



SPXFLOW

Filtration & Separation Technology

AIRPEL SERIES / DOLLINGER / PLENTY / VOKES SERIES





SPXFLOW

SPX FLOW PRODUCTS AND BRANDS SERVING THE FILTRATION MARKET

Whether you're looking to protect process equipment or improve product purity, SPX Flow Technology has the right solution for you. Being a leading provider of filtration solutions, we design and manufacture filtration and separation equipment for industries from Oil & Gas, Power, Chemical and Marine to Water Treatment, Paper/Pulp and General Industry.

SPX FLOW's Filtration and Separation Technology (FaST) group is comprised of 5 leading filtration brands, Airpel / Dollinger / Plenty Filters / Plenty Process Filtration / Vokes Series.

Together they can offer a wide product offering of filtration solutions, whether it be a standalone filter, a complete utility package or fully packaged skidded systems, the FaST group can offer not just the equipment but also the peace of mind and confidence that the end result will meet expectation.

FILTRATION AND SEPARATION TECHNOLOGY GROUP

Airpel Series

>Dollinger®

>Plenty®

Vokes Series



Explore the endless solutions

When you specify our equipment, you get more than a product - you get a partner. Our dedicated team of experienced engineers with over 60 years of filtration experience, utilises in-depth processes plus application and design skills, to provide quality solutions to meet your needs.

With decades of experience in the filtration industry and by working in close collaboration with you to understand your goals and requirements we design the best solution to meet your needs.

Your partnership with us doesn't end at the sale.

Our supportive aftermarket service includes training, consulting, remote diagnostics, genuine spare parts, repair and much more. Our experienced engineers are available to fit replacement parts to ensure that your equipment will continue to run smoothly. Please contact our aftermarket department for specific details on services available in your area.

Explore the endless solutions that SPX FLOW has to offer on www.spxflow.com. You're sure to find answers that can reduce costs, improve equipment efficiency and enhance performance.



Customer Service

The FaST product range comprising of the Airpel, Dollinger, Plenty and Vokes brands, offers a comprehensive range of filtration solutions that are renowned globally for supplying highly reliable, durable and proven filter products into a vast array of different industries.

Working through various routes to market ranging from Original Equipment Manufacturers (OEM's), Engineering, Procurement and Construction (EPC's), and design houses the SPX FLOW FaST team have an extensive and experienced sales team that are well practised in interpreting a customer's individual specifications and requirements, and offering technically compliant and commercial viable solutions to all of the major companies working and operating in the following industries.

- Oil and Gas (Onshore and Offshore)
- Water
- Waste Water and Sewage
- Power
- Chemical
- Petrochemical
- Marine

Throughout our long, established history, the FaST team have developed a fundamental understanding of what our customers expect from initial concept (Front End Engineering and Design - FEED) through to final document submittal, and can rest assured that they have a partner in SPX FLOW who will strive to meet and exceed expectations.

The knowledge of our sales team, the experience of our engineers and the extensive support of our aftermarket team, coupled with our proven filtration products, these are the reasons why time and again customers will not compromise on quality and choose SPX FLOW filtration products.

Capabilities:

SINGLE & DUAL BASKET STRAINERS

- Y-Type
- Single basket type
- Dual basket
- Multi basket designs
- Self draining strainers
- Tanker filters

BACKFLUSH & SELF CLEANING FILTERS

- Self cleaning filters (up to 35 bar)
- Rotor blade self cleaning filters – quick entry design
- Automatic and fully automatic filters
- GRP body backflush filters
- Super duplex stainless steel filter

GAS FILTERS

- Horizontal gas filter
- Horizontal high pressure gas filter
- Gas particulate pipeline filter
- Vacuum / Exhaust filter

LIQUID & GAS FILTER SEPARATORS

- Liquid – liquid filter separator
- Liquid – gas filter separator
- Gas – solid filter separator
- 2 Stage filter separator
- Coalescing pipeline filter
- Liquid particulate pipeline filter

TYPICAL PRODUCT APPLICATIONS



General Industry

Water & Waste Water Treatment
Chemical Processing
Paper / Pulp / Tissue / Fabric
Paints / Coatings / Glass
Food & Beverage



Power

Nuclear
Conventional
Renewable
Heating & Ventilation



Oil & Gas

Upstream
Midstream
Downstream

CARBON (ACTIVATED) BED FILTERS

- Active carbon / Carbon bed filter

CARTRIDGE FILTERS

- Cartridge filters

SKID MOUNTED PACKAGES

- Customised filter skids to suit clients requirements

OIL MIST ELIMINATOR

- Suited for diesel, gas and natural gas engines
- Suited for steam and gas turbines

COALESCERS

- Horizontal and vertical orientations
- Single or two stage construction
- Liquid/gas coalescers

AIR INTAKE FILTERS

- Spin filter
- Panel filter
- Pulse jet filter
- Turbo Kleen
- Single stage / Multi stage air intake filter

INSULATING OIL TREATMENT

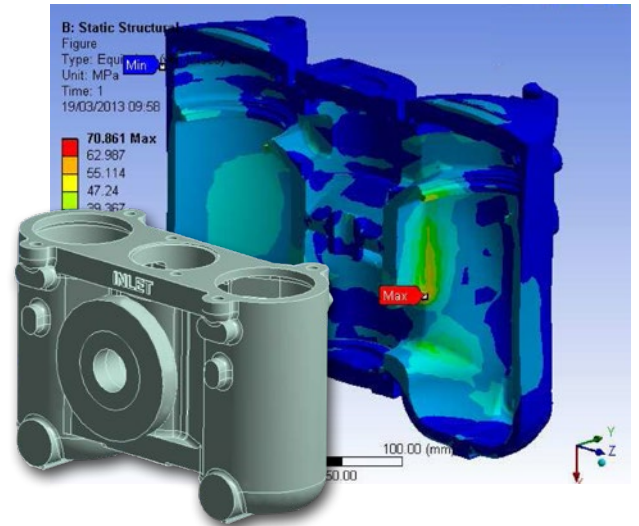
- Streamline fully mobile unit
- Streamline semi mobile unit
- Streamline fixed unit

Engineering and Design

Our highly experienced engineering and contracts team have vast experience in designing filtration equipment for many applications and industries. From initial concept design, to supply and installation, working with our dedicated contract managers, we can offer a full service to ensure your project runs on time and on budget.

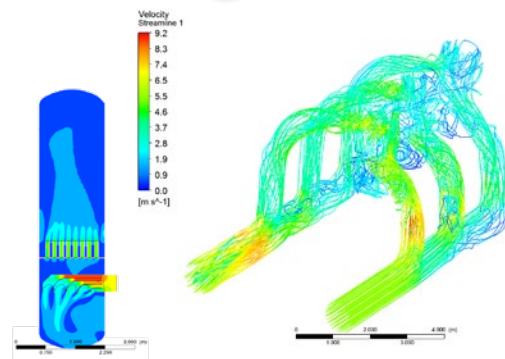
Finite Element Analysis (FEA)

FEA is a good choice for analysing problems over complicated designs especially for pressure vessels such as filters. We have the programs and the knowledge to ensure our filter solutions remain cost effective, efficient and above all, a safe design for operators when installed.



Computational Fluid Dynamics (CFD)

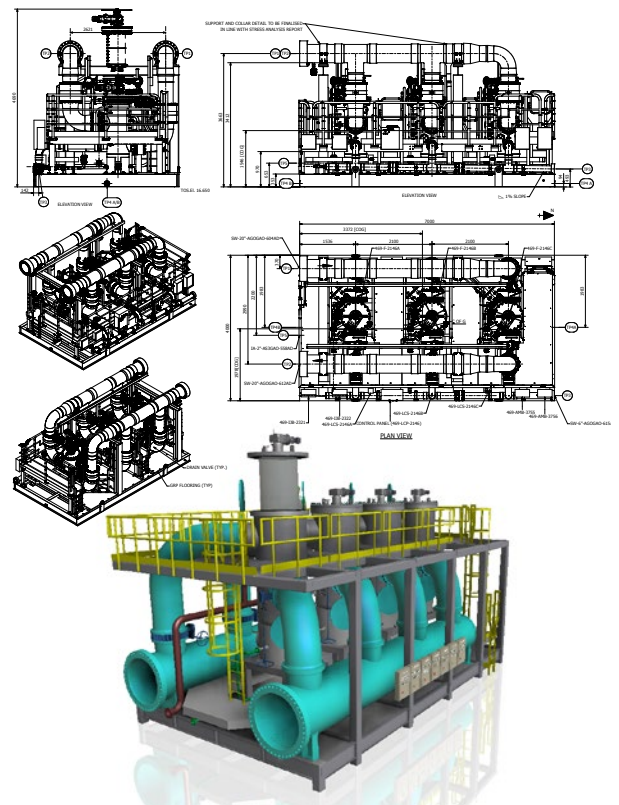
CFD is crucial in developing a solution or solving and analysing problems that involve fluid/gas flows. This is why we use the latest CFD software to simulate the interaction of liquids and gases within our product designs in order to provide a filtration solution which has predictable results.



3D Drafting, CAD and CAE Layout Designs

Space is at a premium whether it be on an oil rig or in a process plant, a new installation or fitting into an existing footprint, we can offer full engineering drawings in 2D and 3D so that full potential of the space is utilised efficiently and effectively.

By using modern CAD / CAE packages we can ensure your filter system can also be used as part of your P&ID documents, making component identification easier and SPIR (Spare Parts Interchangeable Records) accurate from the original supply.

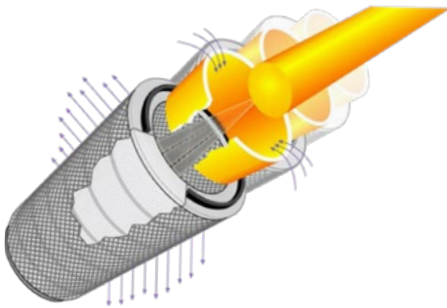


Process Knowledge

Process knowledge is our strength, selecting the right equipment with the correct filtration media is essential when providing a solution for a particular application or problem. By using the experience within the FaST group, the right solution is easy to come by and with our comprehensive filtration knowledge and expertise, you can be sure you are selecting the right partner.

FILTRATION MEDIA

- Basket filters — cleanable
- Liquid and gas elements
- Wedge wire elements
- Perforated elements
- Bag filters
- Cartridge filters
- Carbon bed filtration
- Synthetic and natural fibre media
- Fibreloc® filter media
- High efficiency gas element
- Sintered metal, fibreglass
- Polypropylene elements
- Pulse jet
- Cyclone separators



ELEMENT CONSTRUCTION



Basket

Notch ring & Wire

Media

Our elements are designed and constructed to suit specific process needs, developed over decades of innovation, experience and knowledge.

Incorporating such designs as the efficient radial finned design, which provides the largest filtration area for a given element



Filter Products

Single Filters & Strainers

When the filtering process can be interrupted for cleaning and inspection purposes then our single filters are one of the most efficient and economic product ranges on the market.

With several designs available from standard cast to custom fabricated construction and suitable for liquid and gas applications, you

can be sure that the right product is chosen for your given requirements.

These filters accommodate design features that can assist the operator by reducing down time and increasing cost savings, with features such as quick release covers and cleanable/reusable filter baskets.



Dual Filters & Strainers

Online filter cleaning and inspection is becoming more and more critical so that continuous operation is achieved even during filter cleaning intervals.

The FaST portfolio offers a wide range of standard cast products with an integral isolation change-over valve to custom

products designed with duty and standby configurations incorporating pipework and valves.

Offering low pressure drop, compact designs, various materials and designs, these filters are an ideal solution to online filter applications



Self Cleaning Filters

Automatic self cleaning filters offer a high level of cleaning efficiency with minimal product loss, whilst ensuring process continuity without manual labour or contact with hazardous materials.

These are available in high (35 Bar) and low (13.8 Bar) pressure designs with filtration levels down to 25 micron in either a wedge wire or perforated element.



Backflushing Filter

These are available in various metals or Glass Reinforced Plastics (GRP) body materials. This filter cleans without interrupting the liquid flow and manages the collected contaminants by flushing the inside of the element out through the backwash pipework.

The cleaning cycle is initiated by an

adjustable timer and overridden by high differential pressure.

Standard and custom designs are available with a wide range of perforated sheet and wedge wire elements filtering down to 50 microns which are selected specifically for the application in question.



Cartridge Filters

Used for removing fine contaminant from liquid flows, the cartridge filter design is custom built and fitted with multiple high surface area cartridges installed in a single vessel, manufactured in accordance with international pressure vessel codes.

The Cartridges are 'pleated' to give high

filtration or wound for high temperature or chemical compatibility. Flow is from outside-to-in, with contaminant trapped on the outside surface of the cartridges.

Available in many levels of filtration, pressure classes and materials.



Filter Products

Liquid Filters

Our liquid process filter designs come in a variety of shapes, sizes and materials in accordance with international pressure vessel codes. Available in various designs from single basket and dual basket (duplex) filters to angle basket, fully automatic backflush filters, cartridge type filters and Hi-Flow filters.

Designed to incorporate either quick release or bolted closures and a choice of filtration elements of cleanable or disposable design.



Gas Filters

Designed to remove solids from gas streams, the gas filter range is extensive, from standard cast models to fully bespoke horizontal or vertical designs, all in accordance with various design codes such as Fas PD5500/E13 and ASME VIII.

Utilising our filtration experience these filters will be supplied with the appropriate filtration element for the operating conditions, be it stainless steel, fibreglass or suitable media in a cleanable or disposable designs.

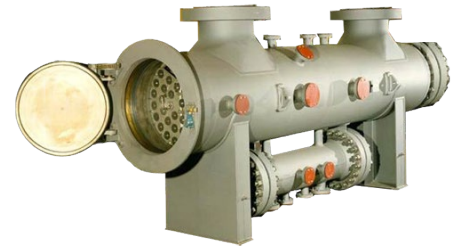


Separators

Designed for the removal of both solids and liquids from gas streams, these filter separators are constructed using Plenty coalescing cartridges, vane units and/or cyclones to achieve the required solid and liquid removal efficiency.

in a range of materials suitable for most operating conditions.

These custom designed and manufactured filters are engineered to meet specific application details whilst in accordance with international pressure vessel codes.



With a variety of models to choose from, units are available from a pipe size of 2" and above, to suit both high and low pressures, and available

Coalescers

These are designed to coalesce fine liquid mist in gas streams into droplets considerably larger than their original size. As the flow enters the vessel below the elements and passes through a flow distributor, this acts as a primary separation device removing coarse liquids by gravity. The flow passes through the coalescing cartridges in an inside-to-out flow direction and liquids are coalesced through the structure of the element.

These then settle by gravity and can be drained from the vessel.

Our units are available in both horizontal and vertical orientation with single or two stage construction, designed to suit the clients requirements and design standards.



Skid Mounted Packages

With a fully customer approved design, these modular packages can include mechanical & electrical components, instrumentation, ladders and platforms so that they are compatible with site requirements.

These skid packages are specifically designed to meet application requirements, using our filtration knowledge and technology, whilst ensuring cost and delivery meet project expectations.



Carbon Bed Filters

These filters work by the process of 'absorption' where one material adheres to another by means of physical or chemical attraction. The use of an extremely porous

carbon media with big internal surface areas, enables the carbon bed to remove mainly organic compounds to meet customer specific parameters.



Oil Mist Eliminator

The Oil Mist Eliminator is designed to extract oil mist droplets from the atmospheric vent and return them to the lubrication oil system, whilst addressing health, safety and environmental concerns.

steam turbines, as well as protecting the environment from dirty and harmful oil mist.

Our Oil Mist Eliminators are easily retrofitted onto existing gas or steam turbines and are also designed specifically for diesel engines with an Auto Pressure Balance (APB) control system.



These highly efficient filters safeguard critical components surrounding gas and

Air Intake Filters

SPX FLOW can offer a wide range of both static and self-cleaning air-intake filter systems in gas turbine and turbo compressor applications. We have a full team of engineers dedicated to detail, designing and project planning the major constructional components of the air intake and ventilation systems.

Custom designs utilise panel filters in accordance with ASHRAE specifications and pulsejet cartridges comply with ARAMCO standards to ensure our customers are being provided with the optimum solutions for their most hostile of environments.



Insulating Oil Filters

Insulating fluid is vitally important for the safe and efficient operation of many types of electrical equipment. In addition to its insulating properties, the fluid is used as a coolant in transformers and as a means of arc suppression in circuit breakers. In each case the operation of the electrical equipment depends on the purity of the insulating fluid, which in service can be

contaminated by particles, water, gases and chemical products.

By installing one of our insulating oil filters to regenerate the oil, a prolonged working life and reduced operating costs are ensured. Available in 3 designs (mobile, fixed and semi-fixed), these units have site and client requirements in mind.





**FILTRATION &
SEPARATION
TECHNOLOGY**

SPX FLOW - An Introduction

SPX FLOW, Inc. (NYSE:FLOW) is a leading manufacturer of innovative flow technologies, many of which help define the industry standard in the market segments they serve. From its headquarters in Charlotte, North Carolina, it operates a sales and support network, centers of manufacturing excellence, and advanced engineering facilities, throughout the world. Its cutting-edge flow components and process equipment portfolio includes a wide range of pumps, valves, heat exchangers, mixers, homogenizers, separators, filters, UHT, and drying technology that meet many application needs. Its expert engineering capability also makes it a premium supplier of customized solutions and complete, turn-key packages to meet the most exacting of installation demands.

Incorporating many leading brands, SPX FLOW has a long history of serving the food and beverage, power and energy, and industrial market sectors. Its designs and engineered solutions help customers drive efficiency and productivity, increase quality and reliability, and meet the latest regulatory demands. In-depth understanding of applications and processes, state-of-the-art Innovation Centers, and advanced pilot/testing technology further assist in optimizing processes and reducing timescales to reliably meet production targets.

To learn more about SPX FLOW capabilities, its latest technology innovations and complete service offerings, please visit www.spxflow.com.

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