

Nanofibers metric for Nanospider™

	Measurement	Units	Nanospider™ Performance
Fiber metrics	Mean fiber diameter	nanometers	50, 100, 150, 200, 250 nm or higher.
	Standard deviation of mean fiber diameter	Standard deviation (given as % of mean, shown as s)	generally 30%, tolerances can be made wider depending on cost targets.
	Linear mass density	Deniers per filament (grams per 9,000 meters) or dtex (g/10'000m)	<0.0001 denier or dtex
Web parameters	Web area weigh	grams/square meter (gsm)	0.03 gsm is the lowest commonly used industrial application. 50 gsm has been the highest used.
	Fiber packing density	meters of fiber/square meter	Depends on mean fiber diameter, gsm and polymer selection.
	Web thickness	micrometers	1-500µm
	Tertiary structures	Various	Hollow and fractured nano-fibers as well as caps and other structures can be created. Nanoparticles can be embedded in the structure in many ways.
Production metrics	Production speed	meters/minute	60 m/min. for production line
	Production width	meters	currently up to 1.6 m
	Annual volumes	square meters/ year	50 million m ² square meters per year for PVA, with a mean fiber diameter of 200 nm, standard deviation of 30%, 0.03 gsm.