

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 monthly 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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That's all, for this month...

INDUSTRY NEWS

EPA'S PM 2.5 MICRON STANDARD BACK IN COURT

From the INDA Washington, DC Office: Early last year, the U.S. Supreme Court handed down a decision thought to end legal challenges to EPA's 1997 standard limiting emissions of particulate matter to no more than 2.5 microns in size. But now the parties are back in court.

In legal arguments before the U.S. Court of Appeals for the District of Columbia Circuit, lawyers for those challenging the standard asked the Court to invalidate EPA's PM 2.5 standard on grounds that the Agency should have considered a less stringent alternative, and then explain why it was not adopted. Lawyers for the U.S. government responded that EPA *had* studied less stringent standards and determined that a lesser approach could not be justified.

The government's argument was supported in legal briefs filed in the case by the American Lung Association. While EPA continues to implement the 2.5 PM standard as this latest challenge plays itself out, it will likely take quite some time for the courts to resolve the matter. This is especially true considering that, despite the verdict reached in the case by the Court of Appeals, the losing party can be expected to appeal to the Supreme Court once again. In the meantime, EPA is predicting that it will survive the current challenge.

PALL ACQUIRES USFILTER'S SEPARATIONS GROUP

Pall Corporation last month signed a definitive agreement to purchase the Filtration and Separations Group (FSG) from USFilter Corporation for a reported \$360 million. The transaction is expected to be completed by the end of this month.

FSG, with approximately \$270 million in sales, designs, manufactures and sells filtration products for the separation and purification of liquids and gases. The company serves the food and beverage, industrial, biotech and pharmaceutical industries, among others. FSG provides end-users with an array of filter elements, housings and systems.

FTC AWARDS GENERIC FIBER DESIGNATION TO CARGILL DOW

Cargill Dow LLC last month announced a Federal Trade Commission (FTC) designation for its NatureWorks fibers. The

designation classifies PLA as a new generic fiber, while the trade name will remain NatureWorks.

To receive new generic classification Cargill Dow had to show: properties and chemical composition radically different from other fibers; what commercial use is foreseen; and that the new generic is of importance to the public. PLA now joins other classifications, including cotton, wool, silk, nylon and polyesters, as a recognized fiber category.

For a fiber to be classified as PLA it must be a synthetic fiber manufactured from polylactic acid or poly lactate derived from naturally occurring sugars, such as those in corn or sugar beets. Cargill Dow originally petitioned the FTC to call this fiber "Synterra," but the name was rejected because it could be confused with other products already on the market.

As a fiber, NatureWorks combines the most desired physical characteristics of natural fibers, such as wool, cotton and silk, and conventional synthetics. The fibers show performance as well as environmental benefits that result from using renewable resources like corn.

Cargill Dow recently completed construction of the company's first world-scale PLA manufacturing facility in Blair, NE. At capacity, the manufacturing plant will produce up to 300 million pounds (140,000 metric tons) of PLA per year. The result will be a dramatic increase in the commercial availability of NatureWorks fibers in conjunction with consumer products being introduced across the market throughout 2002 and 2003.

In a somewhat related move, the FTC also published notice on February 15 that it is considering a generic designation for "a specifically proposed subclass of polyester fibers" from DuPont with the suggested name "elasterell-p."

EFP RECEIVES FDA APPROVAL FOR FILTER

Emergency Filtration Products has received approval of a 510K application for its 2H Technology Breathing Circuit Filter (2HBCF). The 2HBCF features patented 2H Technology, which utilizes a combination of hydrophobic and hydrophilic filter media encased in a sealed embodiment. The filters act in concert to capture and isolate infectious pathogens by removing moisture and particulate from airflow at high levels of efficiency.

EMPYREAN ACQUIRES BELFIBER AND BASALT FIBER

Empyrean Communications has acquired two companies, Belfiber Corporation and Basalt Corporation, via an issuance of 10 million shares of Preferred EPYC shares for the majority shares of Belfiber and the issuance of 13 million shares of Common 144 shares of EPYC stock for 100% of Basalt Fiber.

Belfiber markets imported basalt and fiberglass fiber materials. Basalt Fiber, when fully operational, will produce and market continuous basalt fiber and related products to global markets. Basalt fiber, an advanced technology for the fiber and composites industry, replaces commonly used E or S Glass products and other conventional fiberglass products with better products at competitive prices.

CUMMINS ADDS NEW BUSINESS UNIT

Cummins Inc. has formed an International Distributor Business Unit. This is the fourth business unit for the company, joining the Power Generation Business, Engine Business and Filtration Business.

The International Distributor Business consists of 17 wholly owned and three joint venture distributors with 111 locations that provide Cummins products and related services to end users in 50 countries.

OSMONICS' CUSTOMERS CAN NOW SHOP ONLINE

Filter supplier Osmonics now offers online shopping at www.shop.osmonics.com. Existing customers may access the secure, online environment to conduct purchasing transactions that could be done previously only via phone or fax. At www.shop.osmonics.com, Osmonics business partners have capabilities such as real-time order entry and order tracking, viewing product availability and pricing, creating personal shopping lists, changing unshipped orders and receiving order updates.

DANA TO CONSOLIDATE PRODUCTION

Dana Corp. has revealed plans to move manufacturing from its chassis parts plant in Oakwood Village, OH, to a Wix Filtration Products Division plant. Wix and the Dana Brake and Chassis Division are subsidiaries of Dana Corp., Toledo, OH.

The filter manufacturing and distribution operations should be out of the Oklahoma City plant by July, Fisher said. The chassis parts operation will move in during the summer. Ironically, the company's announcement that it would move its Wix operations from Oklahoma City to Gastonia, NC, came soon after the plant won the Oklahoma Quality Award for Excellence.

Dana late last year unveiled a restructuring plan that called for the closings of about 30 plants and cutting more than 15% of its work force after the company suffered an \$8 million third-quarter loss.

U.S. MICROBICS FILES CARBON TREATMENT PATENT

U.S. Microbics and its wholly owned technology subsidiary, XyclonyX, recently filed a patent application for the "Treatment of Contaminated Activated Charcoal" with the U.S. Patent Office. The invention relates to the treatment of carbon filtration systems and the use of micro-organisms for removal of contaminating hydrocarbons from such systems. The patent

application follows from the successful field trials using Bio-GAC, a blend of hydrocarbon-eating bacteria, to regenerate used carbon from water treatment systems used in refineries and similar to carbon filtration systems used by consumers in their kitchen.

PURADYN RETAINS INVESTOR RELATIONS FIRM

puraDYN Filter Technologies has retained the services of The Anne McBride Company as its investor relations representative. puraDYN manufactures and markets the puraDYN bypass oil filtration system, a highly efficient unit that continuously cleans lubricating oil by reducing solid contaminants to 0.25 micron, and removing liquid contaminants. puraDYN recently completed a listing on the American Stock under the symbol PFT.

SUPPLIER NEWS

JENTEX TO DISTRIBUTE ATEX MELT BLOWNS

Jentex has entered into a U.S., Mexico and Canada distribution agreement with Atex, Milan, Italy, for products produced on its new melt blown production line. Atex is the parent of Atex, Gainesville, GA.

GREEN BAY ADDING SPUNLACE CAPACITY

Green Bay Nonwovens is adding a 4.5 meter spunlace line with wood pulp capability. The new line will be housed in a 65,000 square foot addition to the company's Green Bay plant and is expected to be complete by June 2003. With a current spunlace capacity of 12,000 tons, Green Bay sells to a range of end use markets including baby and feminine hygiene, consumer cleaning and disinfectant wipes, food service and industrial wipes, medical, filtration and home furnishings.

ASSOCIATION NEWS

INDA ANNOUNCES INDUSTRY SLOGAN

In a move to upgrade the image and further define the “nonwovens” industry, INDA, Association of the Nonwoven Fabrics Association, has revealed a new slogan to combine the heritage of the nonwovens industry with its highly technical present and future. The new logo is "Nonwovens * Engineered Fabric Solutions," and INDA is asking its 260 member companies worldwide to include it on all of their promotional and product literature whenever appropriate.

The association will be including the slogan on all of its electronic and printed materials. The slogan is the result of a year of extensive research, which included polling all of its INDA members on their preferences from six final suggestions.

ATME-I AND IFAI TO ‘CO-LOCATE’ THEIR TWO SHOWS

Sponsors of the American Textile Machinery Exhibition-International (ATME-I) and the Annual Exposition of Industrial Fabrics Association International (IFAI Expo) have announced plans to “co-locate” their events in 2006. The organizers point out that the two events are not being merged; rather they will be co-located in the Georgia World Congress Center (GWCC) in Atlanta, on the same or overlapping dates, no later than November 2006.

FINANCIALS

PALL REPORTS SECOND QUARTER RESULTS

Pall Corporation late last month reported sales and earnings results for the second quarter and six months of fiscal 2002, which ended January 26, 2002.

Sales for the second quarter were \$285.4 million, compared to \$304.7 million last year. Foreign exchange rates reduced the reported sales by 2.5%, or \$7.7 million. Earnings for the quarter were \$18.4 million.

Sales for the six months were \$559.6 million compared to \$582.8 million last year. Foreign exchange rates reduced sales 2% or \$10.7 million. Earnings for the six months were \$37.8 million, compared to \$55.5 million.

Eric Krasnoff, Pall's Chairman and CEO, said, "Pall is still very much a 'razor blade' business and we reflect the market conditions of our major customers. The industrial half of our business continues to endure a very challenging operating environment. The slump in the semiconductor sector, commercial aerospace and a generally weak US economy caused the shortfall in sales and earnings for the quarter. The weakening of the Yen in the quarter further impacted these results.

The news from the Life Sciences side of Pall is brighter. Operating profit moved ahead over 30% in the quarter on a sequential basis. Robust biotechnology sales enabled the Pharmaceutical group to grow 10%. The overall BioPharmaceuticals segment grew 7.5%. In the Blood segment, sales were down 5% while unit sales were up 12% in the quarter.

On the Industrial side, Microelectronics sales decreased 41% in the quarter. Aerospace grew 9.5% in the quarter. Strong sales to the Military aerospace market partly offset declines in sales to a Commercial Aerospace industry still reeling from September 11. Good growth in the Marine Water business buoyed the Aerospace results. General Industrial sales were flat in the quarter against a backdrop of malaise in the U.S. Industrial market. Bucking the trend, the non-cyclical parts of General Industrial - Power Generation, Food and Beverage and Water Processing - grew 16% as a group.

DONALDSON ANNOUNCES RECORD QUARTER, SIX MONTHS

Donaldson Company late last month reported record net earnings of \$20.8 million for the second fiscal quarter ended January 31, 2002, up 14.7% from \$18.1 million last year. Revenue was \$264.3 million, down 5.5% from a record \$279.6 million a year earlier. Gross margin for the quarter was 30.8%, essentially equal to the 30.9% from last year.

For the six-month period, net earnings totaled a record \$40.5 million, up 16% from \$34.9 million last year. Revenue was \$552.7 million, down 2.9% from \$569.5 million last year.

Among its different product categories:

* Continued low levels of industrial capital spending drove weakness in Industrial Products, with sales in the second quarter of \$124.6 million, a decrease of 11.6% from a record \$141.0 million in the prior year. Year-to-date, Industrial Products sales were \$256.5 million, a decrease of 2.7% from a record \$263.7 million in the prior year.

* Dust collection product sales in the second quarter were \$44.1 million, a decrease of 21.7% from a record \$56.3 million last year.

* Sales of special application products in the second quarter were \$28.1 million, a decrease of 14.6% from a record \$32.9 million last year. Disk drive filter sales were down from last year, as were photolithography filtration sales, reflecting the weakness in the computer, electronics and semiconductor markets that began a year ago. Year-to-date, special application product sales were \$54.6 million, a decrease of 11.2% from a record \$61.4 million last year.

* Engine Products sales for the second quarter were \$139.7 million, an increase of 0.8% from \$138.6 million last year. This marked the first year-over-year quarterly increase since the

first fiscal quarter of 2001. Year-to-date, revenues were \$296.2 million, a decrease of 3.1% from \$305.8 million last year.

* Aftermarket product sales in the quarter were \$76.0 million, a decrease of 3.4% from \$78.7 million last year. Orders per day bottomed out midway through the quarter, improving slightly in late January as inventory levels at parts dealers and distributors were taken to very low levels.

LYDALL ANNOUNCES 4Q AND YEAR-END NUMBERS

Lydall recently announced financial results for the fourth quarter and year ended December 31, 2001.

For the quarter, income from continuing operations was \$2.4 million. Net income for the fourth quarter of 2001 was \$1.9 million, compared with \$3.3 million a year earlier. Net sales from operations for the quarter were \$52.9 million compared with \$57.2 million for the fourth quarter of 2000. Gross margin improved to 29.2% of sales in the fourth quarter of 2001 compared with 28.3% in 2000. Se

For the full year, income from continuing operations was \$7.5 million, compared with a loss of \$3.6 million. Net income was \$7.4 million, compared with a loss of \$2.4 million, or \$.15 per share in 2000. Gross margin for 2001 improved to 28.3% of sales compared with 26.3% in 2000. Net sales for 2001 were \$223.6 million compared with \$261.1 million in 2000.

Net sales of the Filtration/Separation Segment were down 11% in the fourth quarter of 2001 compared with the same quarter in 2000. Net sales for the year declined by 2% year over year. Operating income, 21% lower in the fourth quarter of 2001 compared with the fourth quarter of 2000, was down 29% for the year.

Sales of air filtration products declined 6% year over year due principally to softness in commercial construction domestically and declines in new clean-room construction in

Asia. This was partially offset by stronger sales of air products in Europe.

NEW PRODUCTS

MIDMAC CARTRIDGE ASSEMBLY MACHINE

Midmac Systems, St Paul, MN, has introduced a “new and improved” Automatic Filter Cartridge Assembly Machine, the ACAM Series C. This piece of standard equipment has been designed to form pleated filter media into a cylindrical shape, insert a metal tube, and seam the filter media with a metal clip. New features include higher cycle speeds, smaller footprint, quieter operation and reduced cost.

PURIFIC RETAIL COOLER

AquaCell has introduced a Purific Water Cooler model specifically designed for the retail consumer market. The Purific 50 is equipped with a filtration system designed to meet the needs and pricing requirements of the retail consumer market. The patented self-filling Purific line of water coolers automatically refills a permanently attached five-gallon bottle with freshly filtered water.

"Bottled water is the fastest growing segment of the beverage industry, with an expected annual growth rate of 30%, as reported in the March 4, 2002 edition of FORTUNE magazine. We believe that this new Purific 50 will fill a niche that is not being addressed for the home market's drinking water needs," said James C. Witham, CEO. AquaCell believes that this new model Purific cooler will provide the consumer home market with a product that directly meets their desire for better drinking water while providing an alternative to expensive and inconvenient bottled water.

FILTER PATENT REVIEW

Water purification system and method

Assignee: WaterChef, Inc.

Abstract: A system and method for purifying water in large quantities for drinking. The system comprises a housing having a water inlet, filtering means connected to the water inlet for filtering sediment and particulate matter from the water, an inlet pump to keep the water flowing through the housing at a predetermined pressure and a mixed bed multimedia unit connected to the filtering means for removing pollutants and controlling organic growth from the water. There is also an ultra-violet treatment means connected to the mixed bed multimedia unit for subjecting the water in the system to ultraviolet radiation and carbon block filtration means disposed for a final filtering prior to dispensing the water at one or more dispensing. There is also a bottle washing means provided within the housing for cleaning water bottles prior to filling with the purified water. The system can supply drinking water for entire communities, yet is portable enough to be easily transported to disaster areas.

Patent Number: 6348155; Issue Date: 2002 02 19; Inventors: Conway, David A; Smith, Thomas J.; Sorensen, Pete; Doyle, Sean.

Geotextile structure for filtration

Assignee: BIDIM Grosynthetics S.A.

Abstract: A geotextile structure for filtering liquid from soil includes a lower layer of geotextile material for contacting soil for filtration thereof. The lower layer presents in its thickness a number of constrictions n included between 15 and 40, and is made of synthetic filaments or fibers presenting a count D wherein D is measured in units of decitex. An upper layer of geotextile material provides mechanical protection of the lower layer. The upper layer presents in its thickness constrictions more open than the constrictions of the lower layer to avoid clogging of the lower layer. The upper layer is made of

synthetic filaments or fibers presenting a count at least equal to 2D. The upper and lower layers are bonded to each other. Patent Number: 6347913; Issue Date: 2002 02 19; Inventors: Delmas, Philippe; Artieres, Olivier

Apparatus for high pressure fluid filtration

Assignee: TherOx, Inc.

Abstract: A bacterial fluid filter includes a filter element supported by a backing member. The filter element and backing member are sealed, e.g., with one or more o-ring seals, in a housing to provide a filter assembly capable of filtering fluid under relatively high pressure. In one embodiment, a filter element, backing member, and seal are disposed in a removable and disposable housing that is sized to fit within a filter housing.

Patent Number: 6346192; Issue Date: 2002 02 12; Inventors: Buhr, Mark S; Daoud, Adib G.; Daw, Derek J.; Merritt, John E.

Filter for secondary smoke and smoking articles incorporating the same

Abstract: Secondary smoke is harmful to passive smokers. A filter sleeve (1) comprises a sleeve (10) with a downstream portion (11) adapted for receiving inhale smoke into an inhalation flow path (13), an upstream portion (12) adapted for inhalation of said inhale smoke and for receiving exhale smoke into an exhalation flow path (14), filter means (15) provided along said exhalation flow path (14), and means (16) for checking reverse flow of ambient air through said exhalation flow path (14). A filter sheath (3) is adapted for overlaying a significant expanse of the sidestream smoke emission areas of a rod of smokable material (7), said filter sheath (3) is sufficiently porous and significantly unimpaired by combustion.

Patent Number: 6345625; Issue Date: 2002 02 12; Inventors: Chew, Kar Eng

Filter Media

Abstract: The present invention is an improved material which may be used as a filter media for gas filtration systems, such as for industrial gas streams and commercial or residential vacuum cleaners. The filter material comprises a filter media support bonded to a porous expanded PTFE membrane, and further comprising a screen material bonded to the porous expanded PTFE. The screen material protects the expanded PTFE surface against damage due to impingement of particles during operation of the gas filtration system.

Pub. No.: EP 1173269; Appl. Data: EP 00926181 2000 04 20;

Applicant: Gore Enterprise Holdings, Inc.

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