
FILTECH
February 14 – 16, 2023
Cologne – Germany
The Filtration Event
www.Filtech.de
Delivers solutions for current and future challenges
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Innovations +++ Highlights +++ Trends

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The Filtration Event
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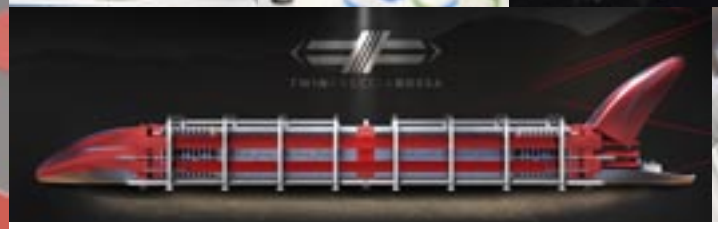
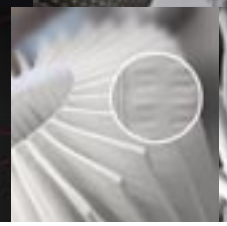
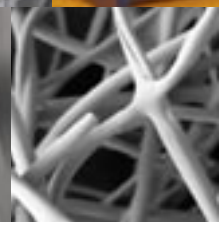
Platform for your success

Join the world's largest Filtration Event







Providing all industries with targeted filtration & separation solutions

The Filtration industry provides innovative solutions for current and future challenges. This dynamic industry is of further growing importance and turning into a key industry worldwide. At the **FILTECH 2023** Show the latest innovations will be on display and will provide visitors with an exclusive overview and insights on the state-of-the-art science and technologies.

Sophisticated and state of the art filtration and separation solutions play a key role in all industries to achieve cost-effective processing structures as well as reduced risks. FILTECH is a global solution provider for targeted filtration & separation tasks covering all industries.

440+ companies will present their cutting-edge products and innovations for the chemical industry,food & beverage, life science, minerals processing, pulp & paper, waste management, water treatment, environmental engineering petrochemicals and many more.

The Conference programme features **180+ technical papers** and gives a representative cross-section of the different procedures and appliances of separation technology as well as across the industry about the applications, from the preparation of mineral raw materials, the chemistry, environmental technology and water purification down to the pharmacy and biotechnology. Most ongoing problems, which play an important role in the current situation are represented in the programme. Like the research and development of highly efficient respiratory masks and air cleaning solutions as decisive tools against viruses, or the cleaning of water polluted with micro pollutants, antibiotic-resistant bacteria/germs and micro plastics.

HJS Emission Technology GmbH & Co. KG — Hall 8 D22

Breakthrough for heated gas filtration up to 800 °C with HJS Sintered Metal Technology SMF

HJS (Menden, Germany) is a global leader in providing a revolutionary approach to emission reduction through its leading-edge sintered metal filter technology – SMF.

SMF filters are manufactured using expanded metal. The coil band configuration has a 0.38 mm cross-section and offers a 99 % filtration efficiency with the ability to remove particles < 5 µm. Its exceptional temperature resistance up to 800 °C / 1.500 ° F allows for a broad range of high-temperature applications and provides enormous potential for energy reduction e.g in bag house filter applications.

"Utilizing technical ingenuity and experience for new industrial applications in Hot Gas/Liquid and Process"

You can find out more by visiting our booth D22 in Hall 8.

Roxia Oy — Hall 8 A40

Introducing Roxia TP16 – Re-engineered pressure filter

Designed by our experts with over 40 years of experience, the Roxia Tower Press 16™ (TP16) sets new standards for any process that requires efficient solid-liquid separation. Proven pressure filtration technology is now re-engineered by utilizing the latest developments in technologies. The design of the Roxia TP16 (filtration area from 16m² to 44m²) is based on the same innovations as our successful bigger TP60 (48m² to 156m²) which was launched last year. Roxia TP16 combines high production performance with low energy and water consumption.

Roxia TP16 is ideal for several areas of application including:

- Chemical industries - GCC, PCC, Talc, Titanium dioxide, Kaolin, Starch, Silicates, Soda ash, Battery metals, REE and Fertilizers
- Mining, minerals processing and metallurgy - Metal concentrates such as Copper, Zinc, Lead, Gold, Silver, Platinum group metals and Molybdenum

Safety interlocks integrated into the automation program and perimeter are just some of the safety features. An expandable maintenance platform enables safe working on heights. For remote monitoring, Roxia filters can be connected to the Roxia Malibu™ online portal. Roxia Malibu is a smart IIoT platform that helps to detect failures before they even occur.

DrM Dr. Mueller AG — Hall 8 E46

ContiLoop: Single-use multicycle filter for process intensification

The ContiLoop is the most sophisticated single-use cyclical cake filtration technology available worldwide. The operation of the filter in cycles, allows for back flush capabilities and filter cloth regeneration, a unique way to evade clogging and cloth fouling. The filter bag and manifold can easily and safely be assembled and dissembled following instructions given by the control panel. The cyclical nature allows the user to combine all the benefits of disposable technology while also prolonging the lifespan of one filter cloth.

The Key Benefits of ContiLoop include:

- Very high filtration rate (2-3x higher than depth filters)
- High filtrate quality (on par with depth filters)
- Increased yield in cell recovery and enzyme recovery operations
- Shorter reactor downtime due to reduced cleaning & validation requirements
- Pre-sterilized and validated filter enclosure available for Pharma and Biotech applications
- Reduced heel volume and compaction of solid waste
- Fully enclosed containment made completely of plastics ensuring safe handling and disposal of hazardous components
- Available in 3 sizes

Visit our booth at the event or contact us for optimized filtration and mixing solutions.

MATEC Industries SpA — Hall 8 C4

Twin Frecciarossa Filter Press: Highest productivity with a proctective shell for harsh environments

Matec Industries has engineered the world's first filter press capable of meeting the highest demands in the recovery of materials from different sectors, combining the efficiency of two machines into a single product with extraordinary performance.

The Twin frecciarossa is currently the most productive filter press on the world market, in terms of operating time and the amount of sludge to be treated. It is also optimized from the point of view of production effectively doubling the market standards. This filter press is also economically optimized, reducing the cost of the structures and engineering works necessary for operation.

The Twin frecciarossa can be equipped with a protective shell (optional), available for all the filter press range. A solution to protect the oleodynamic group and pistons in particularly harsh environments.

Elmarco s.r.o. Hall 7 **M9**

Defeating Defects: New Innovations in Free-Surface Electrospinning

It is well understood that applications such as liquid filtration, performance apparel and battery separators can benefit from the use of electrospun membranes vs. conventional membranes due to the ability to achieve higher flux at the same rejection efficiencies.

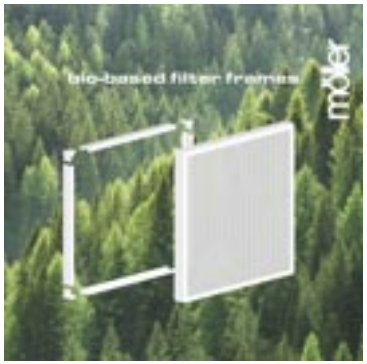
One of the biggest advantages of the electrospinning process is that there are many variables that can be used to tune the nanofiber layer properties. However, despite controlling these variables, a major hurdle in reliable, industrial membrane production using electrospinning, is defect generation. For the aforementioned applications, any significant defect in the membrane, has always created a challenge due to the stringent material performance requirements.

We have taken our significant knowledge and experience with our existing free-surface electrospinning technology (LINEA line) and created a new generation of equipment (INFINITY line) technology which maintains the industrial, high-throughput, and scalable aspects of our existing equipment along with the industry leading ability to virtually eliminate significant membrane defects from these membranes.

MÖLLER GmbH & Co. KG Hall 8 **A15**

NEW innovative material - Sustainable bio-based filter frames

MÖLLER is the leading manufacturer of plastic filter frame systems with 75 years of history and experience.



We offer a full line of frame components for almost every filter application and can provide customized options to meet any customer's specific need.

MÖLLER goes GREEN
We are aware of the increasing importance of environmental protection and want to make our contribution to a sustainable air filter.

Therefore, we have developed filter frames made of a completely bio-based material. This new innovative and sustainable material does not contain any fossil components.

OKUTANI Ltd. Hall 8 **B38**

We will introduce 2 new products at FILTECH 2023

The first product is ULTRA SUPER PUNCHING.
Realizes material thickness twice the hole diameter by punching press.
Our new technology allows us to perforate 3 mm holes in 6 mm stainless steel sheet.
6mm's Tensile Strength increased approx. 2.2~2.7 times and Flexural Strength increased approx. 4.6 times compared with 3mm stainless steel sheet.
Also production costs of punching press are significantly lower compared to drill and laser.

The second is "Sanitary Strainer using perforated Duplex stainless steel"
By replacing wire mesh with perforated duplex stainless steel, we can achieve,

- Longer service life by greatly improving durability and pressure resistance.
- High strength, High corrosion resistance, Thermal low-expansion, Polishability and Saving compared with general stainless steel.
- Easy foreign substance detection and removal by magnets.

Okutani's advanced perforating technology enables a wide range of hole diameters from 0.035mm to 1.00mm. Available in two thickness of 0.5mm and 0.8mm.

Math2Market GmbH Hall 7 **M28**

Digital design and virtual switching of cartridges to increase filter performance – The new GeoDict software feature

Computer-Aided-Design (CAD) is of keen interest to simulate flow and filtration on filters with cartridges. However, performing systematic simulations on different geometrical setups requires the generation of these structures as CAD individually and the import of each sample separately. A new feature in the GeoDict software allows to generate a variety of cartridges with changing pleat count, pleat thickness, and number of porous layers, and digitally switch them inside the housing. Starting now, it is easy and quick to find the ideal configuration between filter area and pleat count for cartridges and their housing, regarding their local minimum pressure drop and many filtration relevant parameters.
This digital test of the performance of filter prototypes circumvents the need for expensive, trial-and-error manufacturing and testing phases, since only promising prototypes undergo measurements at the testbench. These systematic simulations with varying geometries or flow rates may be run simultaneously in cloud applications to further increase the productivity, fit customers requests, and decrease time-to-market.

FILMEDIA — Hall 7 M51

New technology for PTFE impregnation on fiberglass woven fabrics

The chemical properties of the fiberglass woven fabrics can be improved to a great extent by PTFE/TEFLON impregnation, extrusion and drying of chemical resin. Our company's R&D team has developed a New technology of PTFE impregnation, which greatly improves the folding resistance, tensile strength, corrosion resistance and hydrophobic property of fiberglass woven fabrics.

In particular, it is ultra-soft compared with the conventional fiberglass woven fabrics. The folding endurance of the conventional fiberglass woven fabrics is about 30,000 times. However, when the fiberglass woven fabrics are treated by our latest PTFE impregnation process, its folding endurance of the warp direction is more than 100,000 times, and the one of weft direction is more than 50,000 times.

In addition, our company has independently developed special equipment for desizing and PTFE impregnation. This special equipment combines two processes into one, which improves the production efficiency and product qualification rate. The temperature of the equipment can reach 500°C, and the overall temperature difference in the furnace is less than 3°C, thus ensuring the stability and uniformity of the product.

Roth Composite Machinery GmbH — Hall 8 A21

Roth Composite Machinery presents innovative length cutting system

The specialist in mechanical engineering will present an innovative, swivelling length cutting system for its knife pleating machines for the production of filters for the first time. These filters are used in a wide range of applications.

The new length cutting system enables an increase in production output, as the maximum width of the filter material is fed into the machine and the filters are cut through in individual widths lengthwise to the material web. The machine design developed by Roth Composite Machinery features the length cutter directly in front of the folding knives. "For safety and ergonomic reasons, we have designed the complete infeed table, including the cutter, to swivel. The operator can swivel the table by 90° in a position provided for this purpose, so that the cutter practically swings out of the machine. The swivel position is deliberately chosen at the centre of gravity of the infeed table so that the swivelling process can be carried out easily," explains Winfried Schäfer, Senior Sales Manager at Roth Composite Machinery. The operator can make the necessary adjustments on the length cutter directly and without physical exertion.

Diemme Filtration Srl — Hall 8 B16

GHT5000F DOMINO Diemme® Filtration: The largest filter press in the world

Diemme® Filtration has designed and built the first of this "next generation" of enormous filter presses, capable of approximately 3 times the throughput of the largest filter-press currently in operation. The new GHT5000F Domino filter press has included the following benefits:

- IIoT for control, management and optimization from remote (refer to our AIDA system tutor)
- Integrated work platform for easy maintenance
- Rinsing system with 6 points of washing for a homogeneous rinse of the filter media after each cycle
- Automatic high-pressure cloth washing system with double wash-bar to simultaneously clean the cloths of two chambers and halve the downtime to perform HP cloth washing
- Parts of the frame are factory pre-assembled modules to reduce assembly time at the site
- Quick-Connect cable connections between modules minimize wiring and ensure quick assembly at the site
- Cloth replacement from either side of the filter, with simultaneous multi-cloth replacement capability

With a max total filtration volume of 71 m^3, and a max total filtration area of 2.850 m^2, the GHT5000F Domino is the largest filter-press available in the market. On large throughput projects, the GHT5000F Domino will significantly improve the capital cost of a tailings filtration plant compared with installing many smaller filter presses for the same duty. On a case-by-case basis, it is possible to evaluate the Total Cost of Ownership (TCO) and determine if a reduced number of large filtration trains offers savings versus a system with more units of smaller size.

IREMA-FILTER GmbH — Hall 7 L7

IREMA´s latest synthetic advancement – Pleatable high efficiency filter media with > 99,5 % particle separation for air purifiers and vacuum cleaner applications

In the field of highly efficient filter materials, we developed a proprietary synthetic material with particle separation of more than 99,5% (TSI 8130A; 32l/min; 5,3 cm/s).

This newly designed filter media can display its separation properties excellently, e.g. in air cleaners or hoover filters. However, other applications are still waiting to be discovered for this fully synthetic product.

TMCI Padovan SpA — Hall 8 C26

Recovering carbon dioxide produced during grapes fermentation

TMCI Padovan presents an innovative process for recovering carbon dioxide produced during grapes fermentation for microalgae production, photosynthetic unicellular organisms that need carbon dioxide to carry out their natural metabolism. Microalgae biomass is already widely used in various commercial sectors such as agri-food, cosmeceutical and nutraceutical sectors, energy and chemistry.
Fermentation produces CO_2 which is first compressed and then connected to a photobioreactor, made with recyclable materials, so light combined to few other inorganic nutrients will stimulate the algal biomass to absorb CO_2 and release oxygen into the atmosphere through chlorophyll photosynthesis.
Biomass is then concentrated with static (Biom Nitor) and dynamic crossflow filters (Biom Dynamos), reaching the final dry mass of 20-25% w/w.
Concentrated biomass can be used in several ways: fodders, cosmetics or natural fertilizers, it can be used also for mixing into soft drinks to increase the nutritional value but also to wine-based drinks, beer or soft drinks to modify the colours. Furtherly dried biomass can be used as additive for food preparation (pasta, ice cream, pastry, supplements, etc.) but also in cosmetic preparations and any chemical industrial application (biofuels, chemical products, etc.) or high added value molecules (omega 3, antioxidants, natural pigments).

With an average winery of 2.000.000 liters of wine/year with the consequent production of about 176 tons of carbon dioxide, it is possible to accumulate almost 98 tons of algal biomass in 1 year, The TMCI Padovan R&D facility and at the Department of Biology of the University of Padua (IT), patented also a specific strain of microalgae capable to produce an oil very similar as composition to palm oil, thus resulting its valid and convenient alternate.
This aspect definitely prevents undeniable benefits for environmental and human health.

Dürkopp Adler GmbH — Hall 8 A7

QONDAC – Digitize your sewing production

What can be done to boost PRODUCTIVITY even higher?
How can we increase equipment AVAILABILITY?
Is there a way to improve QUALITY any further?

QONDAC is a bi-directional network system that does not only collect and analyse data from sewing machines for productivity and quality monitoring but can also command your DÜRKOPP ADLER sewing machines remotely and teach your workers for best practice.

Hydro Press Industries — Hall 8 A25

Rice bran wax filter press with high pressure technology

Hydro Press Industries will introduce a rice bran wax filter press with high pressure technology to achieve dry cakes with minimal effort. High pressure filter presses are recommended for the application which requires dry cakes. If the cake is a value-added product, then the retention of liquid from the cake can be extracted using high pressure filter press. Hydro Press offers High Pressure filter press series which has benefitted clients from various Industries for last 30 years. Hydro Press has introduced the same concept in rice bran application with lot of R&D to provide an effective solution. High pressure technology replaces the traditional Hydraulic wax press machine. The wax which is obtained in the form of cake from first filtration has oil retention of 55 % approx in the cake solids. Traditionally, a vertical wax filter press is employed in recovering maximum oil from this cake by pressing at higher tonnage. Using traditional wax press the oil retention is reduced from 55 % to 35-40 %. But it is seemingly a laborious process. Using high pressure RBWF series filter press, the oil retention is reduced from 55 % to 27 % with less labour requirement.

The High-pressure filter press is coupled with high pressure pump feeding system. This involves feeding the raw material with higher operating pressure using progressive cavity pump which squeezes the wax and thereby achieving a dry wax cake with low moisture and maximum throughput.

Topsoe A/S — Hall 8 C20

CATAFLEX™ – Remove pollutants and trap dust

TOPSOE™'s catalytic filter bags are designed to give any facility the option of treating off-gases along with trapping dust. Designed for use in most industries that require flue gas cleaning, the CataFlex™ catalytic filter bag consists of a catalytic fabric layer installed inside a standard filter bag. Both the catalyst formula and the fabric material for the catalytic inner layer and the dust filtration layer are optimized according to the process requirements – eliminating the need for costly, space-demanding tail-end gas removal equipment.

Benefits of using CataFlex™ include:

- Removes dust and multiple gaseous compounds in a single step
- No need for costly, space consuming tail-end SCR equipment
- Low pressure drop means no need for costly new ID fans or compressed air
- Bags can be inserted into existing filter houses to provide an affordable drop-in upgrade
- Service life and pressure drop are comparable to conventional fabric filters
- No contact between catalyst and potentially harmful particles

Heraeus Precious Metals — Hall 7 M11

New antimicrobial technology AGXX® to prevent microbial contamination and biofouling in water filtration

Water filters are prone to contamination by microorganisms and biofouling endangering not only consumer health but also shortening product lifetimes. Particularly in the light of the spread of multi-resistant germs, it is more crucial than ever to protect filters from bacterial growth and to enhance water quality by innovative antimicrobial technologies.
AGXX is a new antimicrobial technology which is based on generation of reactive oxygen species (ROS) from water and oxygen by a catalytical reaction supported by two precious metals. AGXX is not based on the release of metals into the environment and offers long-lasting protection. The technology can already be used today in accordance with the Biocidal Product Regulation (BPR).

To this date, it has shown antimicrobial efficacy against over 130 microorganisms including bacteria, viruses, algae, and fungi, among others silver-resistant E. coli strains, methicilin-resistant S.aureus (MRSA), or CoV2 viruses.
The technology is available in various product forms, including activated carbon powders, granules, or pellets as well as on inorganic carriers for incorporation into textile filters.

CleanAir Europe Srl — Hall 8 B61

Eco Atex is the first anti static filter bag cage conforming Atex Directive available in the market

Made in CleanAir cataphoresis Eco Hpc plant, the special cage treatment is able to provide a surface resistivity varying over the time from 10^10 to 10^6 Ohm square. Placed between the insulating filter bag and the earthed cell plate, The Eco Atex cage is able to discharge slowly to the ground the eventual electro static charges retained on the fabric filters by providing at the same time the lower carbonfoot print among cages and a long resistance over time.

Recently awarded (February 2022) as the Best Sustainable Product at the Nine Edition of Premio Impresa Ambiente in Teatro la Fenice – Venice, sponsored by the union of the Italian Chambers of Commerce and by the Italian Ministry of Ecological Transition, Eco Atex is carrying with an out of the box innovative thinking, greener and safer attributes in the manufacturing of fabric filter supports.

BOKELA GmbH — Hall 8 A45

Classification, Clarification, Concentration - Versatile, New Process Solutions by the Use of Metallic Filter Media in Dynamic Crossflow Filtration

The use of metallic filter media in dynamic crossflow filtration with BoCross filters enables versatile and completely new process solutions for tasks such as classifying, clarifying liquids and concentrating solids.
For such tasks the use of metallic filter media offers solutions tailored to the product and objective when state-of-the-art technologies such as wedge wire screen, candle filters, backflush filters, vibration screens, centrifuges or membrane filters reach their limits. Innovative processes such as dynamic sieve filtration and dynamic precoat filtration can be realised. Dynamic sieve filtration allows to continuously sieve out disruptive coarse particles from highly concentrated or highly viscous suspensions with a sharp separation cut. Dynamic precoat filtration allows to completely separate solids and thus produce absolutely clear filtrates. Thereby, the ground layer is created by particles of the suspension - without addition of other substances. Also microfine suspensions can be concentrated when the use of microporous membranes (polymeric or ceramic) is not possible. The modular design of the BoCross filter – i.e. the series arrangement of the filter elements – is a great advantage in this regard. Adaptation to the different separation tasks is done by varying various parameters.

AQUACHEM GmbH Separationstechnik — Hall 8 A38

Fully automatic membrane filter presses

The fully automatic AF-series from AQUACHEM is a technical advancement of conventional chamber filter presses. Due to today's required degree of automation, lack of personnel and the urge to increase efficiency in daily business, the conventional filter press technology is often no longer up to date.

Our fully automatic filter press is a mature and reliable system that has already proven itself many times under the toughest conditions. The press continuously produces and discharges filter cakes safely without the presence of an operator, with a guaranteed machine availability of up to 98%. Suspension leakage during the filter cycle is also a thing of the past.

In addition to the significantly reduced operating costs, the investment is usually only slightly higher than with a conventional chamber or membrane filter press. Due to the higher capacity per available square meter of filter area, a smaller automatic filter press can be used.

High machine availability, low maintenance and reduced disposal costs due to the higher dry matter content of the filter cake are just some of the many advantages of our AF series.

No leakage, minimum personnel cost - maximum flexibility. Convince yourself and contact us.

CleanAir Europe Srl — Hall 8 B61

Eco Smart is the first digital filter bag cage available in the market.

Eco Smart is both an asset management EAM and a CMMS platform based system. The Ecosmart cage is equipped with a special digital tag able to operate in hostile environments with dust, high humidity and high temperatures.

The tag is readable with tablets and smartphones. No battery substitution is needed along the product cycle life. The special App Ecosmartcage permits the connection to the CleanAir platform to interact with the specific cage for asset and order data visualisation, assistance ticket opening and maintenance operation activities.

Lenzing Filtration — Hall 7 L12

How our new cake building filter solution CakeFil improves efficiency whilst reducing fabrication costs

Cake and precoat filtration system are already well known and used in a multitude of industries. Mostly they are semi-automatic and a change of filter media has to be done on a regular basis. Lenzing Filtration has found a method to improve effectively the efficiency of its wet respective dry discharge technology in, at the same time, diminishing the fabrication costs. Furthermore, the often frequently required filter media change is not necessary anymore.
In January 2022, Lenzing Filtration filed a patent for a new candle design.

The target was, to develop a support structure that is inexpensive to fabricate and at the same time provides the lowest possible flow barrier allowing for a backwash flow as high as possible throughout the total candle length. The main body of the candle is made from a continuous casted structure, closed at the lower end with an on-welded plug and at the upper end with a connector to the filtrate chamber.

During filtration, the filtrate flow is downwards via the outer flow channels and leaves the candles upwards via the central dip channel. This allows a complete emptying of the candle from liquid when flowed through by air.
During the backwash, the flow direction is reversed and air or gas is being brought to the very bottom of the candle. An essential factor for an efficient, differential pressure driven backwash.
Continuous, maintenance-free and long-lasting – this is the CakeFil effect.

SANI Membranes A/S — Hall 8 B26

SANI Membranes introducing the new Vibro-I Series

SANI Membranes is proud to announce the introduction of the new, smaller version of the Vibro-I series, bridging the gap between benchtop filtration units and industrial units.
The Vibro® technology has become the work horse for filtration, separation and concentration processes across many applications such as biopharma, algae, new green proteins and carbon nanomaterials. With the introduction of a smaller Vibro-I unit, 2.5m^2 unit, scaling your production capacity has become even simpler. Due to the unique technology of Vibro® Filtration, the process from benchtop filtration units is identical to that of larger units, meaning that the technology is ideal for scaling, as the user can expect the same results when going from one Vibro® unit to another, regardless of size.

Being founded in 2014, SANI Membranes is a relatively new player in the filtration industry but has quickly gained momentum with the Vibro® Technology, characterized by its low and uniform Trans Membrane Pressure, making it possible to achieve very high concentrations, eliminate shear and increase yield by up to 25%.

AHLSTROM — Hall 7 P2

FiltEV® and FortiCell® - New filtration offerings for electrification

Ahlstrom, one of the global leaders in filter media manufacturing, has applied its deep knowledge of the automotive industry to develop a range of reliable filtration solutions for Battery and Fuel Cell Electric Vehicles. Ahlstrom FiltEV® platform is fully dedicated for electric vehicles.
Platform includes:

- New generation of Cabin Air Filter Media delivering higher efficiency on fine particles (HEPA), microorganisms and harmful gases for a safer journey.
- Premium range of Transmission Oil Media for suction and pressure filters delivering better protection of the powertrain and longer lifetime.
- Complete portfolio of Air & Liquid Filter Media for Thermal Management delivering reliability and extended performances to the cooling unit.
- Modular concept of Fuel Cell Air Intake Filter Media protecting the circuits and the catalyst against finest particles and critical molecules.

To complement the Filtration offering for Electric Vehicles, Ahlstrom has introduced Forticell®, a new product platform designed for energy storage applications. Covering a complete portfolio of fiber-based materials for the lead acid battery industry in addition to new solutions in development for Lithium Ion Batteries. Our Fibrous materials have unique properties, delivering enhanced benefits for the performance of batteries.

UNICARB® Activated Carbon - LSR Materials GmbH & Co KG — Hall 7 R6

G-SERIES based on renewable raw materials to reduce the CO_2 footprint

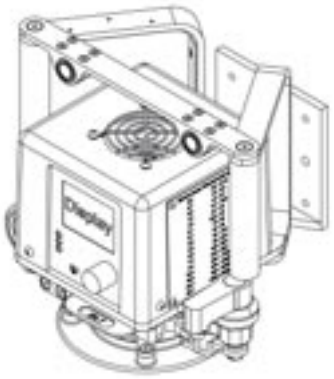
UNICARB® Activated Carbon has made its mission to reduce the CO_2 footprint of its customers and the industry as a whole. In order to achieve this, we offer next to all standard activated carbon types, alternatives based on renewable raw materials.
The G-SERIES – These renewable raw materials have been carefully selected and on top a posterior product improvement took place. The result is an end product produced without fossil raw materials that can price-technically compete with fossil raw material based activated carbons in many applications. The products from the G-SERIES are available as not-impregnated and impregnated grades.
Typical applications: • Exhaust air purification (VOC's) • Biogas upgrading (H_2S, siloxanes) • Odour removal (sewage treatment plants, pumping stations) • Soil remediation (soil vapour extraction) • Acid gases and mercaptans adsorption

Benefits
- Product made of renewable materials: Contributing to a lower environmental impact of your company and project
- Light weight product: Up to 25 % less activated carbon to fill the same volume
- Premium quality product range: Available with CTC values of minimum 50 and 60 %
- Safe to handle: Low exothermic reactions thanks to a special and careful impregnation
- Cost effective: Due to the combination of its density, price and premium quality

TEXTEST AG — Hall 8 B29

FX 3370 Air Permeability Tester SpotAir

The new FX 3370 Air Permeability Tester SpotAir, which is in the final stage of development, can be used to determine the Air Permeability, the Pressure Drop, the Acoustic Impedance and the Flow Resistance in the moving production line.



The same measuring module can be used hand-held, in which case it is battery-powered, or it can be mounted to the frame of the production or finishing machine for a continuous profile measurement. For online use, up to five modules can be linked together for operation by one single PC and with a power adapter. Depending on the number of modules, up to five length profiles over the width of the material are provided by the system.

When the SpotAir is used as a hand-held instrument, the results are stored on a USB stick. During online use, the results are evaluated and documented with the same PC, which also controls the system.

Jowat SE — Hall 8 B8

Jowat Adhesives for Filter Manufacturing - Environment-Friendly - Sustainable - Safe

Jowatherm-Reaktant® MR - Powerful and Hazard-Free

The new Jowatherm-Reaktant® MR 614.50 provides very good results with a low application amount in the lamination processes of activated carbon filters as well as multi-layer filter media. It can be processed at temperatures 40–50°C lower compared to the PUR hot melt adhesives currently on the market—this saves resources and facilitates an optimized application process.

Adhesives from the Jowatherm-Reaktant® MR product range (MR = monomer-reduced) have a free monomeric isocyanate content of less than 0.1%. In accordance with the current EU regulation, the adhesive is therefore not subject to hazard labeling requirements.

Tenmat — Hall 8 B44

Improve your Filtration With a Tenmat Hot Gas Filter

Tenmat are a leading Hot Gas Filter manufacturer, producing a wide range of Hot Gas Filter elements, which are designed to remove particulates, heavy metals, furans, nitrogen oxides, acids and dioxins from gasses at temperatures and efficiencies higher than those achievable with a conventional system.

This is achievable due to our non-ceramic refractory materials and inorganic bonds which can be used in temperatures up to 1000°C. In addition, our Hot Gas filters have a 99.99% filtration efficiency with the ability to remove particles <1µm. Such properties mean that particles can be filtered at higher temperatures, allowing for more efficient heat recovery in downstream equipment.

Tenmat Hot Gas Filters are used to replace traditional bag filters and are constructed of exonerated alkaline earth silicate fibres. This negates the risks that are associated with ceramic fibres, making them safe to handle and meaning our Hot Gas Filters can be disposed of as non-hazardous waste.

EUROPLASMA N.V. — Hall 8 B51

Latest Developments in Plasma Nanocoating Technology to Functionalize Gas and Liquid Filter Media

Plasma is a unique technology to deposit ultra-thin coatings on all exposed surfaces of a material or product. It is increasingly used in manufacturing of filtration media and elements to achieve functionalities such as hydrophilic, hydrophobic or oleophobic. Improvements in process and machine design allow to deposit the coatings in a very cost effective way, with a process that is completely dry and clean. The technology is giving an increasing number of producers of technical nonwovens, membranes, mesh or nanofibers a clear competitive edge. Although today the use of plasma technology for functionalization of gas filter media is well established, the number of industrial applications in liquid filtration is still limited. At Filtech 2023, Europlasma will present its latest developments to improve the durability of plasma nanocoatings, one of the key technological challenges in functionalization of liquid filter media.

a2z Filtration Specialities Pvt Ltd. — Hall 8 A9

A2Z Flexible MiniPleat Lines

At FILTECH 2023, A2Z will be showcasing its Deep Pleat – 300mm Mini Pleat Line with foamed hotmelt system.
A2Z'S Intelligent Servo driven Blade Pleater along with the mini pleat production modules, allows the user to work with a variety of media including glass fiber as well as synthetic, with change overs for pleat depth/pleat pitch, and hot melt patterns on the fly. The operator can save and access upto 2,500 stored product variations, thus allowing multiple combinations/part numbers to be produced. The machine's unique flexible design helps filter manufacturers widen their product range and meet the market's ever changing needs.
The A2Z Mini Pleat production module can be added to any existing blade pleater to produce mini pleat packs with a wide array of media thus further reducing the filter manufacturer's capital expenditure and providing a very flexible production line. This also makes the equipment future-proof with the unique ability to mini pleat a very wide range of media.
The foamed hot melt system which has many advantages of lower cost of production, lighter weight and lower pressure drop with options such as Intermittent and spot beading.
Also, the equipment is IoT- & Industry 4.O-compliant.

Puffe Engineering GmbH — Hall 8 A24

New HTR-25 module including a unique recirculation function

Puffe Engineering due to decades of experience in hot-melt adhesive technology, a reliable partner and provider for tailor-made solutions in many industries.
The modules of Puffe Engineering are made from high quality components. They are perfectly matched to our application heads. Due to their quality, our modules are extremely durable and robust, even when used at extremely high temperatures. You will achieve a precise application with a clean cut of the adhesive.

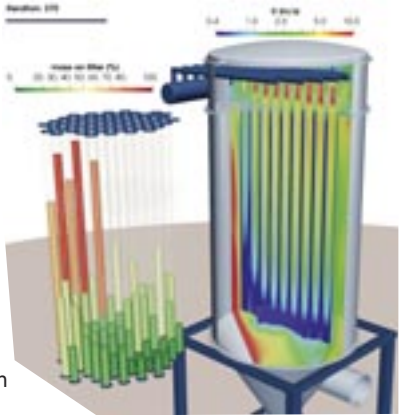
In 2023 we are launching our latest HTR-25 module with Air/Air operation piston for highly dynamic applications including a unique recirculation function. Also optimized for PowerFoam®, it is available both as a variant with standard and reduced cavity. With operation temperature of up to 250 degrees and a working pressure of 90 bars, our modules made of aluminum and tool steel offer fast and precise switching, even over a longer period of time.

DHCAE Tools GmbH — Hall 8 C14

Providing individual software solutions and CFD services.

DHCAE Tools develops special tools for flow analyses (CFD) in filtration applications. By optimising a filter system through CFD analyses, the utilisation of the installed filter area is optimised, operating costs are reduced, and the operating life is increased. In addition, the system is optimised in advance to guarantee stable operation and to avoid high costs due to system failures or plant downtimes.

The simulation tools have now been extensively expanded in order to efficiently reproduce and specifically optimise the flow of geometrically complex multi-filter systems. The interactions that occur during filter loading due to a higher local resistance and the associated constant relocation of the continuous flow are taken into account in an iterative approach. In this way, a particularly accurate modelling of the filter loading is realised over the entire operating time until cleaning. In the model extension, different damage models for the filters were also integrated to evaluate not only the particle deposits, but additionally the impact of large and fast particles on the filter and the resulting risk of damage. Components at risk can now be identified, and optimisations of the filter system can be numerically verified before the actual construction.



ATI - Air Techniques International — Hall 8 F52

100X Automated Filter Tester Validates Filter Efficiency of Respirator Masks

Air Techniques International (ATI) has been a global leader in the design and manufacture of specialized test equipment for HEPA filters, media, filter cartridges, respirators, and protective masks since 1961. The 100X Automated Filter Tester combines ATI's core technologies into a single, compact unit designed to test filter media, replaceable particulate filters, and masks used in medical and industrial hygiene applications.
Its innovative design allows it to meet a wide range of global industry standards including EN 143/149, EN 13274-7, EN 12941/42, ISO 23328, NIOSH 42 CFR Part 84, GB 2626, and more. During the COVID-19 pandemic the 100X has been widely used to validate the filtration efficiency of FFP2/3, N95, and KN95 style facemasks. Filter media and mask manufacturers worldwide depend on the accuracy and efficiency of the 100X.

Stop by our stand to see a live demo of the 100X.

Filtration Services Ltd — Hall 8 B50

The Rotavac One - Pilot-scale rotary drum vacuum filter station

The rotary drum vacuum filter is an extremely versatile unit that is used in a broad range of industries from pharmaceuticals, foods, bulk and fine chemicals through to effluent treatment. Selecting the correct type and size of filter requires test work on representative samples. The Rotavac One is an easy way to undertake trials for a rotary drum vacuum filter. The filter station has been designed as a plug 'n' play assembly with all of the necessary ancillary equipment included within the framework.

A typical Rotavac One filter station includes the rotary drum vacuum filter with variable drum and trough agitator speeds; filtrate receiver; liquid ring vacuum pump with partial seal water recirculation system; positive displacement filtrate pump and local control panel.
Fabricated in stainless steel, the filter is available with scraper discharge or precoat knife discharge, and a screw conveyor for easy filter cake collection. A perfect mimic of a full-scale filter, whether it is used for proof-of-concept, process optimisation or product development.

The precoat version uses our unique automatic knife advance system (AKAS) which controls the knife advance rate in 5 micron increments.
Quick install, simple operation.

SPM Srl — Hall 8 A26

91XFP Pleat Forming Machine

Spm continues the development and research of technical solutions, aimed at satisfying the growing automation and customization needs linked to the different stages of the production process in the field of filtration.

This goal led to the creation of the new 91XFP Pleat Forming, machine for processing the filter media, with longitudinal pre-cutting device and automatic deposit of glue lines. This process recreates the pleat and allows to obtain the spacing of the pleat itself or spaced elements with sealed edges.

Combined with a pleating machine with blades or rollers and a transversal cutting device, the complete filter production line is created.

Hollingsworth & Vose GmbH — Hall 7 H2

CabinPro™ XT HEPA

H&V's CabinPro™ XT HEPA cabin air filter media are an example of our ability to innovate and offer high-performance solutions. This highly stable HEPA efficiency (according to EN1822) filter media offers best-in-class protection against particulate contamination for vehicle occupants. The CabinPro™ XT HEPA is a sophisticated composite filter media.
Being true HEPA, i.e. featuring real HEPA efficiencies according to the EN1822 standard, filters made of CabinPro™ XT HEPA filter media protect vehicle operators and passenger from fine particles, which are representing a serious health risk, causing cardiovascular and pulmonary diseases.

Trupor® - high flux membrane microfiltration media available now in Nylon

Trupor® is H&V's microfiltration membrane product line. Trupor® is sold as a rolled good and is designed to the meet the needs of the water and biopharmaceutical industries by providing superior flux to current materials – often 2x when tested in elements against the benchmark. Trupor® products are available in six pore sizes – 5.0 µm, 1.2 µm, 0.80 µm, 0.65 µm, 0.45 µm and 0.20 µm, come in three polymer families: Nylon, PES-PBT, and PVDF-PBT.
Trupor® Nylon was launched in 2020, and the Trupor® PES-PBT and Trupor® PVDF-PBT launched in 2022.

Hengst Hall 7 **K13**

The electrified cabin air filter Blue.ion

In one hour, the ventilation system in a car draws 300,000 liters of air into the interior of the vehicle – together with pollutants, allergens, and odors from the immediate environment. Fortunately, cabin air filters substantially reduce the pollution level even in the case of very fine particles therefore contributing to a healthy and hygienic climate in the vehicle. The design of cabin air filters involves the conflicting goals of combining a compact design with the lowest possible flow resistance as well as filtration of the finest particles. The new Blue.ion cabin air filter from Hengst can boast constantly high and also energy-efficient filtration performance, which is achieved by combining two technologies: ionization of particles in the air flow and polarization of the filter medium. An ionizer provided directly upstream of the filter ensures that the particles are electrically charged. This improves separation of the particles in the filter, which is likewise charged. Even despite the ionization, the charge decreases over the life of the filter, resulting in a performance drop with reduced particle separation. At this point, polarization has a complementary effect. The use of an electrostatic field permanently maintains the charge in the filter medium. Altogether, the combined system ensures consistently high separation throughout the entire filter life.

Hengst Hall 7 **K13**

Blue.care+
The quietest air purifier in its class

Indoors, the risk of indirect corona infection from virus-laden aerosols is particularly high. The new antiviral air purifier Blue.care+ now makes short work of this.
Equipped with a HEPA H14 high-performance filter, Blue.care+ removes ≥99.995 % of contaminated aerosols from the room air, thus contributing to a noticeably healthy indoor climate. Blue.care+ is also equipped with a powerful yet low-noise blower and state-of-the-art filter technology. This means that the antiviral air purifier from Hengst sets new standards.

With a noise level of <35 db(A), the Blue.care+ is the quietest air purifier in its class.

The new 4V-HT frame system will be available in the following stock sizes: 592x592x292 mm, 592x490x292 mm and 592x287x292 mm.

LUM GmbH Hall 8 **A52**

The new standard in filtermedia efficiency determination and nanoparticle analytics

The new Single Particle Optical Counting and Sizing instrument LUMiSpoc® opens up completely new perspectives not only in the field of nanotechnology but also for filter manufacturers to quantify the efficiency of their products.

In the permeate, residual particle concentrations of 10^3 m^{-1} to 10^9 ml^{-1} and in a size range between 40 nm and 8µm are analysed with a very high resolution. The measuring principle is similar to a flow cytometer. Up to 10,000 particles are detected and number-based size distribution analyzed within just one minute by a newly developed browser- and cloud-based software package SEPView® 7.

The innovative system will be exhibited at FILTECH 2023 by LUM GmbH in Hall 8, Booth A52.
In addition, the analytical photo centrifuge LUMiSizer® with the new accessories for Analytical Centrifugal Microfiltration will be presented.

GKD - Gebr. Kufferath AG Hall 8 **B19**

Innovative microfilter crucible for the analysis of microplastics

Methods for the analysis of microplastics are becoming increasingly important. TED-GC/MS is a method for high accuracies. In order to take into account an important step in the analysis of microplastics, GKD has teamed up with the Federal Environment Agency and the Federal Institute for Materials Research to develop an innovative microfilter crucible for sample preparation.

This microfilter crucible, which was developed as part of the RUSEKU research project in the BMBF's "Plastics in the Environment" research program, is made of stainless steel and is temperature-resistant up to 600 °C. Its advantages in analysis were tested for a year and both, the improved analysis accuracy and the time savings in the laboratory were tested and confirmed.

It has already proven its suitability for use in the analysis of beverages. It combines a filter and sample holder, saving steps and increasing sample throughput. Once separated, particles are transferred directly to the analyzer, reducing the risk of sample loss or contamination. An optimized weave in the bottom allows high recovery rates due to a high separation efficiency of 5 µm.

Fibertex Nonwovens A/S — Hall 7 H14

Fibertex 100% synthetic non charged filter media up to HEPA 13 efficiency level

Fibertex Nonwovens is one of the leading nonwoven manufacturers with latest production technology available. A unique building platform with multiple production technologies allows tailored filtration product concepts for filter manufacturers within both air and liquid filtration based on needlepunch, spunlace, spunbond, high loft, activated carbon and nanofibre production technologies.
The state-of-art nanofibre production capability allows air filtration products up to HEPA 13 efficiency level and being fully mechanical filtration meets latest filtration standards. HEPA 13 pleatable filter media Fibertex Pleatex 80AH13NP6 can be used in various applications, including vacuum cleaners, air purifiers, HVAC systems, respirators and cabin air filters.
The filter media is made of synthetic durable nonwovens, including nanofibres with a low pressure drop and non-charged efficiency, which can replace glass fibre and melt blown media that is commonly used. Fibertex filter media has approximately half the pressure drop compared to

atech innovations gmbh — Hall 8 D18

atech Ceramics in Polypropylene (PP) housings

Since end of 2021 the major producer of polypropylene membranes has stopped his manufacturing for tubular PP membranes.

As a consequence of this termination, PP modules like "Microdyn® tubular modules" or "T-cut-PP" are no longer available, thus membrane system operators are facing a problem if it comes to membrane replacement.

atech innovations gmbh has developed a housing made of polypropylene with exactly the same dimension as the a.m. PP modules but equipped with their unique ceramic membranes in 1,5 µm length (the photo shows a module with 3 m length, for total of 14 membranes).
Just by adapting the individual connections (feed/retentate/permeate), the atech PP modules fit into the PP- membrane system without further modification.
The atech PP-housing does not have any metal parts (fully PP design) so it can be used for corrosive applications as well.

Key features of atech PP module with ceramic membranes: • pore sizes available from 1,2 µm to 1 kD (including 0,2 µm) • narrow pore size distribution • channel diameter 4 mm (5,5 in preparation) • filter surface (up to 18m²), can be adapted • similar feed flow rates as PP membranes (no pump modification necessary) • membranes can be exchanged separately without change of housing • can be used for corrosive liquids (no metal parts in contact with liquid) • high chemical resistance • extremely high water permeability

HETA Verfahrenstechnik GmbH — Hall 8 B33

Quick opening closure optimises downtimes

The ever-increasing cost pressure is forcing plant operators to optimise or, at best, prevent plant shutdowns. Instead of expensive quick-release fasteners, vessels have so far been equipped with standard bolt-nut connections. It costs time and money to open them, ties up maintenance capacities and can even lead to a plant shutdown.
HETA has been aware of this and therefore created an innovative quick opening closure. Only one vent valve needs to be opened to access without tools the filter elements to be exchanged. Conversely, quick closing of the vessel is obvious.
The new HETA innovative quick opening closure can be retrofitted at low cost to any existing vessel with standard welding neck flange. Separate or extraordinary tests for operation are not required as the closure itself is a separate approved component.

The advantages are obvious: service times are reduced significantly. The time-consuming opening of a vessel with a standard blind flange connection by loosening all bolts and screws is eliminated, as is the closing with the correct torque.
The HETA quick opening closure has already proven its economic efficiency in a standard production environment.
Convince yourself and join us on our stand for further information.

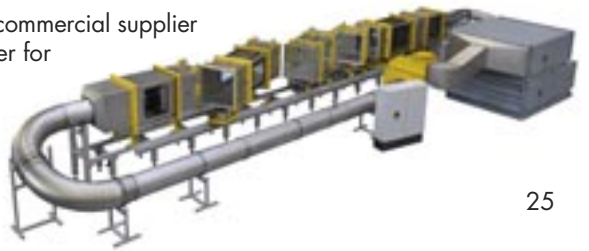
TOPAS GmbH — Hall 8 E76

Water, dust, salt – challenging gas turbine filters with new GTS 114

Topas looks back to a long-term expertise in the field of development, construction, manufacturing and installing of air filter test systems. Based on the new normative regulations from ISO 29461 we have been requested by our key customers to offer a technical solution to test gas turbine filters. The new GTS 114 is based on the successful ALF 114 test system concept. Therefore it also follows testing requirements of ISO 16890 and ASHRAE 52.2. Main new features are related to increased air flow rates up to 11.000 m³/h in recirculation mode with test air conditioning. Furthermore a list of different test aerosols such as oil droplets, salt and dust particles can be applied in combination with multiple measurement technologies such as optical particle counting, optical photometer or flame photometer. The major customer benefit will be the all-in-one solution we propose different from the various test setups described in the different parts of the ISO 29461 standard. Especially doing the water spray performance testing in the same duct required all our construction skills.

Good to know: Topas is the first and global commercial supplier of such a test system and an important partner for filtration applications in this field.

Topas – the air filter testing experts



Institute of Air Handling and Refrigeration - ILK Dresden Hall 8 **A30**

New complex air pollutions need complex filtration solutions

New manufacturing processes, such as additive production methods, laser cutting, battery factoring and recycling, causes more and more complicated waste air ingredients what makes the air cleaning processes more and more difficult. The ILK Dresden laboratory is currently running a couple of research projects dealing with these problems and support interested industries developing filtration materials and complete air cleaning systems. Based on more than 50 years-experience we continuously develop our laboratory to measure all kinds of air pollutions and to investigate the performance auf air cleaning technologies. Of course test rigs according the usual filter test standards are part of the laboratory too.

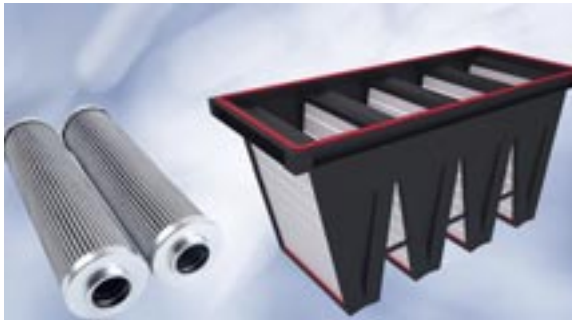
RAMPF Polymer Solutions GmbH & Co. KG Hall 8 **E29**

Conductive Casting Compounds for the Filter Industry

RAMPF Polymer Solutions has developed high-performance polyurethane systems for casting and bonding filter elements. The cutting-edge materials exhibit outstanding conductivity and flowability and meet the directives of the European Union on explosion protection (ATEX).

The directive 2014/34/EU (ATEX) of the European Union regulates the market for explosion-proof electrical and mechanical devices, components, and protective systems. It is relevant for numerous industries and applications, including the filter industry. Here, the static charge inside the filter during cleaning can lead to a spark that, in the worst case, could cause an explosion in the filter.

In order to prevent this, RAMPF Polymer Solutions has developed conductive casting compounds for use in potentially explosive applications. The polyurethane systems have an excellent conductivity of 0.03 MOhm/cm, whilst at the same time exhibiting a very low mixing viscosity and therefore very good flow behavior. As a result, users do not need any complex conveyor systems and potting applications can be easily processed.



The casting compounds are available in Shore hardness A 85 and D 80. Further benefits are high chemical resistance and good machinability.

Hengst Hall 7 **K13**

Ion exchanger Blue.iox – For safe operation of the fuel cell

Electric vehicles, which include fuel cell vehicles, must meet the standards for high-voltage components. To keep vehicles safe, a minimum insulation resistance of the electrically conductive components to the vehicle ground (earthing) must be maintained. One of the challenges of fuel cells is therefore the solubility of ionic components in the coolant circuit. The Blue.iox ion exchanger recently developed by Hengst keeps the electrical conductivity of the coolant to a minimum and thus rules out any short-circuit effects.

The Blue.iox ion exchanger ensures a rapid lowering of the initial ion concentration within the coolant circuit. It can be integrated in the main flow or in parallel connection with components of the coolant circuit. The ion exchanger is available in capacities up to 1500 meq and various designs for use in passenger and commercial vehicles, in agricultural and construction machinery, and for stationary applications as well.

The innovative design of the resin system in the Blue.iox filter cartridge ensures consistently high filtration performance throughout the entire service interval. All the materials used exhibit good aging behavior and were selected for their compatibility with the coolant.

In addition, the Hengst Blue.iox ion exchanger is designed to be easy to handle. A screw cap allows the filter cartridge to be changed cleanly using standard tools, while the integrated shut-off valves ensure that no coolant leaks out.

Hengst Hall 7 **K13**

Cathode filter
To protect the fuel cell from particles and harmful gases

The essential components of the fuel cell are very sensitive to particles and harmful gases. As an example, noxious gases such as sulfur dioxide (SO2) may react with the catalytic converter and cause unwanted deposits, which may, in turn, cause damage to the fuel cell.

The fuel cell's high sensitivity to catalyst toxins is compounded by the use of costly precious metals such as platinum.

Hengst has designed a cathode filter for this purpose, which separates sulfuric gases and ammonia in a particularly effective manner, thereby preventing damage to the catalyst and the fuel cell membrane.

INTERMAS — Hall 8 D11

The European leading manufacturer of extruded netting

Today, an increasing number of industrial applications require materials resistant to high-temperatures.
Most common air filters do not need to bear temperatures beyond 90°C. Intermas has developed a wide range of meshes that are used as pleating support of filter medias. Our extruded plastic netting made in Polyethylene (PE) or Polypropylene (PP) is commonly used to reinforce the pleat of filter medias for HVAC filters, dust collectors, cabin airs and intake filters.
When it comes to liquid filtration, filter components are usually exposed to a much higher temperature range whilst in contact with aggressive chemicals. Intermas extruded netting made in Polyamide 6 (Nylon) and Polybutylene Terephthalate (PBT) is designed to operate under the most demanding conditions and environments.
As opposed to netting made in Polyethylene (PE) or Polypropylene (PP), netting in PA6 and PBT is today a very competitive solution for high-temperature filters and represents the alternative to steel and fiberglass meshes.
Intermas also has a specific family range of meshes used as feed spacers for Reverse Osmosis filters. They are made in PP and are used as membrane separators in RO modules.

MANN+HUMMEL — Hall 8 C11

Wastewater treatment with MANN+HUMMEL's BIO-CEL® products

BIO-CEL® M+ is MANN+HUMMEL's most versatile module optimized for medium-sized and mobile wastewater treatment plants. It features the high-performance and durable BIO-CEL® UV400T ultrafiltration membrane, specifically developed for use in MBR systems and preventing antibiotic-resistant bacteria from entering the environment.

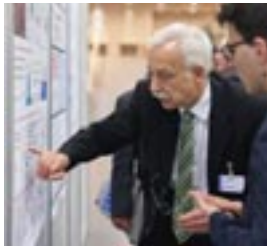
One unit treats wastewater from up to 115 households daily producing around 75 m^3 of filtrate, and can be expanded modularly if required, perfectly fitting into a high cube container. Thus, the construction of a mobile MBR plant does not require any custom-made filter tanks. Retrofitting is also possible.

Ultrafiltration has higher filter quality and better retention against (antibiotic-resistant) bacteria and viruses than microfiltration. Due to BIO-CE[L]® UV400T, solids and bacteria are efficiently removed from wastewater. For eliminating trace substances, activated carbon can be added directly to the membrane tank; a separate fourth and fifth treatment stage is then no longer necessary.

BIO-CEL® M+ can reduce the area of a plant by more than 60%, allowing the construction of extremely compact, decentralized wastewater treatment plants operating with low emissions.

Short Course 1 — 9:00 am - 6:00 pm

Solid/Liquid Separation



This 1-day Course "Solid/Liquid Separation" is of interest to engineers, scientists, managers and other technical personnel involved in solid-liquid separation in the process and other industries. They will find the course informative, regardless of whether they design, purchase, research or use filtration and separation equipment. Plant engineers, technicians and operators should find the course materials directly applicable, and graduate research students will value the expert introduction to the technologies. It is a comprehensive review of the processes involved in the separation of solids from liquids, which will emphasise practical aspects and present appropriate theoretical information as necessary.

Course Presenter
Dr.-Ing. Harald Anlauf was till March 2020 Academic Director at the Karlsruhe Institute of Technology (KIT), Institute of Mechanical Process Engineering and Mechanics and since more than 40 years active in the field of solid liquid separation technology. He earned his academic degrees as Chemical Engineer 1980 and 1985 at Karlsruhe University. 1999-2006 he was Chairman of the VDI-GVC working party „Mechanical Liquid Separation", since 2000 Co-Chairman of the FILTECH Congress Scientific Committee. 2004-2008 he was Chairman of INDEFI and President of the 10th World Filtration Congress 2008 in Leipzig, Germany. He published more than 190 technical papers, books etc. and is internationally active in giving consultations and lectures.

Short Course 2 — 9:00 am - 6:00 pm

Fine Dust Separation

This 1-day "Fine Dust Separation" Short Course is of interest to engineers, technicians, scientists, managers, and other personnel involved in gas-solid separation in the process and other industries. They will find the course informative, regardless of whether they design, purchase, research, or use dust separation equipment for product recovery, emission control, air cleaning or process gas cleaning. It is a comprehensive review of the processes involved in the separation of solid or liquid particles from gases, which will emphasise practical aspects and present appropriate theoretical information as necessary.

Course Presenter
Prof. Dr.-Ing. habil. Eberhard Schmidt is Full Professor for Safety Engineering/ Environmental Protection at Wuppertal University. His academic degrees he earned 1991 and 1998 at Karlsruhe University. From 1993 to 1994 he was affiliated with the Joint Research Centre in Ispra/Italy. In the years 1998 and 1999 he was with Degussa company in the department of process engineering/ particle technology.
He is Co-Chairman of the FILTECH Conference and was Scientific Secretary of 10th World Filtration Congress. He has published more than 100 technical papers, books, patents, etc. and consulted and lectured throughout the world.

The Conference

The FILTECH Conference is the globally acknowledged platform for scientific exchange of the latest research results and knowledge transfer between theory and practice. It provides a representative overview of current research and state-of-the-art developments for filtration and separation targets in a wide range of sectors and covers all relevant subject areas and techniques for the separation of particles from liquids and gases.

More than 180 Technical Papers

An exciting programme gives a representative cross-section of the different procedures and appliances of separation technology as well as across the industry about the applications, from the preparation of mineral raw materials, the chemistry, environmental technology and water purification down to the pharmacy and biotechnology.

For full programme and compendiums of all abstracts visit www.filtech.de

Conference Fees

Early Bird until	**01.12.2022**
Day-Ticket	€ 320
3-Day-Ticket	€ 660
Short Course	€ 490
Regular Price from	**02.12.2022**
Day-Ticket	€ 410
3-Day-Ticket	€ 850
Short Course	€ 610

(all prices including German VAT).

Your Conference Registration includes:

- Proceedings featuring all papers in an abstract book & personalized download-link
- Refreshments during breaks & lunch/es
- Entrance to the FILTECH 2023 Exhibition & Catalogue
- Cologne Public Transport Ticket (February 13-16,2023)

Travel & Accomodation

Travel Restrictions do not apply for trade fair visitors, delegates and exhibitors. Trade fair participants can enter into Germany, as they are considered business travellers with an urgent need to travel. Further regulations and testing obligations for business travellers are currently developped. As regulations can change, attendees are urged to inform themselves before travelling.

FILTECH 2023 will be held again at the venue Koelnmesse in Cologne. Due to Koelnmesse's central location, which is conveniently situated for all transport links, visitors can quickly reach the exhibition centre by car, train and plane.

Train travel time from Airports to Cologne

From **Frankfurt Airport** (FRA): ⟶ Approx. 50 min.
From **Cologne-Bonn Airport** (CGN): ⟶ Approx. 12 min.
with train line S13 – Ticket Category 1B
From **Düsseldorf Airport** (DUS): ⟶ Approx. 45 min.

koelnmesse
Hotel Service

Find, compare, and book at your hotel with the online portal of the Koelnmesse Travel & Hotel Service. Make your online hotel accommodation reservation easily, securely and profit from favourable prices:

The Koelnmesse Travel & Hotel Service does everything to make your stay at **FILTECH 2023** as pleasant as possible. Use their experience and profit from particularly favourable prices.

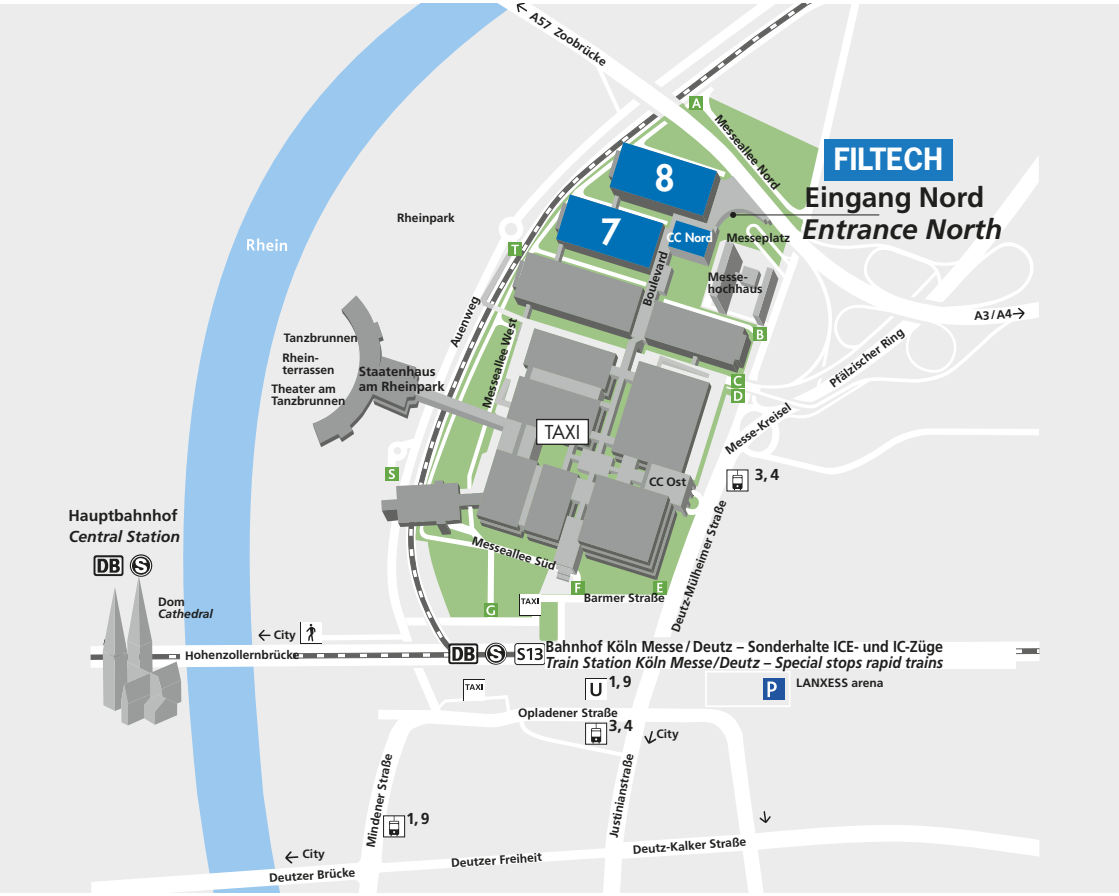
For assistance please contact:

Ms. Sara Langiu-Kollack
Koelnmesse Travel & Hotel Service
Phone: +49 (0)221 8212087
E-mail: s.langiu-kollack@koelnmesse.de

For online booking visit:
www.filtech.de → plan your trip

FILTECH 2023

Koelnmesse · Cologne · Germany



Opening hours Exhibition
February 14 -15 9 am - 6 pm
February 16 9 am - 5 pm

Koelnmesse – Halls 7+8 – Entrance North
Messeplatz 1
50679 Cologne · Germany

Visitor Tickets

Registration until 14.01.23	from 15.01.23
1-Day Ticket: 20,00 €	1-Day Ticket: 40 €
2-Day Ticket: 25,00 €	2-Day Ticket: 45 €
3-Day Ticket: 30,00 €	3-Day Ticket: 50 €

Pre-register now!
Have fast track entry to the exhibition and save up to **50%**
Pre-register at www.filtech.de