

- CYLINDER COLLECTOR
- FLAT COLLECTOR
- SINGLE NOZZLE



NE200 is a laboratory scale electrospinning unit with a single nozzle. The standard machine has a 500 RPM rotating drum collector and a flat collector. It is also possible to improve the functionality of the device with optional accessories. Operation parameters like needle-collector distance, high voltage value can be adjusted from the user panel automatically with a high precision. The system comes with a closed cabinet so it is possible to add temperature and relative humidity control systems as additional options.

NE200

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

CONSTRUCTION

Chasis	Electrostatic Painted Sheet Metal
Feeding Area Material	PE 1000 (PE 1000(High Density, Resistant against chemicals))
Collector Material	7000 Series Aluminum Alloy, Stainless Steel
Total Weight	<130kg
Dimensions	760mm x 710mm x 1170mm

HIGH VOLTAGE POWER SUPPLY

Voltage Range	0- 40 kV
Voltage Precision	0,1 kV
Voltage Display	LED Screen

HIGH PRECISION MICRO PUMP

Flow Rate	0.01-1000 ml/h
Flow Rate Precision	0.01 ml/h
Available Syringes	Standard 1, 5, 10, 20, 50 and 60ml

FEEDING AREA

Number of Nozzles on Each Feeding Pipe Set	No Pipe Set
Number of Feeding Pipe Sets	No Pipe Set
Number of Nozzles	1
Single Nozzle Production	Available
Feeding Pipe Material	Aluminium
Nozzle Material	Electrically Conductive Brass
Nozzle Inner Diameter	0.8mm
Compatible with Standard Syringe Nozzles	YES
Minimum Required Solution for Single Nozzle Feeding	0,5ml
Minimum Required Solution for Each Feeding Pipe Set	x
Minimum Required Solution for Full Loading	x

COLLECTOR

Drum Collector:	
Material	Aluminum
Dimensions of Drum (D x L)	100mm x 220mm
Fiber Deposition Area	314mm x 220mm
Drum Rotating Speed	100-500RPM
Surface Speed (cm/s)	52,3 cm/s - 261,6 cm/s
Coating Homogeneity System	x
Stroke of Coating Homogeneity System	x
Speed of Coating Homogeneity System	x

SPINNING DISTANCE

Distance Between Nozzle and Collector	120mm-3320mm
Distance Adjustment Precision	1 mm
Distance Adjustment Method	Linear Actuator

STATIONARY PLATE COLLECTOR

Material	Stainless Steel
Distance Adjustment Precision	365mm x 130mm

AUTOMATION

Touch Screen	7 inch
Data Saving and Recall	X (Optional)
System Power Button	√
Emergency Stop Button	√
Safe Door Button	√
LED Illumination On/Of	√
Exhaust Fan On/Of	√
Cylinder Rotation On/Of	√
Digital Cylinder Speed Indicator	√
Coating Homogeneity System On/Of	X
Coating Homogeneity System Stroke Adjustment	X
Coating Homogeneity System Speed Adjustment	√
Spinning Distance Adjustment	√
Digital Spinning Distance Indicator	√
Pump On/Of	√

High Voltage Adjustment	√
Digital High Voltage Indicator	√
Digital Temperature Indicator	X (Optional)
Digital Relative Humidity Indicator	X (Optional)

TECHNICAL REQUIREMENTS

Power	110-120VAC or 220-240 VAC @ Max 6A
Grounding	External Grounding Line
Area	Table

EXPERIENCED POLYMERS

Polyurethane	Solved in DMF and THF
Polybenzimidazole	Solved in DMA with particle additives
Polycarbonate	Solved in DMF
Polyacrylonitrile	Solved in DMA and DMF
Polyvinyl Alcohol	Solved in Pure Water
Polylactic Acid	Solved in DMF
Polyethylene Oxide	Solved in HCl
Nylon 6.6, Polyamid 6.6	Solved in Formic Acid
PVC	Solved in THF
Poly Lactic co Glycolic Acid	Solved in DMF

