

Ring Spun Yarns

FAQ'S

1. How fibre length affects ring spinning?

Ans: A longer fibre can be spun to a finer counts and gives a better spinning performance. In general, the longer the fibre, the higher the yarn tenacity. Too long a fibre gives processing problems specially in carding. Productivity at ring frame also increases because the yarn spun from a longer fibre needs a lower twist. But the shorter fibre increases the hairiness and requires more twist to spin the yarn. The quality of the yarn made from shorter fibre is usually poor.

2. What is spinning triangle?

Ans: In the delivery roller nip point, fibres are getting twisted together and the yarn is formed. The twist inserted due to traveler rotation, reaches the front roller delivery point, where the fibres are arranged in triangle fashion. This is called spinning triangle.

3. What should be the min. number of fibres in the yarn cross section for better spinning performance in ring frames?

Ans: It should be around 85 for 38 mm and 68 for 51mm fibre.

4. How finer fibre affects spinning performance?

Ans: A fine fibre in ring spinning gives finer yarns. It also leads to more even yarns. Also low twist is required because of greater interfibre friction. However, it can lead to excessive neps at carding.

5. What is the formula to calculate the number of fibres in a yarn cross section?

Ans: $N = (5315/\text{fibre denier}) / \text{yarn count (Ne)}$

6. What is the minimum fibre strength needed for spinning?

Ans: Minimum fibre strength is 0.6 to 0.7 gf/denier

7. What is crimp? How does it affect spinning?

Ans: It is defined as the waviness of a fibre. It increases the inter fibre friction which helps in spinning process. It also produces yarns and fabrics having a greater bulk and a softer feel.

8. What is the TM used for production of Polyester/Viscose blended yarn?

Ans: Twist Multiplier for P/V yarn is 3.0-3.5

9. What is the formula used for TPI?

Ans: $TPI = TM \times \sqrt{Count(Ne)}$

10. How the periodic variation occurs in drafting zone?

Ans: If drafting roller has eccentric part or the uneven covering of roller result in periodic variation.