
PRODUCT GUIDE

Chapter 10

TeraSpin drafting up-gradation kits



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Research and Development is a continuous process. Hence, some of the information provided in this PRODUCT GUIDE may have become obsolete with TeraSpin's new developments in technology.

TeraSpin is a business unit of A.T.E. Enterprises Private Limited, a company engaged in the service of the textile industry since 1939. TeraSpin came into existence in 2012 after A.T.E.'s takeover of SKF India's textile spinning component business. Since then it has been innovating and making continual improvements in quality and reliability in the service of spinning mills and machinery manufacturers around the world.

TeraSpin's product range consists of weighting arms, top rollers & cradles for roving frame and ring frame, spindle bearing units and complete spindles for ring frames and doubling frames. TeraSpin also offers customized upgrades for existing ring spinning and roving frames.

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Chapter 10 TeraSpin drafting up-gradation kits



The TeraSpin up-gradation kit is an appropriate concept for spinning mills which are looking to improve the performance of their existing roving frames and ring frames with minimum capital investment. There are various makes and models of roving frames and ring frames running in various spinning mills. Also the existing mechanical condition and performance of the various parts of machines varies and hence, there can not be any standard or common solution for all roving frames and ring frames.

Hence, TeraSpin offers tailor-made up-gradation kits to their customers for their existing roving frames and ring frames. Based on an assessment of the mechanical condition and existing performance of the machine, done by our technical team, and on customer's requirement, we design a customized solution to suit our customers' requirement.

Up-gradation kits for roving frames

Up-gradation kits for roving frame are mainly for drafting systems. There can be different type of drafting up-gradations as mentioned below:

- ✓ Pneumatic drafting systems upgraded to spring loaded drafting systems
- ✓ Spring loaded drafting systems upgraded to new spring loaded drafting systems
- ✓ 3-roller drafting systems converted to 4-roller drafting systems
- ✓ 4-roller drafting systems converted to 3-roller drafting systems
- ✓ 4-roller drafting systems with aprons on 2nd roller converted to 4-roller drafting systems with aprons on 3rd roller
- ✓ 4-roller drafting systems with aprons on 3rd roller converted

to 4-roller drafting systems with aprons on 2nd roller

Depending on the mechanical condition and performance of an in-use roving frame, a list is prepared of components which are to be replaced or up-graded. TeraSpin can supply the following components for up-gradation of roving frames:

- ✓ TeraSpin weighting arms of PK 1500 series and PK 1600-40
- ✓ TeraSpin cradles of OH 500 series and OH P series
- ✓ TeraSpin top rollers of LP 300 series
- ✓ TeraSpin distance clips
- ✓ Brackets and arm bars required to fix TeraSpin weighting arms
- ✓ Bottom rollers with needle bearings
- ✓ Apron bridge bar to suit short, medium and long cradles
- ✓ Bottom apron tensioning devices for long bottom aprons
- ✓ Driving shafts (end shafts) for bottom rollers

Up-gradation kit for ring frame

In ring frames, there are two major areas which need up-gradation over a period of time, viz. drafting system and spindles. There can be different type of drafting up-gradation as mentioned below:

- ✓ Pneumatic drafting system to spring loaded drafting system
- ✓ Spring loaded drafting system to spring loaded drafting system

Depending on the mechanical condition and performance of an in-use ring frame, a list is prepared of components which are to be replaced or up-graded. TeraSpin can supply the following components for up-gradation kit of ring frames:

- ✓ TeraSpin weighting arms PK 2000 series
- ✓ TeraSpin cradles OH 62, OH S 168, OH S 175, OH S 1681, OH 131 and OH 121
- ✓ TeraSpin top rollers of LP 300 series
- ✓ TeraSpin distance clips
- ✓ Brackets and arm bars required to fix the TeraSpin weighting arms
- ✓ Bottom rollers with needle bearings
- ✓ Apron bridge bars to suit short, medium and long cradles
- ✓ Bottom apron tensioning devices for long bottom aprons
- ✓ Driving shafts (end shafts) for the bottom rollers
- ✓ Wooden clearer for bottom rollers
- ✓ Wooden clearer for front top rollers

In case of spindle up-gradation, TeraSpin offers the following options:

- ✓ Replacing existing spindles with new spindles of the same type without any change
- ✓ Replacing existing spindle with new spindles with different DUI, wharve dia, plug length, taper, etc.
- ✓ Replacing existing non auto-doffing type spindles (without cutters) to auto-doffing type spindles (with cutters)
- ✓ Replacing existing auto doffing type spindles (with cutters) to non auto-doffing type spindles (without cutters)

Depending on the application (combination of load and speed), TeraSpin offers complete spindles of aluminum plug type with appropriate spindle bearing units like HF-100, HF-1, HF-21 and HF-21C.

Advantages of up-gradation of roving frames and ring frames

- ✓ Do not require any change in the existing building structure
- ✓ Do not require any change in the existing lay-out
- ✓ Maximum benefits with minimum capital investment
- ✓ Actual up-gradation time is very short and hence does not affect daily production to a great extent
- ✓ No need to hire special skills/talent for the installation*

** If requested by customers, TeraSpin provides technical services for installation and fine tuning of up-gradations*



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