

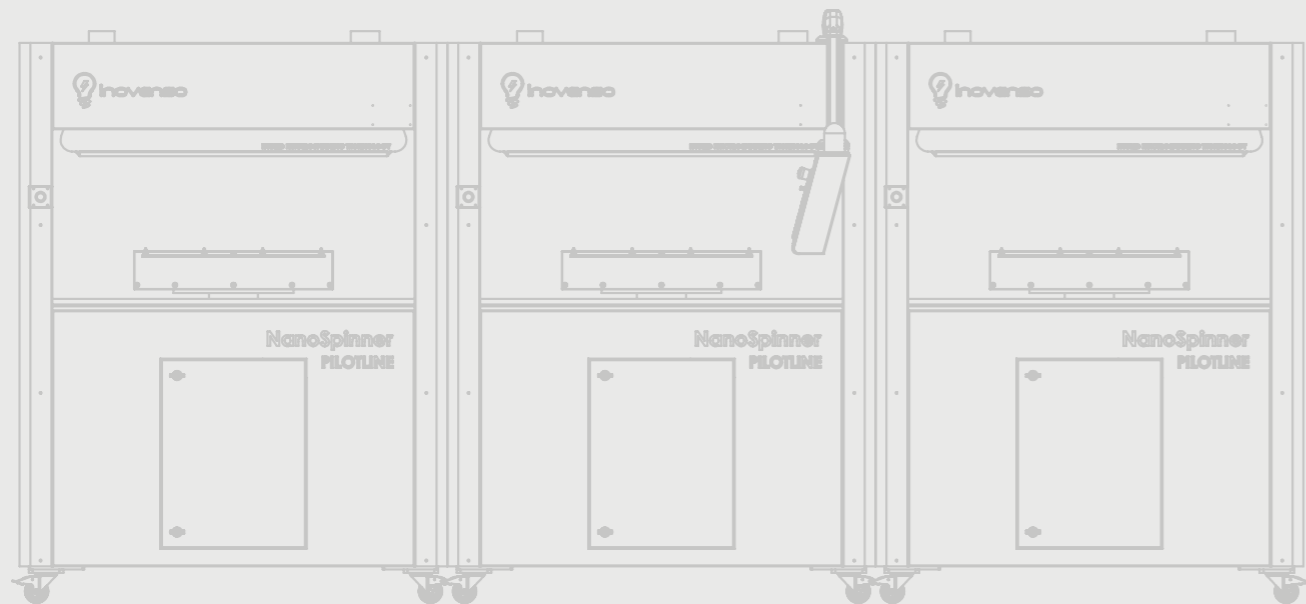
# NanoSpinner

Pilot Line PE3550



# PE 3550

Nanospinner 3550 Electrospinning/Spraying



## About **INOVENSO**

We started our academic activities in 2007 working on nanotechnologies under the Nano Fiber Membrane Group (NanoFMG). After focusing on improving Nanofiber quality during Electrospinning process, we established our born global company Inovenso in 2010. Our name is acronym of Innovative Engineering Solutions. We aimed to developed very efficient electrospinning machines and accelerate nanofiber science. We quickly become a bridge company between academia and industry and proudly contributed to hundreds of scientific projects using polymer nanofibers for wide variety of applications such as biomedical tissue,engineering, pharmaceutical, energy, filtration, material sciences, textile, agriculture, cosmetics.

We brought new innovative approaches to overcome many common obstacles in the nanofiber production field such as scalability, flexibility, standardization and reproducibility with develops customized electrospinning devices all the way from any lab scale desktop starter kits to industrial scale electrospinning machines. It was only possible with working very closely with our clients, understanding their real needs and sharing their concerns and problems.

For more info visit: [www.inovenso.com](http://www.inovenso.com)

## About PE 3550

The PE3550 is a Nanofiber manufacturing line that enables a high throughput of nanofibers, continuously on a roll-to-roll collector. It is composed of three interconnected units of PE 3550, adjustable from a single touch screen panel.

The PE3550 is suitable for a wide range of application, it was initially conceived for the production of Air Filtration Nanofiber-based products (N95/N99 filtration media, HEPA/ULPA filters, automotive, HVAC...). But it can also be used for other applications such as: Bio-medical, Pharmaceutical, Energy, Textile and others..



**The PE3550** is equipped with **168** electrospinning nozzles, allowing the surface to be uniformly and continuously at a width of 550mm. Thanks to its advanced automation system and air conditioning equipment, it enables continuous production at the required quality even under changing environmental conditions.

# PRODUCT DESCRIPTION



**NanoSpinner**  
Pilot Line PE3550

- **Production Rates**

- PA 6 – 0.03 GSM – 18% concentration:

- 202 ml/h (total flow rate)

- 35m<sup>2</sup>/min >>> 2100m<sup>2</sup> /h >>> 49350m<sup>2</sup>/day (23.5h/day)

- 7.106.400 m<sup>2</sup>/year**

- **Single and Multi Nozzle Operation (For each unit)**

- Up to 56 Nozzles during full operation

- Possible to work with single nozzle

- Standard Different Diameters Nozzles can be attached optionally

- 1 precise peristaltic pumps

- 1 High voltage power suppliers (40kV). Each of them charges different pipe sets.

- **Advanced Automation System**

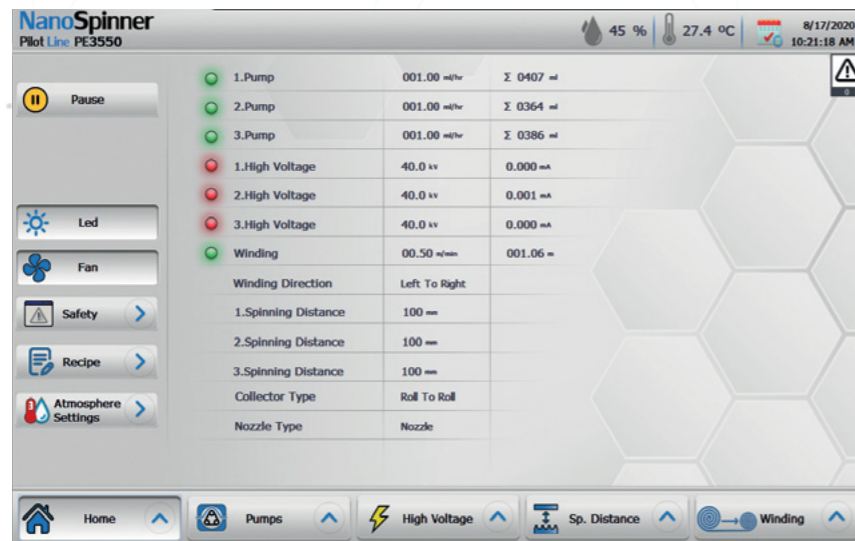
- Full control of the process and system via 12 inches touch screen panel saving all important parameters and recall when needed. Equipped with extra safety features such as spark protection, safety-door option, and integrated safety-relays.

- **Roll to Roll Collector:**

- Fiber Deposition Width: 550 mm

- Substrate Winding Speed: 0,1 m/min - 10 m/min

# UNIQUE USER INTERFACE



## USER FRIENDLY

Specially designed control panel with user-friendly interface makes operations much easier.

## ACCURATE CONTROL

Operator will have the full control of all parameters.

## RECIPE RECALL

The recipes recall function enables users to save parameters and recall instantly.





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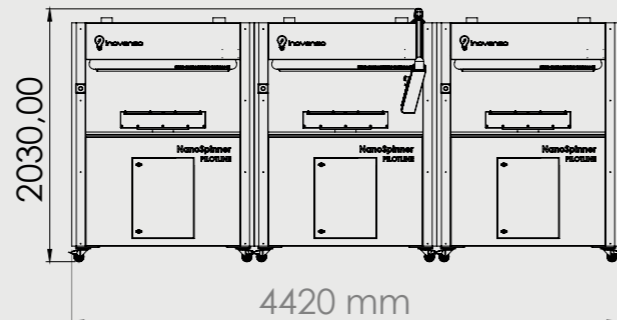
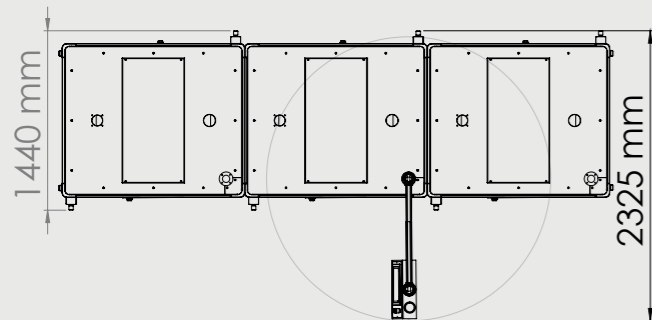
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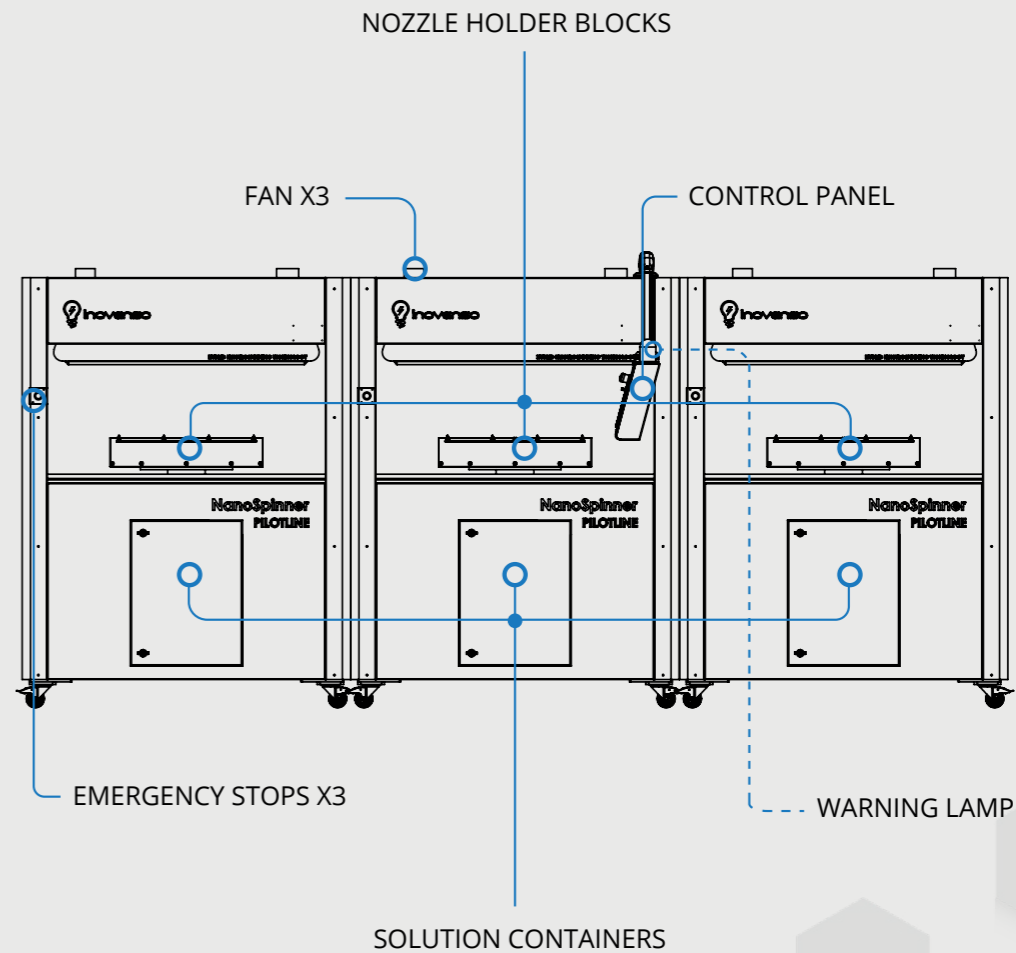
HYBRID ELECTROSPINNING

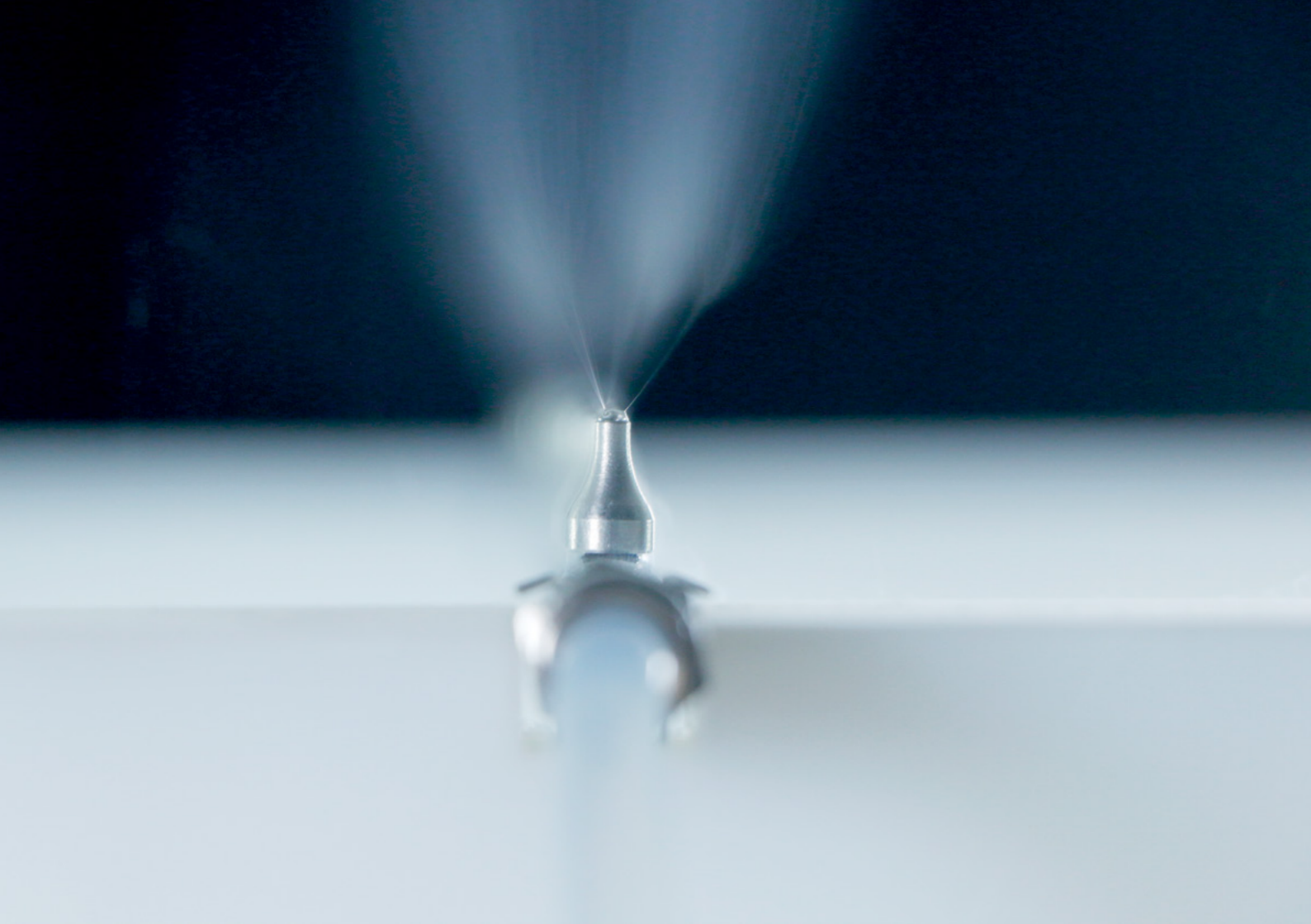
NanoSpinner  
Platform-PC500

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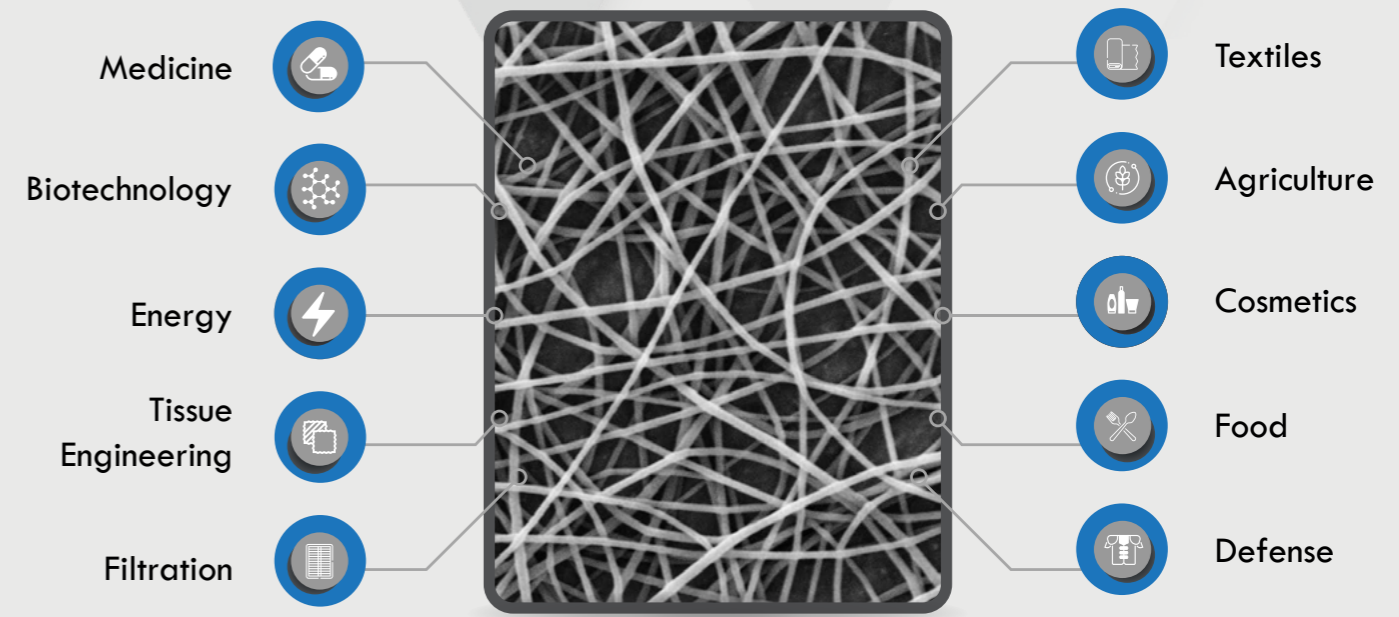


TECHNICAL DRAWING





# APPLICATION AREAS







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