SB-D 26

Double-Head Draw Frame SB-D 26

Highest productivity using minimal space
Depending on the fiber material, the double-head draw frame produces up to 33% more sliver compared to the previous model.
High Productivity
Optimum Machine Efficiency
The rotational can changer for cans up to 1 200 mm in diameter ensures high machine efficiency.
The machine’s compact dimensions make it ideal for applications where space is limited.
Minimal Space Requirement
OUTSTANDING ADVANTAGES

SB-D 26

Flexible Sliver Feeding
Variants with 2-, 3- and 4-row creel

Consistent Yarn Quality in Downstream Processing
Frequency-controlled drive, automatic filter cleaning, lifting cleaning lips on top rollers

Minimal Space Requirement
Compact machine with a width of only 3.38 m and a 1 200 mm can changer

Clean, Consistent Coiling Quality
Individual drives, sliver coiling sensor, coilers CLEANcoil and CLEANcoil-PES, coiler control CLEANtube
Efficient Operator Guidance
LEDs can be seen from a distance

Low Energy Consumption
25% fewer belts and drive elements, energy-efficient drive ECOrized

Quality Through Specific Fiber and Sliver Guidance
Modern drafting system technology with improved fiber guidance, large top rollers with maintenance-free bearings

High Productivity
Max. 2 x 1 200 m/min delivery speed, produces up to 33% more sliver compared to the previous model

Optimum Machine Efficiency
Unique can changer for cans up to 1 200 mm in diameter – regardless of the machine operator
High Productivity
High delivery speed with consistent quality

High delivery speeds

The SB-D 26 produces sliver at a delivery speed of up to 1,200 m/min. Depending on the fiber material, the average speed is up to 33% higher than the previous model. And with consistently high sliver quality.

These technical solutions contribute to the high delivery speed:
• Improved sliver and fiber guidance
• Drafting system with large top rollers and lifting cleaning lips
• Gentle web merging
• Precise sliver coiling thanks to coiler CLEANcoi

High efficiency

The draw frame has high production efficiency. The maintenance and cleaning requirements are low. Lot changes can be implemented quickly with the aid of the expert system SLIVERprofessional. Large top rollers and lifting cleaning lips help prevent frequent lappings. The reliable rotational can changer ensures short change times.
Minimal Space Requirement

Machine layouts for any space

Optimal layout

With a maximum machine width of 3.38 m, the SB-D 26 is the most compact machine in its class. The machine can either be mounted on the mill floor or recessed into the floor. With the latter variant, the transfer height of the can on the empty can magazine is lower. This is more comfortable for the operator. The full cans are pushed out directly onto the floor of the spinning mill. Thus, also reducing the length of the machine.

Optimal use of space

To optimally adjust to the space conditions in the spinning mill, actively driven sliver feeding is possible in 2-, 3- and 4-row creels. The supports for the sliver feedings are height adjustable. They can be adjusted to the respective can heights up to 1,520 mm.

For large cans up to 1,200 mm diameter, Rieter offers two variants for the creels:
- 2-row creel for optimum accessibility
- 3-row creel for limited spaces. This reduces the length of the sliver feeding and is offered exclusively by Rieter.

The combination of the double-head draw frame SB-D 26 without autoleveler and the RSB-D 26 forms the most compact draw frame line on the market. Especially in limited spaces, this combination of machines is the first choice for a spinning mill.
High Efficiency
Automatic can changer for cans up to 1 200 mm in diameter

Reliable rotational can changer

The rotational can changer changes the cans on both heads simultaneously. This keeps the draw frame running efficiently and results in long run times without the operator having to intervene. A consistently high production rate is consequently guaranteed.

The Rieter can changer fills cans between 500 mm and 1 200 mm in diameter. When using cans with a diameter of 600 mm or less, a driven roller conveyor reliably feeds the cans to the changer.

43% more sliver in the can
Cans measuring 1 200 mm in diameter contain around 43% more sliver than cans that are 1 000 mm in diameter. With carded cotton, a can height of 1 200 mm equates to a filling weight of 76 kg; for cans with a height of 1 300 mm, the filling weight is an impressive 83 kg. With combed fiber material, filling quantities of up to 100 kg can be achieved.

Standstills significantly reduced
Larger can filling quantities reduce standstills and boost machine efficiency in the spinning mill preparatory work. This effect can be seen most clearly in the draw frame SB-D 26, where the cans can be inserted both in the feed and in the coiler. The SB-D 26 is as much as 2.5% more efficient when using cans 1 200 mm in diameter than when using cans 1 000 mm in diameter.

Double-Head Draw Frame SB-D 26
Highest Productivity Using Minimal Space
QR code scanning for more information
http://lead.me/bblfI8
(Video)
Fewer transports, fewer operating personnel

Larger filling quantities reduce the number of can transports and can changes in the creels of the downstream machines by 30%. The cans can be easily moved on the floor of the spinning mill thanks to smooth-running rollers. This will require fewer operators.

An example calculation for a spinning mill with combed ring-spun yarn and a production output of 48 tons a day shows the total personnel savings per shift for the carding line, the combing plant, the preliminary draw frame, and the post draw frame. Using cans measuring 1 200 mm in diameter rather than 1 000 mm in diameter means that one less operator is required per shift – and using 1 200-mm cans instead of 600-mm cans requires almost three fewer operators per shift. When rounded up, the total savings amount to three or eight operators a day.

![Fig. 2: Fewer personnel thanks to larger cans – from the card to the autoleveler draw frame (basis for calculation: ring spinning mill with a daily output of 48 tons of combed cotton yarn)](image)

Increased quality thanks to fewer sliver piecers

In the example calculation, there are over 370 000 fewer can transports a year with 1 200-mm cans than with 1 000-mm cans. This consequently saves over 370 000 sliver piecers and results in a correspondingly lower number of defects, which improves the yarn quality considerably.

Less waste

The sliver having a larger coiling radius in a 1 200 mm can optimizes the running performance at high drawing-off speeds, as with OMEGAlap and highly productive draw frames. The cans run even better without interruption until they are completely empty.

Alternative with cans up to 1 500 mm in height

Alternatively, Rieter also offers filling systems for can formats measuring 1 000 mm in diameter and up to 1 500 mm in height. These cans hold around 25% more material than standard cans that are 1 200 mm in height.
Quality Through Specific Fiber and Sliver Guidance

Modern drafting system technology

Optimal fiber guidance

Conventional sliver guides before the drafting system pose a risk of incorrect adjustments. The most common consequence of this is non-centric guidance of the slivers and the resulting disturbing faults in the yarn. Rieter’s patented sliver guide guarantees centric guidance of the slivers at all times and ensures consistent sliver quality.

The web width is reproducible and is set by a simple turning of the guide elements. The geometry of the 4-over-3 drafting system allows narrow cylinder distances. This means that even short fiber lengths can be processed well. Additional fiber guides in the main draft zone prevent lateral slipping of the edge fibers. As a result, there are fewer disturbing faults in the yarn.

Innovative top roller technology

The large top rollers guarantee interruption-free operation without lap formation as well as a long service life. They keep the rotational speed, and so the temperature of the top roller cots, low. This is the basis for high delivery speeds combined with high quality. The load on the top rollers can be set variably. The top roller bearings are lubricated for their entire lifetime.

Ensuring quality

If a lap occurs in the drafting system, the rapid load relief prevents the formation of hard laps even while the machine is still being stopped. The laps can be removed quickly and easily. This ensures the quality of the cots and thus the quality of the sliver.

Threading a sliver into the web nozzle is easy. The motors of the drafting system produce a finer sliver tip which is automatically threaded in by compressed air, quickly and reliably. The central setting of the drafting system distances without gauges allows rapid assortment change.
Consistent Yarn Quality in Downstream Processing

Efficient suction

High sliver quality

Dust deposits in the drafting system can be avoided. Due to the intermittently lifting cleaning lips on the top rollers of the SB-D 26, trash deposits enter directly into the suction system. Sliver funnel blockages are therefore demonstrably reduced. This improves yarn cleanliness. Imperfections and Classimat faults are reduced. In addition, the number of yarn clearer cuts is significantly reduced.

Easier to clean

Cleaning work and laps in the drafting system cause unwanted stops of the machine. The patented and optimally placed cleaning lips reduce the formation of deposits on the top rollers of the drafting system. This makes cleaning easier.

Even challenging raw materials, such as cotton containing honeydew, can be easily processed thanks to the cleaning lips. This increases the productivity of the machine.
Cleanliness already in the sliver feed

The SB-D 26 has an additional suction point before the drafting system. This improves the dedusting of the slivers and makes cleaning easier for the operating personnel. Clean slivers have a positive effect on the running behavior of the end spinning machine, particularly during rotor or air-jet spinning.

Changing parameters easily

Only on the Rieter draw frame can the operator set the suction intensity quickly and conveniently on the touchscreen. The setting is easy to reproduce. This not only makes changing the material easier, but also eliminates quality deviations, for instance when several draw frames are feeding sliver to the same assortment.

Automatic filter cleaning

The filter screen is kept clean using a wiper. A differential pressure measurement in the suction box controls the automatic cleaning cycle. The underpressure therefore remains absolutely consistent. The sliver and yarn quality is consistently high. This ensures good running behavior of the yarn in the subsequent process.
Clean, Consistent Coiling Quality and Good Downstream Processing

Innovations in sliver coiling

Preventing deposits

CLEANcoil is the standard coiler for all fiber materials and therefore offers maximum flexibility. The spiral coiling tube ensures sliver coiling that is free of drafting faults, even at high delivery speeds. The honeycomb structure on the coiler underside reliably prevents deposits.

The patented new coiler CLEANcoil-PES has a new type of coating. Even with hard-to-process polyester fibers, the production time until the next cleaning cycle can be more than doubled. This ensures the high quality of the sliver.

Sliver coiling without accumulations of trash

With the processing of cotton or its blends with man-made fibers, trash particles and short fibers can accumulate during can filling in the sliver duct of the coiler (also known as a “mouse”). When the can fill quantity is reached, the draw frame stops. The “mouse” reaches the uppermost sliver layer.

CLEANtube, the optional control for the coiler drive, prevents trash particles and short fibers from accumulating in the sliver duct. With a can diameter of 1 000 mm, the use of CLEANtube saves up to 200 hours of work for the manual removal of the “mice” per year and prevents up to approx. 0.5% of sliver waste. CLEANtube also avoids up to 100 000 defects in the sliver per year and draw frame head. Therefore, both the production efficiency in downstream processing and the yarn quality remain high.

Optimal sliver coiling

The parameters for the direction of rotation and the speed of the can during sliver coiling can be changed easily on the operating unit. This provides another opportunity to adjust the sliver coiling in the can optimally for the subsequent process.
Precise first sliver layers

A light barrier ensures controlled sliver coiling. It recognizes when the first sliver layers are on the coiler. Only then does it switch from the reduced to the full production speed. This ensures consistent sliver and yarn quality, even for cans with plates that are too low.

Precise sliver coiling from the very first meter prevents tangles in the subsequent processes and breaks while uncoiling the sliver out of the can. The cans therefore run without interruption until they are completely empty. This maintains high levels of machine efficiency, reduces operator intervention and reduces sliver waste.

Assuming 1% of the annual number of filled cans are affected, this means up to 1 000 cans for each draw frame (cans with a diameter of 1 000 mm). Despite difficult conditions, the sliver coiling sensor ensures faultless first sliver layers. This is a further step towards perfect quality without exceptions. A patent is pending for this Rieter innovation.

Light barrier for controlled sliver coiling

Reliable sliver cutting

When processing fibers with high fiber-to-fiber friction, as is the case with man-made fibers, active sliver cutting is necessary for a trouble-free can change. A thin place, which is produced between the drafting system and the delivery roller, is conveyed below the coiler and breaks during the can change. The machine is fitted with active sliver cutting as standard.
Efficient Operator Guidance
Simple and intuitive

Touchscreen for intuitive operation
The SB-D 26 features the latest control generation as well as a high-resolution color touchscreen. The operator is guided intuitively through the program.

Modern interfaces for fast lot changes
Data can be transferred quickly and easily to other machines via an USB interface. Errors when transferring the machine settings can thus be avoided.

LEDs guide the operator
Clear notices are crucial for the operator when it comes to keeping distances short. Therefore, LEDs that are visible from a distance indicate the status of the draw frame. This simplifies the work of the operator.

Meaningful data
The touchscreen not only displays data on production and sliver quality. It can also display helpful additional information: such as a logbook for the complete documentation of machine settings or data of machine downtimes including cause and duration. These are helpful tools for problem analyses on shifts with few personnel, for instance at night.
Fast Lot Change
Easy access to know-how via the touchscreen

Accessing the operating instructions quickly

Printed operating instructions are often not readily available. All the important chapters from the operating manual are therefore accessible on the touchscreen of the SB-D 26. This greatly reduces the time required for the lot changes.

The following settings can be changed quickly and easily on the touchscreen:
- Coiler speed
- Can plate speed
- Suction intensity
- Delivery speed

Frequency-controlled main drive

On the SB-D 26, operating personnel can set the delivery speed quickly and conveniently on the operating unit. Self-explanatory images simplify machine operation. Drive pulleys no longer need to be replaced. This saves time and storage costs. The productivity of the draw frame can be adjusted exactly to the next process stage. The well-designed cooling concept of the converter also ensures the reliability of the drive even at high room temperatures.
High availability thanks to SLIVERprofessional

The expert system SLIVERprofessional is integrated directly into the touchscreen. It provides valuable technological support. SLIVERprofessional provides recommended settings for the entire machine after entering the raw material data. These can be transferred to the machine as a data record. The data record is stored in the machine's internal database and can be activated at any time.

In addition, SLIVERprofessional analyzes spectrogram errors such as periods and draft waves. The operator can rectify the error quickly. This way, the machine always has high availability.

Helpful information

Frequent personnel changes or a shortage of specialists are a challenge for spinning mills. Rieter helps its customers with excellent support directly on the touchscreen.
High Machine Availability Reduces Costs
Sophisticated service and maintenance concept

Long service life

Overpressure in the interior of the machine forces the heat outward. This leads to a long service life of electronic and mechanical components. All major fiber-guiding elements have a resistant Rieter coating. This ensures a long service life.

Work ergonomically

Large work platforms to the left and right of the SB-D 26 make it convenient and safe to maintain and operate the machine. Wide-opening hoods allow quick, ergonomic access to all machine components.
Convenient lubrication

The machine is fitted with a central lubricating strip as standard. This is easily accessible and ensures that no lubricating point is forgotten.

Low-maintenance quick-tensioning device

Quick-tensioning devices for the belts guarantee the right belt tension regardless of who performs the maintenance. This ensures that the belts and bearings have a long service life.

Preventive maintenance through energy monitoring

The standard equipment includes the display of the energy consumption on the machine's touchscreen. The active power [kW] and the active energy [kWh], as well as graphical and shift analysis, are displayed. This data screen is a helpful tool that also enables preventive maintenance.
Low Energy Consumption

New drive concept

Energy-saving drive concept

The draw frame SB-D 26 requires 25% less belts and drive elements compared to the previous model. The individual drive of the coilers replaces the twisted belt thereby increasing its lifetime. The new separate drive for the can plates combines convenience and quality during sliver coiling. The low friction is the basis for the low energy consumption. Due to the frequency-controlled drive, additional energy costs can be saved.

Reducing energy costs

The draw frame is equipped with integrated energy monitoring as standard. This also supports preventive maintenance and can reduce the risk of machine failures. The new drive solution allows annual savings of up to 1 500 euros per machine. Over the lifetime of the machine, this means an extremely attractive return on the investment.
Product Range
The right draw frame for your individual needs

Rieter offers the right draw frame for every requirement in respect of sliver quality, productivity, operator convenience and space requirements. This gives Rieter customers competitive advantages.

All autoleveler draw frames from Rieter use the highly dynamic RSB autoleveling technique. As a result, the draw frames produce high quality sliver. The yarns spun from it have excellent running characteristics in the subsequent production stages.
Machine Data
Double-head draw frame SB-D 26

<table>
<thead>
<tr>
<th>Power creel (driven)</th>
<th>Delivery unit</th>
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</thead>
<tbody>
<tr>
<td><strong>C1 [mm]</strong></td>
<td><strong>C2 [mm]</strong></td>
</tr>
<tr>
<td>600</td>
<td>500, 600</td>
</tr>
<tr>
<td>600</td>
<td>1 000</td>
</tr>
<tr>
<td>1 000</td>
<td>1 200</td>
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* Only when mounted on the floor
** 1 200 mm can changer
**Technological data**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>SB-D 26</th>
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<tbody>
<tr>
<td>Material</td>
<td>Cotton, man-made fibers, blends, fiber lengths up to 60 mm</td>
</tr>
<tr>
<td>Doubling [fold]</td>
<td>up to 8</td>
</tr>
<tr>
<td>Feed [ktex]</td>
<td>20 – 50</td>
</tr>
<tr>
<td>Draft [fold]</td>
<td>4.5 – 11.6</td>
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<tr>
<td>Delivered sliver weight [ktex]</td>
<td>2.5 – 7.0</td>
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</table>

**Installed power**

<table>
<thead>
<tr>
<th>Component</th>
<th>[kW]</th>
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<tbody>
<tr>
<td>Main motor</td>
<td>8.50</td>
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<tr>
<td>Suction motor</td>
<td>1.50</td>
</tr>
<tr>
<td>Machine control</td>
<td>0.13</td>
</tr>
<tr>
<td>Coiler motor</td>
<td>2.50</td>
</tr>
<tr>
<td>Can plate motor</td>
<td>0.40</td>
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<tr>
<td>Can changer</td>
<td>0.44</td>
</tr>
</tbody>
</table>

| Compressed air/consumption [m³/h] min. | 0.10 |

**Standard equipment**

- Energy-saving drive concept ECO-ized (patented)
- Max. delivery speed 1 200 m/min
- Frequency-controlled drives for coiler, can plate, suction and delivery speed
- Rieter’s spring-loaded 4-over-3 drafting system
- Drafting system suction with cleaning lips on top and bottom rollers
- Central drafting system setting without gauges, simultaneous for both sides
- Rapid top roller load relief in the event of a standstill or lap formation
- Pneumatically-supported sliver threading
- Coiler CLEANcoil with honeycomb structure (standard)
- Automatic can changer
- Reliable sliver cutting without additional mechanism
- Automatic filter cleaning
- Central lubricating strip
- Lifetime-lubricated top roller bearings
- Touchscreen for intuitive operation
- Quick-tensioning device for belts
- Operating instructions integrated in the machine display
- LEDs for operator guidance, visible from a distance
- USB interface
- Operating instructions (digital)
- Connection port to mill monitoring system SPIDERweb

**Variants**

- Can format at feed: diameter up to 1 200 mm, height up to 1 520 mm
- Can format at delivery: diameter 500, 600, 1 000 mm, 1 200 mm, height up to 1 520 mm
- Power creel: 2-, 3- and 4-row creel
- Integrated suction (exhaust air into room or duct)
- Central suction
- Machine mountable on floor or recessed into floor

**Options**

- Coiler CLEANcoil-PES (100% PES)
- Coiler control CLEANtube – sliver coiling without trash and short-fiber deposits
- Expert system SLIVERprofessional integrated in operating unit
- Sensor for sliver coiling
- Can brake for cans with castors (diameter 500, 600 mm)
The data and illustrations in this brochure and on the corresponding data carrier refer to the date of printing. Rieter reserves the right to make any necessary changes at any time and without special notice. Rieter systems and Rieter innovations are patent protected.

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