

Case Study

TeraSpin spindles racing at 24000 rpm

Background

One of India's well known specialty spinning mills, recognised for spinning the best quality fine and super fine 100% cotton yarns, was looking at gaining maximum possible production while maintaining the highest yarn quality. In order to improve their productivity, the mill wanted to increase the speed of the ring frame. However, it was not possible to increase the speed of the ring frames with the spindles that were then on their ring frames. Hence, the spinning mill decided to upgrade their ring frame spindles.

TeraSpin – experts in spinning machinery components

Highest possible ring frame performance requires the highest quality spinning machinery components. The spinning mill therefore approached TeraSpin for its requirement of high speed spindles. TeraSpin recommended and supplied spindles with HF-100 inserts to meet the mill's requirement of high quality with high speed.

These spindles were installed and commissioned in April 2016. The results speak for themselves, and the said spinning mill is extremely happy with the performance upgrade possible with TeraSpin's spindles.

Performance of TeraSpin high speed spindle with HF-100 inserts

Raw material	100% cotton
Yarn count	Ne 60-80 combed compact yarn
Ring diameter	36 mm
Bobbin length	170 mm
Wharve diameter	18.5 mm
Maximum spindle speed with TeraSpin spindle	24000 rpm
Average spindle speed with TeraSpin spindle	23000 rpm

Conclusion

TeraSpin high speed spindles equipped with HF-100 inserts can run consistently with a spindle speed of 24000 rpm, enabling this specialty spinning mill to reach its dual goals of high speed with high quality.