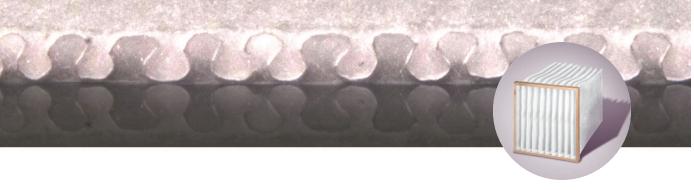


NANOWAVE® FOR HVAC





NanoWave brings multiple performance benefits to filter manufacturers and consumers:

- Only synthetic media to achieve an "A+" energy rating for HVAC pocket filter.
- Lowest total-operating cost with low pressure drop and long filter life.
- Reduced energy usage due to lowest pressure drop.
- Can be stitched, welded, pleated and incinerated.
- Meets all global air filtration standards.

Hollingsworth & Vose

Advanced Materials for a Cleaner World®

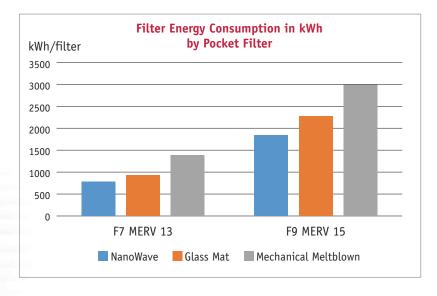
Hollingsworth & Vose's NanoWave air filtration media for HVAC outperforms all competitive media.

NanoWave, H&V's proprietary extended surface synthetic media, offers the lowest pressure drop and highest dust loading values on the market. Additionally, it can be incinerated so it is environmentally friendly. NanoWave complies with all current and forthcoming global standards (ASHRAE 52.2, EN779:2012, GB/T 14295-2008, ISO 16890).

EN779:2012 and mechanical filtration

Filter life tests conducted by industry experts prove that only mechanical filtration provides constant filtration efficiency and guaranteed protection to people and processes over a filter's life. NanoWave is an extended surface mechanical filter media that meets EN779:2012 efficiency requirements.

Based on independent element tests NanoWave provides the highest energy rating of any media in pocket filter applications.



In a typical HVAC unit with 4 pre and 4 main filters, NanoWave can generate energy savings of \$400 per year compared to glass mat and \$1,200 compared to mechanical meltblown filters.



Global Presence Hollingsworth & Vose is a seventh generation family-run company and a global leader in the supply of advanced materials for filtration, battery separator and industrial applications. The company operates manufacturing sites and research centers in the Americas, Asia, Europe, and India and is headquartered in Massachusetts, USA.

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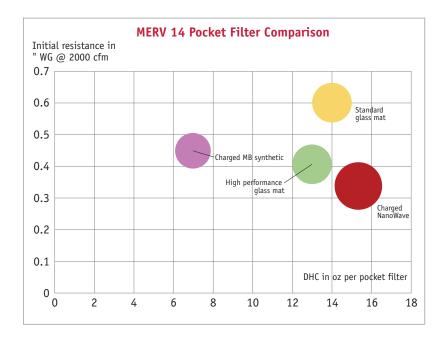
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ASHRAE 52.2 and charged filter media

ASHRAE 52.2 standard mandates that a filter's initial efficiency and pressure drop determine the MERV rating. Due to NanoWave's mechanical design, even when discharged, NanoWave maintains a higher minimum MERV rating than meltblown media. Additionally, the low pressure drop inherent in its design results in longer filter life than glass mat.



Development and testing capabilities

H&V constantly reviews market feedback in order to extend the NanoWave product line to offer solutions (M5-F9/ MERV 7- MERV 15/ PM1- PM10) for additional applications and emerging market needs.

NanoWave filter media can be used to meet a broad array of filtration applications:

- Residential and commercial rigid filter
- Residential furnace filters
- Auto cabin air filters
- Vacuum cleaner bag and exhaust filters

Hollingsworth & Vose leads the market in testing capabilities. Operating manufacturing and test facilities globally, H&V is able to aide customers with media selection and processing, as well as to offer converting guidance and application training.

www.hollingsworth-vose.com



