

SAURER.



Think leading.

Autocoro 11





Schlafhorst Systems offer the highest versatility in the market. Whether an application requires the uniqueness and productivity of air spinning or the smart flexibility of rotor spinning, we have the right solution for you.

Saurer is a leading, globally active technology company with a focus on machines and components for yarn production. We support the textile industry in the areas of sustainability, digitalisation, and automation. For decades, sustainability has been an important part of our vision. The basis of our design philosophy, E³, optimizes energy, economics and ergonomics of every new machine generation with added intelligence. Anticipating the need for circular economy, all of our spinning machines are already optimised to process recycled or regenerated fibre materials.

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Spotlight Sustainability.

Sustainability has been a focus at Saurer for decades. Saving resources is enormously important to us when developing new machines, technologies and upgrades. Our machines are optimised for the processing of sustainable fibre materials. Benefit from these features in the future when you use sustainable fibres to give textiles a second life.



E³: Our development philosophy

The needs of our customers are our top priority. With every new or further development, we pay attention to reducing energy consumption, increasing efficiency and improving ergonomics. The E³ philosophy underlies all our designs and our smart solutions provide added value to customers.

With the transformation of the textile industry for the Circular Economy, the processing of sustainable fibres is another important focus point in our developments.

Energy

- Up to 10% energy saving compared to previous Autocoro generation

Economics

- Synchropiecing 60 for higher efficiency
- Recycling Xtreme rX for more productive recycled fibre processing
- Three-chamber system for better sorting and reuse of fibres
- Patented interval cleaning of rotors for cleaner rotors and better yarn
- Up to 6 lots simultaneously for more flexibility

Ergonomics

- New patented rX yarn guide drive for extended maintenance intervals
- LED visualisation of machine status for intuitive operator guidance
- Bar code guided tube control for higher package quality
- Intuitive DCU setting for higher efficiency

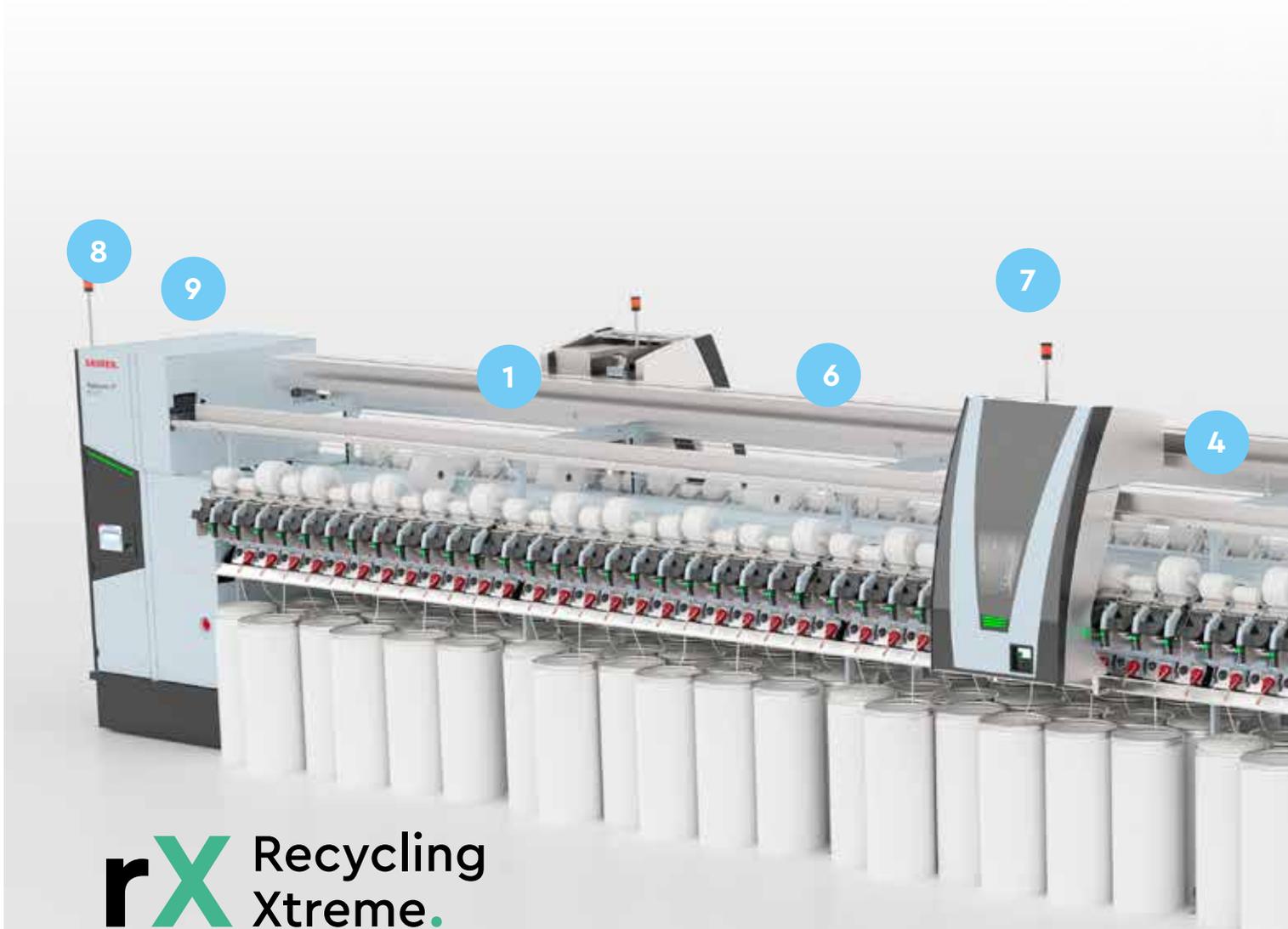
The 4th generation.





- **More sustainable: Up to 10% less energy, higher performance with Recycling Xtreme edition, more productivity, longer cleaning intervals and better package quality**
- **Improved automation: Ramp-up in less than 5 minutes with 65% higher piecing capacity**
- **More digital: Better packages with barcode tube control, higher efficiency with digital DCU control and efficiency visualisation**

Autocoro 11. Think leading.



rX Recycling Xtreme.

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- 1 Energy saving with E-drives 2.0, Quattro power supplies and new vacuum technologies

 - 2 Higher material reuse with three-chamber system

 - 3 Higher recycling performance with Recycling Xtreme machine edition and Corobox SE 21

 - 4 Higher productivity with Synchropiecing 60

 - 5 Digital package quality improvement with Digitube and Digiwinding

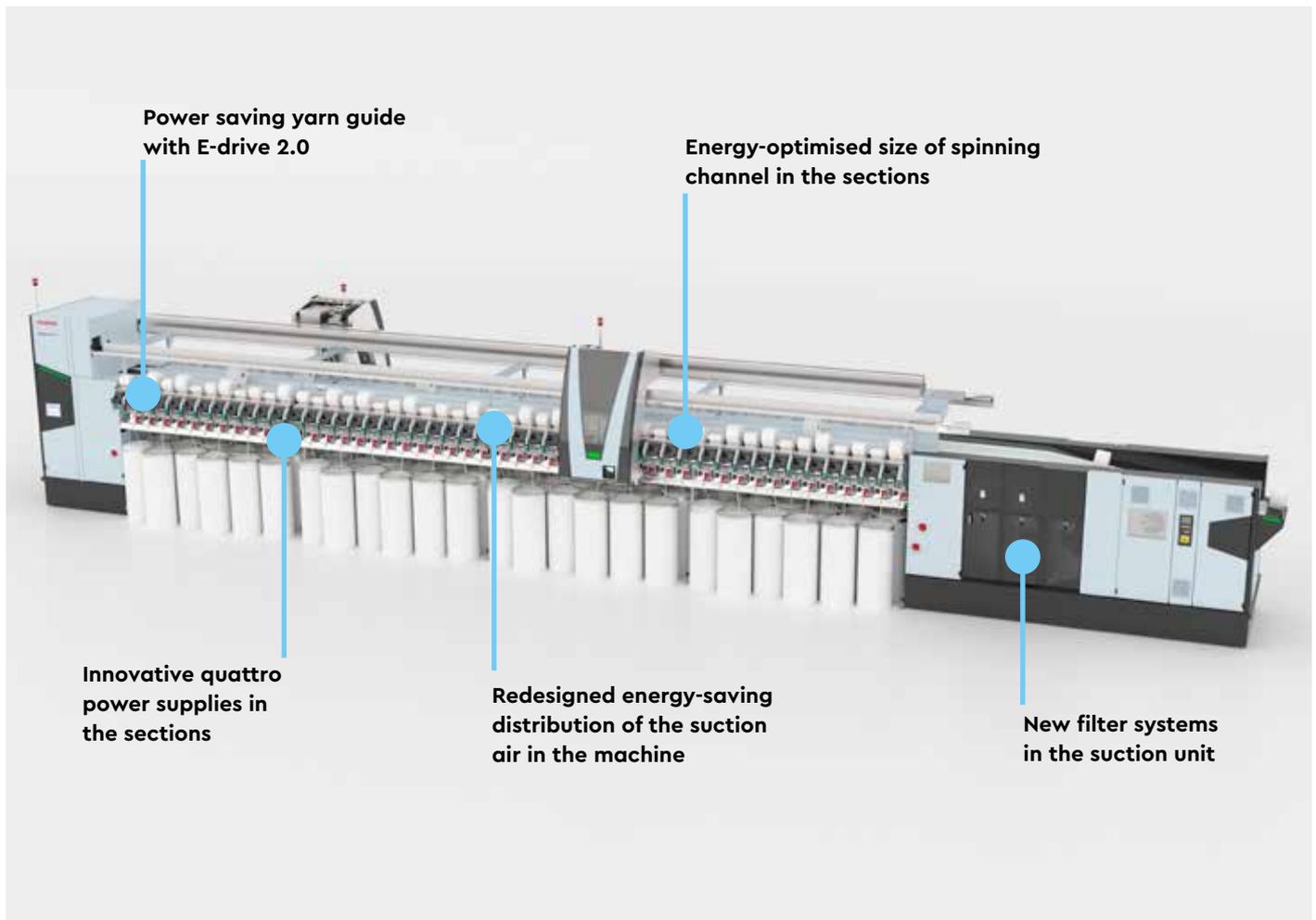
 - 6 Savings with Digiwinding FX

 - 7 More efficiency with new doffing cleaning unit DCU

 - 8 Higher operator performance with efficiency visualisation, Multigate, status lights and multicolor displays

 - 9 More flexibility with Multilot 5+1, Pilotspin and Fancynation





Be sustainable

Autocoro 11 is the fourth generation of the Autocoro automatic rotor spinning machine with individual drive technology successfully established in the market by the innovation leader, Saurer.

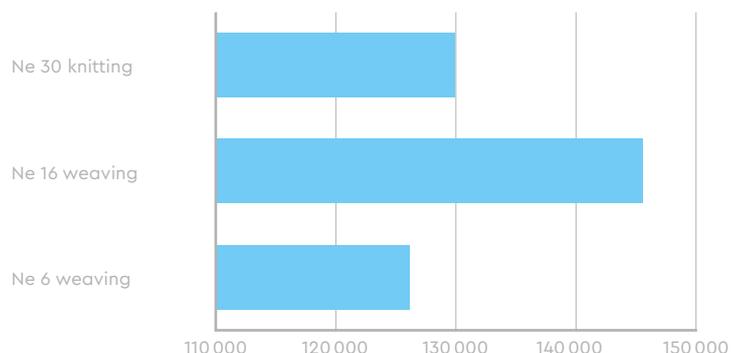
The fourth Autocoro generation with individual drives, the new Autocoro 11 clears the way for even more sustainable spinning. Highly productive and resource-saving, thanks to new digital solutions and even more sophisticated automation.

Use up to 10% less energy

The technology for the vacuum system and vacuum distribution in the machine has been completely redesigned to make rotor spinning with the Autocoro 11 even more energy-efficient. There are also new energy-saving modules in the machine, i.e. Quattro power supplies and new E-drives in the winding head that save up to 10% on energy for sustainable yarn production.

10% less energy: Less impact on the environment

Savings with Autocoro 11 with 720 spinning units – kWh/year





Transparent energy information for each yarn package

Energy monitoring provides a transparent carbon footprint for each lot and each kilogram of yarn. The energy demand data is stored in the Informator of Autocoro 11, where it can be retrieved at any time and is verifiable for the yarn buyers.



Less fibre loss

The fibre beard supports of the new SE 21 spin box can be lengthened or shortened by simply clipping them on and off. The speeds of the opening roller can be precisely matched to the sustainable fibres. This ensures the desired quality and keeps the fibres in the yarn.



rX Recycling Xtreme.

Recycled fibres with a particularly large number of short fibres and an extremely high dust content are the perfect playground for the Autocoro 11 with the Recycling Xtreme edition.

Better sorting – better reuse

The Autocoro 11 uses the new three-chamber system to strictly sort all waste from the spinning process into fibres, yarn remnants and dirt. This ensures maximum recycling of waste.

More productivity with new rX yarn guide drive

A cleaner spinning environment can be achieved with the new patented rX yarn guide drive unit with new design and self-cleaning systems. In combination with the new dust-repellent spinbox design and special opening roller cap coating, the result speaks for itself: Higher productivity, at least 100 times longer manual cleaning intervals and dust-free packages with straight flanks.





**Better yarns
with new patented rotor cleaning system**

With new patented rotor cleaning based on digitally controlled linear motor technology, up to eight new doffing cleaning units (DCUs) help to achieve better yarn quality. A new movement mode of the cleaning scraper is integrated, the positioning of the scraper in the rotor groove is more precise and much more efficient. This removes even the most stubborn contamination in the rotor, a clear plus when processing sustainable fibres.

More efficiency with new dirt channel cleaning

The machine environment is increasingly polluted by dust and fibre residue, especially when spinning recycled yarns. The Autocoro 11 with the Recycling Xtreme edition removes these fragments in a targeted manner. The dirt channels are cleaned in several places simultaneously. The spin boxes remain clean and efficiency increases, while the manual maintenance effort decreases.





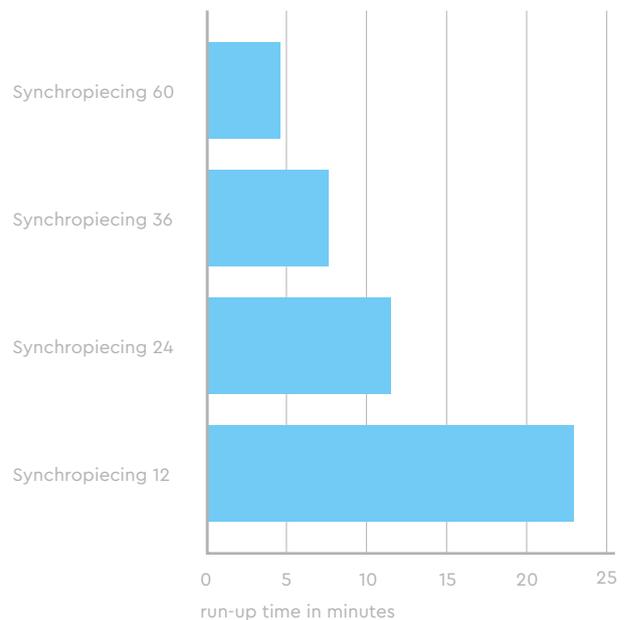
Leading automation

Synchropiecing 60 for high productivity

60 parallel piecing processes speed up even long Autocoro 11 machines with 816 spinning units from a downtime to the highest efficiency in continuous production in less than 5 minutes. Synchropiecing 60 decouples fibre quality and high productivity. Yarn breaks due to variations in fibre quality are reduced and an adjustment of the production speed is no longer necessary. The machine efficiency remains high for all spinning constellations.

Machine run-up in less than 5 minutes

816 spinning units, Ne 20 knitting yarn





Reduce costs with digitalisation

Intuitive DCU

The new DCUs are the right hand of spinning mill personnel and communicate quickly and easily. LED signals that are visible from afar show the ideal timing of auxiliary package supply. Thanks to new digitally controlled touch menus with plain text information, the operator knows what to do immediately. Both the efficiency of the DCUs and the Autocoro 11 increase.

Reduced process costs

With Digiwinding FX, high-quality, rounded dye packages are produced right on the Autocoro 11. Folding and rewinding are no longer necessary, and yarn production costs are reduced.

Flexpack FX increases the profitability of all package types, generates dye packages with rounded edges, packages with straight flanks or oversized packages in perfect, digitally controlled quality.





Digitally controlled quality

Digital tube control

The new Digitube digital, barcode-controlled tube monitoring guarantees 100% identical lot packages. Tube and package mix-ups are a thing of the past. The barcode control is suitable for plain as well as coloured and patterned tubes, which means that operators benefit maximally from digital security on the one hand and do not need to renounce visual colour tube recognition on the other hand.

Save on costs with digital winding

Autocoro 11 packages manufactured with Digiwinding have straight flanks and are up to 10% heavier with the same diameter. They increase the efficiency in weaving and knitting and save logistics costs for the spinning mill. This means freight costs are also reduced when they are shipped in sea freight containers.





More efficiency with digitalisation

Machine efficiency visualised digitally

The Autocoro 11 digitally visualises all tasks at a glance simultaneously for all machines. The new LED technology on all four sides of the machine shows the operator whether there is potential for optimisation and whether the packages need to be cleared. This increases the machine's efficiency without additional processes in a convenient and targeted manner.



More flexibility with digitalisation

Flexible Multilot technology

With Multilot digital lot management, the Autocoro 11 spins up to 5+1 lots simultaneously. The integrated colour sensor in the Autocoro 11 ensures the desired tube colour for each lot. In combination with Digitube digital barcode-controlled tube identification, the tubes can also be marked with a wide variety of patterns, an additional convenience for operating personnel in the spinning mill as well as in the downstream processes of knitting and weaving.

Convenient tube feeding

Multigate makes tube insertion even easier and faster. Operators are guided visually so every sleeve is in the right place.



**Lot changes and test packages at full production**

Seamless lot changes mean that the Autocoro 11 can change from one lot to the next without loss of production, even with clean lot separation when changing cans and spinning components.

With Pilotspin, Autocoro 11 can produce any number of test packages with different settings, while the remaining spinning positions simply continue spinning.

Fancynation for fashion yarns

The Autocoro 11 can produce fancy yarns and conventional plain yarns simultaneously by combining Multilot with the Fancynation digital fancy yarn device. All lots are allocated to the spinning positions according to demand and can also be changed during production, which significantly increases the flexibility of the spinning mill.

Technical data

Automatic rotor spinning machine Autocoro 11

Technically designed for rotor motor speeds up to 180 000 rpm

Rotor motor speeds from 20 000 until 180 000 rpm in practice

Spin box SE 21

Take-up speed up to 250 m/min

Piecing with digital piecing technology Digipiecing

Doffing of full packages with the doffing and cleaning unit Doffing Cleaning Unit (DCU)

Sectional design with 24 spinning positions per section

Spindle gauge: 230 mm

E-Drive technology for energy-saving yarn production

Max. number of spinning units: 816

Technology data

Raw materials

Natural and manmade fibres and their blends

Fibre length up to 60 mm

Yarn count range

167 – 10 tex

Nm 6 – 100

Ne 3.5 – 60

Sliver count range

8.0 – 2.5 ktex

Nm 0.125 – Nm 0.40

Ne 0.07 – Ne 0.24

Draft

25 – 400 fold

Basic equipment and options

Basic machine

Digital controlled piecing technology Digipiecing for simultaneous piecing	●
Energy Monitoring on the informator, shows the energy consumption per kg yarn	○
Recycling Xtreme edition, machine specially prepared for the processing of recycled raw materials	○
Synchropiecing 6 for up to 6 simultaneous piecings	●
Synchropiecing 12/24/36/60 for up to 12, 24, 36 or 60 simultaneous piecings	○
Pilotspin: freely selectable number of related spinning positions - For the production of sample and test packages with up to 5 different settings - No automatic package doffing	○
2 package doffing and cleaning units with EIS (Event Identification System) - Integrated cleaning head for the pneumatic and mechanical cleaning of spinning components - Pneumatic cleaning of spin box and winding head - Operation with colored touch display - Automatic cover opening at the touch of a button	●
DCU Status-Light Visualisation of empty starter-bobbin in DCU (with LED)	○
Rotor cleaning with patented digital controlled linear motor technology	●
Machine performance efficiency visualisation with LED light bar visualisation of machine efficiency, status waste chambers and package conveyor belt at the machine head and end stock	○
Tube magazine for up to 432 empty tubes , arranged in 12 rows with 36 empty tubes per row	●
Tube magazine for up to 576 empty tubes , arranged in 12 rows with 48 empty tubes per row	○
EVA Electronic Vacuum Adjustment for a constant and electronically controlled spinning vacuum 65 to 95 mbar	●
Informator: Input of spinning parameters, data display on screen or via an external printer (not included in the scope of supply) by means of USB interface	●
Three-chamber system Yarn residues, waste and fibres are collected separately	●
Optimized trash removal - Optional for machines up to 552 spinning units - Standard equipment for machines with 576 spinning units and longer	○ ●
Fancynation yarn device , number of sections operated with Fancynation can be freely selected in combination with Multilot (option)	○
Connection to central waste disposal systems	○
Conveyor belt per machine side for package removal	●
Connection to central transport systems for packages	○
MultiLot processing system 2/3/5/5+1 Simultaneous production of up to 2, 3,5 or 6 lots on one machine, including - Seamless lot changes - Tube magazine with single-motor drive of lot-related tube rows in up to 5 groups (for 5+1 lot production the tube color for 2 lots has to be identical) - Automatic tube colour detection by sensors (single-colour tubes) - 2 package conveyor belts with individual control	○
Multigate , visual support system for tube feeding operation process	○
Digitube , sensor for spinning tube detection, for tubes with bar codes	○
Senses	○

● Basic equipment ○ Option

Basic equipment and options

Spinning and winding unit

Spinning unit

Corobox SE 21:

- Metal cover ●
- Exchangeable fiber beard support with freely selectable length (short or medium length)
- Single-motor driven rotors, magnetic axial and radial bearings
- Technically designed for rotor motor speeds up to 180,000 rpm,
rotor speeds from 20 000 – 180 000 rpm in practice with infinitely variable setting and digital control
- Individual driven opening rollers with infinitely variable electronic setting and digital control
- Individual driven and digitally controlled SDSI Single Drive Sliver Intake

Additional exchangeable fiber beard support (short or medium length, type long after consultation) ○

DigiPiecing: Digitally controlled piecing technology at each spinning position by means of single-motor driven piecing elements ●

Yarn quality monitoring

Corolab XQ – digital yarn monitoring system for quality control and for clearing thick and thin places ●

Corolab XF – digital yarn monitoring system for quality control and for clearing thick and thin places and foreign fibres ○

Digital piecing tester at each spinning position ●

Winding unit

rX yarn guide drive

for higher take-up speeds, extended cleaning intervals and better package design at sustainable fiber processing ○

Digitally controlled winding process and package build with single-motor package drive and single-motor yarn guide ●

Take-up speed: Up to 300 m/min for any machine length ○

Digiwinding: Digitally controlled function for straight package flanks without traverse reduction, complete digital anti-patterning ○

Digiwinding FX: Rounded package flank transitions mean reduced process costs in the production of dye packages, includes Digiwinding ○

Multicolour symbol display: Menu navigation based on symbols and pictograms, display of the production groups in different colours ●

Electronic length measuring unit for packages with a defined yarn length ●

Motor-driven waxing device for wax rolls up to a size of 75 × 50 mm ○

Additional **package cradle damping** for manmade fibers (Tilger) ○

Package formats

Cylindrical packages up to 300 mm in diameter ●

Tapered packages 1°50' up to 280 mm diameter ○

FlexPack FX: Cylindrical packages up to 350 mm diameter, packages with particularly high or particularly low density and for packages with rounded flanks ○

● Basic equipment ○ Option

Spinning cans

not included in Saurer delivery

Round cans

Ø 457 mm (17,5"): two rows

Ø 530 mm (20"): three rows

Height 900 mm up to 1200 mm (36" to 48")

Rectangular cans

220 mm width x 970 mm depth

Height 900 – 1200 mm (36" to 48")

Height when using can supports: 1070 mm (42")

Tubes

not included in Saurer delivery

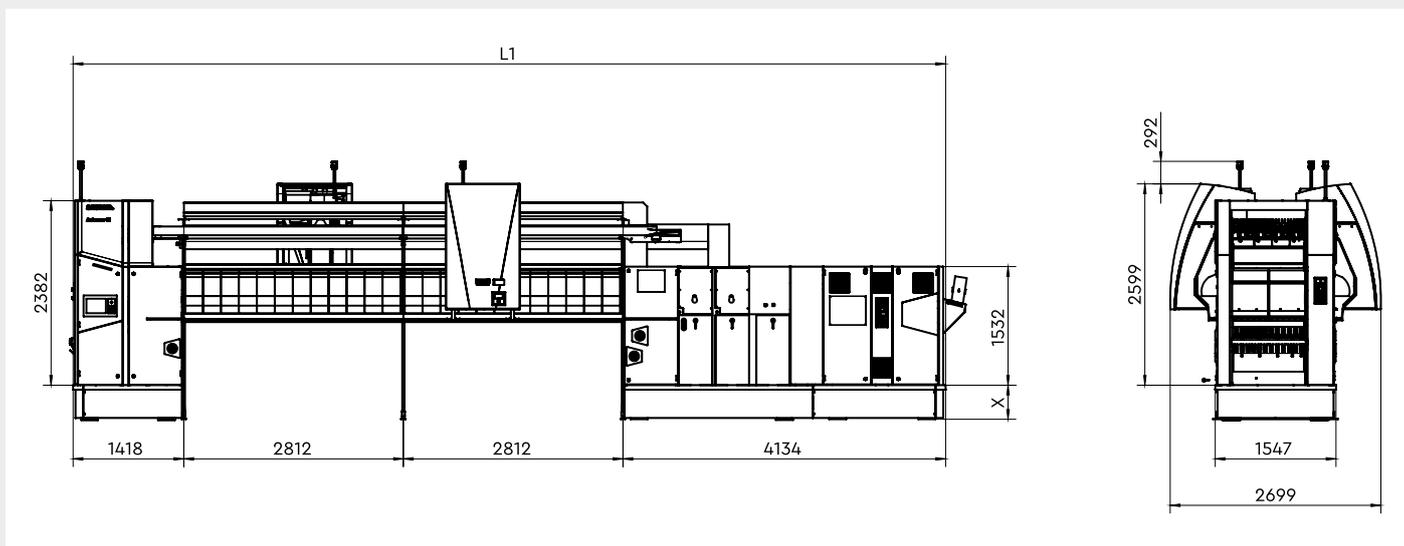
Bar code tubes Please contact your tube supplier for the printing possibilities of your individual bar codes on your tubes.

Dimensions

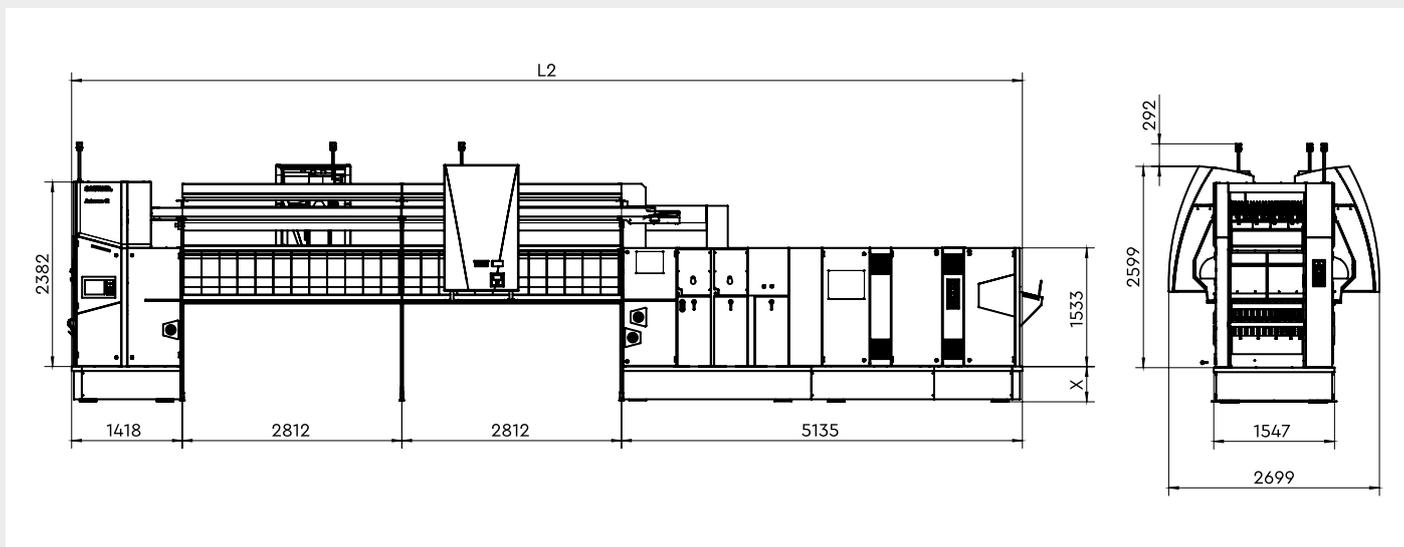
Dimensions and weights

	Spinning units	Sections	Net weight (2 doffers)	Length L1	Net weight (2 additional doffers)
	48	2	7040 kg	10174/11175 mm	600 kg
for each additional section	24	1	1520 kg	2812 mm	

Suction unit (standard design)



Suction unit (reinforced design)



Senses – Sensibly connected.

Visualise your Autocoro machine data with Senses.

In Senses you can collect, visualise and analyse the machine data of your Autocoro machines and all other Saurer machines.



Data transparency in rotor spinning

Senses makes the machine data of your Autocoro machines transparent. With the help of the individually configurable cockpit, you always have all the data relevant to you in view.



Find out more about Senses.

Simple, fast and secure recipe management*

With Senses, you can easily distribute recipes digitally to your machines. This reduces the setting time at the machine as well as the risk of incorrect entries. In addition, you have an overview of all your machine settings at all times, you can identify deviations and correct them in Senses if necessary.



Find out more about Senses Element Recipe.



Increasing efficiency with off-standard

The off-standard analysis makes it quick and easy to see which positions are not running optimally and you can react accordingly. This increases the productivity of your Autocoro machines on the one hand and the quality of the yarn you produce on the other.



Find out more about our Off-Standard View.

* Some functions are option-dependent

Sun – Service Unlimited.

Keep your rotor spinning competitive with our Life Cycle Partnership.

We offer innovative solutions and services to ensure product quality, machine performance and profitability throughout the machine life cycle. Original parts ensure the full potential of your machine. Tested and proven for decades in spinning mills worldwide.



Updates and Upgrades

Let us increase your productivity and improve the performance of your mill. Keep your machines up to date with our modifications, retrofits and software updates.

Find out about our latest updates & upgrades for your installed machine base.



Preventive maintenance

Preventive maintenance ensures reliable production: you can avoid unplanned machine downtime and keep your mill running at a high level of efficiency.

Find out more about our preventive services for your installed machine base.



Secos – more than just your e-shop

In Secos you can order your original parts online and find all your machine documentation.

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



Regarding this brochure

Research and development never stand still. This may mean that some statements about the Autocoro 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.