

## ABOUT MONADNOCK



Monadnock Non-Wovens LLC (MNW), founded in 1998, manufactures meltblown synthetic media for a wide range of technical applications at its plant in Mt. Pocono, PA. MNW produces specialty fabrics and lofted nonwovens for the automotive, biotechnology, filter, and industrial markets.

Monadnock Non-Wovens is a division of Monadnock Paper Mills, Inc. (MPM), which was established in 1819 in Bennington, New Hampshire. Approaching its 200<sup>th</sup> anniversary, MPM provides a diverse range of products including technical/specialty, premium printing and packaging papers for leading brands worldwide.

## WHAT WE DO

Monadnock Non-Wovens designs and makes its own fiber production equipment and manufacturing lines. The manufacturing plant presently has seven melt blown nonwoven lines that can produce lofted nonwovens and roll goods up to 70 inches wide.

Monadnock developed an innovative packaging method that preserves the loft of the lightweight nonwoven product during the transportation and die cutting operation. This packaging is recyclable.

## PROVEN TECHNOLOGY AND PRODUCTS

Monadnock Non-Wovens has been serving automotive Tier 2 suppliers for over 16 years. It manufactures a lightweight acoustical insulation well known in the automotive industry that is sold to industry approved die cutters. This insulation material is currently used for acoustical products found on a wide range of cars, trucks, vans, and SUVs made by both domestic and transplant OEMs.

## COMMITMENT TO QUALITY

Monadnock Non-Wovens is certified to the new ISO 9001:2015 Quality Management System (QMS) Standard by SGS Certification Services. Some of the key updates in ISO 9001:2015 include an increased emphasis on risk-based thinking, understanding internal and external factors that can have an effect on an organization, and leadership involvement.

## SUSTAINABLE MANUFACTURING

All MNW products are manufactured with 100% renewable electricity. Through a significant investment in Green-e® certified renewable wind-powered energy certificates (RECs), MNW has offset its entire electrical requirements while supporting new, additive wind-powered electricity generation.

All MNW polypropylene meltblown products are recyclable.



## HPAM® - THE NEXT GENERATION OF SOUND ATTENUATION MEDIA



Monadnock Non-Wovens developed HPAM® High Performance Acoustic Media for the automotive market. HPAM is a fine fiber, polypropylene meltblown, lofted nonwoven that significantly improves sound absorption at lower frequencies through an enhanced fiber matrix and a tunable scrim on both sides. The two-sided product allows interchangeable left hand and right hand parts reducing inventory SKUs.

With this tunable scrim, Monadnock HPAM provides excellent sound absorption at low weight allowing vehicles to *meet acoustical targets* while addressing challenges of light-weight aluminum bodies and improved acoustics. The acoustical scrim has been upgraded to achieve better sound absorption than higher weight competitive materials.

A lightweight NVH (noise, vibration and harshness) solution, HPAM® meets the industry demands for weight reduction, fuel economy, low noise levels, and consumer satisfaction in an acoustical product. It also provides OEMs with cutting edge technology for addressing automotive NVH concerns.

HPAM® is a trademark of Monadnock Non-Wovens LLC and is registered in the United States.

### HPAM CHARACTERISTICS

HPAM is highly compressible making it extremely suitable for use in cavities with varying thickness. It may be die cut with existing equipment - no tooling or equipment modifications are necessary. Die cut parts can have a perimeter seal to encapsulate loose fibers and eliminate product degradation.

- Thickness range from 11.5 – 27.0 mm
- Weight range from 16 – 50 gsf; 172 – 558 gsm

### APPLICATIONS

Die cut parts made from HPAM® can cover the following applications.

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| ✓ Door panel insulators                       | ✓ Insulators for spare tire cover               |
| ✓ Headliner acoustical pads                   | ✓ Insulators for spare tire storage area        |
| ✓ Pillar trim insulators - A, B, C, D pillars | ✓ SUV & sedan rear quarter panel insulators     |
| ✓ Center console insulator                    | ✓ Rear under seat insulators                    |
| ✓ Instrument panel insulators                 | ✓ SUV lift gate insulators                      |
| ✓ Trunk trim acoustical pads                  | ✓ Dissipative dash insulators                   |
| ✓ Package tray acoustical pads                | ✓ Die cut parts shaped to replaced molded parts |

### MADE WITH THE ENVIRONMENT IN MIND

Constructed with 100 percent virgin polypropylene, HPAM is lighter than competitive products - critical for fuel economy, and it is fully recyclable at the end of its useful life. As with all MNW products, HPAM is made with 100 percent renewable electricity through the purchase of Green-e certified renewable wind power energy certificates.

