



Inovenso’s NE300 fully automated electrospinning machine NE300 is designed to carry electrospinning research to a more advanced level.

NE300 is a Hybrid Electrospinning System of eight needles. It has a 314 x 220 mm nanofiber coating area via a rotating drum collector, also a flat collector of 130 x 370 mm comes with the standard configuration.

The NE 300 has an Electrically insulated cabinet with high density PE parts inert to chemical solutions, which enables working with many different solvents and polymers.

# NE300

Description	Advanced Level Multi 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. 150 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 on Each Feeding Pipe Set	4 pcs
Number of Feeding Pipe Sets	Up to 2 Sets
Number of Nozzles	Up to 8 Nozzles (Also possible to use with single nozzle)
Single Nozzle Production	Available
Feeding Pipe Material	Aluminium
Nozzle Material	Electrically Conductive Stainless Steel
Nozzle Inner Diameter	0.8 mm
Minimum Required Solution for Single Nozzle Feeding	1 ml
Minimum Required Solution for Each Feeding Pipe Set	8,5 ml
Minimum Required Solution for Full Loading	16 ml

ROTATING COLLECTOR

Drum Collector	
Material	Aluminum
Dimensions of Drum (D x L)	100 mm x 220 mm
Fiber Deposition Area	314 mm x 220 mm
Drum Rotating Speed	100-500 RPM (Able to produce aligned nanofibers.)
Surface Speed (cm/s)	52,3 cm/s - 261,6 cm/s
Coating Homogeneity System	X-axis repetitive motion
Stroke of Coating Homogeneity System	Adjustable Between 30 mm and 80 mm
Speed of Coating Homogeneity System	Adjustable Between 2 mm and 20 mm/sec

SPINNING DISTANCE

Distance Between Nozzle and Collector	23,5 mm-233,5 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

SAFETY FUNCTION

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