

**TECHNICAL TUESDAYS**

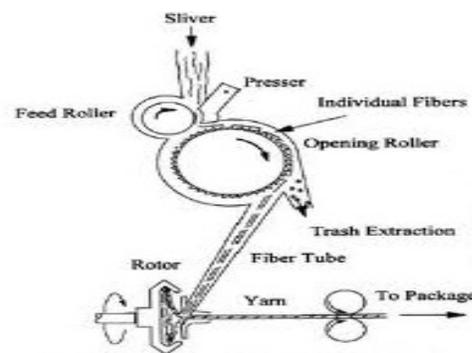
TOPIC: Rotor Yarn Spinning Process

REF: REF: TT/ Oct 2014/ WK 1

What is the Rotor Yarn Spinning Process?

The Rotor Yarn Spinning Process is also known as Break Spinning or OE Spinning Process.

Sliver from the carding process goes into the rotor, is spun into yarn and comes out, wrapped up on a bobbin. In such a case, the roving stage and re-packaging on an auto-coner are not required.



Advantages of the Rotor Spinning Process:

Less labor-intensive

Higher production as compared to ring spinning owing to rotor speeds up to 140,000rpm.

Lower power consumption as compared to ring spun yarn, for producing per kg of yarn.

Lower process sequence on eliminating simplex process and separate winding process.

Disadvantages:

In the Rotor Spinning Process there is limited coarser counts.

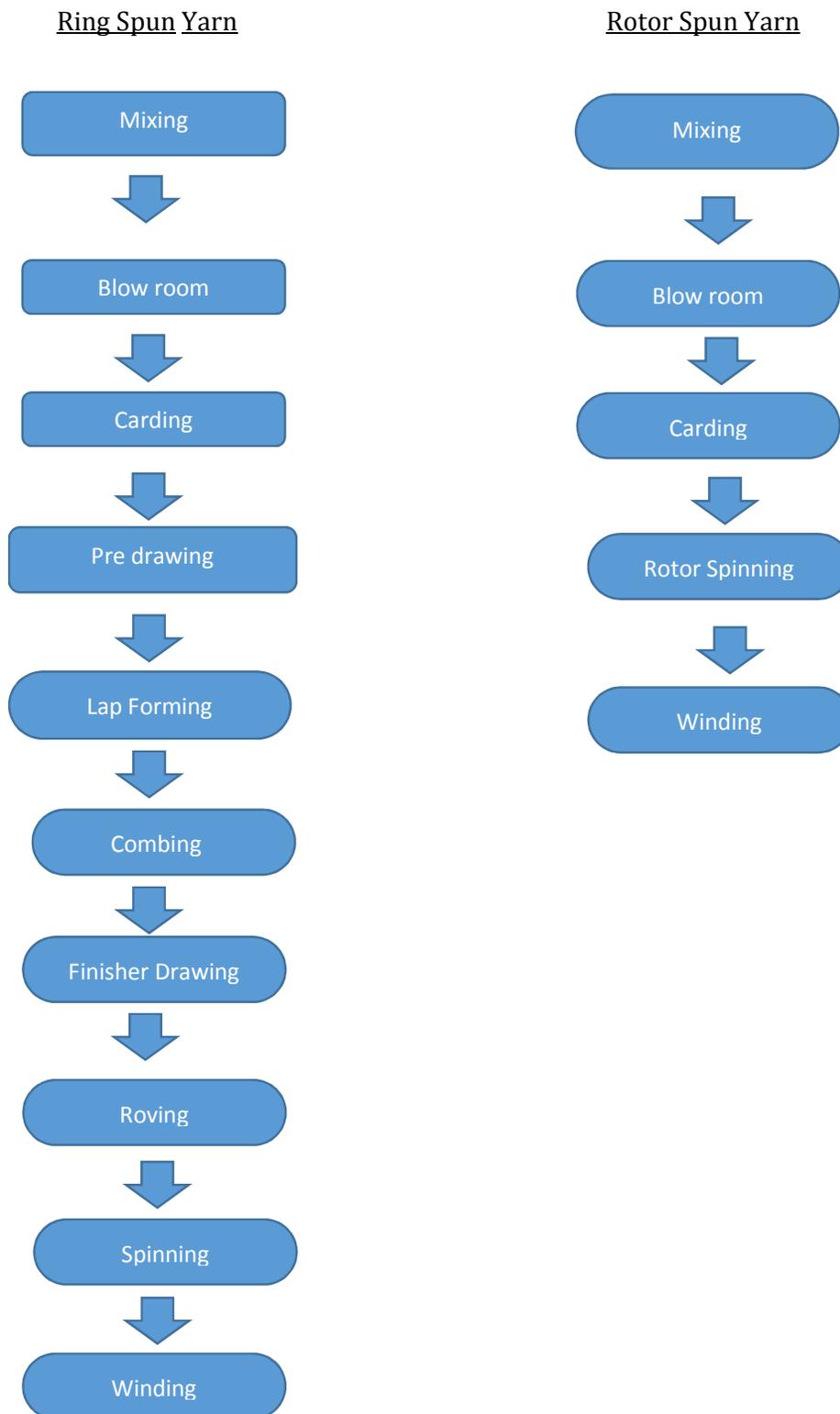
The structure of the yarn itself with fibres is less in parallel, compared to ring spun yarns.

Example - cloth made from open-end yarn has a 'fuzzier' feel and poorer wear resistance.



Difference between ring spun yarn & rotor spun yarn :

Taking into account the process sequence:





With respect to yarn quality:

<u>Rotor Spun Yarn</u>	<u>Ring Spun Yarn</u>
Lower yarn uniformity	Better yarn uniformity
Higher yarn hairiness	Lower yarn hairiness
Handfeel is harsh	Handfeel is smooth
Only coarser count can be produced	Finer count can be produced

End uses of rotor spun yarn:

Men's and women's outer wear, denims, furnishing fabrics, terry towels, table cloths.

Wishing you a great week ahead!

Technical Tuesdays is a knowledge sharing initiative by Resil Chemicals Private Limited

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