AUTOCORO 9.
LEADING TECHNOLOGY –
THE NEXT GENERATION.
—
Leading technology – the next generation.

Four years ago, the Autocoro 8 revolutionised the world of rotor spinning. Its innovative, highly productive individual spinning position technology overcame the barriers imposed by belt drives and raised productivity to previously undreamed-of heights. The next Autocoro generation is again taking over leadership of the market.

The Autocoro 9 impressively demonstrates the superiority of its technology. With its increased intelligence it sets new standards in energy efficiency, productivity, economy, user-friendliness and quality. Spinning mills all over the world that produce large volumes of commodity yarns have already reshaped their markets with the new Autocoro technology. The success story continues – with the new Autocoro 9.
Autocoro 9

Get to know the new Autocoro 9 with E³ added value. Reduce energy costs by up to 25%. Achieve maximum productivity results. Massively reduce personnel and maintenance costs. Check out the exciting benefits of the Autocoro 9 now.

Highlights

- Reduce energy costs by up to 25%
- Maximise efficiency with the unique individual spinning position technology
- High rotor speeds of up to 180,000 rpm and take-off speeds of up to 300 m/min – on all lengths of machine and also for very large packages up to 350 mm in diameter
- Individually customisable machine length, perfectly automated spinning positions with up to 8 doffers and SynchroPiecing 24
- Increased efficiency due to automatic spinning position cleaning with the Vacuum Trash Cleaner (VTC)
- Maximum productivity/m² thanks to optimal space utilisation
- Reduce maintenance times and personnel requirements
- Maximum economic efficiency in all markets
E³ – Triple added value

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

Energy

Up to 25 % less energy

- Minimum energy costs
- Innovations for greater energy efficiency
- Maximum cost transparency through energy monitoring

Economics

Up to 30 % more productivity

- Outstanding efficiency
- Maximum productivity for commodity and specialist applications
- Outstanding productivity per m²

Ergonomics

Up to 60 % less maintenance costs

- Intelligent processes
- Maintenance and cleaning during on-going operation
- Intuitive, smart symbol display
- 30 % larger tube magazine with automatic tube colour control

25 % less energy costs with E³

<table>
<thead>
<tr>
<th></th>
<th>Competition</th>
<th>Autocoro 9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy</td>
<td>11.2</td>
<td>8.4</td>
</tr>
</tbody>
</table>

Energy costs: € Cent/kg yarn
Brazil, 480 spinning positions, 100 % CO,
Weaving yarn Ne 24, 143,000 rpm, 181 m/min

19 % less spinning costs with E³

<table>
<thead>
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<tbody>
<tr>
<td>Energy</td>
<td>10.4</td>
<td>5.6</td>
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</tbody>
</table>

€ Cent/kg yarn
- Personnel
- Compressed air
- Energy
- Space requirement
Brazil, 480 spinning positions, 100 % CO,
Weaving yarn Ne 24, 143,000 rpm, 181 m/min
Energy costs reduced by up to 25 %

- Best energy efficiency on the market thanks to the enhanced individual spinning position technology of the current machine generation
- New energy monitoring: Low energy consumption displayed on the Informator: per kg of yarn and per lot
Energy efficiency

Frugal even at high speed
Schlafhorst has systematically enhanced the revolutionary individual spinning position technology and made the Autocoro 9 even more economical. Make significant energy savings – even at maximum rotor speed.

More intelligent E-Drive saves energy
New, more energy-efficient components make the Autocoro 9 even more economical. Its innovative E-Drive has become even smarter thanks to improved process and control technologies. Intelligent savings – at each spinning position.

Energy Monitoring
The new energy monitoring system checks energy consumption online. You can read off the current energy consumption – per lot or per kg of yarn. You can also analyse the stored consumption data to make your production even more energy-efficient.

Up to 18 % energy savings compared to the Autocoro 8 thanks to E-Drive technology

- China
  - 480 spinning positions, weaving yarn Ne 21,5, 100 % CO 145,000 rpm
  - 110 kWh/machine, -17 %
- Turkey
  - 504 spinning positions, knitting yarn Ne 30, 145,000 rpm
  - 110 kWh/machine, -15 %
- China
  - 480 spinning positions, weaving yarn Ne 12, blend with recycling 118,000 rpm
  - 90 kWh/machine, -18 %
Up to 30 % more productivity
Maximum efficiency in rotor spinning

- High rotor speeds of up to 180,000 rpm in practice
- Take-off speeds of up to 300 m/min on all lengths of machine and also for very large packages up to 350 mm in diameter
- Custom machine length with high-performance automation: individually configurable number of spinning positions, up to 8 doffers, SynchroPiecing 24
- Seamless lot change, PilotSpin, MultiLot 2-5 and Fancynation for each section
- Highest productivity per m² – lowest space requirements per kg
- Increased efficiency with the VTC due to automatic spinning position cleaning during the processing of regenerated fibres
Maximum economy at all times

180,000 rpm achieved in practice – with all machine lengths and with super-sized packages
In comparison to competitor machines, the Autocoro 9 demonstrates its unrivalled performance every day in practice. It spins at rotor speeds of up to 180,000 rpm with any length of machine and any size of package.
Take-off speeds of 300 m/min with super-sized packages of 350 mm diameter are the everyday norm for spinning mills with Autocoro 9.

Higher profit through cleaning automation
The VTC is located in the middle of the machine, where it vacuums the dirt removal conveyor belt halfway. The machine remains clean even at high material throughput rates and the fibre waste is taken to where it belongs: the dirt collection chamber. The VTC now significantly boosts the raw material tolerance further.

11 % more yarn per m² compared with the competition
The Autocoro 9 combines high speed with a super-compact, space-saving design. Make better use of your production area and produce 11 % more yarn than with competitor machines.
High-performance automation

Intelligently automated spinning positions
Each spinning position on the Autocoro 9 is an intelligently automated, independent production unit with individually controlled spinning and winding processes and the highest piecing capacity anywhere in the world. Automation is now more intelligent and more powerful. High performance with any raw material and under all operating conditions.

Productivity increased by 29 % due to high rotor speeds plus high efficiency ratings

<table>
<thead>
<tr>
<th>Machine</th>
<th>Efficiency %</th>
<th>Ne 30, weaving yarn</th>
<th>65 % recycled cotton, 35 % PES, Turkey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conventional machine</td>
<td>98.2%</td>
<td>98.2%</td>
<td></td>
</tr>
<tr>
<td>Autocoro 9</td>
<td>99.6%</td>
<td>99.6%</td>
<td>+29%</td>
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<tr>
<td>120,000 rpm</td>
<td>98.5%</td>
<td>98.5%</td>
<td></td>
</tr>
<tr>
<td>1,400 yarn breaks/ 1,000 rotor hours</td>
<td>99.0%</td>
<td>99.0%</td>
<td></td>
</tr>
<tr>
<td>97.5</td>
<td>98.0</td>
<td>98.5</td>
<td>99.0</td>
</tr>
</tbody>
</table>

Autocoro 9
94,000 rpm
200 yarn breaks/
1,000 rotor hours
**Powerful automation capabilities**
The 8 doffers manage each required package change with ease. Since piecing is integrated in the individual spinning positions, the doffers are solely responsible for the package change. What is impossible for competitor machines, is achieved every day with the Autocoro 9 – the combination of a long machine with short package run times and high efficiency. An enormous competitive advantage!

**SynchroPiecing 24: up to twelve times faster startup**
Powerful digital piecing technology ensures the high productivity of the Autocoro 9. With the new SynchroPiecing 24, the new Autocoro starts up to twelve times more quickly than a conventional machine with two robots. The contrast with conventional machines is particularly striking here.

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**Start up to 12 times quicker – 600 spinning positions**

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>2 robots</td>
<td>135</td>
<td>11</td>
</tr>
<tr>
<td>4 robots</td>
<td>180</td>
<td>84</td>
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<tr>
<td>6 robots</td>
<td>220</td>
<td>56</td>
</tr>
<tr>
<td>SynchroPiecing 6</td>
<td>168</td>
<td>50</td>
</tr>
<tr>
<td>SynchroPiecing 12</td>
<td>84</td>
<td>25</td>
</tr>
<tr>
<td>SynchroPiecing 24</td>
<td>35</td>
<td>13</td>
</tr>
</tbody>
</table>

Run-up time in minutes

- Competition
- Autocoro 9
Seamless lot change even on single-lot machines
Fully automatic lot change with no idle time – only possible with the individual spinning position technology of the Autocoro. The intelligent spinning units manage all this automatically. They know when the old lot is running out and which tube colour and datasets they need to request for the next lot. The Autocoro 9 changes at each individual spinning position to the next lot with no loss of productivity – it even achieves clean lot separation during can and spinning component exchange.

Practical MultiLot technology
With its innovative MultiLot technology, the Autocoro 9 is able to spin up to five lots simultaneously. You can specify the number and assignment of spinning positions for the individual lots. This enables you to produce smaller “just in time” lots in parallel with the delivery of large customer orders.

Spinning trials during on-going production
With PilotSpin you can use individual spinning positions for the production of test packages while the other spinning positions simply continue to spin. This means you can maintain the high productivity levels of the Autocoro 9 even during spinning trials – a significant plus point, particularly with long machines.
**Fancynation – on individual sections**

Your entry to fancy yarn production has now become more affordable. Fancynation is available on the Autocoro 9 as a cost-effective option for individual spinning sections – ideal for commodity spinning mills that want to develop new markets without major capital investment. Spin up to five different fancy yarns simultaneously, or fancy yarns and smooth yarns in parallel, on one machine. And with the fancy yarn library each yarn is reproducible at the touch of a button.

**New, stronger yarn effects, for outstanding productivity**

The Autocoro 9 offers yarn effects that are almost twice as strong with an increase in mass of 800% – and at high take-off speeds of up to 300 m/min.
Intelligent processes, up to 60 % less maintenance costs

- Lean maintenance: maintenance and cleaning during on-going operation
- More efficient control, spinning position optimisation with new smart symbol display
- Fewer movements with 30 % larger tube magazine and integrated automatic tube colour control
Efficient lean maintenance
The intelligent individual spinning position drive enables maintenance of individual spinning positions during on-going operation. There is now no longer any need for gangs of cleaning personnel, nor for complete machine shutdowns for maintenance and cleaning that is necessary for competitor machines. With the Autocoro 9 you save 60 % of your maintenance costs.

Smart symbol display
The intelligent spinning positions communicate individually with operating personnel via a smart symbol display. In the event of malfunctions, the display signals the relevant error. Your staff can then intervene immediately on site.

Less handling
The 30 % larger tube magazine of the Autocoro 9 reduces the amount of handling thanks to longer refill intervals. The magazine is equipped with an intelligent colour detection system. It learns the tube colours and always sends the right tube to the conveyor.

Many other ergonomically optimised components of the Autocoro 9 reduce the travel and service times of your personnel.
Groundbreaking Autocoro yarn and package quality

- Quality leadership through innovative digital technology: DigiPiecing and DigiWinding
- The right Corolab clearer for all requirements
- Innovative, high-performance FX technologies for the most demanding requirements
  - Perfect dye packages with DigiWinding FX
  - The best XXL packages with FlexPack FX
The next generation of quality

Innovation through intelligence
With its Autocoro digital technologies, Schiöffhorst is setting new quality benchmarks in rotor spinning. Textile technology processes are digitally controlled with precision – based on the Autocoro 9 individual spinning positions. On the Autocoro 9 you can achieve yarn and package characteristics that were previously unimaginable.

100 % digital piecing, directly and completely at the spinning position
With DigiPiecing these features come as standard on the Autocoro and offer an outstanding future technology that outstrips the competition. Completely digitally controlled piecing is integrated in each individual Autocoro spinning position. The single-motor drives ensure a high-precision piecing process from sliver intake and rotor motor through to yarn take-off. For maximum reproducible piecing quality at each spinning position.

DigiWinding
DigiWinding has made Autocoro packages a byword for quality and maximum value added. The intelligently produced packages have straight flanks and up to 10 % higher weight. Operating periods in the weaving mill are increased and the unwinding properties are better than with packages from competitor machines. In addition, logistics costs are reduced by a tenth.
Digital yarn clearing
The Corolab XQ technology in the Autocoro 9 ensures perfect yarns and piecings that deliver what they promise. As well as looking at yarn count variations, the Corolab sensors analyse the structure of all piecings. Corolab also ensures that slivers that are too thick or too thin are recognized as “incorrect slivers”.

The Corolab XF yarn clearer also eliminates foreign fibres in the yarn.
Textile innovation

FX made by Saurer Schlafhorst
With its technology innovations, FX from Schlafhorst revolutionises quality standards in spinning and winding processes. The intelligent FX high-tech components achieve groundbreaking quality improvements in the characteristics of yarns and packages.

They open up the possibility of creating products with innovative added value and of optimising upstream and downstream textile production processes. FX made by Saurer Schlafhorst is the technology innovation that offers textile companies measurable benefits.

DigiWinding FX
With DigiWinding FX you can produce at the touch of a button packages with process-optimised density and up to 10% more weight with the same diameter. In addition, you can now also produce high-quality rounded dye packages. DigiWinding FX saves on logistics and process costs as it does away with edge bending and rewinding.

FlexPack FX
In addition to the functions of DigiWinding FX, the unique Autocoro 9 FlexPack FX technology offers further optimisation possibilities for all diameters. With FlexPack FX you benefit from new value creation potentials whether for process-optimised dye packages, packages with straight flanks or oversized package formats.
Schlafhorst: Innovation leader in rotor spinning

- Be at the forefront of the market now and in future with Autocoro technology.
- More success in the commodity yarn market with unique future-oriented rotor spinning technology.
- SUN – SERVICE UNLIMITED
A step ahead of the market

The technology platform of the future
In less than four years the Autocoro 8 has written a unique and revolutionary chapter in the history of rotor spinning. This innovative rotor spinning development would hardly be possible without individual spinning position technology.

The Autocoro 9 is now continuing this success story and ensures you stay at the forefront of the market – today and tomorrow.

Leading in the commodity market
With its unbounded productivity, outstanding energy efficiency, incomparable economy and unsurpassed quality, the Autocoro 9 sets new standards in the commodity market. Take the lead in your market – with the Autocoro 9.
Customer Support

SUN – SERVICE UNLIMITED

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

With SUN – SERVICE UNLIMITED, Saurer sets the benchmarks in:

- Consulting
- Installation
- Know-how Transfer
- Original Parts
- Maintenance and Repair
- Updates and Upgrades
SECOS 2.0

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

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

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

“senses” – the new control centre

For maximum added value and profitability
“senses” is the new Saurer control centre 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 be upgraded to new modules 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.
**Autocoro 9 Technical data**

**Machine type**
Automatic Rotor Spinning Machine Autocoro 9
- DigiPiecing digitally controlled piecing technology
- Doffing of full packages with the DCU doffing and cleaning unit
- Sectional design with 24 spinning positions per section
- Spindle gauge: 230 mm
- E³ Energy: E-Drive technology for energy-saving yarn production

**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

**Silver feed**
8.0 – 2.5 ktx/Nm 0.125 – Nm 0.40/Ne 0.07 – Ne 0.24

**Draft**
25 – 400 fold

**Basic machine**
- DigiPiecing digitally controlled piecing technology for simultaneous piecing
- Energy Monitoring on the Informator *
- SynchroPiecing 6 for up to 6 simultaneous piecing processes
- SynchroPiecing 12 for up to 12 simultaneous piecing processes *
- SynchroPiecing 24 for up to 24 simultaneous piecing processes *
- PlotSpin: Freely selectable spinning positions for the production of sample and test packages, no automatic package doffing *
- 2, 4 *, 6 * or 8 * DCU package doffing and cleaning units with EIS Event Identification System
- Sensor-monitored package doffing process
- Integrated cleaning head for the pneumatic and mechanical cleaning of rotors, navels and yarn navel tubes
- Pneumatic cleaning of spindle and winding head
- Automatic cover opening at the touch of a button *
- 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 96 mbar
- Input of spinning parameters on the Informator with touch-screen input display
- Data display on screen or via an external printer (not included in the scope of supply) by means of USB interface and flash card
- Yarn residues, waste and fibres are collected separately in a dual-chamber system
- Fancynation yarn device, number of sections operated with Fancynation can be freely selected * in combination with MultiLot *
- Possible connection to central waste disposal systems *
- Conveyor belt per machine side for package removal
- Central lubrication and bearing temperature monitoring of the suction system motor
- Seamless lot change with can and spinning component exchange function *
- MultiLot processing system *
  - Simultaneous production of up to 5 lots on one machine
  - MultiLot 2: 2 lots
  - MultiLot 3: 3 lots
  - MultiLot 5: 5 lots
  - Seamless lot changes
  - Tube magazine with single-motor drive of lot-related tube rows in up to 5 groups
  - Automatic colour detection of single-colour tubes
  - 2 package conveyor belts with individual control
  - Vacuum trash cleaner (VTC) *
- Take-up speed:
  - Up to 300 m/min for any machine length *
- Operating unit with 3-colour LED on each spinning position
- Operating unit with operator-friendly display and menu navigation using symbols and pictograms *
- Additional package cradle damping for manmade fibres *
- Electronic length measuring unit for packages with a defined yarn length

**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

**Tube dimensions, cylindrical, smooth/flanged**
- diam. 54 x 170 mm / diam. 54/42 x 170 mm

**Spinning and winding unit**

**Spinning unit**
- Corobox SE 20
- DigiPiecing:
  - Digitally controlled piecing technology at each spinning position by means of single-motor driven piecing elements
  - Single-motor driven rotors, magnetic axial and radial bearings
  - Technically designed for rotor motor speeds up to 200,000 rpm
  - Rotor speeds from 20,000 – 180,000 rpm in practice with infinitely variable setting and digital control
  - Single-motor driven opening rolls with infinitely variable electronic setting and digital control
  - Single-motor driven and digitally controlled SDSI Single Drive Sliver Intake
  - Motor-driven waxing device for wax rolls up to a size of 75 x 50 mm *

**Winding unit**
- Digitally controlled winding process and package build with single-motor package drive and single-motor yarn guide
- DigiWinding *:
  - Digitally controlled function for straight package flanks without traverse reduction, complete digital anti-patterning
  - DigiWinding FX *:
    - Includes DigiWinding
  - Rounded package flank transitions mean reduced process costs in the production of dye packages

**Spinning cans**
Spinning can dimensions – round cans:
- Diameter 457 mm (17.5")
  - (two rows)
  - Height 900 mm to 1,200 mm (36" to 48"").
- Spinning can dimensions – rectangular cans:
  - 220 mm width x 970 mm depth x 900 – 1,200 mm height (1,070 mm when using can supports).

**Automatic package removal systems**
- Removal systems e.g. single palletizer or Autoflow
- Distribution by Neuenhauser Maschinenbau GmbH, Neuenhaus, Germany
* Option
### Dimensions and weights for each additional section

<table>
<thead>
<tr>
<th>Spinning positions</th>
<th>Sections</th>
<th>Net weight (2 doffers) kg</th>
<th>Length L1 mm</th>
<th>Net weight 2 additional doffers kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>48</td>
<td>2</td>
<td>6,800</td>
<td>10,174/11,175</td>
<td>600</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>10,174/11,175</td>
<td></td>
</tr>
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</table>

24 additional sections:

<table>
<thead>
<tr>
<th>Sections</th>
<th>Net weight 2 additional doffers kg</th>
<th>Dimensions</th>
<th>Length L1 mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td></td>
<td>2382</td>
<td>1417, 2812</td>
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<td>25</td>
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<td>1417, 2812</td>
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**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 have been selected for information purposes only. They may show special equipment which is not included in the standard scope of supply.
Our quality management system complies with the requirements of EN ISO 9001.