterning
The anti-patterning cycle has been optimised to increase efficiency while going easy on the yarn, ensuring that you benefit from enhanced productivity even during this key phase in the winding process.





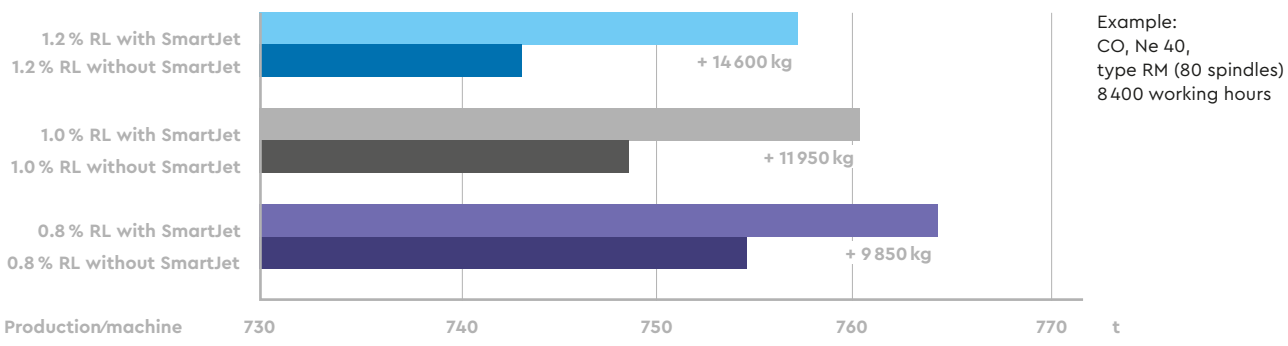
Shorter cycle, higher productivity
From clearer cut to package restart in a flash: cycle sequences have been intelligently automated. With SmartCycle, the cycle process can be variably customised – for measurably higher productivity.

Intensified upper yarn search with SmartJet (optional for RM, E, K)
Thanks to a variable cycle sequence, the suction nozzle intensifies the yarn search.

If the yarn can not be detected, the doffer lends assistance with the unique SmartJet power nozzle.

Long-term stable yarn pick-up by autocalibration
The position of the aerodynamically optimised suction nozzle gives a reliable function with long-term stability and reproducibility thanks to intelligent autocalibration – for maximum efficiency. Benefit from increased pick-up rates.

Higher productivity thanks to SmartJet



Example:
CO, Ne 40,
type RM (80 spindles)
8 400 working hours

User-friendly and intelligent winding.

→ **Everything in view, productivity at the touch of a button: thanks to the Informator with new graphic functions**

→ **Senses, the new mill management system for easy data and information handling**

→ **Smart sensors, autocalibration and automatic function checks for reduced manual effort**

→ **Better overview due to open machine design**

Smart handling

Powerful, comfortable user cockpit
The new Informator offers the most modern operating convenience: capacitive touch display with a large, user-friendly 15.6" format and a zoom function, for example, as is used in tablet computers and smartphones.

What's new is that each user can individually configure his or her start screen with winding and process parameters. It is designed for state-of-the-art data archiving with much larger storage capacity. The extensive range of graphical and tabular evaluations can be adapted individually. Trend and history graphs over up to 15 shifts offer extensive analysis and optimisation possibilities for your winding process.

Long service life, low maintenance effort
The Autoconer uses extremely durable components, machine-specific optimised electronic components and robust process controls. A long service life and reduced servicing are the result – creating the ideal production conditions!

Open design makes work easier
With the Autoconer, you can observe aggregates and components such as bobbin preparation station or tube cleaning more closely and they are easily accessible. The open design of the lower part of the machine in particular is impressive, offering greater clarity and ergonomic operation.

Senses – the new mill management system

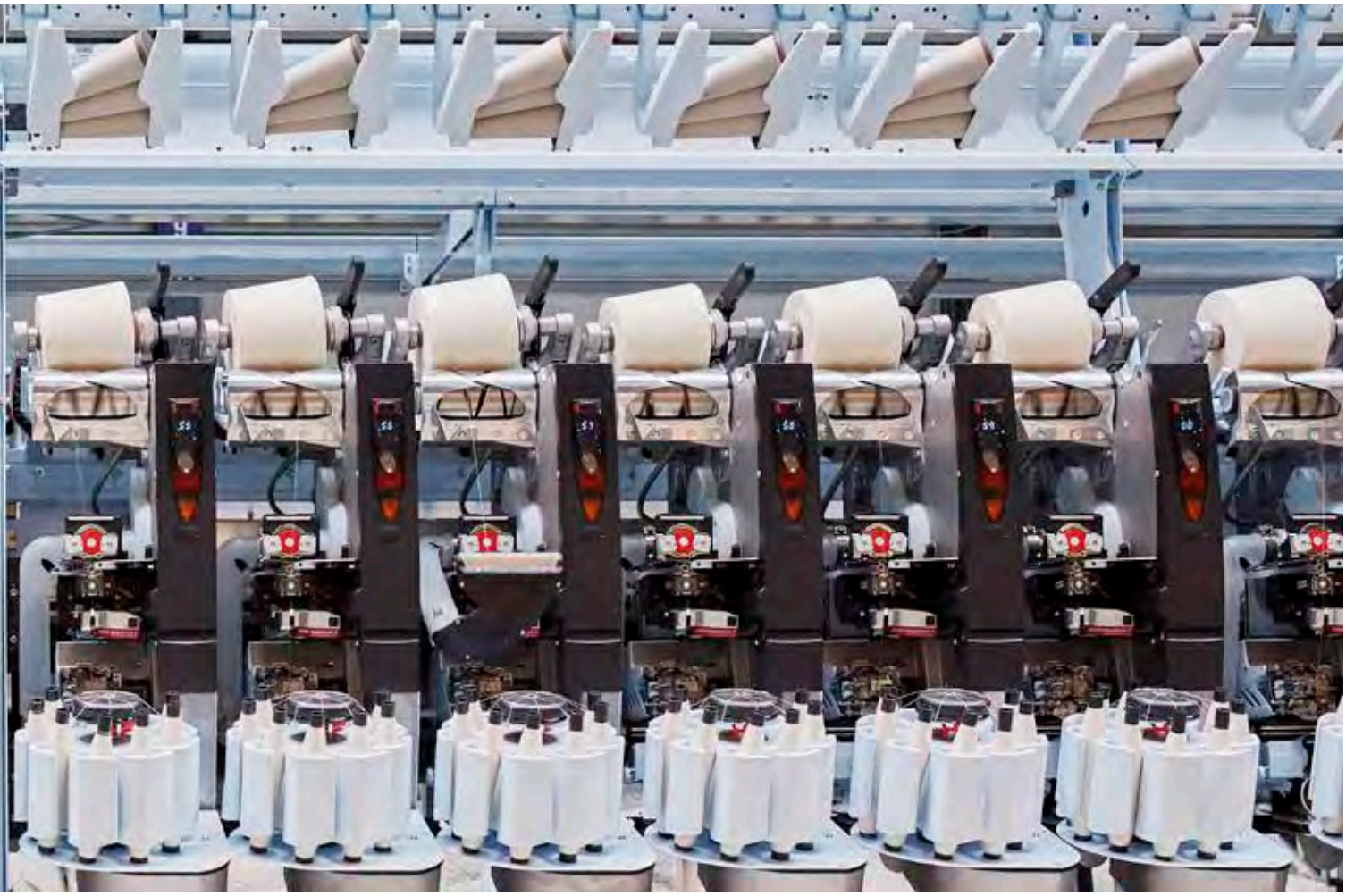
For maximum added value and profitability
Senses is the new Saurer mill management system (optional) for the entire textile value-added chain. The information system collects, bundles and visualises the production, quality and machine data of your entire spinning mill. The application delivers valid information to management and the machine operators in order to profitably optimise the use of raw materials, material, time, personnel, energy and capital.

Senses is therefore the ultimate addition to your Saurer machinery. The application runs on all smart devices, adapts to your demands and can upgraded to new Senses Elements at any time in the Saurer software shop. Use your new digital senses and sustainably optimise the profitability of your textile business through real-time information and big-data mining.

Smart production

Automation smartly networked
Reliability and efficiency without manual intervention. The Autoconer realises this concept for the future down to the last detail.
Smart networking interlinks its automatic, intelligently controlled process sequences to increase efficiency further and ensure top performance independently of personnel.

Upper yarn pick-up Piecing cycle	**Material flow**	**Doffer X-Change**	**LaunchControl**
Vacuum control Power on demand	**Bobbin Sharing Vario Reserve**	**Empty tube strategy**	**Slip-free start-up**
SmartCycle	**SPID**	**Intermediate storage**	
SmartJet	**Q-Package**		



Smart sensor technology and autocalibration
The Autoconer uses the latest sensor systems and drives for autocalibrating aggregates and functions. Your advantage: precise, reproducible settings that remain stable over a long period without any manual input.

Automatic function monitoring
The functional design and intelligent sequences minimise stoppages and manual intervention. You benefit from greater process reliability and a much lighter workload for staff.

SmartSplicer	**SmartCycle**	**Doffer X-Change**	**Circular magazine**	**Doffer X-Change**
Autocalibration feeder arm	**Autocalibration suction nozzle**	**Teaching mode**	**Automatic elimination of incorrect creelings**	**Package start-up control**
		Multitube handling		**Tube Check**

Autoconer model range.

→ Machine concept

→ Rewinding machines

→ Technical data

→ Equipment, options

→ Dimensions

Type D

Type RM

1 Energy unit/control cabinet

2 Suction system (intelligent vacuum control)

3 Energy Monitoring

4 Informator (central settings)

5 Yarn/dust chamber

6 Separate yarn/dust chamber

7 Doffer X-Change

8 Package storage/removal

9 Package removal with intermediate store

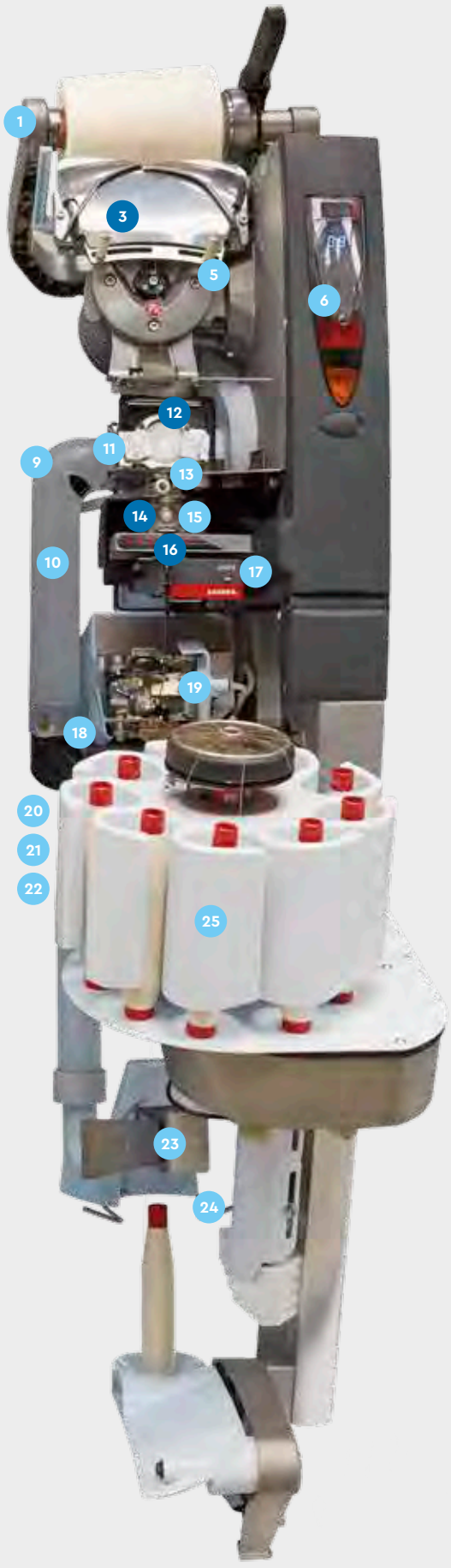
10 Bobbin dust removal (RM, D, V)

11 Travelling cleaner

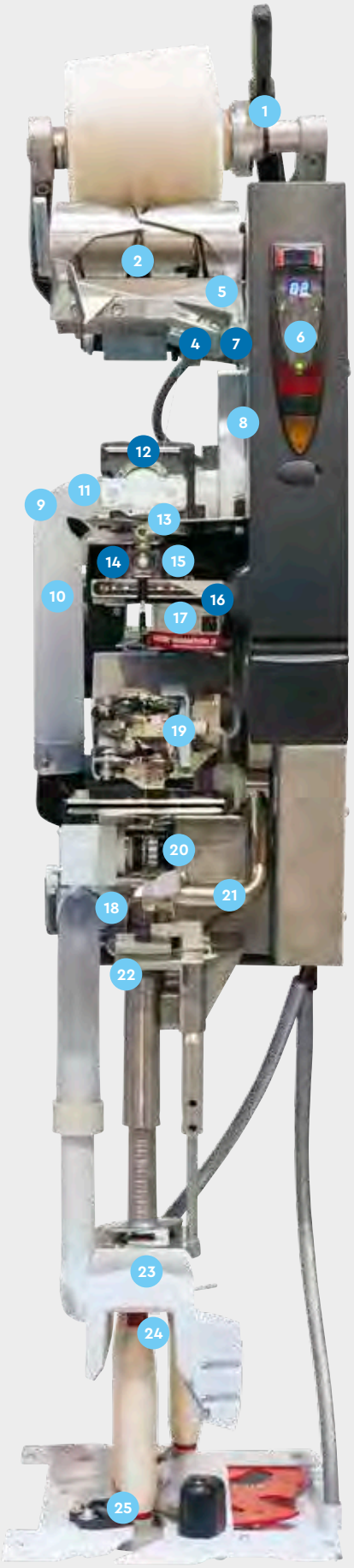
12 Automation aggregates (D, V)

● Standard
● Option

Type V



Type RM



Type D/V

Type RC

Type K

Type E

1 Package cradle incl. cradle compensation

2 Eco-Drum-Drive System

3 PreciFX

4 Quality Guard

5 Quality Cut

6 Winding unit display

7 Propack FX + Variopack FX

8 LaunchControl, high-speed anti-patterning

9 SmartCycle

10 Suction tube with autocalibration

11 Upper yarn sensor

12 Waxing unit

13 Yarn trap

14 Autotense FX + Variotense FX

15 TensionControl

16 Ecopack FX

17 Electronic clearer

18 MultiJet

19 SmartSplicer

20 Tensioner

21 Gripper arm

22 Lower yarn sensor

23 Unwinding accelerator

24 Snarl preventer

25 Material feed (bobbins/packages)

● Standard
● Option

Autoconer rewinding machines

Equally high quality standard
In addition to bobbin processing, the Autoconer product family also offers you rewinding machines for all requirements. Autoconer rewinding machines guarantee the accustomed benchmark quality of Saurer due to their identical technology and comparable handling when rewinding packages and residual packages. Don't settle for second best.

Type E:
for easy individual creeling
- Manual package feed with single creeling
- Rewinding with yarn clearing and automatic yarn joining
- Drum or PreciFX displacement technology

Drum	●
PreciFX	●
Clearer	●
Splicer	●
Package doffer	●
Package feed	Manual, simple
Feed package diameter	300 mm
Feed package traverse	3" – 10"

● Standard
● Option

Type K:
with ergonomic comfort creeling

- Comfortable manual feed of reserve package in ergonomically optimal position
- Automatic change of feed packages with change mechanism
- Rewinding with yarn clearing and automatic yarn joining
- Drum or PreciFX displacement technology

Drum	●
PreciFX	●
Clearer	●
Splicer	●
Package doffer	●
Package feed	Manually, convenient
Feed package diameter	240 mm
Feed package traverse	3 " – 6 "

● Standard
● Option

Type RC:
with large magazine for package remnants

- Manual feed of the residual packages into the large capacity magazine
- Magazine for 6 or 12 package residues
- Rewinding of residual packages
- Rewinding with yarn clearing and automatic yarn joining
- Drum or PreciFX displacement technology

Drum	●
PreciFX	●
Clearer	●
Splicer	●
Package doffer	●
Package feed	Circular magazine
Feed package diameter	115 mm (12-package magazine) 190 mm (6-package magazine)
Feed package traverse	3 " – 6 "

● Standard
● Option

Technical data

Machine concept
Single spindle machine, single-sided longitudinal design. Available as right-hand and left-hand machines.

Spindle gauge
320 mm from winding unit to winding unit.

Materials processed
Single and plied yarns of natural and manmade staple fibres; a winding test may be required in some cases.

Yarn count ranges
- 333 tex to 5.9 tex (Nm 3 to Nm 170; Ne 2 to Ne 100)
- Winding test required for coarser or finer yarns

Package formats
- 83 mm (3 ") traverse, cylindrical to 4 ° 20 '
- 108 mm (4 ") traverse, cylindrical to 4 ° 20 '
- 125 mm (5 ") traverse, cylindrical to 4 ° 20 '
- 150 mm (6 ") traverse, cylindrical to 5 ° 57 ' optionally with increasing taper up to 11 °

Package diameter
- Max. 320 mm, from cylindrical to 5 ° 57 ' tubes
- Max. 300 mm, for 5 ° 57 ' tubes with increasing taper to 11 °
- Emergency stop at 326 mm
- Max. 260 mm, with intermediate storage.

Package tubes
Cylindrical and tapered, according to DIN/ISO standards.

Winding speed
Infinitely variable from 300 to 2 200 m/min, depending on yarn type, bobbin build and machine specification.

Acoustic emissions
Acoustic emission data satisfy the international standard EN ISO 9902–4.

Installed power
Depending on the number of winding units and the specified equipment options.

Connections
Power and compressed air supply via customer connections.

Vacuum
- Vacuum generated on each Autoconer by the suction system.
- Discharge of hot exhaust air from the Autoconer.

Equipment options feeding

	Type RM	Type D	Type V
Feed bobbin length	180–360 mm	180–260 mm	180–260 mm
Feed bobbin diameter	max. 52 mm (9 pockets) max. 72 mm (6 pockets)	max. 52 mm	max. 52 mm
Material feed/automation	Manual feed of bobbins into circular magazines	Automatic bobbin feed by flat/circular conveyor (Standalone machine)	Automatic feed of bobbins to the winder and return of empty tubes to the ring-spinning machine (Link installation)
Winding units/section size	Sections of 4, 6 winding units, 10 to 96 winding units, in steps of 2, according to section arrangement		

	Type E	Type K	Type RC
Material feed/ Feed change	Manual package feed Single creeling Manual feed change	Manual package feed Ergonomic with reserve package Automatic feed change mechanism	Manual package feed into large magazine (6 or 12 pockets) Automatic feed change mechanism
Number of sections, winding units, winding unit numbers	Sections of 4, 6 winding units 10 to 96 winding units, in steps of 2, according to section arrangement		Sections of 2, 3 winding units 5 to 48 winding units, according to section arrangement
Sectional combination	with RM, K, RC	with RM, E, RC	with RM, E, K

Machine equipment options, automation units

Autoconer version 171	Type RM	Type D	Type V	Type E	Type K	Type RC
Cleaning the machine						
MultiJet per winding unit with adjustable frequency of the pulse	●	●	●	●	●	●
Bobbin dust removal	O	O	O	–	–	–
Autoconer standard travelling cleaner	●	●	●	●	●	●
Joint collecting chamber for yarn waste and dust	●	●	●	●	●	●
Separate chambers for yarn waste and dust	O	O	O	O	O	O
Automatic emptying of yarn waste chamber into a central suction system	O	O	O	O	O	O
Package doffing and removal						
X-Change package doffer	O	●	●	O	O	O
SmartJet	O	●	●	O	O	–
Tube Check	O	O	O	O	O	O
Deposit tray for full packages	●	–	–	O	O	O
Package conveyor belt	O	●	●	O	O	O
Package removal system with intermediate storage (packages max. 260 mm diameter)	O	●	●	O	O	O
Interface with automatic package removal	O	O	O	O	O	O
Information systems						
Informator with graphic user interface via touchscreen and USB interface	●	●	●	●	●	●
Senses (mill management system)	O	O	O	O	O	O
Power unit						
Energy Monitoring	O	O	O	O	O	O
Energy Monitoring Pneumatic	O	O	O	O	O	O
Suction system with intelligent vacuum control (AVC) and sensor, Power on demand	●	●	●	●	●	●
Automation units						
SmartTray with RFID		●	●			
Flat circular conveyor		●	-			
Direct link		-	●			
Underfloor link		-	O			
1st bobbin preparation station BPS		●	●			
2nd and more BPS		O	O			
Top winding device		O	O			
UWL-A		O	O			
Mechanical tube inspector		●	●			
Optical tube inspector		O	O			
Tube stripper		O	O			
Bobbin-tube extractor		O	-			
SPID		-	●			
Q-Package		O	-			

● Basic equipment O Option – Not available

Equipment options winding unit

	Type RM	Type D	Type V	Type E	Type K	Type RC
Winding unit, winding unit control system, units in the yarn path						
Eco-Drum-Drive System for winding speeds of 300 to 2 200 m/min	●	●	●	●	●	●
Drum lap detection	●	●	●	●	●	●
Cradle compensation	●	●	●	●	●	●
Package brake and lift-off after yarn break or bobbin idling	●	●	●	●	●	●
LaunchControl	●	●	●	●	●	●
Electronic length measurement and package diameter computation	●	●	●	●	●	●
Quality Cut power failure circuit	●	●	●	●	●	●
Electronically controlled, productivity-optimised standard anti-patterning	●	●	●	●	●	●
Quality Guard sensor (not in combination with PreciFX)	O	O	O	O	O	O
Increasing taper	O	O	O	O	O	O
Waxing including wax roll monitoring	O	O	O	O	O	O
Upper yarn sensor, lower yarn sensor	●	●	●	●	●	●
Yarn trap	●	●	●	●	●	●
Electromagnetic yarn tensioner, centrally adjustable	●	●	●	●	●	●
Residual yarn shears	●	●	●	–	●	●
Adjustable unwinding accelerator	●	●	●	–	–	–
Snarl preventer	●	●	●	–	–	–
TensionControl	●	●	●	–	–	–
FX-Serie						
Yarn tension control system Autotense FX incl. Variotense FX	O	O	O	O	O	O
Anti-patterning system Propack FX incl. Variopack FX (not in combination with PreciFX)	O	O	O	O	O	O
Precision length measuring system Ecopack FX	O	O	O	O	O	O
PreciFX	O	O	O	O	O	O
Speedster FX	O	O	O	–	–	–
Automatic yarn joining						
SmartSplicer (for standard and compact yarns)	●	●	●	●	●	●
SmartSplicer Injection, Thermo, Elasto	O	O	O	O	O	O
Electronic yarn clearing						
Standard clearer	●	●	●	●	●	●
Superior clearer	O	O	O	O	O	O
IRis FX	O	O	O	O	O	O

● Basic equipment O Option – Not available

Dimensions

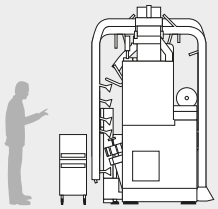
Machine dimensions Autoconer, type RM (winding unit number samples, delivery as combination of 4 spdl. or 6 spdl. section is possible)

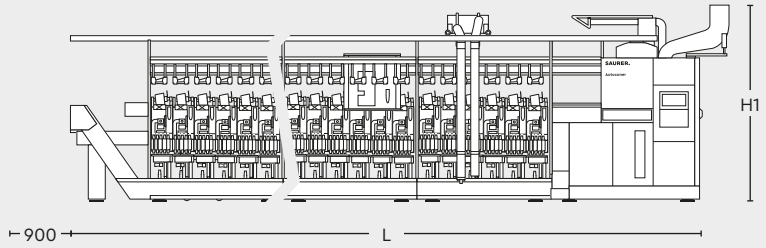
Winding units RM	10	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96
L measurement (mm)	6773	7413	9411	11409	13407	15405	17403	19401	21399	23397	25395	27393	29391	31389	33387	35385

Take + 900 mm space for bobbin carriage shunting into account, type RM with continuous tube transport

Height

H1 (mm)	2928





Autoconer, type RM

Machine dimensions Autoconer, type D (Winding unit number samples, delivery as combination of 4 spdl. or 6 spdl. section is possible)

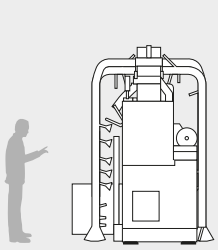
Winding units	10	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96
L1 (mm)	7612	8252	10250	12248	14246	16244	18242	20240	22238	24236	26234	28232	30230	32228	34226	36224

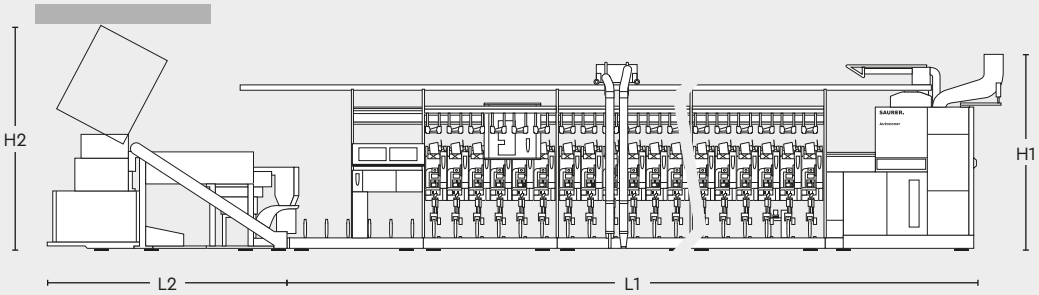
Height

H1 (mm)	2928
H2 (mm)	2700 – 3580

Interface Module

L2	Flat-circular conveyor for type D (mm) + Lifter	3615.5





Autoconer, type D

Dimensions

Machine dimensions Autoconer, type V

Winding units	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38
L1 (mm)	7 612	8 252	8 970	9 610	10 250	10 968	11 608	12 248	12 966	13 606	14 246	14 964	15 604	16 244	16 962

Winding units	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68
L1 (mm)	17 602	18 242	18 960	19 600	20 240	20 958	21 598	22 238	22 956	23 596	24 236	24 954	25 594	26 234	26 952

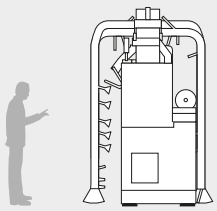
Winding units	70	72	74	76	78	80	82	84	86	88	90	92	94	96	
L1 (mm)	27 592	28 232	28 950	29 590	30 230	30 948	31 588	32 228	32 946	33 586	34 226	34 944	35 584	36 224	

Height

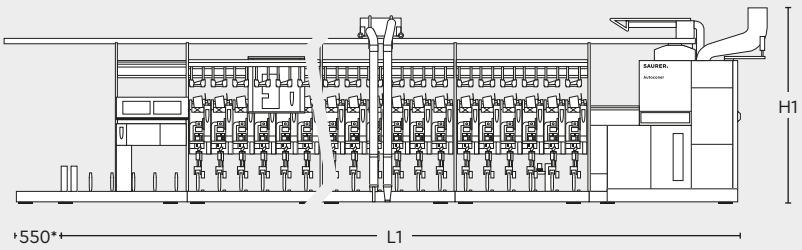
H1 (mm)	2 928

Interface Module

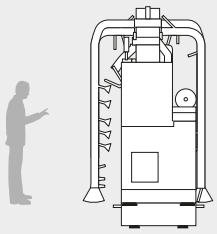
L3	Underfloor link, Interface standard	2 500
L4	Underfloor link, additional interface for Rieter	120



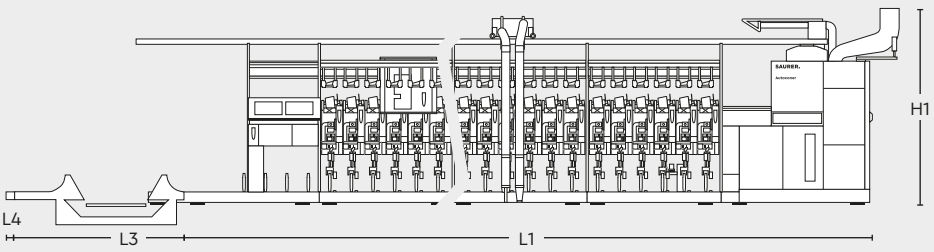
Autoconer, type V direct link



*not for Rieter and Z 72XL



Autoconer, type V underfloor link



Regarding this brochure
Research and development never stand still. This may mean that some statements about the Autoconer have been rendered obsolete by 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.

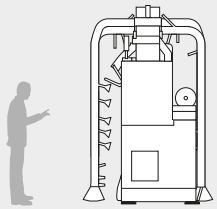
Dimensions

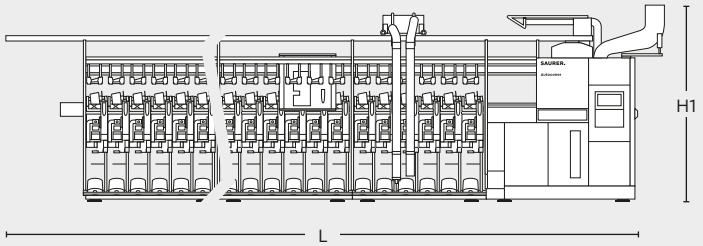
Machine dimensions Autoconer, type E, K, RC (winding unit number samples, delivery as combination of 4 spdl. or 6 spdl. (2 or 3 for type RC) section is possible)

Winding units E, K	10	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96
Winding units RC	5	6	9	12	15	18	21	24	27	30	33	36	39	42	45	48
L measurement (mm)	6773	7413	9411	11409	13407	15405	17403	19401	21399	23397	25395	27393	29391	31389	33387	35385

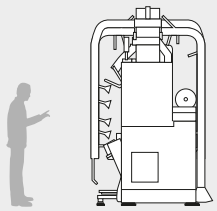
Height

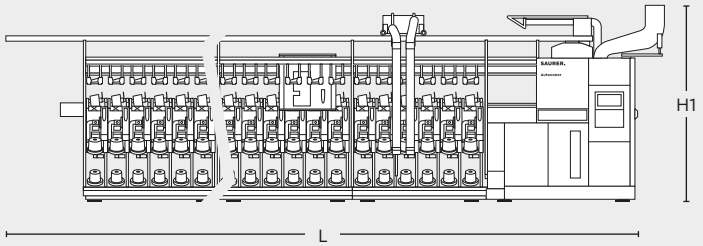
H1 (mm)	2928



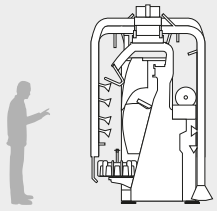


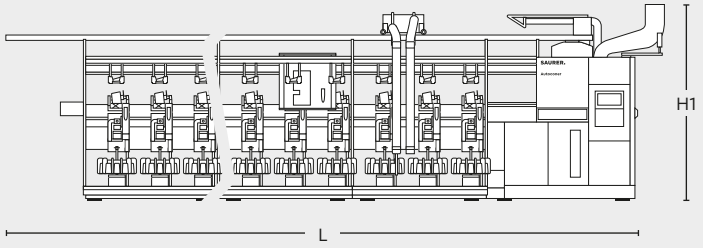
Autoconer, type E





Autoconer, type K





Autoconer, type RC

Sun

Saurer sets the benchmarks with:

- → Consulting
- → Installation
- → Academy
- → Original Parts
- → Maintenance
- → Updates and Upgrades

Sun – Service Unlimited

Strong and reliable life-cycle partnership.
Unique smart solutions to increase the benefit to the customer.
Notable performance and sustainability throughout the machine lifetime.

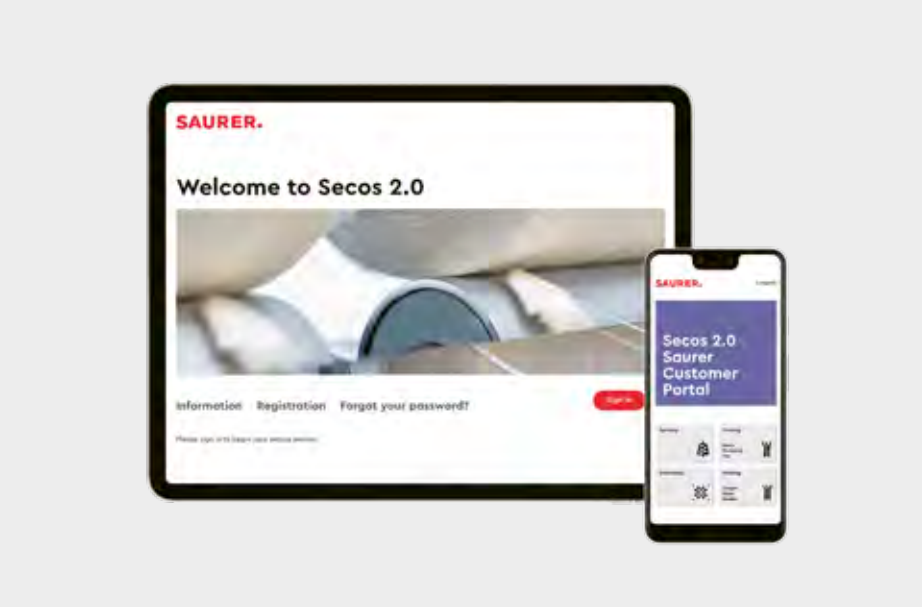
Sun is a bundle of differentiated services that add real value to Saurer machinery throughout its entire life cycle. Highly trained staff using state-of-the-art tools improve our customers' daily operations in a flexible and individual way. We provide the owners of Saurer machinery with innovative solutions and services to improve the product quality, machine performance and profitability.

We keep you competitive.

Secos

Saurer Customer Portal

→ Order Saurer original parts quickly through the Secos e-shop. The most common wear parts for each machine type can now be found more easily with photo catalogues.
→ Find instead of searching: all your data, all your machines, all your original parts at a glance
→ Convenient order management with order history going back 5 years
→ Quick finder functions with one-click buttons for favourites and current Saurer offers



secos.saurer.com

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TÜV CERT DIN EN ISO 9001

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

BLUeCOMPETENCE Alliance Member
Partner of the Engineering Industry Sustainability Initiative