PRODUCT DATASHEET

Benchtop Electrospinning Unit

Nanofibres on the bench, safely enclosed





DETAIL – ROTATING DRUM COLLECTOR

OVERVIEW

The Tech Inc. Benchtop Electrospinning Unit makes nanofibre mats and membranes from polymer solutions in a closed, interlocked chamber. A syringe pump feeds the solution to the needle, a high-voltage supply draws the jet, and the fibres collect on a flat plate or rotating drum.

MODELS AND CONFIGURATIONS

- **Single-needle unit** – teaching and method development.
- **With rotating drum** – aligned fibres and larger mats.
- **With humidity control** – repeatable fibre diameter.

TYPICAL DESIGN DATA

Voltage	0 to 30 kV, positive or dual polarity
Flow	0.01 to 10 ml/h
Collector	Flat plate or drum, 100 to 3000 rpm
Distance	Needle-to-collector 5 to 25 cm

APPLICATIONS

Nanofibre membranes for filtration, membrane distillation, batteries, sensors, tissue scaffolds and drug delivery.

KEY ADVANTAGES

- **Safe** – interlocked chamber and HV cut-off
- **Repeatable** – pump, voltage and distance stored as recipes
- **Flexible** – flat or drum collection
- **Scalable** – same settings as our multi-nozzle and production systems

Designed and built by Tech Inc. · **Part of the Davey Group since 1990**

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