

# INDIAN INSTITUTE OF TECHNOLOGY BOMBAY MATERIALS MANAGEMENT DIVISION Powai, Mumbai 400076.

# PR No. 1000028450 (Rfx No. 6100001549) Detailed Technical Specifications for Needleless Electronspinner

#### A. Main Features

- Needle-free or hybrid electrospinning system
- Effective width of nanofiber layer: 250 300 mm
- Run time per batch: 40 100 min
- Volume of solution per batch: 50 ml
- Substrate speed : 0 6000 mm/min
- Spinning voltage : 0 80 kV
- Meets all CE requirements (Certification for electrical equipment)
- Safety door locks
- Safety shut-off switches
- Integrated substrate unwind / rewind
- Standalone equipment

#### B. Spinning unit

- Total number of spinning electrodes: at least 1 or more
- Spinning electrode width: 350 mm or more
- Stationary wire electrode system
- Integrated unidirectional substrate unwind / rewind

### C. Equipment variable

- Spinning voltage : 0 - 80 kV

- Substrate speed : 0 - 6000 mm/min - Spinning distance : 120 - 300 mm

#### D. Accessories

- Spinning carriage : 50 ml

- Small volume spinning carriage: 10 ml

- Provides cleaning containers for carriages

## E. Optional peripherals

- Humidity and temperature control (NS AC 150)
- Industrial camera with adjustable stand
- Provision for core-shell electrospinning

#### F. Consumption

- Power: up to 300 W
- Meets all Safety/regulation
- Meets all CE requirements (Certification for electrical equipment)

### G. Polymer filling

- Operating mode: batch

- Batch volume: 10 ml to 50 ml

### H. Desktop

A desktop with the required configuration should be provided if necessary.

### I. Site requirements

- Operating staff required: 1 person Production premises: 3 m x 3 m space required
- Exhaust ventilation connection required
- Appropriate treatment of waste air required
- Extinguishing system connection required
- External grounding required

# J. Warranty

3 years warranty

**Note:** Certification for electrical equipment. Thus, the certificate guarantees that the components and parts would withstand the voltage and current ratings as mentioned and specified in product specifications