

**WOOLLEN YARN VARIOUS**

This document list out the essential plant and machinery requirement of woollen yarn various. This documents also list out the essential test equipment requirement of woollen yarn various.

**Essential Plant & Machinery Requirement For Spinning:-**

1. 3-1/2 Cylinder Woollen Carding machine
2. Ring spinning machine
3. Winding machine with automatic splicing facility (Autoconer or equivalent)
4. Final winding machine

**Note:-**

In addition to above, controlled atmosphere of production shop for Humidity & Temperature is an essential requirement.

**Essential Plant & Machinery Requirement For Processing:-**

1. HTHP Top/fibre Dyeing machine-with automatic temperature and pressure control
2. Hydro-extractor
3. RF Dryer

**Essential Test Equipments:-**

1. Conditioning Chamber
2. Wrap Reel
3. Weighing Balance
4. Twist Tester
5. Tensile strength testing machine
6. Laundrometer
7. pH Meter - perspiro meter
8. Projection Microscope
9. Soxhlet Apparatus
10. Dry Cleaning test equipment
11. Drying Oven
12. Equipment for blend composition conformance
13. Crockmeter
14. Spectrophotometer
15. Light fastness tester\*

**Note:-**

1. \*If the firm does not have light fastener tester, the firm should have arrangement with NABL accredited lab for Dye fastness to Light for which a letter from NABL accredited lab should be issued to the firm that they are undertaking testing of samples from the firm.
2. The above list of test equipment is illustrative in nature which may or may not be relevant for certain type of yarns. Therefore at the time of capacity verification, the requirement of test equipment may be verified in accordance with test parameters in the specification and test equipment shall have required range to test the required parameters
3. The firm shall provide valid "wool mark" or "wool mark blend" certificate where ever applicable as per governing specification. In case of expiry of certificate, copy of application for renewal should be provided.