

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.

In This Issue:

Lead Article

HHS Issues Terrorist Protection Guidelines

Industry News

Lung Association Offers Tips On Dealing With Wildfires

Clarcor Acquires Total Filter Technology

Seychelle Introduces Water Purification System

Home Filters Rank High On Hot Products List

Atlanta Suburb Completes Water Purification Project

Osmonics Nabs Four City Contracts

Gaynor Named At Puradyn

Fiber Dynamics Purchased By Management Group

U.S. Microbics In Deal To Spin Off Majestic

Corning and Foseco In Long-Term Filter Deal

Richey Named Esco CEO

Vitex and Pall Modify Inactine Agreement

Environmental News

Pall Brings Drinking Water To Drought-Stricken Areas

New Filter Removes Arsenic, Heavy Metals From Water

Financial News

Donaldson Reports Record Fourth Quarter and Year

Filter Patent Review

Industry Meetings

**World's Largest Filtration Event Set For December
INTC Set For September In Atlanta**

LEAD ARTICLE

HHS ISSUES TERRORIST PROTECTION GUIDELINES

The Department of Health and Human Services (HHS) has released new guidelines for protecting ventilation systems in commercial and government buildings from chemical, biological, and radiological attacks. The guidelines provide recommendations that address the physical security of ventilation systems, airflow and filtration, systems maintenance, program administration, and maintenance staff training.

HHS Secretary Tommy G. Thompson said the guidelines offer "practical advice to building owners, managers and maintenance staffs on the steps they can take to protect their ventilation systems."

The guidelines recommend that security measures be adopted for air intakes and return-air grilles, and that access to building operations systems and building design information should be restricted. The information also recommends that the emergency capabilities of systems' operational controls should be assessed, filter efficiency should be closely evaluated, buildings' emergency plans should be updated, and preventive maintenance procedures should be adopted. The document also cautions against detrimental actions, such as permanently sealing outdoor air intakes.

"Guidance for Protecting Building Environments from Airborne Chemical, Biological, or Radiological Attacks," DHHS (NIOSH) Publication No. 2002-139, is available on the NIOSH Web page at www.cdc.gov/niosh. Copies also can be obtained by calling the NIOSH toll-free information number, (800) 35-NIOSH (800-356-4674).

INDUSTRY NEWS

LUNG ASSOCIATION OFFERS TIPS ON DEALING WITH WILDFIRE

With seemingly much of the western United States on fire, millions of people are being exposed to higher-than-normal levels of outdoor and indoor air pollution. Such pollution can result in increased respiratory problems, particularly for those with allergies and asthma.

In response, the American Lung Association Health House Program and 3M are offering "Breathe Easier: Home," a free booklet that offers some tips for dealing with this air pollution problem. Naturally, filtration plays a major role in this. Among the recommendations:

- ✓ Use a high-efficiency furnace filter and replace it every two to three months. This filter provides filtration for central air conditioning as well. A high-efficiency filter not only protects the furnace, but can also capture up to 30 times more pollutants, such as smoke, pet dander and pollen, than standard fiberglass filters.
- ✓ So that air is always passing through the filter, run the furnace fan continuously, regardless of the outdoor temperature. To do so, set the furnace thermostat to the "on," rather than the "auto," position

CLARCOR ACQUIRES TOTAL FILTER TECHNOLOGY

Clarcor has completed the acquisition of Total Filter Technology Inc. (TFT), a manufacturer of meltblown and string wound filter cartridges and liquid filter bags. TFT is based in North Chelmsford, MA and is a privately owned company. The terms of the transaction were not disclosed.

Norm Johnson, Claror's Chairman and CEO, said, "TFT furthers our Total Filtration Program as its products complement other process liquid filters we already manufacture, such as pleated membrane and depth cartridges. Customer demand for process liquid filters has grown substantially in recent years and we expect this to continue."

SEYCHELLE INTRODUCES WATER PURIFICATION SYSTEM

Seychelle Water Filtration Products says it has completed the research and development of its newly designed pure water vending machine. This new product can be used on non-potable municipally delivered water.

This product will be targeted at the international market in countries where the ability for people to access clean water is a problem. The Pure Water Machine is designed to produce more than 2,000 gallons of cold purified water per day. The unit removes contaminants such as pathogenic, viral, bacterial and organic matter from water sources. The system utilizes a patent pending multiple stage ozone oxygen system in conjunction with the company's exclusive ionic absorption micro filtration process.

The product will enable people to purchase a gallon of cold purified drinking water for approximately 20 cents. The vending machine will be equipped with the appropriate power supply and connections for the water source. Upon delivery, all the owner has to do is set it up, plug it in to a power source and connect the unit to the water supply.

HOME FILTERS RANK HIGH ON HOT PRODUCTS LIST

drugstore.com, inc., an Internet retailer for health, beauty and wellness products, last month distributed the first edition of a monthly Health and Beauty Index that measures trends and attitudes of the U.S. population reflected by their health, beauty, and wellness purchases. Among the product categories scoring higher than most was water filters.

The index highlights the top product category gainers of the month based on the transactions of drugstore.com shoppers. The Top 10 Category Gainers For July 2002

- ✓ Family Planning (fertility & ovulation kits) 52% growth from June to July
- ✓ Pets (toys, supplements, medicine, accessories) 33%
- ✓ Salon (salon brand hair care) 28%
- ✓ Tissues & Swabs (facial tissues, cotton swabs) 24%
- ✓ Incontinence (wipes, pads, briefs) 21%
- ✓ Water Filters (water filtration systems) 17%
- ✓ Exercise (fitness supplies, kits, books, videos) 15%
- ✓ Contraceptives (condoms) 12%
- ✓ Physical & Mental Wellness (supplements, herbals) 12%
- ✓ Diabetes Care (meters and other diabetes supplies) 11%

ATLANTA SUBURB COMPLETES WATER PURIFICATION PROJECT

Last week Fulton County, located on the outskirts of Atlanta, officially opened its new water reclamation plant. The Cauley Creek Water Reclamation plant is the first in Georgia to use Zenon's ultra-filtration membrane technology and is also the first to have a comprehensive reuse program.

This facility is based on Zenon's ZenoGem membrane bioreactor that will treat area wastewater to near drinking water standards. In an effort to decrease the amount of water withdrawn from the Chattahoochee River, the treated effluent will be used to irrigate surrounding golf courses, churches, residential developments and area businesses. This in turn will reduce demand on the county's drinking water system.

OSMONICS NABS FOUR CITY CONTRACTS

Osmonics was recently awarded contracts for four municipal water treatment systems to be used to purify water for Clara City, MN; Todd Creek, CO; Hennessy, OK and The Village of Golf, FL. The four contracts will generate over \$1,000,000 in sales for the company. These four systems will be built and tested at Osmonics' ISO 9001-certified factory and delivered in less than 10 weeks from receipt of order.

GAYNOR NAMED AT PURADYN

puraDYN Filter Technologies, the global by-pass oil filtration system company, has named Jim Gaynor Director of Manufacturing and Operations. Gaynor will be responsible for the production and assembly of puraDYN's products, together with full time participation in the management of facilities, equipment, inventories, manpower, transportation, quality standards and cost structure. In addition, he will assist in completion of ISO 9001 compliance and certification for plant/manufacturing facilities and processes.

Mr. Gaynor comes to puraDYN from his most recent post at JDS Uniphase, Horsham, PA, where he served from June 2000 to April 2002 as Vice President Operations/General Manager.

FIBER DYNAMICS PURCHASED BY MANAGEMENT GROUP

Fiber Dynamics announced last week that a group led by company President James Heery has bought controlling interest in the company from Sommers Inc. of Coral Gables, FL. The company, which closed on the purchase July 1, did not disclose a purchase price. Sommers had owned the 19-year-old company since 1987.

The company provides material for the linings of the cuff, collar and waistband to the apparel market and also offers products to the automotive, filtration, home furnishings, coating, laminating and health-care industries.

U.S. MICROBICS IN DEAL TO SPIN OFF MAJESTIC

U.S. Microbics has entered into a bilateral Letter Of Intent with Majestic Safe-T-Products under which it will spin-off 70% of a newly-formed subsidiary to MSPL in a tax-free exchange for 30% ownership of MSPL.

One of Majestic's key product lines is the Refilter, a recyclable diesel exhaust filtration system designed to meet impending EPA standards that mandate a 90% reduction in particulate matter emissions for all commercial diesel powered vehicles by the year 2007. At a projected price point of \$3,000 per unit, the addressable market for the Refilter exhaust filter is approximately \$4.5 billion

CORNING AND FOSECO IN LONG-TERM FILTER DEAL

Corning and Foseco Metallurgical have signed a three-year contract to supply Corning extruded ceramic molten metal filters to Foseco. The agreement, valued at approximately \$40 million, will provide the foundry industry in North America with Corning extruded ceramic molten metal filters, used by foundries to improve the quality and yields of metal castings.

Under the contract, Foseco will continue to provide warehouse, distribution, technical support and marketing services for Corning's extruded ceramic filters, branded Celtex in North America.

RICHEY NAMED ESCO CEO

Esco Technologies recently announced that Victor Richey, President and COO, has been elected CEO, effective October 1. Dennis Moore, who has held the CEO position since 1992, will continue to serve as Chairman until April 2003 when he reaches 65 years of age. At that time, Moore plans to retire as a Director, Chairman of the Board, and employee of the company.

VITEX AND PALL MODIFY INACTINE AGREEMENT

V.I. Technologies and Pall have modified their worldwide collaboration for the INACTINE red blood cell pathogen inactivation system. Driven by the recent receipt of FDA approval to commence pivotal Phase III clinical trials in the U.S., this modification seeks to accelerate clinical development and broaden geographic distribution in the U.S. and other international markets through the establishment of agreements with additional distribution partners.

ENVIRONMENTAL NEWS

PALL BRINGS DRINKING WATER TO DROUGHT-STRICKEN AREA

Pall sent out a press release announcing that its new Septra CB (Crypto Barrier) membrane water filtration system is being used to provide 3.5 to 4 million more gallons of drinking water a day to drought-stricken

Roanoke, VA. Crystal Spring, the City's second largest water resource, had been out of service since May 2000, because it was under the influence of surface water. The Pall Septra CB filtration system exceeds federally mandated standards for the removal of protozoan cysts such as Giardia and Cryptosporidium from surface waters. The system was fully operational less than three weeks after the order was placed.

Roanoke's main water source, Carvin's Cove Reservoir, is currently at 30% of its capacity, its lowest point in 55 years. Pall's solution has enabled City officials to bring the Crystal Spring facility back online four months ahead of schedule.

NEW FILTER REMOVES ARSENIC, HEAVY METALS FROM WATER

(From various news stories) Cleaner water doesn't seem like a concept that needs to be sold. But that's just what John Schroeder does as president of Hydroglobe. The one-year-old business is associated with Stevens Institute of Technology. From an office on the edge of the school's Hoboken, NJ campus, Schroeder and a team of part-time salespeople pitch filtration equipment aimed at municipalities and owners of contaminated sites.

The equipment -- three systems known as ActivMet, FerriMet, and MetSorb -- remove most of the arsenic and heavy metals from groundwater and wastewater. The technology was developed by Stevens students and Professors George Korfiatis, Xiaoguang Meng, and Chris Christodoulatos during the mid-1990s.

Hydroglobe is stepping into what may be a hot market. Last year, new federal standards were adopted by the EPA to reduce the acceptable level of arsenic in drinking water from 50 parts per billion to 10 parts per billion. The change takes effect January 2006, but a state law could be adopted and implemented sooner, said Schroeder.

Arsenic gets into groundwater naturally as minerals dissolve from rocks and soils. Prolonged exposure can result in cancer of the skin, lungs, bladder and kidney. Some studies have also linked the element with skin lesions, hypertension, cardiovascular disease, diabetes, and reproductive problems.

"Parts per billion is a low level, yet it's having all these effects," Schroeder said. "There is a three-in-1,000 chance of getting cancer even at the new standard."

Since danger still lurks, the state of New Jersey has been assessing a standard that would be half the federal mandate and take effect in 2003

- three years before the federal standard kicks in. "The technology is available to achieve the lower number," Schroeder said, but a ruling isn't expected until October.

FINANCIAL NEWS

DONALDSON REPORTS RECORD FOURTH QUARTER AND YEAR

Donaldson recently reported record net earnings for the fiscal year ended July 31, 2002 of \$86.9 million, up 15% from \$75.5 million last year. Revenue was \$1.126 billion, down 1% from \$1.137 billion last year.

For the fourth fiscal quarter, net earnings totaled a record \$24.9 million, up 9.3% from \$22.8 million last year. Revenue was a record \$303.9 million, up 2% from \$297.8 million last year.

FILTER PATENT REVIEW

Methods of running and washing spiral wound membrane module

Assignee: Nitto Denko

Abstract: A spiral wound membrane element is formed by covering a spiral membrane component prepared by winding a plurality of independent or continuous envelope-like membranes around the outer peripheral surface of a water collection pipe through raw water spacers with a separation membrane and further covering the same with an outer peripheral passage forming material. In washing, permeate containing a chemical is introduced from an opening end of the water collection pipe while the permeate derived from the outer peripheral surface of the water collection pipe is discharged from at least the outer peripheral side of the spiral wound type membrane element and raw water is axially fed along the outer peripheral portion of the spiral wound type membrane element. In filtration running, the raw water in which bubbles are diffused by an air diffuser may be supplied to the spiral wound membrane element stored in a pressure vessel. Alternatively, filtration running may be temporarily stopped for holding the spiral wound type membrane element for a prescribed time in a state sealing the raw water and the permeate in the pressure vessel.

Patent Number: 6432310; Issue Date: 2002 08 13; Inventors: Andou, Masaaki; Hisada, Hajimu; Ohara, Tomomi; Kawada, Ichirou

Composite filter element

Assignee: Cuno, Inc.

Abstract: A combination filter element comprising a bundle of hollow microporous fibers housed within an extruded carbon block, wherein the carbon block is fabricated to balance particle retention capacity against absorption capacity to provide a composite filter with desirable pressure drop, filter life, and particulate and chemical contamination reduction, and a filtration device, in which combination filter element may be employed, having a base portion including a sump which has an inlet and an outlet and a base which has a reception port for receiving the filter element.

Patent Number: 6432233; Issue Date: 2002 08 13; Inventors: Hamlin, Thomas J.; Contaxis, III, William; Chen, Wei-Chih; Bassett, Laurence W.

Gravity driven liquid filtration system and method for filtering biological liquid

Assignee: Hemasure, Inc.

Abstract: A filtration system and method for the filtration of a biological liquid are disclosed. The system and method may include a biological liquid collection assembly, a filtration assembly in communication with the collection assembly and a blood components preservative assembly in communication with the collection assembly. The preservative assembly includes a blood components preservative container and the preservative container may contain a blood components preservative solution and contains a measured quantity of a sterile gas. The preservative assembly is adapted to automatically transfer at least a portion of, respectively, the preservative solution, if present, and the gas to the collection assembly under a force of gravity once fluid flow communication is commenced between the preservative container and the collection assembly. Further, when the collection container contains at least a portion of the biological liquid and a transferred portion of the preservative solution, if present, and the gas, the collection container is adapted to automatically transfer at least a portion of, respectively, the biological liquid, the preservative solution, if present, and the gas to the filtration assembly under the force of gravity once fluid flow communication is commenced between the collection container and the filtration assembly.

Patent Number: 6428712; Issue Date: 2002 08 06; Inventor: Castino, Franco

Method of filtering a fluid

Assignee: Sanyo Electric Co.

Abstract: Removables 12 trapped by a first filter film 10 are used as a second filter film 13, and clogging of the first filter film 10 is prevented, and an external force such as bubbles is applied to the second filter film

13 to maintain filtering capacity. And when removables are mixed with the filtered water, the filtered water is recirculated again to the tank in which the wastewater is stored, and after it is checked that a desired inclusion rate has been reached filtration is started again.

Patent Number: 6428709; Issue Date: 2002 08 06; Inventors: Tsuihiji, Motoyuki; Inuma, Hirofumi

Portable glovebox and filtration system

Assignee: The United States of America as represented by the Secretary of the Army

Abstract: A portable containment system includes a glovebox apparatus, a self-contained filter unit, and removable conduits extending therebetween. The glovebox apparatus includes a first module for releasably covering a first sidewall opening. The first module, which has body and flange portions, has a storage position where the body portion is positioned through the first sidewall opening into the glovebox interior and an operative position where the body portion is positioned exterior of the glovebox. The glovebox apparatus includes second modules for releasably covering a second sidewall opening where the second modules are smaller than the first sidewall opening for inserting the second modules into the interior of the glovebox for storage. The filter unit includes a plurality of gas filters, an air pump, and detectors for monitoring the air flow through the system.

Patent Number: 6428122; Issue Date: 2002 08 06; Inventors: Henry, Charles E.; Heyl, Monica J.; Reutter, Dennis J.

INDUSTRY MEETINGS

WORLD'S LARGEST FILTRATION EVENT SET FOR DECEMBER

The most anticipated filtration industry events of the year – the annual Filtration International Conference and Exposition – is set for December 3-5, 2002 at the Washington Convention Center in Washington, DC. Filtration 2002 is by far the main event for the global filtration industry, with over 2,000 professionals from around the world expected to attend. More than 200 exhibitors will be showing the latest in filter media, raw materials, machinery, suppliers and services.

"Exhibit sales are brisk and I expect the show floor to sell out," commented Marilyn Bellinger, Sales Coordinator for INDA, the sponsor of Filtration 2002. "I am truly excited at the number of brand new exhibitors who have signed up to be a part of the experience."

The conference sessions focus on cutting edge information as well as two basics courses. Filtration 101 & Filtration 201. Filtration 101 - The Fundamentals of Filtration will review the fundamentals of air/gas and water filtration. New for Filtration 2002 is Filtration 201 - Advanced Filtration. Filtration 201 goes beyond the basic principles that will be taught in Filtration 101 in covering advanced air filtration principles, porometry and new water filtration technologies.

Conference sessions are comprised of the following:

- ✓ HEPA/HVAC - topics to be covered include Electret HVAC Media; Mass Production of Nanofiber Air Filter Media; Complying with FTC Claim Regulations
- ✓ A Filter Forum - An open discussion of the filtration industry
- ✓ Respiratory Protection - topics to be covered include the Role of NIOSH Today in Regulation Respiratory Protection Standards; Individual Protection Filters; Collective Protection Filters; Testing of Filters Used for Respiratory Protection
- ✓ Nuclear Air - topics to be covered include Dedication of Low Efficiency Commercial Air Filters for Nuclear Safety Rated Service; Filtration Needs for Capturing Beryllium Aerosol; HEPA Filter Types & Uses within the DOE; HEPA Filtration Media for Use in the Nuclear Industry

For information about attending, please contact INDA, P.O. Box 1288, Cary, NC 27512 USA, Phone: (919) 233-1210 ext. 126 Fax: (919) 233-1282. Or visit www.inda.org

INTC SET FOR SEPTEMBER IN ATLANTA

The International Nonwovens Technical Conference (INTC) 2002 will be held September 24-26, 2002 at the Renaissance Waverly Hotel in Atlanta. This year's INTC continues the tradition that was begun in 2000 by TAPPI, The Technical Association of the Pulp and Paper Industry), and INDA (Co-Sponsors of INTC).

The sessions for the conference include: Binders & Additives; Polymers & Fibers; Properties & Performance; Process Technologies; Filtration; Finishes & Surfaces; Mats & Insulation; Absorbents; Porometry; Automotive Interiors; Protective Barriers; Process Modeling; and Sustainability. Also featured will be a Nonwoven Products Tutorial, Student Poster Presentations as well as a Table-top Event and Reception. For more information and to register: www.inda.org.

THAT'S ALL, FOR THIS MONTH ...

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