# SAURER.



# Be faster.

Autospeed/Autospeed M











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

Contents	
4	
Highlights	
5	
E <sup>3</sup> : our product promise	S
6	
The team player for you	ır
success.	
10	
Substantial energy savi	ngs.
14	
Maximum productivity.	
20	
Efficient automation	
solutions.	
24	
Technical data	
30	
Sun	

# **Highlights**

- → Maximum efficiency with up to 224 spindles
- → Short machine length thanks to 220 gauge for optimal space utilisation
- → Up to 20% energy savings from intelligent energy-saving mode
- → Precise machine control for maximum productivity
- → More production due to short doffing times
- → Intuitive EasySpin touchscreen
- → Labour-saving automation



#### **Energy**

Up to 20% less energy

- → Powerful drive concept
- → Energy-optimised bobbin rail drive
- → Maximum cost transparency through Energy Monitoring

#### **Economics**

**Maximum productivity** 

- → Long machines for all raw materials
- → Doffing time less than 2 minutes
- → Short lot change times

#### **Ergonomics**

Reduced handling input

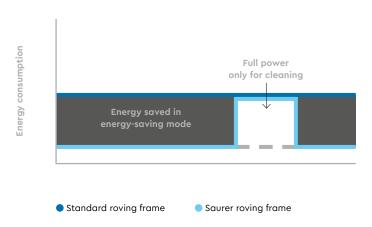
- → User-friendly settings with EasySpin
- → Ergonomically adjustable screen
- → Made-to-measure automation

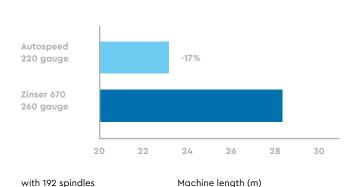
#### E3: our product promises

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 E<sup>3</sup> 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.

Up to 20% lower energy requirements

Up to 17% shorter machine length with 220 gauge



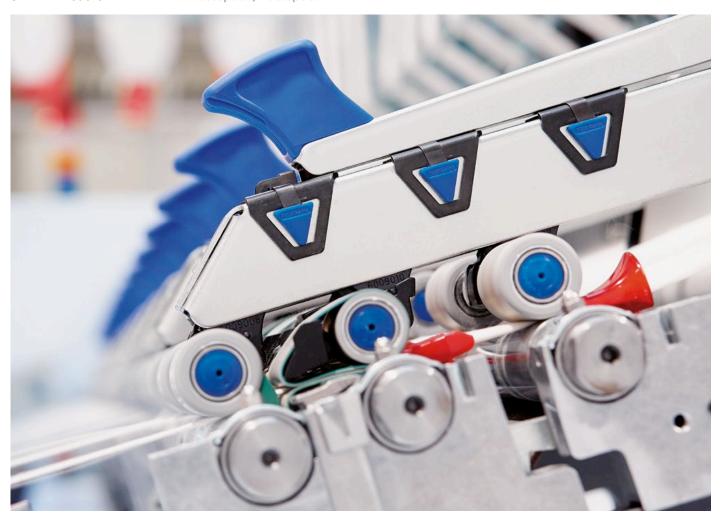


# The team player for your success.





- → Maximum value added from drawframe sliver to quality package
- → Universal application from fine to coarse
- → Consistent roving bobbin quality
- → Homogeneous bobbin build with EasySpin
- → Fast, reliable operation with EasySpin
- → Central setting configuration for maximum reproducibility
- → Impressive roving quality thanks to flexible press finger solution



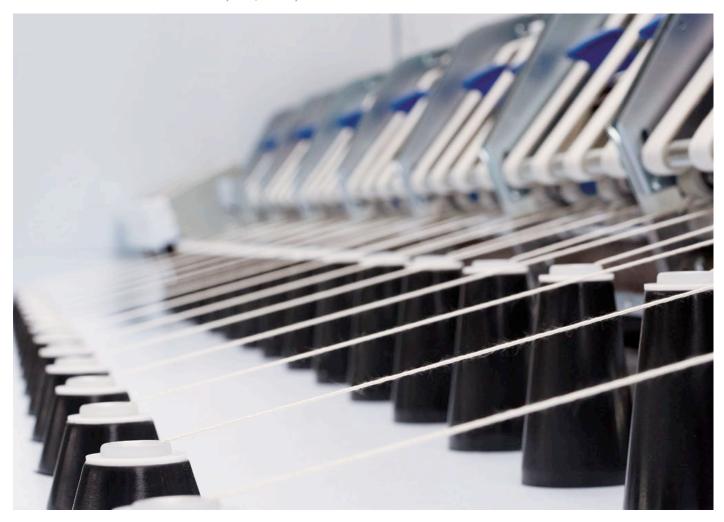
# The best roving frame

Top speeds. Precise package build with uniform roving tension. Maximum protection for you valuable material. It's perfect roving frame technology from Saurer. The 6 000 Saurer roving frames that have been installed around the world over the past decades tell a clear story. Spin roving that ideally combines economy and quality.

Whether you choose the entry-level Autospeed M model for manual doffing or the high-productivity Autospeed with automatic doffer – with roving from the Saurer roving frame you are always a step ahead of the competition.

#### Individual configuration for all requirements

Whether you deal with cotton, manmade fibres or blends, our roving frames can be specifically tailored to your needs. You can choose from a range of drafting system variants, enabling you to process any raw material and any staple length in an ideal and highly productive manner. Meet the most demanding standards of your customers with Saurer precision technology – and produce top roving quality with maximum efficiency.



## Top roving quality

#### Effective flyer table blowing for clean roving

A gentle flow of air cleans the sensitive area of the roving intake. You benefit from particularly clean, high-quality rovings. The ideal basis for efficient downstream processing!

### Precision and reproducibility – knowing what

The roving runs into the heads of the two flyer rows at exactly the same angle. They therefore produce constant, reproducible quality with no difference in count in the roving between the back and front row. The even roving tension enables higher operational productivity.

# High-quality fine yarn production with 220 gauge

The manual Autospeed M roving frame and Autospeed automatic roving frame are also available as fine yarn roving frames in 220 gauge. The low creel height and additional transport rollers, optionally fitted above each can, protect the sliver and ensure particularly high-quality production. And with the 220 gauge you also save on space.

# Substantial energy savings.





- → Energy savings with the proven drive concept
- → Up to 20% less energy thanks to innovative energy-saving mode
- → Energy-optimised bobbin rail drive with maximum efficiency
- → New Energy Monitoring: low energy consumption shown on the EasySpin touchscreen

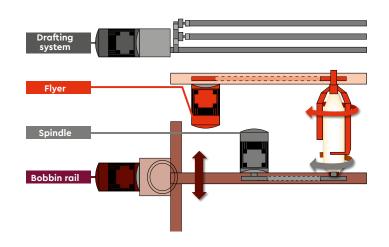


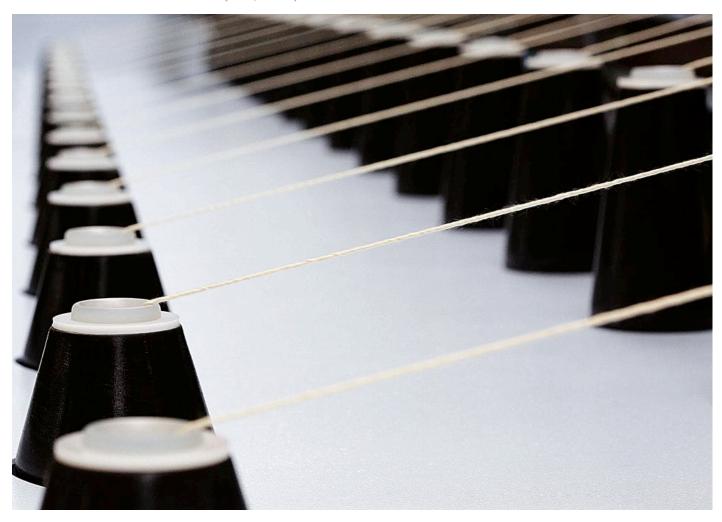
### Save energy

# Optimised drives reduce your energy consumption

The section motors of the roving frames directly drive the toothed belts for the flyers and spindles – with no additional gear unit. The bobbin rail drive is energy-optimised and offers long-lasting reliability. This reduces your energy and spare parts costs over the long term.

Plus, thanks to its standard mains power failure support system, the roving frame brings production to a controlled stop if a power outage occurs. Ultra-secure production conditions for you!





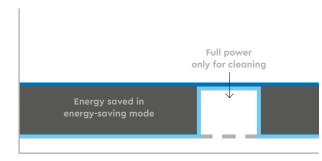
#### Individual energy savings

The tried-and tested energy-saving mode saves up to 20% of energy. The suction system uses far less power. Full power is only activated briefly for the cleaning cycle. You can adjust the intervals to suit your needs.

#### **Energy Monitoring**

Your operators can keep an eye on your machine's energy consumption online with EasySpin. No time-consuming energy measurement is required and production can be optimised in terms of power used. Time, resource and staff savings thanks to integrated online measurement.

#### Up to 20% lower energy requirements



Standard roving frame

**Energy consumption** 

Saurer roving frame

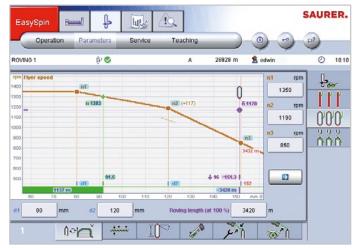
# Maximum productivity.

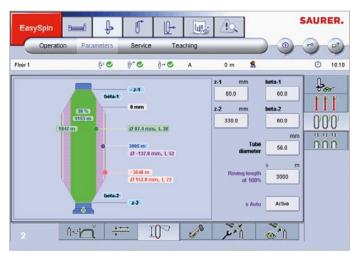




- → Exact machine control for precise bobbin build and high flyer speeds
- → Optimisation of flyer speed as the bobbins fill up
- → Increased flexibility thanks to short lot change times
- → Maximum productivity thanks to 220 gauge with up to 224 spindles
- → Productivity boost thanks to automatic doffer with shorter doffing time
- → Easy and rapid configuration via EasySpin touchscreen
- → Time savings thanks to rapid and efficient bobbin removal between two automatic doffing operations







## Spend time on production, not adjustment

#### Exact machine control for top speeds

The EasySpin software control system guarantees exact machine control. Using four independent drives, EasySpin coordinates the drafting system, the traverse of the bobbin rail, spindle rotation and flyer rotation. You benefit from consistently high flyer speeds with extremely low break rates and increased productivity.

# Shortest possible lot change for maximum output

Minimise set-up times, increase efficiency. With central settings and article data archive, your productivity levels are better than ever before with EasySpin. Graphic displays simplify the fine settings during lot changes. Ultra-rapid lot changes thanks to intelligent control software.

In addition, a practically unlimited number of lots can be stored on a USB stick and transferred from one roving frame to another.

#### Optimised flyer speed as the bobbins fill up

EasySpin optimises bobbin formation with precise control of the main drives as the bobbins fill up. This is achieved through defined control parameters. For top performance at lowest yarn break rates.

- I EasySpin display: optimised flyer speed
- **2** EasySpin display: homogeneous bobbin build



# High productivity and precise bobbin build

# Uniform roving tension over entire bobbin structure

Homogenous bobbin build is vital for successful spinning. As a result, you can control the roving tension manually and adjust it precisely to your requirements. The optional TensionControl unit regulates the tension automatically.

# Optimal roving monitoring for consistently high quality

All roving frames are equipped with a collective light barrier as standard so as to monitor the roving. The optional individual roving detector features one sensor per spinning position. This is recommended for materials with a high twisting tendency.

#### Shorter machines with 220 gauge

Both the Autospeed M and the Autospeed are available in 220 gauge – with up to 224 spindles. With a 192-spindle machine you save up to 17% in terms of machine length (Zinser 670 with 260 gauge compared to an Autospeed with 220 gauge). Thanks to the smaller machine length you are able to utilise your production area more effectively.













## **Turbo doffing**

#### Impressive doffing times with the Autospeed

The doffing time of less than two minutes guarantees increased productivity, particularly with long machines because the full bobbins are removed outside the spinning units. The Autospeed thus resumes production as soon as the empty tube is inserted. You therefore increase your productivity, particularly with coarse rovings and frequent doffing operations.

The travel distances and speeds of the bobbin rail are optimally coordinated in order to achieve a rapid doffing process. Ultra-effective doffing technology with inbuilt quality assurance.

#### Automatically assisted doffing with the Autospeed M

During manual doffing, the bobbin rail is lowered into the ideal lowest position, upon which the bobbin guide releases the roving bobbins via a centre spindle in the flyer.

The bobbins can be reached entirely when the bobbin rail is lowered so your staff can even take them out from the back row unproblematically and without damaging them.

Separation of the roving, lowering of the bobbin rail into the doffing position, placement of the roving and production startup are all performed fully automatically on the other hand.

- Bobbin rail moves out, doffing bar with empty tubes is lowered
- 2 Removal of full bobbins and mounting of empty tubes
- **3** Raising of doffing bar with full bobbins, insertion of bobbin rail and machine startup





# Reduction in the operator's workload

#### Ingenious ergonomics with EasySpin touchscreen

The EasySpin touchscreen is located at a new position on the Autospeed. Your personnel are now able to use the ergonomically adjustable screen even during doffing. Fine settings during lot startup and change are explained with user-friendly graphic displays.

# Efficient package removal between two doffs with the Autospeed

Thanks to a platform your personnel have better access to the drafting system area and flyer table.

With manual bobbin removal your personnel can select an adjustable intermediate position for the doffing bar at an ergonomically optimal height. This enables manual bobbin removal during the idle time between two doffing operations. The burden on your operatives is therefore more evenly spread.

# Efficient automation solutions.





- → Roving bobbin transport system with fully automated RoWeLift transfer station
- → Automatic RoWeClean tube cleaning increases productivity and makes you less dependent on personnel
- → RoWeStore the tube magazine keeps production flowing
- → Saurer Autoflow systems for custom roving transport automation
- → Senses mill management system for increased profitability in the textile business





## Clever technology

#### One-to-one transfer with fully automatic **RoWeLift transfer station**

Put an end to mix-ups and damage to materials. RoWeLift provides contactless and fully automatic transfer of the roving bobbins from the Autospeed to the transport system. The RoWeLift transfers tubes and bobbins one-to-one and in record time (less than 15 seconds). You benefit from assured quality and less dependence on personnel. For maximum flexibility you can install the transfer station at the front or rear end of the machine.

#### RoWeClean: automatic tube cleaning with outstanding raw material utilisation

With the Autospeed, RoWeClean automatically removes roving residues from the tubes. They are sorted according to type and can be reused. You therefore benefit from extremely effective raw material utilisation, as well as savings in terms of resource and personnel input.

#### RoWeStore: automatic tube magazine with a large capacity

The tube magazine ensures there are always enough cleaned tubes in the system so that automatic package change is never interrupted.



# Complete spinning systems

# Individually tailored solutions from the roving frame to the winding machine

The Saurer Autoflow systems offers unique automation solutions, tailored to your budget and spinning plant layout.

From roving frame to winding machine, your processes are quicker, more error-free and less personnel-dependent. For a modern spinning plant and maximum productivity.

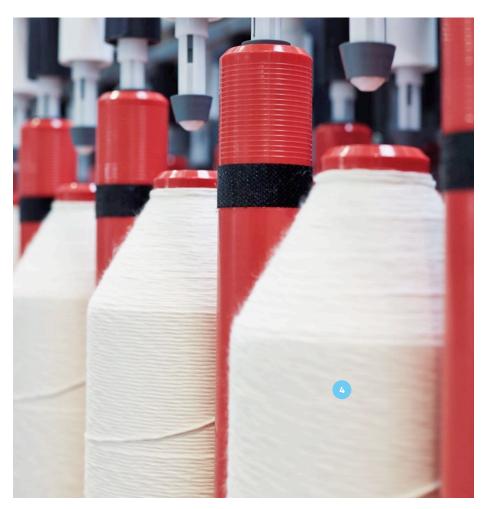
# Senses – the new mill management system

#### For maximum added value and profitability

Senses is the new Saurer mill management system 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.



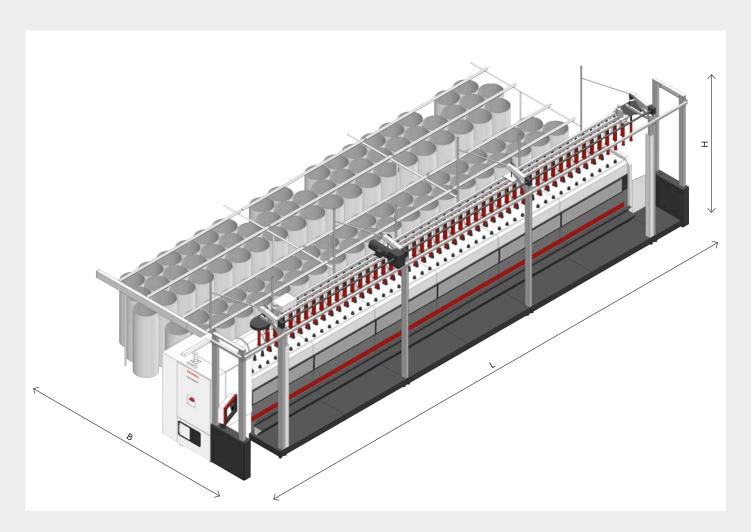




- **1** EasySpin touchscreen
- 2 Energy-saving mode for suction and flyer table blowing
- **3** Gauge 220 mm or 260 mm
- 4 Automatic doffing
- **5** Optional RoWeLift and roving bobbin transport system



# Machine dimensions – Autospeed



#### Machine length L in mm

L = 1200 + X + 925

X = No. of spindles x gauge : 2

#### Machine height H in mm

H = 3408

#### Machine width B in mm

Gauge	Can diameter	Machine width
260 mm	20" (500 mm)	approx. 4985
260 mm	24" (600 mm)	approx. 5802
220 mm	20" (500 mm)	approx. 5342
220 mm	24" (600 mm)	approx. 6346

In standard layout

## Technical data - Autospeed

#### **Application area**

Staple fibres up to 63 mm

#### **Raw materials**

Cotton, viscose, manmade fibres and their blends.

#### **Spindles**

24, 36, 48, 60, 72, 84, 96, 108, 120, 132, 144, 156, 168, 180, 192, 204, 216
(G = 260 mm)
32, 48, 64, 80, 96, 112, 128, 144, 160, 176, 192, 208, 224
(G = 220 mm)

With no. of spindles > 168: double-sided drafting system drive for viscose, manmade fibres and their blends

#### Flyer sizes

 $400 \text{ mm} \times 150 \text{ mm}$  (16"  $\times 6$ ") for G = 220 mm and 260 mm  $400 \text{ mm} \times 175 \text{ mm}$  (16"  $\times 7$ ") for G = 260 mm

#### Flyer speed

max. 1500 rpm

#### Gauge G

220 mm and 260 mm

#### Count range

For 16" x 6": 2 222 tex - 200 tex (Nm 0.5 - 5.0) (Ne 0.3 - 3.0)

For 16" x 7": 2 222 tex - 455 tex (Nm 0.5 - 2.2) (Ne 0.3 - 1.3)

#### Twist range

10 - 100 twists per metre (0.25 - 2.54 twists per inch)

#### **Draft range**

3.0 - 15.8 fold

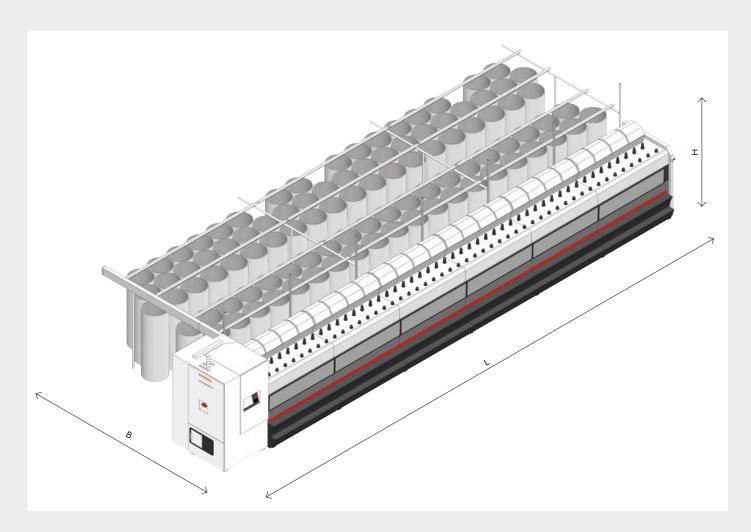
#### **Drafting system**

3-roller 2-apron drafting system or 4-roller 2-apron drafting system

#### **Options**

- TensionControl
- Individual roving detector
- Energy Monitoring
- Senses mill management system
- RoWeLift
- RoWeClean
- RoWeStore

# Machine dimensions – Autospeed M



#### Machine length L in mm

Single-sided drafting system drive L = 1200 + X + 188 Double-sided drafting system drive L = 1200 + X + 925 X = No. of spindles x gauge : 2

#### Machine height H in mm

H = 2520

#### Machine width B in mm

Gauge	Can diameter	Machine width
260 mm	20" (500 mm)	approx. 4246
260 mm	24" (600 mm)	approx. 5 063
220 mm	20" (500 mm)	approx. 4603
220 mm	24" (600 mm)	approx. 5 607

In standard layout

## Technical data - Autospeed M

#### **Application area**

Staple fibres up to 63 mm

#### **Raw materials**

Cotton, viscose, manmade fibres and their blends.

#### **Spindles**

24, 36, 48, 60, 72, 84, 96, 108, 120, 132, 144, 156, 168, 180, 192, 204, 216
(G = 260 mm)
32, 48, 64, 80, 96, 112, 128, 144, 160, 176, 192, 208, 224
(G = 220 mm)

With no. of spindles > 168: double-sided drafting system drive for viscose, manmade fibres and their blends

#### Flyer sizes

 $400 \text{ mm} \times 150 \text{ mm}$  (16"  $\times 6$ ") for G = 220 mm and 260 mm  $400 \text{ mm} \times 175 \text{ mm}$  (16"  $\times 7$ ") for G = 260 mm

#### Flyer speed

Max. 1500 rpm

#### Gauge G

220 mm and 260 mm

#### Count range

For 16" x 6": 2222 tex - 200 tex (Nm 0.5 - 5.0) (Ne 0.3 - 3.0)

For 16" x 7": 2 222 tex - 455 tex (Nm 0.5 - 2.2) (Ne 0.3 - 1.3)

#### Twist range

10 - 100 twists per metre (0.25 - 2.54 twists per inch)

#### **Draft range**

3.0 - 15.8 fold

#### **Drafting system**

3-roller 2-apron drafting system or 4-roller 2-apron drafting system

#### **Options**

- TensionControl
- Individual roving detector
- Energy Monitoring
- Prepared for doffing
- Senses mill management system

#### Regarding this brochure:

Research and development never stand still. This may mean that some statements about the roving frames have been rendered obsolete by technical progress. The illustrations are selected for informative content only. They may also include special equipment that does not form part of the standard specification.

# Sun



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.

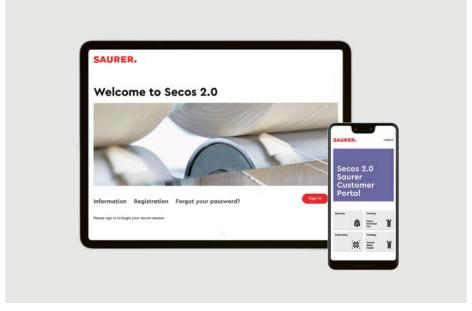
Sun is a bundle of differentiated services that add real value to Saurer machinery throughout its entire life cycle. Highly trained staff using state-of-the-art tools improve our customers' daily operations in a flexible and individual way. We provide the owners of Saurer machinery with innovative solutions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



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Our quality management system complies with the

requirements of EN ISO 9001.

