

Automation from one source – from roving frame to package

Uebach Palenberg, Germany - 23.10.2014

Schlafhorst is the only supplier offering excellent opportunities for the highest possible degree of automation in the ring spinning mill, adapted to individual customer requirements. From roving frame through to winding machine, a process flow with no need for manual intervention is possible. Automated and intelligent material flow, automated and adapted bobbin handling as well as automatic and most rapid package winding make a perfect, fully automated ring spinning mill. The customers benefit from reductions in personnel, space, and logistics costs, eliminate human operating errors and can thus trust in the highest possible process reliability.

Zinser 670 roving frame – individual automation for maximum quality

The integrated automatic doffer and the RoWeLift automatic bobbin transfer station are the keys to increased automation and to bobbin handling without the need for manual intervention. The Zinser 670 roving frame is the only machine of its type that also offers an integrated tube cleaner and tube storage. These automation units also permit effective utilization of the raw material.

Contactless and accurate transportation of the sensitive roving bobbins protects yarn quality

Every spinning mill makes different demands on an automated roving bobbin transport system. Schlafhorst's CimTrack system for creel automation offers the right solution for all situations. Highly individual, customized planning is possible, from the low-cost variant with manually operated trolley trains to a fully automated system with CimTrack 3 or CimTrack 4.

In spinning mills with a continuous production programme, the FixFlow system, a fixed link between a group of ring spinning machines and one or more roving frames, makes sense. The full packages and empty tubes run in a continuous circuit between the machines. The FlexFlow system is used in flexible production programmes with frequent lot changes. The flexible assignment of roving frames to ring spinning machines facilitates swift, easy adaptation to changes in production conditions.

Zinser ring spinning machines: For a rapid return on investment

Zinser ring spinning machines embody the decades of experience accumulated by the market and technology leader Schlafhorst. They offer convincing levels of reliability, innovative performance, flexibility and an extensive application spectrum, as demonstrated for example by the sought-after Zinser 351 machine, which has been on the market for 13 years.

2012 heralded the dawn of a new era of ring spinning machines. Schlafhorst launched two new machine generations onto the market with resounding success. The ZinserRing 71 ring spinning machine and the corresponding compact spinning machine, the ZinserImpact 71, are the entry-level models to the world's most reliable ring spinning and compact spinning technology.

In the ZinserRing 72 ring spinning machine, Schlafhorst offers spinning mills a highly productive and economically convincing platform for further growth and greater profitability. The ZinserRing 72 with 1,920 spindles is especially economical in production, contributing to revenue growth. The ZinserImpact 72 compact spinning machine is an impressive exponent of self-cleaning compact spinning technology

Reduced labour costs and maximum efficiency with the Zinser CoWeMat

Fast, reliable automatic bobbin changing on the Zinser ring spinning machine by the CoWeMat makes it possible to utilize the production capacity to optimum effect, as it performs the work arising at intervals without the need for staff. Bottlenecks, waiting times and downtimes are non-existent compared with installations with manual doffing, ensuring permanently high efficiency ratings for the ring spinning mill. Staffing costs can be reduced by up to 50%.

The Zinser ring spinning machines as linked machine with CoWeMat reduces labour and space requirements to a minimum. The linked solution guarantees minimum logistics costs and maximum quality assurance – maximum efficiency in constant production and for large lots.

Zinser BobbinTray – for greater productivity

The Zinser BobbinTray system transports bobbins and empty tubes without contact, thus ensuring high Zinser yarn quality. Tray moving mechanisms that are susceptible to malfunctioning are not used. The individually guided, round BobbinTrays and the conveyor belt ensure precise positioning during doffing and an even, rapid and reliable material flow between the ring spinning and winding machines.

Autoconer X5, type V – the completion for fully automated ring spinning

The Autoconer X5 V - the direct link between the ring spinning machine and the package winder - already saves around 30 - 40% on staff costs (compared with RM) in practice, and this trend is rising. But apart from economic efficiency, automation offers another convincing argument – quality: the linked system raises the yarn and package quality to the absolutely highest level. The production capacities of the spinning and wind-

ing machine are coordinated to one another in the optimum manner for greater efficiency, i.e. for more kilograms of yarn each day.

Schlafhorst supplies made-to-measure linked solutions that suit customer's plant organization perfectly. Whether as a direct link without a bobbin bridge or with bobbin bridge or alternatively also as an underfloor link, the Autoconer X5 machine concept satisfies every requirement. Every bobbin reaches the intended winding unit safely and completely intact.

Most modern material flow technology, high cycle rates, an energy-saving transport system and energy-saving process sequences are characteristics of the Autoconer X5. Security and reliability are guaranteed. As a treat and bonus, customers can keep an eye on the quality produced by their ring spinning machine continuously online using the optionally available SPID system, to maintain quality at the highest level. As an automation solution with its intelligent material flow system FlowShare FX and the proven, stable Caddy transport system, the Autoconer X5 is the benchmark in automation.

A special advantage of the Autoconer X5, type V is its energy-saving mode to utilize further energy-saving potential. If the Autoconer X5, type V machine has wound all its bobbins and the ring spinning machine is still engaged in production of the new take-up, the winding machine can switch to energy saving mode for reduction in the power take-up of the suction system. Everything is then reactivated in good time for the transfer of the new bobbins.

The monitoring tasks of the operators are clearly organized and characterized by short distances. The Informator is located directly on the machining center, so the operator is only a couple of steps away from the operating terminal of the ring spinning machine and can quickly survey the production sequences and data of both machines.

Unique Plant Control System for spinning and winding data analysis at a glance

Collecting data, speeding up information flow, using staff and machines better – with the Schlafhorst Plant Control System the customers systematically increase the quality and economic efficiency of their spinning mill. Variable connection options for individual machines, plants and combinations make it easy to get an overview about all the production and quality data. Data access is possible at any time and from any PC – from any of your operating sites' machines networked anywhere in the world. Absolutely unique in the ring spinning world is the possibility to connect Zinser roving frames, Zinser ring spinning machines and Autoconer winding machines to one data management system, to Plant Control System. With this system you have not only a completely automatic spinning mill from roving to winding; you also have access to all the

production and quality data from this complete solution at a glance. This can't offer any other supplier in the world.

Customized automation solutions: greater productivity, minimum staffing and reliable quality

Automated ring spinning was previously only something for high-wage countries, but is increasingly becoming a general topic in spinning mills worldwide. This is because even in countries with low wage levels it is becoming more and more difficult to find the necessary staff for spinning mills. Increasing the level of automation compensates for this. Automation is also about improving quality, however, because frequent contact with the bobbins, which damages the material and impairs quality, is avoided. Many working processes can be simplified and designed to be less labour-intensive thanks to greater automation. Schlafhorst offers efficient, customer-oriented solutions with its systems in all areas of the ring spinning mill.

Media contacts

Ralph Knecht

Senior Vice President
Head of Business Development
and Central Sales
Schlafhorst
Zweigniederlassung der
Saurer Germany GmbH & Co. KG
Carlstr. 60
52531 Übach-Palenberg
Germany
T + 49 2451 905 2597
ralph.knecht@saurer.com
www.saurer.com

About Schlafhorst:

Schlafhorst has been a trailblazer in the production of staple fibre yarns for 130 years. As the market and innovation leader, the textile machinery manufacturer offers solutions for the entire spinning mill line right up to the quality package. World-famous brands like Zinser, Autocoro, BD and Autoconer, together with unique process competence, make Schlafhorst the partner of choice for successful textile companies. With production plants in Germany, India and China as well as an international service and consultancy team, Schlafhorst fulfils its mission: to make spinning mills across the globe more efficient, productive and economical.

About Saurer Group:

The Saurer Group is a leading textile industry group mainly specializing in machinery and components for yarn processing. Saurer unites the spinning brands Schlafhorst and Zinser, the twisting brands of Allma and Volkmann, pre-spinning brand Jintan and the Saurer Embroidery brand along with the Saurer Components division consisting of the brands Accotex, Daytex, Fibrevision, Heberlein, Temco and Texparts. With annual sales around 1,2 billion CHF, 3.800 worldwide employees and locations in Switzerland, Germany, Turkey, Brazil, Mexico, USA, China, India and Singapore, the group is well positioned to serve world's textile industry centres.

Pictures with caption



Largest selection, individualized planning – this is Schlafhorst spinning automation



Autoconer X5, type V – the completion of the fully automated ring spinning plant