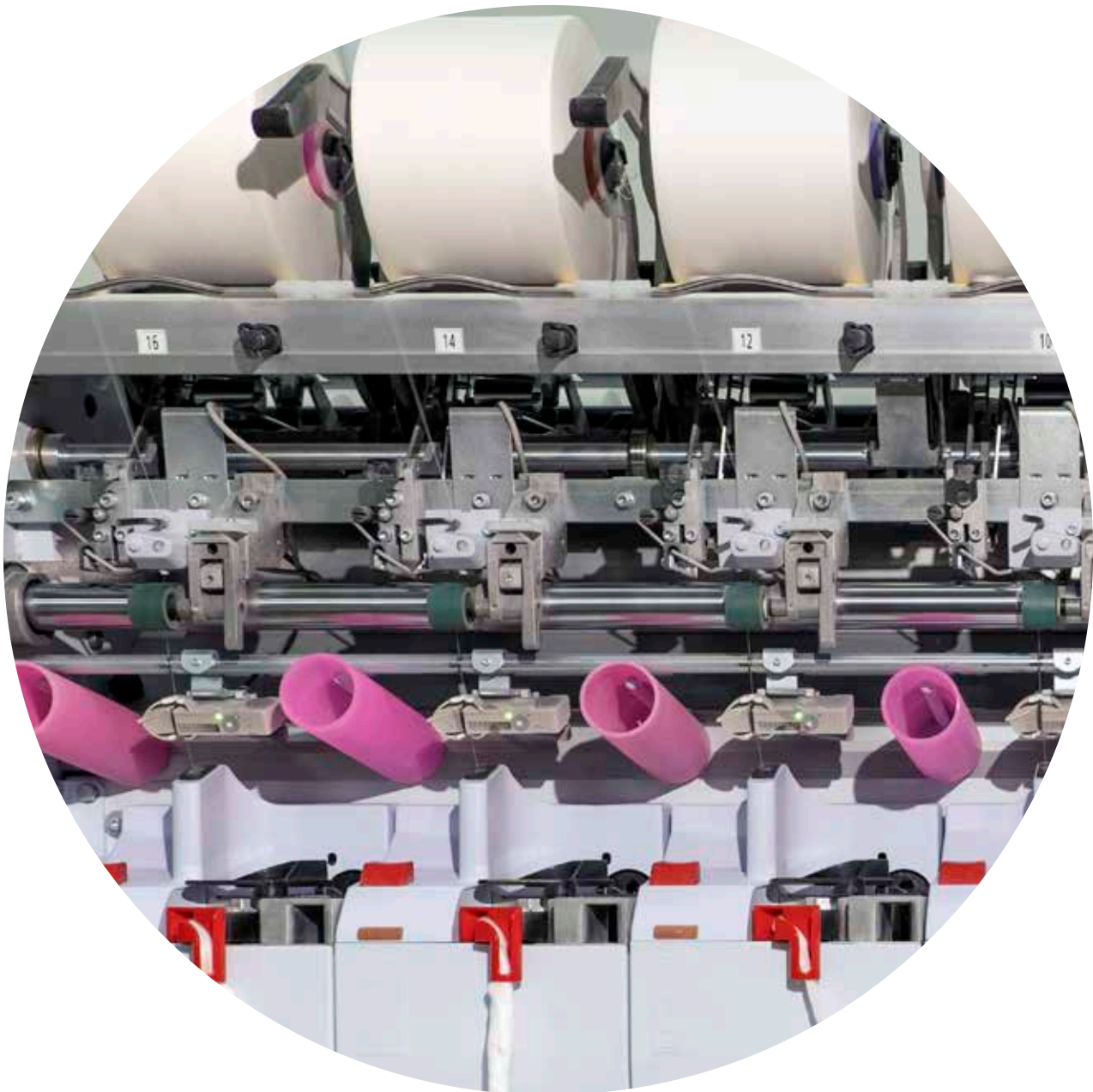


SAURER.



Get even more.

BD 480 Plus





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.



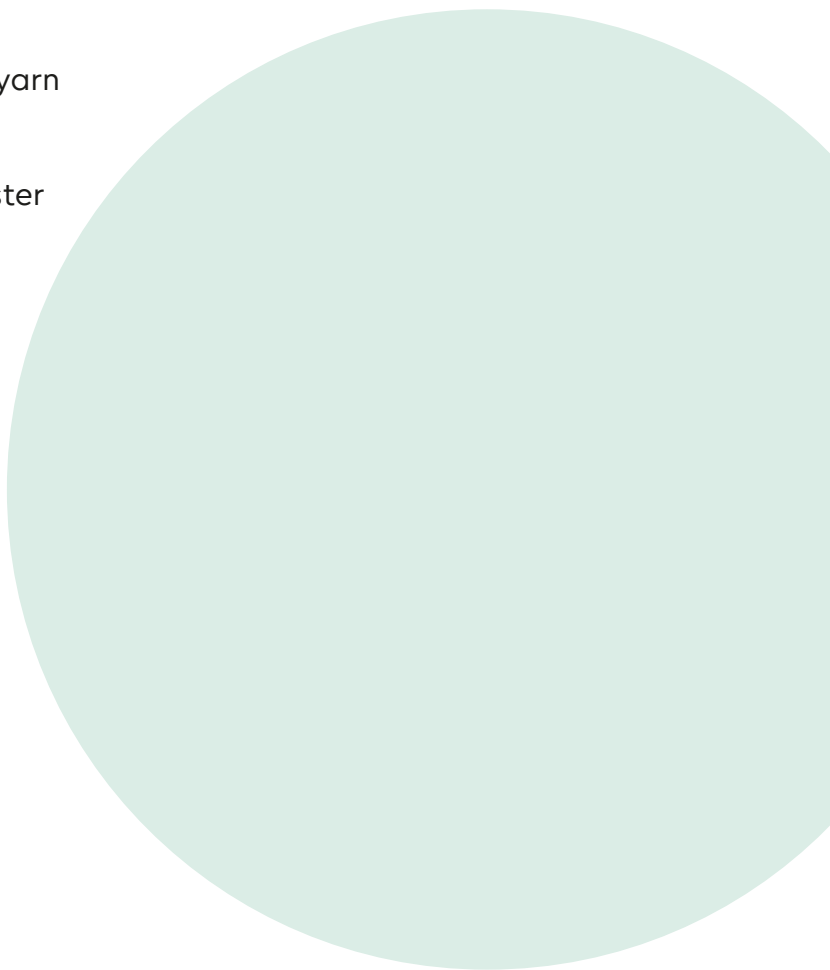
E³: our development philosophy

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.

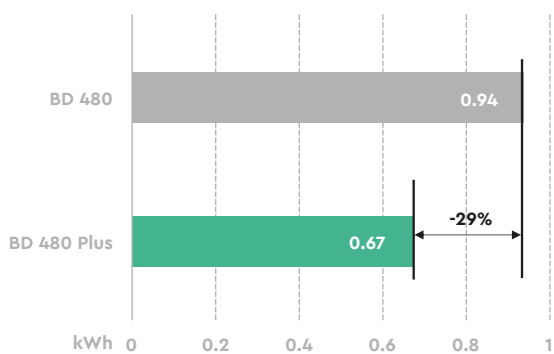
With the transformation of the textile industry for the Circular Economy, the processing of sustainable fibres is another important focus point in our developments.

Economics

- Up to 29% energy saving per kilogram of yarn
- Doffing unit DU for higher efficiency
- More productivity per square metre
- Proven Joint Spinning In technology for faster run-up and lower personnel requirement
- Better yarn quality
- Higher material tolerance
- Faster and more convenient operation

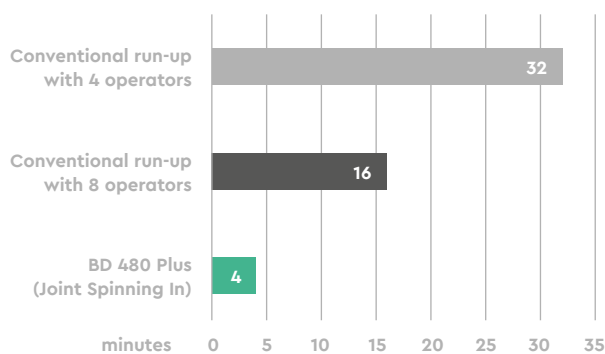


Energy saving for each kg yarn



China: Material 65% PES / 35% CO, Yarn count Ne 19

Full production in just a few minutes



Run-up time for 480 positions

More productivity – More



ore profit.



- Energy saving up to 29% per kilogram of yarn thanks to new air system
- New automatic doffing unit (DU) for higher efficient and lower personnel requirements
- Optimised spin box structure meets different spinning requirements and ensures spinning stability and good yarn quality
- Extended spinning positions up to 512 units for more productivity
- Highest flexibility for entirely new sales market
- Unique compact design of the machine and spinning position results in maximum productivity per square metre

BD 480 Plus – excellent customer benefit.





1 Energy saving with new air system

2 Optimised spin box ensures spinning stability and good yarn quality

3 Proven Joint Spinning In (JSI) technology for faster runs up

4 More efficiency with new doffing unit (DU)

5 Maximum flexibility with Fancynation



Get even more

When deciding on which semi-automatic rotor-spinning machine to choose, benefit from the performance and reliability of the market leader – the BD brand from Saurer. More than 50 years of experience as the technology leader in semi-automatic rotor spinning. More than three million BD spinning positions have been sold worldwide.

Get even more with BD 480 Plus.

Maximise your mill's potential

The BD brand guarantees rock-solid reliability with the multiple benefits of energy saving, consistently good yarn quality, low spinning costs and high productivity. Together with unsurpassed service and individual knowledge transfer for your spinning mill, it maximises your potential with an attractive price-performance ratio.

Saurer quality standard

Saurer has been leading innovation in the industry with a long history, and has always been supporting customers in improving their profitability. The widely recognised BD technology for nearly half century guarantees a longer machine life and higher stability, which has proven itself to meet the Saurer quality standard.



Proven energy efficiency

Optimised air supply system

Spinning cost is always of the greatest concern for customers, and energy consumption is also a vital consideration.

The new-generation BD 480 Plus is equipped with an optimised aero-dynamics system, which contributes to energy savings up to 29% per kilogram of yarn compared to the previous generation, greatly reducing the cost of spinning for customers.

Automatic vacuum system

The vacuum system of the BD 480 Plus has a proven and highly efficient original electronically controlled suction system. It controls the vacuum level precisely to your requirements, supported by the automatic electronically controlled screen cleaning system. This significantly extends the adjustment cleaning intervals of the BD 480 Plus and prevents machine stoppages by reducing the negative pressure, which further helps to save energy.

Higher machine efficiency

New: doffing unit (DU)

The BD 480 Plus with up to two doffing units ensures high efficiency and lower personnel requirements. The full packages can be changed automatically with no interruption to the spinning process. Your operators are unburdened and available for new tasks.



Increased productivity

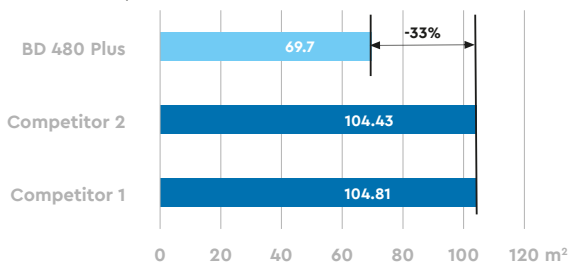
More productivity per square metre

As the market leader of rotor spinning machine, Saurer helps you to make the best possible use of your spinning plant. With the BD 480 Plus, you benefit from the profitability, value retention and productivity of the market leader.

What's more, you also can get a machine length tailored to your requirements up to 512 spinning positions, which gives customers greater opportunity to gain more productivity. In addition, the advantage of compact spinning position design allows you to produce yarn on the largest possible number of spinning positions per square metre.

33% less space needed per machine

(when a new plant is constructed)



Higher rotor speed

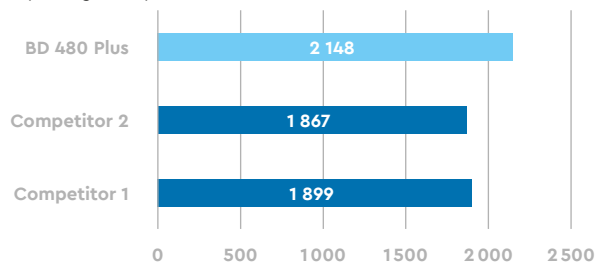
Thanks to the stable system structure design and precise spinning components, the BD 480 Plus is able to spin efficiently at higher speed in practice.

Fully automatic run-up with proven JSI piecing technology

The unique Joint Spinning In (JSI) technology of BD 480 Plus enable a faster runs up of the machine. It offers synchronous piecing at all spinning positions at the press of a button. What this means in practice is, different from others, a complete machine run-up without having to take personnel away from other areas. In addition, the precise digital control system guarantees piecing reliability.

More spinning units - higher production - better margin

(Spinning units per 1 000 m²)





Fewer staff, more production

The color display – More ergonomics

Lot changes are faster thanks to the color display. In addition, spinning processes and machine productivity can be optimised while the machine is running – with three clicks at the user-friendly control panel.

Prompt action

The BD 480 Plus flags errors and required operator interventions by means of highly visible and audible signals. Warning lights, alarm tones and spinning position LED displays show precisely where action needs to be taken. These proven optical and acoustic signals are particularly useful on long machines for rapid operator intervention.

Time savings and improved productivity

The BD 480 Plus facilitates operation and maintenance. Spinning components can easily be accessed and replaced quickly without the need for tools. An integrated wiper means sieves do not have to be cleaned manually, which reduces the workload for operators. Furthermore it prevents machine stoppage caused by pressure drops. Downtimes are reduced and machinery and personnel can be deployed more efficiently.



Yarns for the international market

New spin box NSB 38 V2

The proven spin box of BD 480 Plus meets the different spinning requirements and ensures good yarn quality and consistency. Even when using materials with a high proportion of regenerated fibres or lower-grade cotton fibres, quality yarn can still be spun efficiently.

Yarns and packages that meet your needs

The unique E-cam technology of BD 480 Plus ensures the absolute synchronisation of the left and right traversing movement of the machine. Meanwhile, without needing to stop the machine, you can precisely control the angle of wind, anti-patterning, package traverse and take-up tension centrally at the control panel, which further guarantee stable running of the machine and a qualified package.

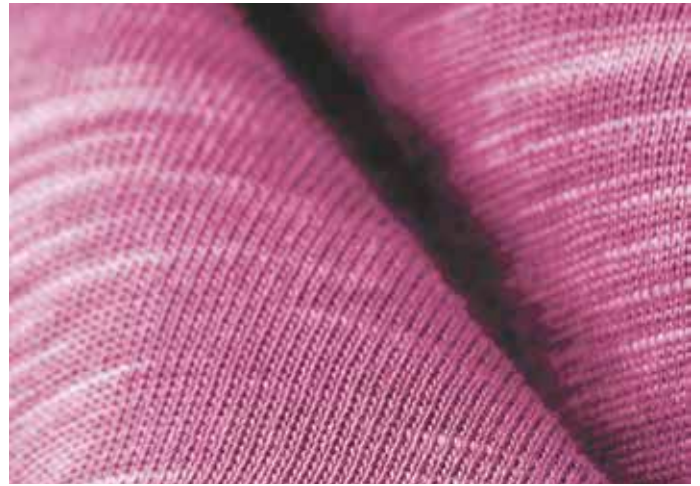
The vacuum system controls the vacuum level precisely according to your requirements, keeping constant negative spinning pressure from the first spinning position to the last one, and further ensuring consistently high yarn quality.

Yarn inspection proven in practice millions of times

Effective yarn monitoring is ensured by Corolab Q from the proven Corolab system family, which has been installed over one million times worldwide.

For over 60 years, this has been one of the best quality guards that the market has to offer. Corolab checks your yarns not just during spinning, but also inspects the piecings.

BD 480 Plus has optimised the position of Corolab Q sensor for more stable yarn quality detect, and reliable clearing of thick and thin places, as well as piecing that don't match. Meanwhile, it also monitors the quality of the feeding sliver.



Maximum flexibility

Fancy yarns: fancy yarns integrated

You can save up to 100 fancy compositions and 100 lots in the integrated digital Fancynation system of your BD 480 Plus. This is ideal for more market opportunity for spinning plants that eager to follow the trends in the fashion and textile industry and keep their differentiation at the meantime.

Coarse yarns up to Nm 1.7/Ne 1

BD 480 Plus offers maximum flexibility when it comes to different yarns. Whether viscose yarns, manmade yarns, extremely short cottons and noils, or coarse yarn up to Ne 1 (Nm 1.7) – you will produce outstanding quality.

Technical data

Semi-automatic rotor-spinning machine BD 480 Plus

With 32 to 512 spinning positions

Sectional design with 16 spinning positions per section

Spindle gauge: 210 mm

Burmester BM 2+ semi-automatic piecing technology

NSB 38 V2 spin box

Technically designed for rotor speeds up to 120 000 rpm

SDSI (Single Drive Sliver Intake), single-motor driven sliver intake with reverse function, intake speed 0.04–13 m/min

Rotors

Available coatings:

- D = diamond coating
- DN = diamond coating and nickel-plated
- BD = boride and diamond coating (3D coating)

Rotor diameter 32–76 mm

Opening roller

Available coatings:

- DN = diamond coating and nickel-plated

Various tooth geometries

Tube dimensions (cylindrical):

- Ø 50 × 170 mm
- Ø 54 × 170 mm
- Ø 40/50 × 170 mm
- Ø 44/54 × 170 mm

Tube dimensions (tapered):

- 2° Ø 44/65 × 170 mm, Ø 54/65 × 170 mm
- 4° 20' Ø 33/59 × 170 mm, Ø 28/59 × 170 mm

Technology data

Raw materials

Natural and manmade fibres and their blends

Fibre length up to 60 mm

Yarn count range

250–15 tex / Nm 4–67 / Ne 2.4–40

588–15 tex / Nm 1.7–67 / Ne 1–40

Depending on raw material and machine length

Sliver feed

7.0–2.5 ktex

Nm 0.14–Nm 0.40

Ne 0.08–Ne 0.24

Draft

40–350 fold (IDS)

Cross angle of wind

30°–40° (Easy electronic setting via screen)

Take-up speeds

Depending on the machine length and on the angle of wind:

- Cylindrical packages: up to 180 m/min
- Tapered packages: up to 165 m/min
- Fancy yarns with Fancynation: up to 150 m/min

Yarn guide traverse

Cylindrical and tapered tube: 150 mm

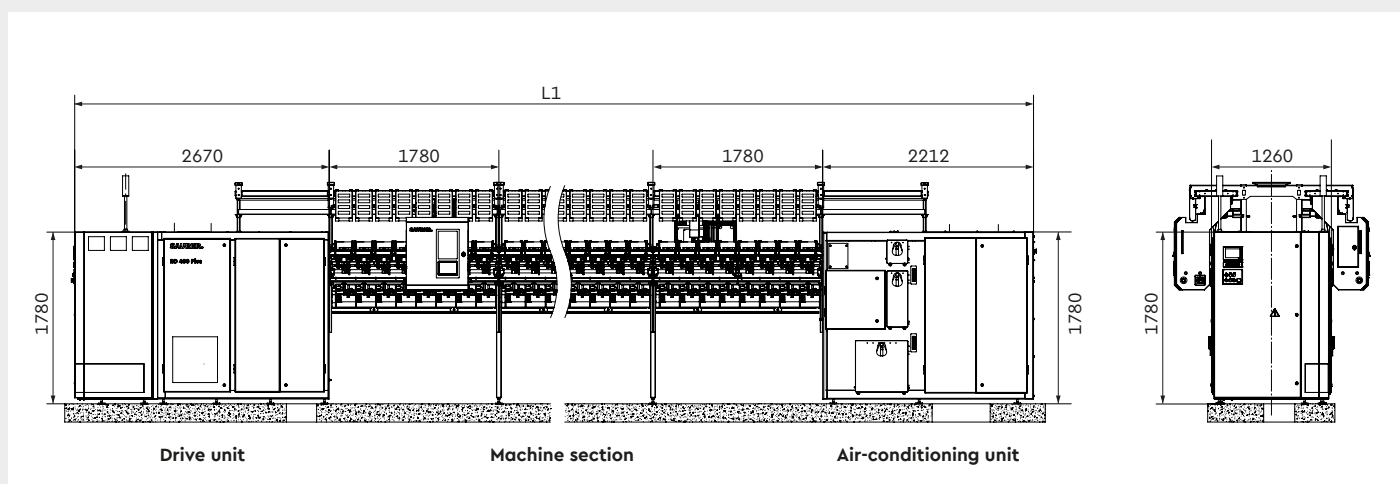
Traverse displacement infinitely variable from 0–4 mm

Anti-patterning achieved by periodically adjusting the movement of the yarn guide

Dimensions

Dimensions

	Spinning positions	Sections	Space requirement without cans	Space requirement with cans (14 inch)	Space requirement with cans (16 inch)	Length L1
	32	2	9.89 m ²	12.07 m ²	14.40 m ²	8442 mm
Dimensions for each additional section	16	1	2.14 m ²	2.61 m ²	3.11 m ²	1780 mm



Machine equipment options

IDS Intelligent Drive System: Piecing parameters, rotor speed, negative spinning pressure, trash aspiration, and take-up speed are all infinitely adjustable	●
Frequency inverter for opening roller Electronically controlled adjustment of the opening roller speed by means of frequency inverter	○
Package doffing units DU - Doffing on the fly - Up to 2 doffing units - Operation with colored touch display - Available for cylindrical packages	○
Operator display - For entering all spinning and piecing parameters, negative spinning pressure, trash aspiration and take-up speed - Graphical support provided by pictograms; data collection and analysis; visualisation of maintenance interval; data visualisation on screen; central lubrication monitoring	●
Spinning components	
Rotor speed - Rotor speed in practice up to 80 000 rpm - Rotor speed in practice up to 105 000 rpm - Rotor speed in practice up to 110 000 rpm	● ○ ○
Navels - Ceramic inserts, smooth, notched, spiral navels, steel navels, smooth, notched for coarse yarns - Kinds of models available	○
Cleaning inserts: - Double inserts and single inserts	○
Suction system	
EVA (Electronic Vacuum Adjustment) - Electronically controlled, constant negative spinning pressure and electronically controlled trash aspiration	●
Yarn residues, waste and fibres are collected separately in a two-chamber system	●
Automatic filter cleaning - Machines with more than 448 spinning positions - Machines with up to 448 spinning positions	● ○
Winding head	
Packages formats - Cylindrical packages up to 300 mm, 4.2 kg weight - Tapered packages 2° up to 280 mm, 3.8 kg weight - Tapered packages 4° 20' up to 280 mm, 3.5 kg weight	● ○ ○
Waxing device - Centrally driven wax roller	○
Lifting of winding arms - Controlled mechanical package lifting	○
Stop spinning when yarn length is reached - Length measurement device for producing packages with specific yarn lengths	●
Corolab Q Digital Technology - Corolab Q digital sensors for recording yarn diameter deviations and piecing quality at every spinning position	○
Joint Spinning In - Electronically controlled mass piecing, e.g. following a power failure	○
Travelling cleaner - Travelling cleaner for blowing /cleaning the spinning positions and suction of fibre fly	○
Conveyor belt for removing packages	●
Two-colour LED at each spinning position for operator guidance	●
Three-colour signal light for operator support	●
Fancytation fancy yarn device - Single-motor SDSI (Single Drive Sliver Intake) control software; adjustment via operator terminal; - reverse function for more striking effects; repeat control when piecing; integrated memory for 100 effect data records	○
Coarse yarn 250–588 tex / Nm 1.7–4 / Ne 1–2.4	○
Machine Height: Depending on the height of the cans - Can height 36" (diameter: 14", 16") - Can height 40"/42" (diameter: 14", 16")	● ○
Senses Interface	○

● Basic equipment ○ Option

Senses – Sensibly connected.

Visualise your BD 480 Plus machine data with Senses.

In Senses you can collect, visualise and analyse the machine data of your BD 480 Plus and all other Saurer machines.



Data transparency in rotor spinning

Senses makes the machine data of your BD 480 Plus 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.



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.

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



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 BD 8 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.