



NE100 is an easy-to-use, single-nozzle electrospinning unit designed for small-scale nanofiber production. It integrates advanced features to ensure efficient and precise operation. Key features include a reliable 9” touch screen panel for precise process adjustments and a high throughput hybrid nozzle for enhanced production capacity. The rotating drum collector, capable of up to 500 RPM, facilitates the production of oriented or aligned nanofibers. Safety is prioritized with a protected cabinet, safe-door, and warning light to mitigate high voltage risks. The NE100 is CE certified and includes WiFi connectivity for remote monitoring and control of all process parameters. Additionally, it is part of the Inovenso Scale Up Program, allowing users to upgrade their devices to more advanced models, making it a versatile and scalable solution for nanofiber production.

# NE100

Description	Advanced Level Single Nozzle Electrospinning Unit
Spinning-Type	Bottom-Up Spinning

## CONSTRUCTION

Chasis	Electrostatically Painted Steel
Feeding Area Material	PE 1000 (High Density, Chemical resistant)
Collector Material	7000 Series Aluminum Alloy, Stainless Steel
LED Illumination	
Exhaust Fan	
Atmosphere Control (Optional)	
Total Weight	Approx. 130 kgs
Dimensions	W: 770 mm L: 675 mm H: 1040 mm

## HIGH VOLTAGE POWER SUPPLY

Voltage Range	0- 40 kV
Voltage Precision	0,1 kV
Max. Current	0.125 mA

## HIGH PRECISION MICRO PUMP

Flow Rate	0.35 - 7123 ml/h (BD 60 ml syringe)
Flow Rate Precision	0.01 ml/h
Available Syringes	All types are available

FEEDING AREA

Number of Nozzles	1
Feeding Pipe Material	Aluminium
Nozzle Material	Electrically Conductive Stainless Steel
Nozzle Inner Diameter	0.8 mm
Compatible with Standard Syringe Nozzles	
Minimum Required Solution for Single Nozzle Feeding	2 ml

SPINNING DISTANCE

Distance Between Nozzle and Collector	11 mm-211 mm
Distance Adjustment Precision	1 mm

STATIONARY PLATE COLLECTOR

Material	Stainless Steel
Distance Adjustment Precision	370mm x 130mm

UNIQUE USER INTERFACE

9” Touch screen control panel with well designed user friendly interface
Fully able to control all parameters
Saving & recalling all parameters via recipe & recall function

REMOTE MONITORING and CONTROL SYSTEM

Wi-Fi Connectivity
Comprehensive Monitoring
Full Control
BatchID Management
Extended Storage
Graphical Data Display
User Authentication
Activity Logs
Log Monitoring
Fault and Alarm Management

SAFETY FUNCTION

Safe Door
Emergency Button & Safety Relay
HV Warning Light
Electrical Isolated & Grounded Cabinet
Over Current Protection
Fully Sealed Cabinet