

High speed spindles for ring spinning machines



QUALITY
RELIABILITY
INNOVATION

Spindles



TeraSpin is one of the few manufacturers of complete spindle that make **spindles and inserts that enable ring frames to attain speeds up to 25,000 rpm (mechanical)**.

TeraSpin spindles are specially designed for **smooth running at high spindle speeds**. Optimisation of various design parameters, a high level of manufacturing precision, and high-quality German components reduce the vibration and noise level of the spindle.

Spindles are available with different design combinations:

- Aluminium plug type
- For manual doffing ring frames
- For auto-doffing ring frames
 - with TeraSpin Smart Yarn Catchers
 - with knurling and cutters
- Suitable for
 - 4-spindle tape drives
 - tangential belt drives
- Equipped with
 - self-locking inserts or external locking hooks
 - spring type buttons or centrifugal type buttons

Features

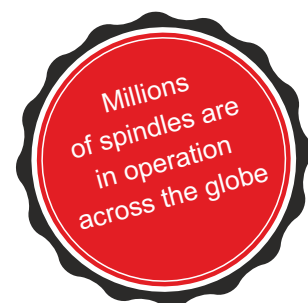
- High level of manufacturing precision for all spindle components
- Only two-point contact (at footstep and neck bearing)
- Compact neck bearing manufactured with higher precision
- Optimised damping of spindle vibrations with improved design and German components
- Well proven conical footstep design manufactured with high precision
- Spring support for axial load

Benefits

- Low vibrations
 - Low noise level
 - Long life
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HF 100	For spindle speeds of up to 25,000* rpm (mechanical)
HF 1	For spindle speeds of up to 22,000* rpm (mechanical)
HF 21	For spindle speeds of up to 20,000* rpm (mechanical)
HF 21C	For spindle speeds of up to 18,000* rpm (mechanical)

**when used under the right conditions*



Premium ES spindles

Energy is a major cost in spinning that eats away the profits of spinning mills. Hence, **energy saving, without compromising productivity and quality, is a top priority for spinning mills.**

TeraSpin Premium ES spindles are the best solution to reduce spinning energy cost. These spindles, which are available with HF1/HF100 spindle bearing units with 18 mm wharve diameter are specifically designed to reduce energy consumption significantly. The well proven, strong, and sturdy design of HF1/HF100 spindle bearing units make the spindles suitable for both manual and auto doffing machines.

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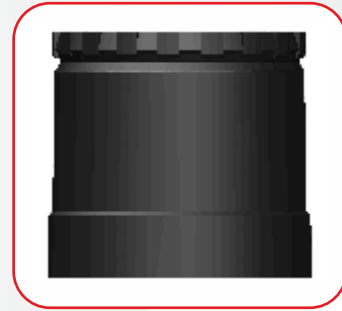
Features

- Wharve diameter: 18 mm minimum
- High level of manufacturing precision for all spindle components
- Only two-point contact (at footstep and neck bearing)
- Compact neck bearing manufactured with higher precision
- Optimised damping of spindle vibrations with improved design and German components
- Well proven conical footstep design manufactured with higher precision
- Spring support for axial load

Benefits

- Low vibrations
- Low noise level
- Long life
- Significantly lower energy consumption

Smart Yarn Catcher SYC-F & SYC-C



SYC-F



SYC-C

Accumulation of residual yarn on ring frame spindles at the end of every doff has been a perennial problem for the spinning industry. The accumulated residual yarn is not only a waste of material, but also needs to be manually cleaned, which involves many man-hours and affects the productivity of the ring frames.

No more accumulation of residual yarn – with the TeraSpin Smart Yarn Catcher (SYC), available in two variants – SYC-F and SYC-C.

Continuous innovation is TeraSpin's hallmark. TeraSpin has developed a SYC that is self-cleaning. The residual yarn left behind after every doff is expelled by centrifugal forces – putting an end to a major pain area in the operation of ring frames!

No more residual yarn accumulation with SYC

No residual yarn accumulation → No cleaning

Labour hours saved → As it eliminates manual cleaning effort

Better machine utilisation → Maximise uptime. Boost productivity

Features

- Automatic opening & closing of clamping faces with change in spindle speed
- Firm grip of yarn between upper & lower clamping faces, which align precisely with each other due to unique mechanism
- Special cutter for reliable yarn cutting

	SYC-F	SYC-C
Clamping faces open at	12,500 rpm	6,500 rpm
Clamping faces close at	6,500 rpm	2,500 rpm
Application	Ring frames for fine count	Ring frames for coarse count

Benefits

- Minimum yarn used (1-1.5 turns) for clamping
- No accumulation of residual yarn – the flat annular clamping faces enable the clamped yarn to move out of device easily by centrifugal forces
- No cleaning of residual yarn – saves approx. 1.5 man-hours per ring frame of 1,200 spindles
- Reduced start-up breaks
- Improved ring frame productivity

Manufactured by:



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