

INDA's e-Filter Newsletter

The Filtration Industry's Information Hub

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Welcome to e-FILTER, sponsored by INDA, Association of the Nonwoven Fabrics Industry (www.inda.org). It is sent every other month to executives within the global filtration business and focuses on the latest news, new products, patents, legislative issues and commentary in the filtration industry. Check out the information at the end of this newsletter on how to subscribe or submit your company's information for inclusion.

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Filtration 2009 Lives Up to Reputation as Largest Filtration Event in North America

Annual three-day industry event attracted over 1,400 Attendees to Chicago's Navy Pier last month

With the business of filtration playing an increasingly vital role in personal and business applications around the world, the Filtration 2009 International Conference and Exposition drew an impressive number of visitors and a total of 109 exhibitors to Navy Pier in Chicago from November 17-19.

Living up to its reputation as the largest filtration industry event in North America, Filtration 2009 attracted 1,426 attendees, an increase from the previous year's event in Philadelphia. It also offered three days of seminars and tutorials covering all aspects of the supply chain.

The exposition consisted of a strong contingent of filtration-related companies that showcased their manufacturing and processing equipment, filtration media, associated filter components and testing services, as well as liquid and air filters.

"Attendees at Filtration 2009 were able to see and touch the latest developments in raw materials, machinery and finished products," says Rory Holmes, President of INDA, Association of the Nonwoven Fabrics Industry, organizer of the annual event. "The well-attended Conference offered a host of papers on the latest technology and issues impacting the business of filtration and the two-day Exposition provided attendees a chance to experience the products that are the future of this industry."

As Holmes points out, Filtration 2009 was held at a time when the products made and sold by exhibitors and attendees are taking on increased importance in everyday lives. "The business of filtration is at the forefront of the battle against airborne diseases and illnesses, as well as the demand for better interior air quality in domestic and commercial applications, and all of these were certainly topics of interest at Filtration 2009."

Among the highlights of Filtration 2009:

- ❑ The theme for this year's Filtration 2009 Conference was "Creating value and finding opportunities in difficult economic times." The three-day program included industry experts who specifically addressed vital topics under the general themes of "Creating Value" and "Finding Opportunities."
- ❑ Two Keynote Addresses offered Conference attendees an opportunity to hear from a pair of global experts on topics pertinent to the business of filtration. First, Rick Eastman of Baird Securities provided a presentation entitled "The State of the Economy, the Stock Market, and Implications for the Industry/Filtration Sectors." Then Ben DuPont, co-founder and

president of yet2.com, a global marketplace for technology, offered a presentation called “Intellectual Property and Innovation in Filtration.”

- Once again, a Best Booths competition was held to recognize and reward the most attractive and innovative displays at Filtration 2009. Winners were announced in three categories. Ahlstrom received recognition for the Best Large Booth (200-square feet or larger), while the Best Mid-Size Booth Award went to DelStar Technologies. Two Best Small Booth Awards were presented, to CEREX Advanced Fabrics and Clean & Science.

The Filtration 2009 international Exposition and Conference was organized by the industry, for the industry, and the Filtration Committee was headed by Co-Chairs Eric Hanson, of Air Techniques International, and Jay Forcucci, Filtrair, Inc.

Committee members include Jérôme Barrillon, Ahlstrom Filtration; Neville Bugli, Consultant; Walter Chappas, Allasso Industries; Andrew Giles; Jean Girard, Texel; Rowland Griffin, Monadnock Non-Wovens; Thomas Justice, Flanders Corporation; Norman Lifshutz, Hollingsworth & Vose; Per Lindblom, Hollingsworth & Vose; Fred Lybrand, Elmarco; Christine Murray, Freudenberg Filtration Technologies; Chris Peart, HDK Industries; Uwe Peregi, Herrmann Ultrasonics; Joseph Petrosky, Lydall Filtration Separation; Carol Santos, Batson Group; David Stockbower, Fiberweb; R. Vijayakumar, Aerfil.

Filtration 2010 will be back on the East Coast and is scheduled for November 30-December 2, 2010, at the Pennsylvania Convention Center in Philadelphia, Pennsylvania. For more information: www.inda.org.

INDA Names Five Finalists for 2010 Visionary Award

Five consumer products covering a range of end-use applications have been nominated as finalists for the prestigious 2010 Visionary Award.

Now in its ninth year, the Award – which is given annually to a new consumer product that utilizes nonwoven fabrics in its final form – will be presented at the VISION 2010 Consumer Products Conference, January 20-22, 2010 in New Orleans, Louisiana. The finalists will make presentations during VISION 2010 and conference attendees will vote on the recipient of the 2010 Visionary Award.

“Even in the challenging business climate of the past 12 months, consumer products’ companies have invested in the development of new products and these five finalists of the 2010 Visionary Award are proof of the success of these efforts,” says Visionary Award Chairman Michael Jacobsen, of INDA, Association of the Nonwoven Fabrics Industry, organizer of the annual Vision Consumer Products Conference.

“They represent the most significant advances in incorporating nonwovens technology into consumer products and they are being recognized not only for

their technical attributes, but for their novel use of nonwoven fabrics as well,” Jacobsen adds.

The five finalists are:

The Dial Corporation/Henkel, Purex Complete 3-in-1 Laundry Sheets

The product does it all in one easy-to-use sheet. Consumers can use the same sheet from washer to the dryer providing cleaning, softening and anti-static benefits. Each sheet contains the proper amount of detergent, softener and anti-static agent for a single load of wash.

Advanced Cleaning Technologies, The Ultimate Cloth

The Ultimate Cloth is a patented, exclusive technology that makes it “the best cleaning cloth in the industry today.” The Ultimate Cloth is a streak-free window cleaner that cleans and polishes windows, mirrors, windshields and glass as well as many soft surfaces such as leather and vinyl.

Rockline Industries, Regenerated Cotton Wipe

The substrate for the Regenerated Cotton Wipe is made from 100% biodegradable materials — the blend is 25% viscose and 75% cotton. The cotton is produced from the post-industrial waste from the manufacturing of T-shirts, and the recovery process to regenerate the cotton is energy and water friendly.

Procter & Gamble, Always Infinity feminine hygiene pad

This newest feminine hygiene pad from P&G features a soft cover sheet designed to work with the pad's Infinicel core, Microdots for fast absorption, a new wing design for secure protection, form-fitting channels for leakage protection and a wider design in the back to provide increased coverage.

Superior Felt and Filtration/Wein Products, Fitseal disposable respirator mask

This mask employs nonwoven tribo technology coupled with a medical adhesion system that makes it an effective disposable mask in swine flu/H1N1 protection as well as for use in protection in dealing with SARS, Avian Bird Flu, disaster clean up, emergency response, terrorism and tourism abroad.

Last February at VISION 2009 in New Orleans, Ahlstrom's Disruptor™ nonwoven water filter media received the 2009 Visionary Award. Previous recipients include Kimberly-Clark's Spa Sensials personal care treatment (2008); Covidien's (Tyco) Swim Pants (2007); Chicopee's Disaster Relief Blanket (2006); Fiberweb's Resolution Print Media (2005); Church & Dwight's Brillo Scrub 'n' Toss (2004); FMJ ChemBio's Civilian Quick Escape Mask (2003); and Procter & Gamble's Swiffer (2002).

For complete program and registration information for VISION 2010: <http://www.inda.org/events/vision10/index.html>.

Nominations Still Open for IDEA10 Achievement Awards

In other awards news, nominations are still open for the prestigious IDEA10 Achievement Awards, which are once again being co-sponsored by INDA,

Association of the Nonwoven Fabrics Industry, and *Nonwovens Industry* magazine. The awards, presented every three years in conjunction with the IDEA International Engineered Fabrics Exposition and Conference, are designed to award innovation within the nonwovens and engineered fabrics industries. Nominations will be accepted through December 31, 2009.

The IDEA10 Achievement Awards will recognize the leading companies, individuals and new products in the global engineered fabrics industry. The awards will be presented on the show floor during IDEA10, April 27-29, 2010, at the Miami Convention Center in Miami Beach, FL.

All members of the global engineered fabrics industry are eligible for the IDEA10 Achievement Awards. Nominations can be made in five categories through a number of outlets, including the INDA website at www.inda.org and through the *Nonwovens Industry* site at www.nonwovens-industry.com.

A Selection Committee will then select three finalists in each category, and in early 2010 members of the industry will have the opportunity to vote on the recipient in each category through the Nonwovens Industry and INDA websites.

“These IDEA Achievement Awards promote innovation and recognize outstanding achievement within the worldwide engineered fabrics community and it is fitting that they will be presented during IDEA10, the most important industry trade show of the year,” says Rory Holmes, President of INDA, the organizer of the triennial IDEA Conference and Exposition.

Nominations are being accepted in five categories:

- ❑ IDEA10 Equipment Achievement Award ... Given to the company with the best equipment new product introduction since IDEA07.
- ❑ IDEA10 Roll Goods Achievement Award ... Given to the company with the best roll goods new product introduction since IDEA07.
- ❑ IDEA10 Raw Material Achievement Award ... Given to the company with the best fiber/raw material new product introduction since IDEA07.
- ❑ IDEA10 Short-Life Product Achievement Award ... Presented for the best new disposable product utilizing engineered fabrics introduced since IDEA07.
- ❑ IDEA10 Long-Life Product Achievement Award ... Presented for the best new durable product utilizing engineered fabrics introduced since IDEA07.

Anyone with questions on the nomination process should contact project coordinator Michael Jacobsen at 201-396-7005; [mjacobson@inda.org](mailto:mjacobsen@inda.org)

INDA to Hold Wipes Webinar

In other INDA news, the association will offer — in association with *Nonwovens Industry* magazine — a Consumer Wipes Tutorial webinar on Wednesday, December 9th at 10:00-11:30 Eastern Standard Time. The webinar, which is available for a cost of \$150, is open to both newcomers and industry veterans.

The webinar will cover the 'A-Z's' of Wipe Technology, including:

- ❑ The basics of wipes production
- ❑ Become a better buyer
- ❑ Compare different technologies
- ❑ Get new ideas
- ❑ Get up to speed quickly
- ❑ Consider new technologies for your products
- ❑ Determine the advantages/disadvantages of processes

Featured nonwoven technologies include carding, spunlacing, needlepunching, dry form pump and coform.

Presented by industry veteran Rory Holmes, President of INDA, this is a cost effective way to learn the basics of this exciting market category.

To register, visit: [Wipes Webinar Registration](#)

FILTRATION INDUSTRY NEWS

Hollingsworth & Vose to Expand Capacity

In an expansion of its Adsorptive Filter Media technology platform, Hollingsworth & Vose plans to install a carbon composite filter media manufacturing line in the U.S. H&V's unique patented AFM technology combines particulate and gas phase filtration in one media to meet demanding customer adsorption requirements. Already produced at H&V's Hatzfeld, Germany site, the AFM technology platform provides a high degree of flexibility allowing the filter media adsorption performance to be tailored to specific environments. Other benefits include low dusting, extended filter life cycle, high capacity, high efficiency and good processability.

Mike Clark, Vice President & General Manager of H&V's High Efficiency & Specialty Filtration Business Unit said, "We see a growing market need for gas phase filter media and want to bring these capabilities to our North American customers. Expanding our AFM platform is consistent with our global strategy to provide the highest quality advanced technology filtration media to meet our customers' needs."

K-C Introduces High Efficiency HVAC Filtration Media

Kimberly-Clark recently introduced its newest line of high-efficiency filtration media for Heating, Ventilation and Air-Conditioning (HVAC) system air filters. Based on the company's patented, bi-component, nonwoven technology, the new media is ideal for a range of HVAC filter styles delivering MERV 11-15 performance.

The new Kimberly-Clark Filter Media delivers both high initial and high sustained particle capture efficiencies, helping to deliver excellent indoor air quality (IAQ) and keeping HVAC components clean for more efficient and less costly operation. It also maintains a low airflow resistance, which reduces

energy costs, as the HVAC system does not need to run as hard to deliver the required amount of air to the building.

The new media can be used in a variety of filter types, including pockets/bags, rigid cells, mini-pleats, v-banks, and aluminum separator filters. Use areas for HVAC filters made with the new media include commercial and institutional buildings, industrial filtration systems, gas turbine filtration systems, paint booths, laboratories, air purifiers, offshore oil rigs and more.

The 100% synthetic media is thermally bonded to prevent fiber shedding during manufacture or in use and features a mix of fiber diameters in a gradient density structure, with more loosely packed fibers on the upstream side and more densely packed fibers on the downstream side to aid in particle capture efficiency and prevent face-loading of the filter. The composite structure is highly durable and tear-resistant, making it less susceptible to damage during converting, transportation and installation.

The media's fibers are made from chemically inert polymers, making it completely safe to handle. In addition, the fibers are hydrophobic, preventing moisture absorption and resisting microbial growth. The media can be thermally, adhesively, ultrasonically, or stitch-bonded, providing a wide range of converting options. It is also pleatable with pre/post heat.

Filtration Consultancy Established

Clint Scoble, industry veteran, formerly president of BWF America and VP, Snow Filtration, has founded a consultancy dedicated solely to the textile based industrial filtration market. The company, Filter Media Services, LLC, will provide support to filter media manufacturers (woven, felted and non-woven), dust bag and liquid filter cloth converters and manufacturers of parts and accessories for filtration equipment. FMS will also serve end users of filter media and associations whose members use filter media in any form in their process and pollution control equipment. Based on prior experience, Filter Media Services will be of particular value to overseas manufacturers seeking to penetrate the U.S. filtration market.

Filter Media Services, LLC, based in Cincinnati, is central to many of the U.S. filter media producers and end users. Services offered cover every aspect of producing, marketing, selling and using filter media for process filtration or pollution control. A few of these services include technical support and diagnosis, sales training, fabric filter maintenance and training, spearheading new product or service introduction, plus partnering and strategic alliances. Greater detail is available on the company's website (www.filtermediaservices.com).

Filtration 2009 Showcased Host of New Products

A successful Filtration 2009 International Exposition and Conference organized by INDA recently took place on November 17-19 in Chicago, Ill. Among the interesting news at the show:

- ❑ **DelStar Technologies** used this year's Filtration Exposition to launch a new air filtration product, Alphastar Triboelectric Media, a unique electrostatic needlefelt manufactured by ECN Industries and exclusively distributed by DelStar. Alphastar Triboelectric Media, developed with a proprietary fiber blend, produces higher filtration efficiency at a lower resistance than similar weighted electrostatic products.

DelStar Technologies will sell Alphastar media as an extension of its filtration roll good collection, as well as incorporated into innovative composites. By utilizing layers of Naltex netting and DelPore meltblown media, the potential performance results of these composites will be unmatched in the filtration industry. DelStar Technologies will be introducing the benefits of Alphastar Triboelectric Media to the air filtration market. Its high dust loading capacity, with low pressure drop, will advance vacuum bags, cabin air filters and HVAC furnace filters. Its low resistance and excellent sub-micron particulate filtration efficiency will be important to facemask and medical filter manufacturers. The developmental composite products will provide further advantages for processing and reducing filter size and weight.

- ❑ Days after announcing a plan to expand its meltblown media capacity, **Hollingsworth & Vose** was at Filtration 2009 showcasing its proprietary technology called Capaceon. Designed to improve the lifetime of filters through higher dust holding capacity, Capaceon provides improved filter performance, a longer lifetime on identical size filters or the ability to decrease filter size for the same lifetime.

The Capaceon technology targets the heavy duty air, panel air, lube and fuel filtration markets. H&V was also showcasing its Nanoweb product line extensions, NanoWave and Perform products. Since the introduction of our Nanoweb technology, H&V has added two new product offerings to the mix—a Nanoweb media with an all-synthetic base layer and a flame retardant Nanoweb media. These two products offer the same high efficiency performance as other Nanoweb grades, with the added benefit of moisture resistance with the all synthetic grades and flame retardancy with the FR grades.

- ❑ **DuPont Protection Technologies** introduced DuPont Nomex KD, a new technology that combines Nomex and Kevlar fibers in a unique nonwoven filter material that improves upon the capabilities of existing filter materials. Designers of industrial air filters used in high-temperature applications such as asphalt production and cement clinker coolers will be able to use Nomex KD to create more efficient, more effective and potentially less costly filtration solutions.

“DuPont has been supplying Nomex fiber for use in hot-gas air filtration for many years,” said Kathy Kowalski, global marketing manager for Performance Materials—DuPont Protection Technologies. “With this new technology we have combined Nomex, known for its ability to withstand extreme temperatures, with Kevlar, an exceptionally strong fiber used for ballistic protection. The resulting fabric delivers up to 60% better filtration performance than standard Nomex.”

DuPont Nomex KD is produced in a nonwoven process forming fibrillated microfibers that increase the filtration surface area. The larger surface area leads to greater filtration efficiency and less dust leakage. High dimensional stability could improve durability and extend bag life, and in applications requiring spark resistance, the stability of Nomex KD in heat and flame conditions helps maintain bag integrity.

- ❑ **General Nonwovens** exhibited light- and heavy-weight polyester filter media ranges sold under its FilterGen brand. These products are used as carrier media or as a reinforcement layer for air or water filtration. FilterGen is a 100% synthetic filter consisting of either polyethylene terephthalate (PET) or polypropylene (PP). The company’s thermal bonded polyester and polypropylene nonwoven layers are chemical free.

Under the FilterGen brand General Nonwovens can produce nonwovens and composite filter media for the following filtration end uses: gas turbine filters; pleated panel filters; automotive cabin air filters; filter media for spas; oil and liquid filters; casting substrate for liquid filtration; support media for pleated filter cartridges using membranes; hydraulic oil filters; cartridges for heating and ventilating filters; technical and analytical filters; coolant and lubrication filters; and dust collection filters.

- ❑ **Blue Heaven Technologies** has developed a high temperature duct to test air filters at high temperatures up to 300 degrees F (149 degrees C). Filters can be tested at full flow, up to 4000 CFM with pressures to 25 inch w.g. The technology was on display at Filtration 2009. The new duct is designed with observation ports to allow visual inspection of the filter throughout the test. Any deformation, buckling or degradation can be observed and measured via a laser detection system. Real world conditions can be simulated by running the duct at the desired temperature and flow for any period of time to determine the long-term effects.
- ❑ **Sealant Equipment** highlighted two specific technologies. The See-Flo 7 Pneumatic Meter, Mix Dispense System has a pneumatic drive meter design that is simple to use and will last for many years. It offers economical, reliable and trouble-free continuous flow metering and a regulator adjustable flow rate feature to meet product flow rate requirements. It is designed for filled and unfilled low to medium viscosity materials and offers a mechanically adjust ratio for different formulas or durometers. In addition, a ratio check feature easily verifies

the mix ratio and an optional adjustable shot size feature allows quick volume adjustment.

Also featured was Sealant's Servo-Flo 704 Servo-Gear Meter, Mix and Dispense System. The dual independent-servo drive gear meter design provides many benefits for the user, including electronically change ratio when using different formulations, fast and precise ratio adjustment for varying durometer, quick change of dispense volume when changing filter sizes and the ability to change flow rate on-ratio during the dispense cycle and to program multiple flow rates during dispense for quality control.

The Servo-Flo 704 systems include resin and catalyst double-acting or diaphragm supply pumps or tanks and supply hoses, 2200-545 Series No-Drip Mix and Dispense Valves, dispense hoses and mixers.

- While its polyurethane potting adhesives certainly offer increased production efficiency, **BayOne Urethane Systems** highlighted its sustainability efforts at Filtration 2009. The company tailors its products to operate most efficiently on the plant floor, taking advantage of the unique properties of polyurethane elastomers and foams to minimize materials consumption, plant footprint, and processing time.

BayOne understands that sustainability is vital to its customers' process and the company is dedicated to providing systems that can help achieve a company's sustainability goals. To that end, its polyurethanes reduce materials consumption, eliminate stack emissions, eliminate reportable emissions, are 100% MDI systems and reduce energy consumption.

BayOne does this by polyurethane systems are tailored for a unique combination of processing and performance requirements. For example, the material cost savings of the foam adhesive are achieved through the material's expansion properties, requiring a drastically lower shot size (75%-80% reduction) versus plastisol. In turn, its foam adhesives are formulated with a low viscosity for superior self-leveling properties with minimal wicking, helping you to keep production cycles humming with a minimal shot size.

- **Lenzing's Business Unit Nonwovens** exhibited at Filtration for the first time to highlight is Viscose and Tencel fibers for use in filter manufacturing. "We have experienced increasing interest in Lenzing Viscose and Tencel fibers for filtration applications and Filtration 2009 provides an ideal platform for us to network with existing customers and establish new relationships," explains Chris Potter, business manager-technical products.

Business Unit Nonwovens reinforces the demands of the filtration industry by focusing on innovation in this area. "Continuous product development enables us to tailor the properties of our fibers," adds

Potter. “In that way optimized performance satisfies the individual requirements of our customers and their customers.”

Being food grade, Lenzing Viscose is the established benchmark with a long history of use in food and beverage filtration. Tencel offers a new dimension in filtration utilizing the fiber’s propensity to fibrillate. These circular shaped microfibers deliver high efficiency filtration without impairing operating performance. The end uses are numerous, including cigarette filter tips, automotive fuel and oil filters as well as industrial air and liquid process filters.

THAT'S ALL, FOR THIS MONTH ...

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