

Our Plant (SRF Ltd) was started in the year 1992 with TORAY Twister Technology. Further capacity expansion was carried out in the year 2006 with SADC Twister technology where we purchased second hand Twister machine from U.S.

In our Textile process, Nylon 6 yarn is converted to Greige Fabric through Twisting and Weaving. Twisting of yarn is achieved by providing ply and cable twist.

Twisting Operation

The function of a Twister is to produce Cord from Yarn of desired doff length. It is carried out in three steps.

Step 1: Yarn is twisted into Ply in upper part of the machine according to TPM (twist per meter) specification.

Step 2: Plies (twisted yarn) are twisted into Cord in Bottom part of the machine according to TPM (twist per meter) specification.

Step 3: Ring rail mechanism wind the Cord on a Bobbin in uniform manner.



We are having total 42 No. of SADC Twister machines and the entire process is carried out by single motor of following specifications Make AEG(U.S make) Type-3 phase induction motor Kw/Hp-45/60 RPM- 1460 Bearing DE/NDE -6313 C3 ZZ

As these were second hand machine and the motor were designed for 560 Volt (As per U.S technology) then again we rewinded it at 415 Volt to get the better efficiency of motor.

Since installation we are facing very frequent bearing failure problem of Motor (DE) Drive end side only where it is belt coupled with the load (Main drive shaft)and having excessive tangential stress within it.

We are looking for your suggestion on following issue.

- 1) How we can prevent from very frequent bearing failure.
- 2) Suggestion to improve motor efficiency/ loading
- 3) Suggestion to conserve the power on twister machine

Your suggestion/additional information required in this regard will be highly appreciated

Regards
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