



MecNa™ mechanical filtration for consistent efficiency & durability in air filters

MecNa™ - Revolutionizing air filtration with 3D nanofiber design for superior durability and performance.

MecNa™ is our revolutionary air filter media which addresses the common issue of reduced lifespan due to low dust holding capacity in current nanofiber filter media. Developed in the post-COVID pandemic era, when guaranteed efficiency for critical filtration applications became essential, MecNa™ sets a new standard by offering unparalleled longevity and filtration performance.

The uniqueness of MecNa™ is its revolutionary 3D nanofiber-structured media design. Unlike continuous electrospun fibers MecNa™ embeds individual nanofibers within the filter media, enhancing both durability and performance.

This particular construction overcomes the typical limitation of reduced lifespan of filter elements due to low dust holding capacity, ensuring high initial resistance to airflow. Additionally, since it relies on mechanical filtration, you can count on consistent efficiency without any particle removal efficiency dropping problems commonly seen in electrostatic filter media.

OUR BENEFITS

- 3D nanofiber structure
- Mechanical filtration
- Exceptional durability and longevity in air filters
- Efficiency never drops after APP-J conditioning or IPA charging
- MERV11A and MERV13A
- Superior dust holding capacity
- Versatile applications in HVAC, indoor air quality and, industrial air filtration

Mechanical filtration with 3D nanofiber structure.



The MecNa™ 3D nanofiber-structured filter media revolutionizes filtration technology by offering enhanced durability, ensuring long-lasting performance in various settings.

The mechanical filtration properties ensure consistent efficiency which is maintained throughout its life, outperforming electrostatic filter media whose performance can degrade over time.

With a low pressure drop, it supports efficient airflow and system performance while enhancing energy efficiency. Its superior dust holding capacity captures more contaminants before needing replacement, making it an ideal choice for diverse and challenging environments.

Discover the advantages of MecNa™ - outperforming other air filter media.

	MecNa™	Conventional nanofiber media	Meltblown nonwoven media
Nanofiber integration	Nanofibers embedded in media structure	2D nanofiber layer	Fine fiber media layer
Depth or surface filtration	Depth	Surface	Depth/ surface
Size of fiber	Submicron fiber size	Submicron fiber size	Micron sized fibers
Dust holding capacity	Highest DHC	Lowest DHC	Moderate DHC
Does efficiency drop with APP-J conditioning or IPA discharging?	No	No	Yes
Resistance to airflow	Lowest resistance	Highest resistance	Moderate resistance
Meanflow pore size	Moderate	Smallest	Moderate



Versatile applications across industries.

MecNa's™ mechanical nanofiber structure ensures the consistent delivery of clean and purified air, seamlessly adapting to a wide range of environments. As it guarantees best air quality, it is the optimal solution for both conventional and challenging settings. Therefore it can be used for indoor air quality, industrial air filtration and other critical applications.

Indoor air quality

- HVAC Systems
- Ventilation systems e.g. in healthcare facilities, hotels, etc.

Industrial air filtration

- Air pollution control
- Power plants
- Gas turbines
- Data centers

Other critical application

- Clean rooms
- Animal farms