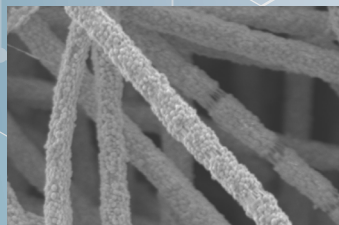
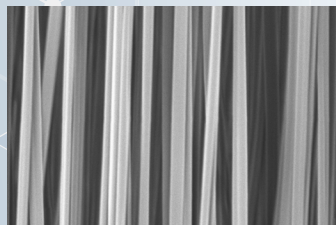


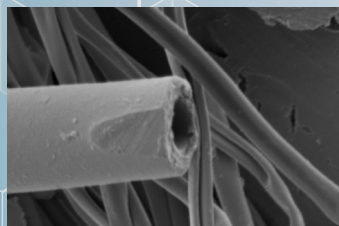
Your application can be realized.



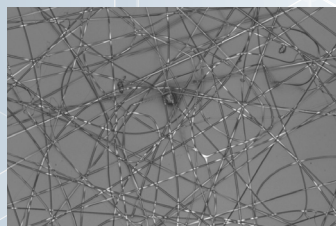
Fiber containing particles



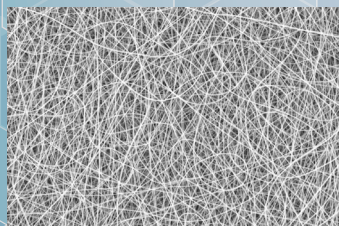
Aligned sheet (PLLA)



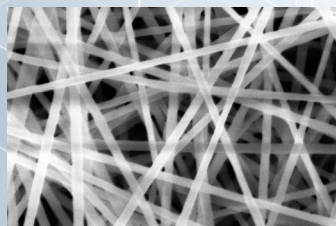
Hollow fiber (PMMA)



Collagen



Ethyl Cellulose



Gelatine



Electrospinning System for R&D
NF-500

■ Spinning large samples and long sheets

The system has a wide spinning space to spin 500mm-wide long sheets and 600 x 600mm size samples.

■ Integrating all available components

The system can integrate all available optional spinnerets and collectors and can make a variety of nanofiber samples.

■ Realizing various spinning conditions

The system can create various spinning conditions to make high quality nanofibers using a 50kV high voltage supply, 2 sets of syringe pumps and a touch panel to program and control electrospinning.

■ Employing a solution-heating spinneret

With a combination of a solution-heating spinneret and a high frequency power supply solutions that is difficult to use solvents or that can be dissolved only at high temperature can be spun into nanofibers.

■ Simulating mass production

Using a multi-jet spinnet (8 or 12 outlets) and a roll-to-roll collector mass production can be simulated for future industrializing.

■ Considering operators' safety

To ensure operators' safety the NF-500 have devices such as a high voltage interlock, a door lock, an exhaust gas filter, an emergency switch and a signal tower.

In addition, high voltage output will be discharged immediately after power off to avoid electric shock.

Major performance and specifications

Purpose	Research and development
Typical products	500mm-wide nonwovens, Aligned membrane Core/shell • hollow nanofiber, Tubular Fiber, Long sheet
Standard parts	Plate collector • Clip spinneret
Optional parts	Collector Drum (Φ200 W200, Φ200 W200, Φ200 W30, Φ200 W300, Φ200 W600) Disk • Mandrel • Y-axis Slide • R to R Spinneret Vertical clip • Tubeless • Coaxial • 11-syringe clip Multi-jet spinneret 4/6/8 holes • Solution-heating • BNP
High voltage supply	Voltage 0.0kV~50.0kV Current 0.0μA~100.0μA
Spinneret operation	Range of motion: 600mm, Traversing speed: 0 to 300mm/s
Rotation speed of collectors	Drum: 100 to 3000rpm Disk: 100 to 3000rpm Mandrel: 50 to 100rpm
Spinning distance	50 to 300mm
Programmable parameter	• High voltage output • Feed rate of solutions from pump • Collector rotation speed • Slider vertical travel (Semi-automatic) • Frequency and interval of cleaning • Slider speed and distance
Inhaling and exhausting volume of fan	60m ³ /hr or more
Feed rate	0.1 to 60ml/hr
Capacity of syringes	2.0 / 5.0 / 10.0 / 20.0 (ml)
Safety devices	Safety interlock • Door lock • Emergency stop button Signal tower • Exhaust purification filter High speed shutoff of high-voltage output after POWER OFF High-voltage shutdown in case of overcurrent

General Rating

Operation ambience	Temperature: 20 to 30°C Humidity: 30% to 70% (without dew)
Voltage input	85 to 125V, 170 to 250V AC (single phase)
Power consumption	1500VA or less
External dimensions	1460W x 950D x 1903H (mm)
Spinning chamber	1454W x 788D x 1045H (mm)
Weight	700kg or less

Plate collector W600
(Standard component)Drum collector
Φ200 W600Mandrel collector
L600Roll-to-roll collector
W500

Disk collector



Y-axis slide collector

Clip spinneret
(Standard component)

Vertical clip spinneret



Coaxial spinneret



Tubeless spinneret



11-syringe clip spinneret



Solution-heating spinneret



Multi-jet spinneret

BNP(Bit Nozzle Pipe)
Spinneret

*Components for NANON can also be integrated.



Click here to see nanofiber samples.

