

Yarn Doubling

FAQ'S

1. Why doubled yarns are preferred?

Ans: The object of doubling is to double the individual threads. Doubling avoids unevenness and the strength of doubled yarn is correspondingly better than the single thread. So doubled yarns are preferred.

2. Why tensioning device is so important in doubling machine?

Ans:

- a. Even tensioning of yarns maintains uniform twisting of doubled yarns.
- b. Snarling of doubled yarns is avoided
- c. Uniform strength of doubled yarn is ensured

3. Why doubled yarns are twisted?

Ans: The purpose of this operation is to unite, by twisting, two or more doubled yarn ends, in order to obtain a stronger yarn. It is a two-stage process namely doubling and twisting.

4. How ring doubler is different from ring frame spinning?

Ans: This is similar to ring spinning frames, except that they are fed by packages of doubled yarn and via a feeding cylinder that consists of a metal shaft with pressure cylinders to keep winding speeds constant.

5. What are the merits of TFO over ring doubler?

Ans: Two twists are inserted for each turn of the spindle and this means higher output rates.

Direct winding of large packages is possible with fewer knots and the possibility of carrying out 2-ply assembly directly on the machine. It is possible to have different spindle gauges ranging from 200, 240 and 300 mm.

6. What are the special features one can expect from modern TFO machine?

Ans: The modern TFO has pneumatic threading systems and an automatic tying carriage, a package lifting system, and slowing of the machine in the event of yarn breaks or the package running out (following breaks, this slowing action is delayed to allow the twisted yarn to finish winding and thus to avoid damaging the surface of the package), a travelling blow/suction cleaner.

7. Name the two stage twisting machine?

Ans: Two for one twister and three for one twister.

8. Why some times waxing is required in TFO?

Ans: Waxing is applied in some machines, in order to reduce the effect of friction on the yarns, oil is applied through a device located on the spindle head and comprising a tank and a bush that, by capillary action, allows the oil to rise, reaching the yarn contact zone. This operation is carried out before the first twisting stage.

9. What are the two stages of doubled yarns?

Ans: Doubling and twisting

10. What are all the methods followed to produce double yarns?

Ans:

- a. Ring doubler
- b. Uptwister
- c. Two for one twister
- d. Three for one twister