





	NS Lab <i>For laboratory research</i>	NS 1S500U <i>For research & small volume production</i>	NS 4S1000U <i>Semi-industrial manufacturing</i>	NS 8S1600U <i>Industrial manufacturing</i>
				
	Webpage	Webpage	Webpage	Webpage
	Catalogue	Catalogue	Catalogue	Catalogue
	Movie	Movie	Movie	Movie
Nanofiber production				
Max. width of nanofiber membrane	300 mm	500 mm	1000 mm	1600 mm
Controlled fiber diameters	80 - 700 nm	80 - 700 nm	30 - 1000 nm	30 - 1000 nm
Number of spinning electrodes	1 wire	1 wire	4 wires	8 wires
Spinning voltage	0 - 80 kV	0 - 100 kV	0 - 140 kV	0 - 140 kV
Max. number of units in line	N/A	N/A	N/A	up to 4 units
Substrate				
Substrate speed *when using external winding	0 - 5.0 m/min	0.005 - 5.0 m/min *0.0005 - 10 m/min	0.2 - 12.0 m/min	0.4 - 40.0 m/min
Max. width of the roll	500 mm	550 mm	1100 mm	1700 mm
Max. diameter of the roll *when using external winding	145 mm	400 mm *500 mm	1000 mm	1200 mm
Polymer solution				
Volume of solution per batch	10. 50 ml	10. 50. 1000 ml	18 l	60 l
Run time per batch	30 - 80 min	30 min - 8 hours	8 - 16 hours	8 - 16 hours
Dimensions				
Length	1045 mm	1470 mm	2700 mm	2800 mm
Width	1295 mm	1640 mm	2200 mm	3300 mm
Height	2053 mm	2250 mm	2500 mm	3000 mm
Weight	275 kg	510 kg	1800 kg	2500 kg
Connections				
Power consumption *when using external winding	up to 300 W	up to 1.4 kW *up to 5.4 kW	up to 12 kW (without peripherals)	up to 12 kW (without peripherals)
Voltage supply	adapted for grids in all countries			
Exhaust ventilation	200 m ³ /hour	250 m ³ /hour	2000 m ³ /hour	2500 m ³ /hour
Compressed air *when using external winding	Not required	Not required *5 bar	Required	Required
Inert gas	Not required	Not required	Required	Required
Peripherals & Optional Items	Air conditioning unit NS AC150 Camera for process analysis	Air conditioning unit NS AC150 External Unwind / Rewind Endless Belt CE	Air conditioning unit NS AC1000 Unwind / Rewind Adhesion pre-treatment Air dryer Air permeability tester Polymer mix station incl. Filling and cleaning station Waste air treatment Data storage CDS free carriage Endless Belt CE	Air conditioning unit NS AC1000 or NSAC2000 Unwind / Rewind Adhesion pre-treatment Air dryer Air permeability tester Polymer mix station incl. Filling and cleaning station Waste air treatment Data storage Endless Belt CE

Note: All fiber metrics and runtime per batch depend on polymer, solvent, substrate and process.