

**CV NORMS FOR 100% SYNTHETIC FABRICS VARIOUS**

This document list out the essential plant and machinery requirement of 100% Synthetic fabrics various. This documents also list out the essential test equipment requirement of 100% Synthetic fabrics various.

**Essential Plant and Machinery Requirement:-**

Preparatory and Weaving Process :-( \* See Note below)

1. Winding machine
2. Beam Warping Machine
3. Shuttle less looms capable of weaving 100% synthetic fabrics

Processing Machines:-

1. HTHP Dyeing Machine  
OR  
High Temperature High Pressure (HTHP) Jet Dyeing  
OR  
Pad Dry and Thermosol on Loop Agers  
OR  
Pad Dry and Thermosol on Hot-flue
2. Calendering Machine
3. Special Finish Application (Silicone finish etc.)
  - a) Three Bowl padding Mangle
  - b) SS Drying Range
  - c) Curing/Polymerizer
4. Stenter

**Note:**

\*For Parachute fabric, weaving and processing set up is mandatory. For other fabrics the firm shall have processing facility as mandatory, however as far as weaving is concerned it must have notarised legal tie up with other firm who must possess all the essential weaving machineries as stipulated in the norms and it should be verified by the CV team.

**Essential Test Equipments:-**

1. Conditioning Chamber
2. Weighing Balance
3. Measuring tape/scale
4. Tensile strength tester
5. Thread counter
6. Laundrometer
7. Perspirometer
8. Crockmeter
9. Light fastness tester\*
10. Twist tester
11. Air permeability tester
12. Thickness tester
13. Material confirmation test facility
14. Tear strength tester
15. pH meter
16. Flex meter for resistance to flexing
17. Hot Air Oven

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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 fabric. 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.