

**Clarification: Lab scale dry jet wet spinning facility:**

1. The lab scale dry jet-wet fiber spinning facility should be compact in nature including all operational, maintenance and ergonomic considerations so that it accommodates in the specified area of Length 65 feet x width 15 feet and ceiling height of 11 feet.
2. The fiber forwarding rollers chrome coating thickness should be around 20 microns and with a surface smoothness (mirror polishing) of roller  $\leq 0.2$ -micron Ra.
3. In the fiber spinning facility, two overflow liquid collection tanks with required piping and pumps to be provided for storing and transferring the overflow liquid from coagulation and washing/stretching baths.
4. Take up winder for the fiber spinning unit should have option for changing over the fibre spools manually as well as automatic changeover.
5. Power transmission from electrical drive to all the driven rollers should be through gear arrangement in all the fiber forwarding unit. All three rollers should rotate without any wobbling/oscillation/vibration/slip.
6. HMI control for all the equipment parameters (mentioned in section VI –detail about the scope of supply) connected to a centrally computer control unit. HMI (LCD/LED) display screen should be  $\geq 12$  inch. The desktop computer should be industrial grade type with latest version of operating station compatible with the centrally computerised control unit. The desktop computer unit should have 7th Generation Intel® Core™ i5 processor or higher version with LED monitor display size of 21 inch or higher.
7. Section VI.20 : Vendor to provide proper air curtaining at the entrance, all the process exhaust for equipment and central ventilation system with HEPA filters to ensure the cleanliness. The cleanliness of the area is critical for operation hence, all necessary arrangement exhaust, ventilation, floor and wall coating should be ensured by vendor to achieve the cleanliness equivalent to class 10000.