

Welcome to the fall addition of the Micrex Newsletter. For previous newsletters please see: [www.micrex.com/newsletter.htm](http://www.micrex.com/newsletter.htm).

New Life for Traditional Nonwoven Products:

Customer's curiosity about how the Micrex Process might help put new life in well established products inspired us to crepe a sample using ubiquitous carded, chemically bonded, polyester nonwoven. The results were a surprise. After being Microcreped and heat set (at 330 deg F.) nearly all the carded (parallel) fibers function as machine direction springs providing good stretch and a surprising level of resilience. Because fibers are low denier, the crepe pattern is so fine it is nearly invisible. Carded, latex bonded nonwovens are one of the grandparents of spunlace and other more recent nonwoven technologies and the Micrex Process can offer new ways to enhance these products.

Can Spunlace Simulate a Knits Stretch and Softness?

Many spunlace grades don't have balanced stretch. They often stretch well in the cross machine direction but poorly in the (MD) machine direction. MD stretch from creping can make a spunlace nonwoven feel more like a knit with balanced extensibility and softer hand. Done properly, the crepe pattern is so fine that it is nearly invisible and at first touch, customers may think they have a knit fabric in hand. Importantly, Micrex through our contract converting capability provides the opportunity to offer a brand new product without capital investment.

Filter Media - Increased flow in the same space!

Filter cartridges, bags, sleeves, etc. all have specific surface areas and controlled permeability. It is usually desirable to provide greater flow and more dirt holding capacity thus extending the filter's useful life and value. Creping (prior to pleating) is an interesting way to add more surface area that can reduce pressure drop and increase contaminant collection. Creping filter media can also add area to flat media (plate & frame filters) and deliver the extra flow and capacity needed to provide longer life and competitive edge.

How do your nonwovens "sound"?

Buyers of new automobiles, kitchen appliances or even a new home don't want them to be noisy. Those who make these products are competing to find the best ways to appeal to customers by controlling noise. While often used to dampen noise, nonwovens still have room for improvement. The factors influencing noise dampening include the materials, densities, and shapes. There is an interesting potential to improve noise reduction (compared to flat nonwovens) by giving them specific folding patterns (creping). Amplitude and frequency can be chosen to provide angles of reflection to improve control of medium to high frequency noise often the most annoying part of the spectrum. A creped nonwoven in an enclosure might also act as a (Helmholtz) resonator trapping unwanted frequencies and making our world less noisy. Many of us spend most of our lives indoors and it would be interesting to learn if anyone has developed the technology to use creped nonwovens to help keep noises out?

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If there is anything we can do to improve your products through increased softness, bulk, stretch, hand improvement, absorbency, drape and decorative effects in paper, textiles and nonwovens -- please contact us.

Richard.Walton@micrex.com, President  
Peter.Smith@micrex.com, Vice President  
Drew.Horn@micrex.com, Product Development

Micrex Corporation  
17 Industrial Road  
Walpole, MA 02081 USA  
800.660.1915  
508.660.1900  
Fax: 508.660.1818  
[www.micrex.com](http://www.micrex.com)

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