



NF-Star™

Nanofiber Production

Commercially available electrospinning machines used in the production of flat sheet nanofibers have high running costs and low production rates. To resolve these challenges, EWTCOI researchers have come up with an industrial scale electrospinning device with novel features for the continuous production of flat sheet nanofiber sheets. Developed at relatively low capital and operational costs, **NF-Star™** delivers a high production rate and has been licensed for local commercial production.

EWTCOI pushes the boundary to overcome industry challenges faced by SMEs.

Key Features & Benefits

- Deioniser control during the ion exchange process
- Humidity control for controlled coagulation
- Inline heat press 25°C to 300°C
- Self-cleaning capabilities with reduced solvent usage
- Continuous production of nanofiber flat sheet membranes
- High nanofiber membrane production rate
- Three to five times of cost reduction compared to current similar systems

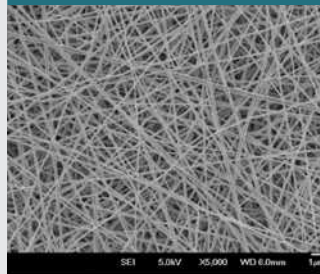
Applications

- Nanofiber filters for water and air separation applications
- Functional materials and devices such as composite reinforcement, protective clothing and smart textiles, and energy and electronics such as batteries/cells and capacitors, sensors and catalysts

Pilot Scale NF-Star™



SEM Image of Nanofiber Membrane



Flat Sheet Membrane

