

[www.filter-concept.com](http://www.filter-concept.com)

# CORPORATE OVERVIEW

# World's leading provider of Filtration Solutions



- Filter Concept Pvt. Ltd. is one of the leading manufacturer, exporter and supplier of industrial filters.
- We provide micron and macron filtration of air, gases and liquids for industrial application.
- We are, proudly, a one stop shop for industrial filtration needs.

# Our Accreditation

- ISO 9001: 2015 Quality Management System
- ISO 14001 : 2015 – Environment Management System
- ISO 45001 : 2018 –Health & Safety Management System
- ASME 'U' STAMP – Boiler/Pressure Vessel Code
- ASME 'UM' STAMP Miniature Boiler/Pressure Vessel Code
- ASME 'R' STAMP Boiler/Pressure Vessel Repair Code
- ASME 'NB' STAMP Boiler/Pressure Vessel Repair Code
- CE

# FCPL- AT A GLANCE

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- 10,000+, Product Sub-Categories...
- 3500+, Satisfied Regular Industrial Customers...
- 3000+, Regular Customers are Top Companies Of Indian Economy...
- 450+, International Clientele... Majority belong to Fortune 500 Club
- 80+, Countries, We Export...
- 50+, Industries, We serve...
- 17+, Years Of Excellence in Industry...
- 7+, International Quality Certifications & Accreditations...

# VISION

To become a frontrunner company in filtration business by providing world class quality products and services to our customers and maintain highest level of customer satisfaction.

# MISSION

Growth of company, employees and associates by adopting advanced technology, positive attitude, teamwork and innovative approach.

# OUR STRENGTH

Adequate  
Machineries and  
Infrastructure

Professional working  
relations with focused  
liaison and associates

3500+ Satisfied  
Regular Customers

An Enthusiastic  
and Committed  
Team

A committed connection of  
Dealers, Distributors and  
Channel Partner Network  
Across the Globe

# Filtration Technology & Services

Filter Concept is a front runner in the filtration field with world class quality products, using state-of-the-art filtration technology and thus offering services that ensure highest level of customer satisfaction. We are known for providing superior and distinctive filtration services with an array of our standard and customized products.

The filtration process has taken a new shape with our remarkable innovations, consequently catering to the filtration industries at large. Filter Concept has achieved industrial excellence with a dedicated team of professional experts.



# GLOBAL REACH

## Our presence across the globe

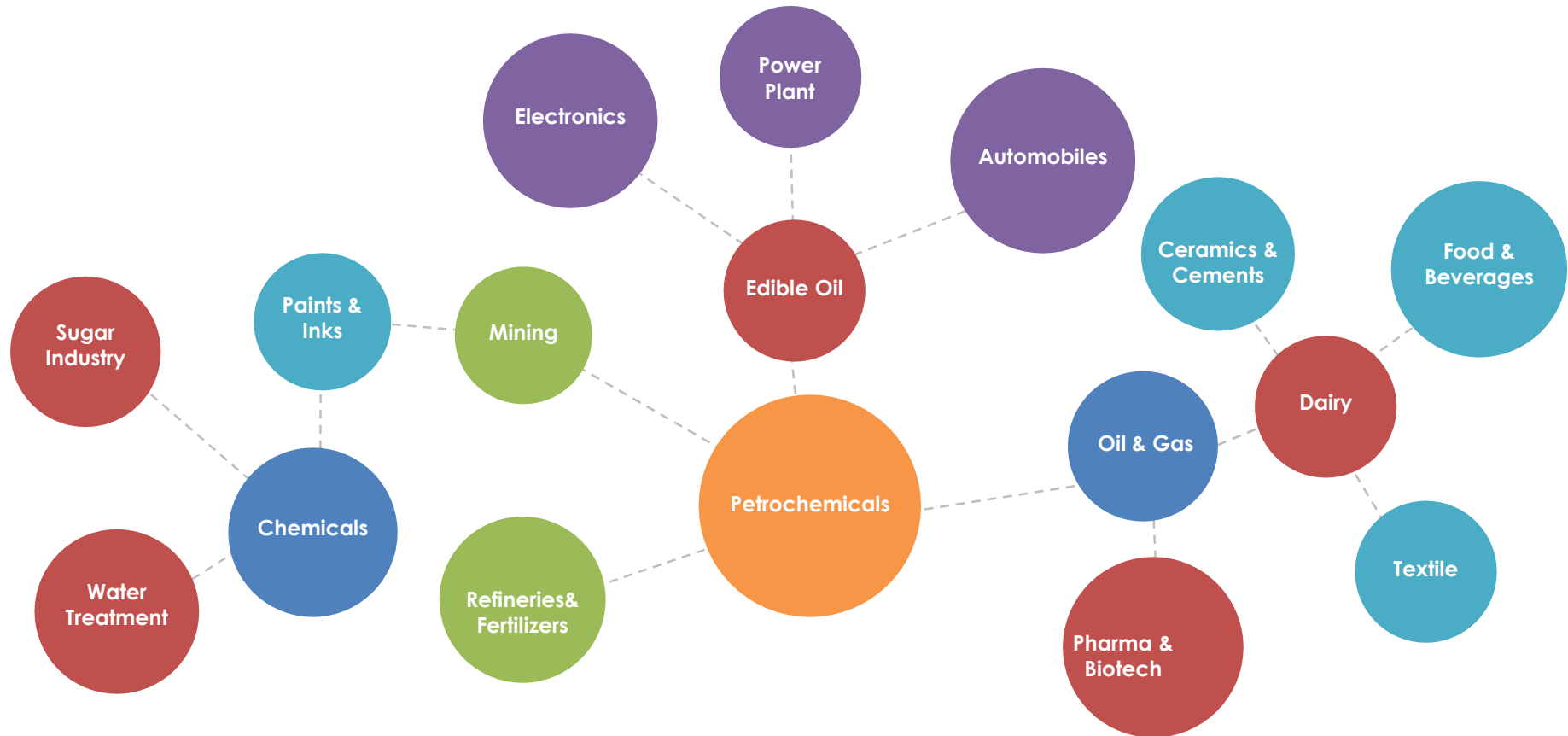


Canada  
Mexico  
Trinidad &  
Tobago  
USA  
Brazil  
Colombia  
Ecuador  
Peru  
Venezuela  
Azerbaijan  
France  
Germany  
Greece  
Egypt  
Equatorial  
Guinea  
Gabon  
Ghana  
Kenya  
Libya

Italy  
Netherlands  
Norway  
Poland  
Portugal  
Romania  
Spain  
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Kazakhstan  
Korea  
Taiwan  
Angola  
Mozambique  
Nigeria  
South Africa

Australia  
Bahrain  
Kuwait  
Oman  
Qatar  
Saudi  
Arabia  
U.A.E  
Brunei  
Indonesia  
Malaysia  
Philippines  
Singapore  
Thailand  
Vietnam  
Sri Lanka  
Hong  
Kong  
Tanzania  
Uganda  
Zambia

# INDUSTRIES WE SERVE



# RESEARCH & DEVELOPMENT

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- Dedicated R&D Department with technical and industry experts.
- Niche team of reverse-engineering technicians to provide retrofit (tailor-made) filtration infrastructure.
- Constant upgradation of product portfolio.
- Strong Intellectual Property presence within India and the WIPO regime.
- Dedicated team of service technicians who identify difficulties faced by customers and offer immediate rectifications.

# QUALITY CONTROL & CUSTOMER SATISFACTION

Every product and product-unit must be approved by the quality control and standards department at the development stage, manufacturing stage and finally at the time of dispatch to the end-user.

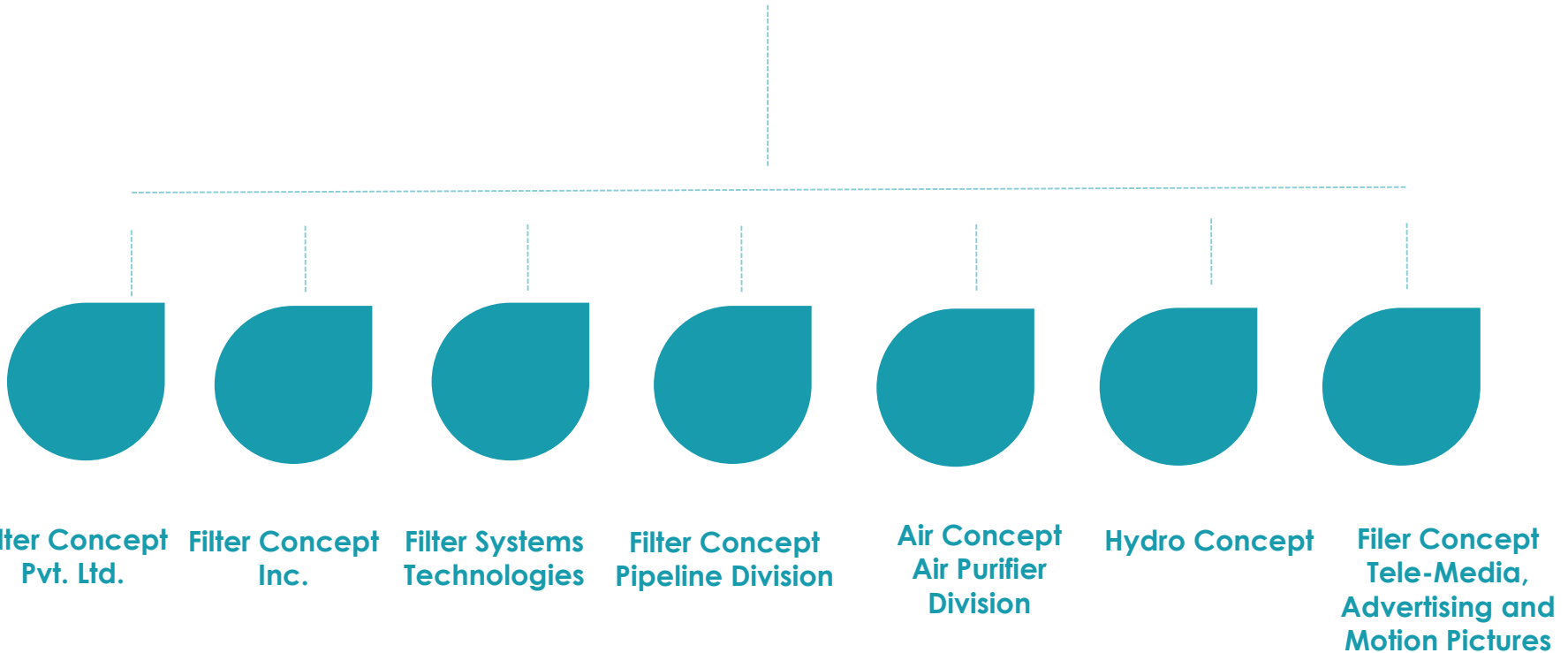
# INFRASTRUCTURE

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We have infrastructure that facilitates and fortifies every activity and each facet of our business. We have an assemblage of modern gadgetry constantly kept under the vigilance of the technicians for performance appraisal. Apart from this, we have highly trained workers.

# OUR SUBSIDIARY COMPANIES

## Filter Concept Group of Companies



# CSR ACTIVITIES

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Filter Concept is conscious of its responsibility towards the society and continuously works to improve it further by organizing various events year on year pertaining to the upliftment of the under-privileged people, organizing blood donation camps, providing child education and helping to grow a sustainable environment by fighting against pollution and global warming.

# CSR ACTIVITIES

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Filter Concept has provided the full cost of education to the school going children of its employees and has also offered special incentives to those who excel academically. An additional arrangement of scholarship was also done for the girl children.



Filter Concept has arranged for a number of blood donation campaigns across the city to aid the needy. Through this initiative it also brings an opportunity for its employees to render volunteer service to the community.



Filter Concept celebrates the World Environment Day every year on 5th June by organizing environmental education and awareness programmes, planting saplings, distributing seeds and 'go green bags' to show solidarity and the concern to protect the environment.





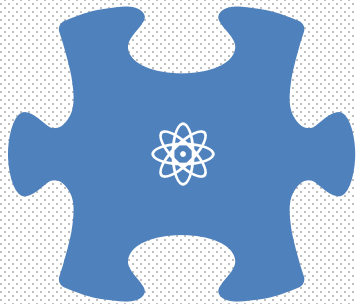
# PROGRAMS TO EMPOWER THE YOUTH

Filter Concept gives value to its dear employees and acknowledges the worth they provide for its existence. The company treasures its professional and experienced workers with an aim to fulfil its mission which lies in the growth of the company, its employees and associates by adopting advanced technology, positive attitude, teamwork and innovative approach.

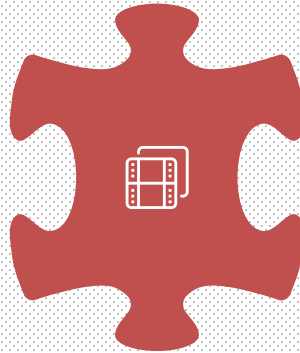
We also encourage the youth to join us for a productive contribution to the company and to the society on a wider note.

# PROGRAMS TO EMPOWER THE YOUTH

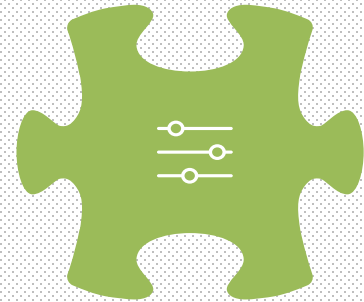
The following programmes are also arranged to involve the young generation



Filter Concept  
Internship Program



Filter Concept  
Talent Exhibition



Filter Concept Career  
Guidance Program

# ADDING VALUE TO MAKE A DIFFERENCE

Filter Concept has been able to bring a change, by adding value through its products and services, thus fulfilling the exact requirements of the major industries, both directly and indirectly, thereby bringing an overall positive difference in development of the nation.

Besides the dedicated social activities give empowerment to the society on humanitarian grounds.

# We Assure Quality

## Standard Operating Procedure Available

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- » Fabrication Procedure
- » Welding Procedure for GTAW & SMAW Process
- » Procedure for Liquid Penetrate Testing
- » Procedure for Radiography
- » Procedure for NON - Destructive
- » Procedure for Hydro Testing
- » Procedure for pneumatic Testing
- » Procedure for surface Preparation
- » Painting Procedure
- » Procedure for Rubber Lining

## Testing Facility Available

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### Mechanical Testing

- Tensile Test as per
- Hardness Test
- Bend Test
- Impact Test

### Spectro Analysis

### Wet Analysis

### PMI Testing



# We Assure Quality

## Supporting Technical Documents Available

- » Design Calculation & Detailed Engineering Drawing
- » Quality Assurance Plan
- » Material Identification Reports ( With Mill TC & Lab TC)
- » WPS, PQR, WPQ
- » Welding & NDE Map
- » Welding & NDE Inspection Reports
- » Liquid Penetrating Testing Report
- » Radiography Testing Report
- » Final Dimensional Report
- » Hydrostatic Report
- » Pneumatic Test Report
- » Instrument Calibration Report
- » Surface preparation Report
- » Visual Inspection & Assembly Report



# We Assure Quality

## Design Standards

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- » ASME - Sec. VIII Div.-1
- » BS - British Standard
- » DIN
- » API

## List of Third Party Associated

- |                                       |                 |
|---------------------------------------|-----------------|
| » TUV Nord                            | » NPCL          |
| » TCE                                 | » TATA PROJECTS |
| » Lloyds Register Inspection Services | » NTPC          |
| » EIL                                 | » ONGC          |
| » DASH                                | » GAIL          |
| » ABS Industrial Verification         |                 |
| » JACOBS                              |                 |



# SEGMENTS WE COVER



**PROCESS FILTRATION**



**AIR FILTRATION**



**HYDRAULIC & LUBE OIL  
FILTRATION**



**COMPRESSED AIR FILTRATION**



**GAS FILTRATION**





- Cartridge Filter System
- Catalyst Recovery Systems
- Bag Filter System
- Basket Filter & Strainers
- Self Cleaning Filter
- Filter Cartridges
- Filter Bags - Liquid



# FILTER HOUSING

## CARTRIDGE FILTER SYSTEM

- Cartridge Filter Housing
- Hygienic Filter Housing
- PVC Cartridge Filter Housing

## BAG FILTER SYSTEMS

- Bag Filter Housing
- Bag Vessel Assemblies
- PVC Bag Filter Housing
- Plastic Liner Bag Filter Housing

## SELF CLEANING FILTER SYSTEMS

- Auto Backwash Filters\*
- Auto backflush Filters \*
- Scraper Mechanism Filters \*
- Disc Type Filters \*

\*Patented

## BASKET FILTER & STRAINER

- Duplex Basket Filter
- Y Strainer
- T Strainer

## CATALYST RECOVERY SYSTEMS

# Process Filtration

- Cartridge Filter Housing
- Hygienic Filter Housing
- PVC Cartridge Filter Housing

# Process Filtration

## Cartridge Filter Housing

Cartridge filter system offers wide range of flow capacities & contaminant holding capacities. Cartridge filter housing diameters can accommodate around **1 to 500** cartridges. Cartridge filters are normally used as polishing filter in almost all process industries.

## Operation

Contaminated fluid enters the housing and is distributed evenly around the filter cartridges. Filtration takes place from outside to inside. Solids are collected on the outside of filter cartridges & clear filtrate is collected at outlet.



## Features

- Low pressure drop
- High dirt holding capacity
- Zero hold up design
- Machined cover gasket groove provide positive O-Ring sealing
- Easy to clean
- In-line inlet and outlet high flow rates
- Positive sealing arrangement to avoid bypassing
- Suitable for DOE, Code 7 & 222 O'-Ring type filter cartridge
- Accommodates 10", 20", 30", 40", 50" & 60" long filter cartridges.
- End connections for ¾" to 24" pipe
- V posts or threaded center posts
- Quick opening tri clovers design

# Process Filtration

- Easy to operate & low maintenance
- Low down time
- Flow rate up to 2000 m<sup>3</sup>/hr & More
- Customized design available
- Housings are permanently piped
- ASME code stamp available
- Duplex / Triplex / Jacketed cartridge filter unit designs are available
- High temperature & high pressure design are available

## Applications

- |                         |                    |                        |
|-------------------------|--------------------|------------------------|
| • Pharmaceuticals       | • Coolants         | • Bore Well water      |
| • Petroleum Derivatives | • Paints & Inks    | • Dairy                |
| • Water Treatment       | • Food & beverages | • Dyes & Intermediates |
| • RO Pre filtration     | • Processing       |                        |
|                         | Chemicals          |                        |

# Process Filtration

## Hygienic Filter Housing

Hygienic filter housing is manufactured from 316 stainless steel of the highest quality. These are suitable for a variety of liquid filtration applications designed to fit standard 222 O' Rings & 226 O' Ring cartridges.

## Operation

Contaminated fluid enters the housing and is distributed evenly around the filter cartridges. Filtration takes place from outside to inside. Solids are collected on the outside of filter cartridges & clear filtrate is collected at outlet.



# Process Filtration

## Features & Benefits

- Integral cartridge location
- Low product hold-up
- Easy to clean
- Steam sterilisable
- EPDM seals / silicone
- Quick release housing clamp
- Hygienic clamp pipe fittings
- Full range of sizes

## Applications

- Food
- Dairy
- Beverage
- Electronics and Pharmaceutical Industries



# Process Filtration

## PVC Filter Housing

Filter Concept PVC Filter Housings combine design simplicity with high filtering quality. PVC Filter Housings offers wide range of flow capacities & contaminant holding capacities. Cartridge filters are normally used as polishing filter in almost all process industries.

## Material of Construction

- Filter Housing-PVC
- Bolt & Nut-SUS 316L

## Inlet/Outlet

- FCPL-PCU-5 & FCPL-PCB-5 Series-1.5" BSP
- FCPL-PCB-9-3" BSP

## Closure

- FCPL-PCU-5-Union
- FCPL-PCB-5 & FCPL-PCB-9-Bolt & Nut





# Process Filtration

## Applications

- Pharmaceuticals
- Petroleum Derivatives
- Water Treatment
- Coolants
- Paints & Inks
- Food & beverages
- Bore Well water
- Dairy
- Dyes & Intermediates
- RO Pre filtration
- Processing Chemicals



# Process Filtration

## Catalyst Recovery Systems

Catalyst recovery systems are normally used to recover the precious catalyst where in system required to recover fine particles of catalyst [such as platinum, palladium, rhenium and rhodium, Raney nickel, rhodenium ] after it is used. These systems used in almost all industries like petrochemicals, pharmaceuticals, Refineries, Edible oil etc.

### Features

- Customized designs are available
- High temperature resistance
- Positive sealing arrangement for avoiding bypassing
- Steam sterilisable
- End connections of 3/4" to 24" pipe

### Applications

- Refineries
- Pharmaceuticals
- Petrochemicals
- Edible Oil



# Process Filtration

- Bag Filter Housing
- Bag Vessel Assemblies
- PVC Bag Filter Housing

# Process Filtration

## Bag Filter Housing

Bag filter system is designed for optimum filtration performance. Its range provides filtration solution for a broad variety of fluid applications in the process industry. They are particularly useful for filtering large volumes of high viscosity liquids. Bag filter is constructed of filter housing, filter bags, internal cage to support bags, positive sealing arrangement, & choice of end connections. The internal support ensures bags will not burst as high differential pressures build up during operation.



# Process Filtration

## Bag Filter Housing

### Operation

Unfiltered fluid enters the housing and is distributed evenly around the filter bags. Filtration takes place from inside to outside. Solids are collected on the inside of filter bag for easy removal. The filtered fluid then exits through the outlet pipe.



# Process Filtration

## Features & Benefits

- High flow rates
- Low pressure drop
- High dirt holding capacity
- Positive sealing arrangement to avoid bypassing
- Suitable for PP Collar, Rigid Ring & Snap Band Bags
- Quick opening Tri Clovers & Fly nut design
- Easy to operate & low maintenance
- Low down time
- Flow rate up to 2000 m<sup>3</sup>/hr & More
- Customized design available
- Large-area, heavy-duty baskets
- Housings are permanently piped
- Covers are O'-Ring sealed



# Process Filtration

## Applications

- Processing Chemicals
- Petroleum Derivatives
- Coolants
- Cutting Oils
- Cleaning Fluids
- Vegetable Oils
- Edible Oil
- Polymers
- Paints & Inks
- Resins
- Varnishes
- Pharmaceuticals
- Sugar Syrup
- Lacquers
- Plastisols

# Process Filtration

## Bag Vessel Assemblies

Bag vessel assembly keeps the filter system on stream by reducing bag filter change time. The single large acme thread closure ensures quick opening and positive sealing. Bag Vessel assemblies are light and portable. The bag vessel's economical price allows to install a preferred duplex system for totally uninterrupted flow rates. It is made of light weight corrosion resistant polypropylene to give all the strength without bulk. It has Fixed-head mounting and is compact enough to attach to any machine.





# Process Filtration

## Bag Vessel Assemblies

### Operation

Unfiltered fluid enters the housing and is distributed evenly around the filter bags. Filtration takes place from inside to outside. Solids are collected on the inside of filter bag for easy removal. The filtered fluid then exits through the outlet pipe.



# Process Filtration

## Bag Vessel Assemblies Features & Benefits

- All polypropylene construction
- High efficiency filtration
- Micron rating 1 to 200
- Snap lock bag sealing surface
- Positive sealing of different bag thickness
- Dynamic large 'O'-ring seal
- Compression bag sealing surface
- Knife edge sealing



# Process Filtration

## High Flow Cartridge Filter Housing

High Flow Tubular type filter systems, a boon for water treatment plants / processes, are high-performance and cost-efficient filters for industries that are engaged in liquid filtration processes especially on a very large scale.



# Process Filtration

## Operation

Contaminated fluid enters the housing and is distributed evenly around the filter cartridges. Filtration takes place from inside to outside. Solids are collected on the inside of filter cartridges & clear filtrate is collected at outlet.

## Material of Construction

- FRP – Fiber Reinforced Plastic
- ASTM A 516 GR 60, 65 & 70/ ASTM A 106 Gr B
- ASTM A 240 GR 304, 304L, 316, 316L / ASTM A 312 GR 304, 304L, 316, 316L

## Applications

- |                          |   |
|--------------------------|---|
| • Pre-treatment          | Paints & Coatings                               |
| • Sea water desalination | Bottled water Filtration                        |
| • RO Pre filtration      | Condensate water filtration                     |
| • Petrochemical          | High fructose, edible oil, soft drinks and milk |
| • Refineries             |   |

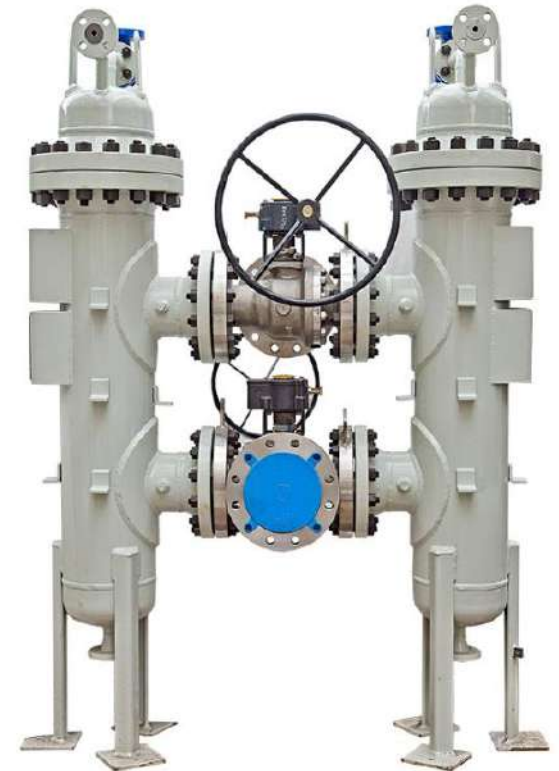
## Basket Filters & Strainers

Basket filters & strainers will permit the straining & filtering of a wide variety of fluids, to retain solids of almost any size. All baskets are easily removable & cleanable. Basket strainer elements can be offered in single cylinder, double cylinder, multi cylinder & pleated design depending upon requirement of application.

# Process Filtration

## Duplex Basket Filter & Strainers

Duplex basket filter & strainer permits continuous operation because flow can be switched back and forth between two filter sections. This allows one side to be serviced while the other is in use. Normally duplex basket filters are separated with three way ball valves or two way ball valve/ butterfly valve connected with equalization tee, between two baskets filter housing.



# Process Filtration

## Basket Filters/ Strainers & Duplex Filters Strainers - Features & Benefits

- Large-area, heavy-duty baskets
- Filtration rating available from 5 micron to 2000 micron & more
- Carbon steel, or stainless steel (304 Or 316) housing
- Low pressure drops
- Housing are permanently piped
- Covers are O'-Ring sealed
- Easy to clean
- Option of insitu backwashing
- ASME code stamp available
- High pressure rating design available
- Flow rate up to 2000 m3/hr & More
- Customized design available

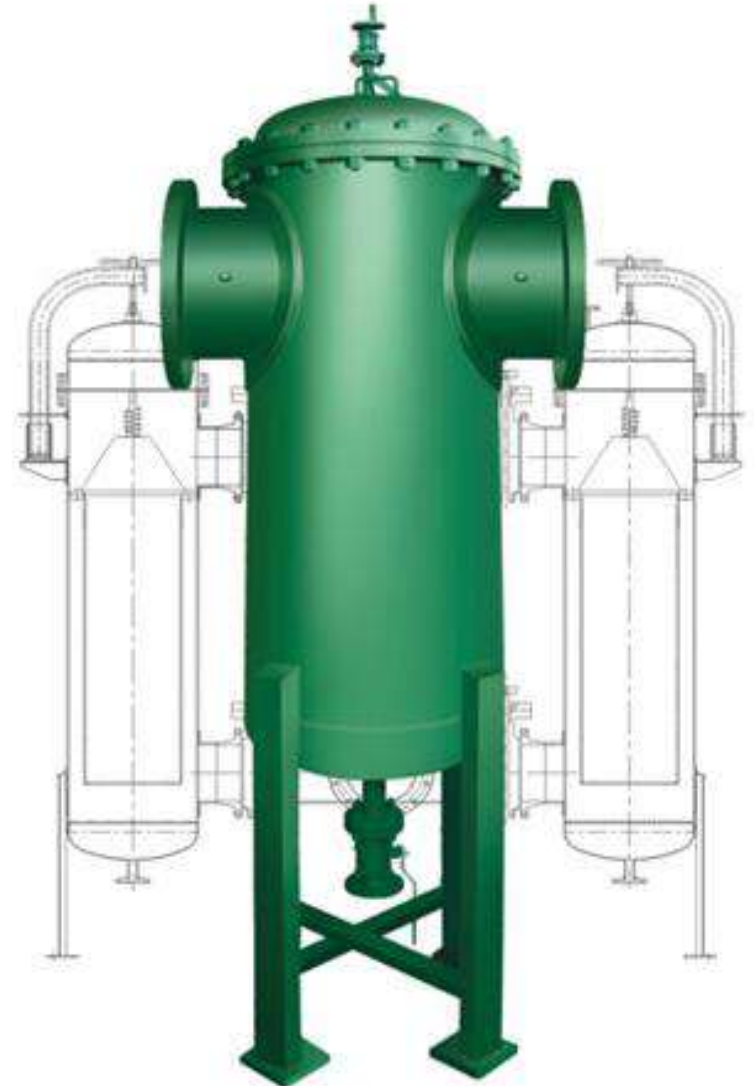


# Process Filtration

## Basket Filters/ Strainers & Duplex Filters Strainers

### Applications

- Power Plant
- Process Industries
- Cement Plant
- Steel
- Petrochemicals
- Fertilizers
- Refineries
- Oil & Gas
- Chemicals
- Textiles





# Self Cleaning Filter Systems

- Auto Backwash Filters (Patent No- 329066)
- Auto back flush Filters (Patent No- To be announced)
- Scraper Mechanism Filters (Patent No- 298340)
- Disc Type Filters (Patent No- 326989)

# Process Filtration

## Auto Backwash Self Cleaning Filter Systems (Patent No- 329066)

Auto back wash Self Cleaning Filter is used for Preliminary Filtration of demanding application of Various Industries. Its very useful for applications where suspended solid load is Comparatively high & highly viscous material and slurry based filtration applications.

These filters can offer filtration level starting from 0.2 micron to 2000 micron.



# Process Filtration

## Auto Backflush Self Cleaning Filter Systems( Patent No- to be announced)

Self cleaning filter is constructed of filter housing, filter element, back flushing valve, differential pressure gauge, differential pressure switch, Dust Extraction assembly, Geared motor with Sensor and Control Panel.

These filters can offer filtration level starting from 5 micron to 2000 micron. They are designed to deliver flow rate up to 2000 m<sup>3</sup>/hr or even more than that with parallel configuration.



# Process Filtration

## Auto Backflush Self Cleaning Filter Systems- Features & Benefits

- Simple operation of filtration
- Easy process of Backwash / Back flush
- Less wastage of water for cleaning
- No consumable cost
- Minimum manual intervention
- Uninterrupted through put all time, even during back flushing
- Can handle high suspended load

# Process Filtration

## Scraper Mechanism Filter Systems (Patent No- 298340)

Scraper Mechanism Self Cleaning Filters are widely used for continuous filtration requirement without any replacement of Filter Consumables and without Exposure of operators. Like auto backwash filter, Scraper Mechanism Self Cleaning is used for preliminary filtration following the same principle of differential pressure; the only difference is that it is used for applications where back washing medium is not available. In other words, Scraper Mechanism Self Cleaning Filter is used where in one cannot introduce any additional substance for back washing.



# Process Filtration

## Application- Scraper Mechanism Filter Systems

- Surface water removal
- Solvents
- Boiler backwater
- Chemicals
- Swimming pools
- Latex
- Landscape water
- Adhesive
- Green spray
- Lubricants
- Agriculture irrigation water
- Domestic water supply
- Tooth Paste
- Reverse osmosis
- Glycol
- Softening
- Cooling water
- Ion exchange
- Reclaimed water
- Oil field
- Ground water
- Paint & Inks



# Process Filtration

## Disc type Self Cleaning Filter Systems (Patent No-326989)

Disc Type Self Cleaning Filter is used for highly viscous material filtration like Grease, Lube Oil, Edible Oil, Toothpaste & many more. Here, we don't required any backwashing media to clean the Filter Element. It is working under principle of differential pressure parameters for uninterrupted filtration requirement.



# Process Filtration

## Disc type Self Cleaning Filter Systems - Features & Benefits

- No replacement costs for filter screen and no disposal expenses.
- Reduces the risk of operators in contact with the dangerous material.
- Reduces the environmental pollution.
- Reduces the labor demands and no more filter screen change outs



# Process Filtration

## Filter Consumables

Filter cartridges

Filter bags

FILTER media



# Process Filtration

## Spun Bonded Cartridges

Spun bonded filter cartridges are made up of 100% polypropylene fibers. The fibers have been carefully spun together to form a true gradient density from outer to inner surface. Filter cartridges are available with core & without core version.



# Process Filtration

## Spun Bonded Cartridges - Salient Features

- Free of surfactants, binders and adhesives
- Excellent flow with low pressure drop
- High dirt holding capacity
- 100 % Polypropylene for wide chemical compatibility
- High strength & pressure resistance
- One piece construction up to 1016 mm & more
- Nominal & absolute filtration rating



# Process Filtration

## Wound Cartridges

Wound cartridges are designed to meet the most demanding filtration duties. They offer an economic, compact, easily installed and maintained filtration system for removal of particulates from liquid. They are appreciated due to high dirt holding capacity and its rugged construction which allows facing different applications in liquid and gas filtration.



# Process Filtration

## Wound Cartridges - Salient Features

- Standard and customized sizes to fit most housings
- Filtration rating from 1 to 100 Micron
- High strength & pressure resistance
- Manufactured in continuous length
- Full range of sizes from 10" to 60" Length
- Excellent flow with low pressure drop
- High dirt holding capacity
- Compatible with a wide range of fluids
- NSF & FDA approved filter cartridges are available.



# Process Filtration

## PP Pleated Cartridges

Polypropylene filter cartridges are precisely manufactured for use in critical filtration applications within food, pharmaceuticals, biotech, dairy, beverages, brewing, semiconductor, water treatment & other demanding process industries.

Polypropylene pleated cartridges use the very latest gradient density micro fiber media technology to provide a combination of excellent micron ratings, high flow rates and high contaminant holding capacities.



# Process Filtration

## PP Pleated Cartridges- Features & Benefits

- Absolute & nominal efficiency
- 0.1 to 40 Micron ratings
- High surface area more than 0.5 m<sup>2</sup> per 10" filter
- Wide chemical compatibility
- No fiber migration
- Thermally welded construction
- FDA approved filters
- End connections to fit all standard housings



# Process Filtration

## PTFE (Poly Tetra Fluoro Ethylene) Filter Cartridge

PTFE Cartridges are made up of poly tetrafluoroethylene. PTFE is characterized by high chemical inertness. PTFE and polypropylene, the unique two materials used in cartridge manufacturing are chemically inert, not shedding and biologically safe according to F.D.A., USP and EEC requirements for pharmaceutical and food contact use.





# Process Filtration

## PTFE Filter Cartridge – Applications

- Pharmaceuticals
- Sterilization of inlet & exhaust flow
- Vent filter
- Gas purification (like nitrogen & others)
- Compressed air (sterile grade)
- Acid / Solvents & base filtration
- Wet etching process
- Electronics Industries
- Semi conductors
- CD- R & DVD – R factory
- Fine filtration of DI water
- Photoelectron chemical filtration



# Process Filtration

## PES [Poly Ether Sulphone] Filter Cartridges

PES Cartridges are made of poly ether Sulphone with uniform pore distribution to ensure maximum performance in bacterial retentions. It's upstream & down stream polyester support ensures resistance to pressure shocks.



# Process Filtration

## PES [Poly Ether Sulphone] Filter Cartridges-

### Construction

- Filter Media PES (Poly Ethersulphone) Membrane
- Support Media Polypropylene fiber
- Inner Core High strength polypropylene
- Outer Core High strength polypropylene
- End Caps High strength polypropylene
- O Ring / Gaskets EPDM / Buna N / Silicone / Viton



# Process Filtration

## Sintered [Non-Metallic ] Cartridge

Sintering is a process for making articles from its base material in powder .They are made by mixing elemental or alloy powders and compacting the mixture in a die, the resultant shapes are then sintered or heated in a controlled atmosphere furnace to bond the particles. Sintering is traditionally used for manufacturing ceramic objects and after that it is used for filtration application.



# Process Filtration

## Sintered [Non-Metallic ] Cartridge - Features

- Made of single base material, hence free from any binder
- Specific Pore size distribution due to sintering process
- Withstand very high differential pressure
- High void volume compared to conventional sintered material
- Easy to clean & back wash
- Wide chemical compatibility



# Process Filtration

## High flowment Filter Cartridges

PP Pleated and glass fiber cartridges are designed for higher filtration area & high throughput .It has 6 inch/152mm large diameter, and is coreless, single open-ended structure with an inside to outside flow pattern. Due to its large diameter with big filter area, it requires lesser elements for a given flow rate than standard cartridges diameter, due to lesser elements Filter vessels 's size workout smaller, resulting in lower capital Investment and installation costs, as well as reduced operating costs



# Process Filtration

## PP/ Glass Fiber Pleated Filter Cartridges - Features & Benefits

- Easy to dispose due to its unique coreless design
- Minimize overall size of filter housing due to its high throughput
- Absolute rated filtration efficiency



# Process Filtration

## Oil Adsorbing Cartridges

Oil adsorption filter cartridges have been specifically developed and manufactured for the high efficiency removal of dissolved & dispersed oils from water within the gas & oil production industries, marine bilge and ballast water treatment systems, contaminated surface water run off & other industrial process industries. Filter media of this cartridge is material containing modified cellulose. This filter media will remove upto 95% of total hydrocarbons from water in a single pass. Dissolved oil, emulsions & dispersed droplets are adsorbed and retained from water by filter media.





# Process Filtration

## Resin Bonded Cartridge

RB (Resin-Bonded) Cartridge is produced from cellulose fibers, which have been intrinsically bonded together by a melamine resin, to create a solid highly durable & porous structure. By treating the fibers in this fashion we can ensure a stronger cartridge that is less likely to collapse than a wound or pleated cartridge.



# Process Filtration

## Resin Bonded Cartridge - **Features & Benefits**

- Free of surfactants, binders and adhesives
- Excellent flow with low pressure drop
- High dirt holding capacity
- Temperature limit 4.4 Deg C to 93.3 Deg C
- Longer service life



# Process Filtration

## Jumbo Pleated Cartridge

Jumbo pleated cartridges are made up of of pleated polyester filter media with Polypropylene core inside and moulded end caps. Filter cartridges are designed for high flow rate and low pressure drop, due to its high filtration area. It is very popular for RO pre filtration & Pool water filtration applications



# Process Filtration

## Jumbo Pleated Cartridge- Features & Benefits

- Pleated design for higher surface area and contaminant removal.
- Longer filtration runs for lesser change-out and less maintenance
- Low pressure drop
- Designed for general water filtration purposes



# Process Filtration

## Carbon Cartridges

Carbon block cartridges are designed for high effective filtration of water for certain VOC'S, pesticides, chlorine, odor & test & sediment reduction down to 5 micron. These cartridges are manufactured entirely from FDA compliance materials. They are suitable for potable water filtration, as well as many industrial, commercial & food service applications.



# Process Filtration

## Carbon Cartridges - Features & Benefits

- High loading value
- High flow rate
- High dirt holding capacity
- Greater chlorine removal efficiency
- Good Oil adsorption medium

## Type of carbon filters

- Activated coal carbon
- Coconut shell carbon



## **Reusable, Environment Friendly, High Temperature Resistant SS Filter Cartridge**

With a traditional Filter System; the cost of consumables was a major concern. After product's usage to dispose the consumables in environment was a major concern. We, Filter Concept accepted the challenges to overcome pollution related problem faced by various industries. As a part of it; Filter Concept has introduced stainless steel filter cartridges to **reduce emission of hazardous contaminants generated by various industries** as well as to **reduce the cost of consumables**. Our Stainless Steel Filter Cartridges, which has many advantages, compare to conventional Filter cartridges like reusable, washable; which helps the Industries to fulfill environmental pollution control norms in across the globe.

## TYPES OF SS FILTER CARTRIDGES

- Stainless steel wire mesh type
- Stainless steel sintered metal powder type
- Stainless steel random fiber / sintered metal fiber type
- Stainless steel multi layered wiremesh

## Types Of Filter Design

- Plain cylindrical design
- Pleated configuration design
- Welded design





# Process Filtration

## SS Filter Cartridges Features & Benefits

- Stable pore shapes
- High permeability
- Low pressure drop
- High dirt-holding capacity (longer lifetime)
- High temperature resistance
- High differential pressure, with stand capacity
- Strong corrosion resistant
- Back flushing
- Excellent mechanical strength
- No media migration
- Customized Sizes available



## Filter Bags

- Filter Bags-Liquid
- Felt Bags
- Mesh Bags
- Monofilament Mesh Bags
- Extended life Felt Bags
- Extended life Mesh Bags
- Durable Felt Bags
- Oil Adsorbing Bags
- Absolute Bags
- Pleated Felt Bags
- Pleated Absolute Efficiency Bags
- Dual Flow Bags
- Carbon Bags
- Water Absorbent Bags
- Antistatic Bags
- PP pleated Oil Adsorbent Bags
- PP Pleated Hardshell Filter Bags
- Iron Removal Filter Bags



# Process Filtration

## Water Absorbent Filter Bags

- Superior water absorbing capability : Absorb and retain water upto 50 times of its own dry weight.
- Dual purpose : Not only removes water from oil, but also retains contaminants of 1, 5, 10, 25 and 50 microns.
- FDA compliant non-woven felt. 100% free of silicon contamination
- Single & multiple layer depth media composites
- 1 ~ 200 micron range, nominal rating
- Patented SDS & STS pressure seal rings, steel snap-fit rings
- Wide chemical compatibilities
- Fiber migration & extractable free media treatment
- large contaminant retention capacities, extended service lives
- Change-out differential pressure 0.10 MPa, Max. 0.16 Mpa



# Process Filtration

## Oil Adsorbent Filter Bags

- Heavy duty oil adsorbing capability, adsorbs trace oil up to twenty-three times of adsorbents dry weight.
- Exclusively FDA compliant ultra fine Polypropylene micro fiber media. 100% free of silicon contamination.
- Multiple layer depth media composite
- Trace oil removal & contaminants retention dual-performance



# Process Filtration

## Oil Adsorbent Filter Bags

- 1 ~ 100 micron range, nominal rating
- Patented SDS & STS pressure seal rings, steel snap-fit rings
- Wide chemical compatibilities
- Fiber migration & extractable free media treatment
- Large contaminant retention capacities, extended service lives
- Change-out differential pressure 0.10 MPa, Max. 0.16 MPa





- Pulse Jet Dust Collection Systems
- Air Intake Filter Systems
- Pleated Air Filters
- Filter Bag - Air
- Compressor OEM Filters



**AIR FILTRATION**

# Air Filtration

## PULSE JET DUST COLLECTION SYSTEM

## AIR INTAKE FILTER SYSTEMS

## COMPRESSOR OEM FILTERS

- Compressor Filters
- Panel Filters
- Hepa Filters

## PLEATED AIR FILTER

- Pleated Dust Collection Bags
- Pleated Nomex Media Bags
- Pleated Dust Collection Cartridges
- GT Air Intake Filters

## FILTER BAGS-AIR

- Non Woven Filter Bags
- Sintered Multilayer Wire mesh
- Pocket Filters

# Air Filtration

## Pulse Jet Dust Collection Systems

Filter Concept is manufacturer of Pulse Jet Dust Collection system for various Industries requirement for air quality improvement and enhancing the quality of air released by collecting dust and other impurities from air or gas by removing particulate matter from the air and environment. We are a manufacturer of highly customized units to accurately match your Application requirements with customized ducting solutions along with our dust collectors for your specific dust collection requirements.





# Air Filtration

## Pulse Jet Dust Collection Systems- Construction

Cartridge Housing, Baffle Plate, FILTER Bags, Sequential time controller, Solenoid Valve, Compressed Air Header, Safety Valve, Drain Valve, Pressure Gauge, Acrylic Manometer.



# Air Filtration

## Pulse Jet Dust Collection Systems- - Features & Benefits

- Easy to operate and Handle
- Easy to install & remove
- Low consumption of compressed air (for cleaning)
- High Filtering efficiency even for the finest dusts
- Filter media selection as per application
- Accessories as per client's request



# Air Filtration

## Pulse Jet Dust Collection Systems- Applications

- Pharmaceuticals
- Powder & Coating
- Chemicals
- Cement
- Metals & Minerals
- Steel & Power



# Air Filtration

## Air Intake Filter Systems

TURBINES, ENGINES, CENTRIFUGAL FANS, BLOWERS, & COMPRESSORS are common equipment for Industrial utility. They intake atmospheric air for its further operations. If moisture, dust, and varieties of solid particulate are present in the intake air, such contaminants can build up on the internal components such as valves, impellers, rotors, and vanes.



# Air Filtration

## Air Intake Filter Systems – Applications .

- Turbines
- Engines
- Centrifugal Fans
- Blowers



# Air Filtration

- Pleated Dust Collection Bags
- Aramide Media Pleated Dust Collection Bags
- PU Molded Pleated Dust Collection Bags
- Pleated Dust Collection Cartridges
- GT Air Intake Filters

# Air Filtration

## Pleated Dust Collection Bags

Pleated dust collection bags are now widely used in the field of dust collection system. These are made up of 100 % Spun Bonded polyester media with different coatings on it, as per requirement of applications.



# Air Filtration

## Pleated Dust Collection Bags- Features & Benefits

- Filter area 3 to 4 times Larger than traditional filter bag
- Open Pleat Spacing
- Low consumption of compressed air (for cleaning)
- High efficiency due to surface filtration
- Reduction in downtime & maintenance
- Easy to install & remove
- Leak proof design
- Very stable; do not break or fall through sheet





# Air Filtration

## Pleated Aramide Bags

Pleated nomex bags are the latest Innovation by Filter Concept for high Temp. upto 220°C. Pleated Nomex bags are now widely used in the field of dust collection system for high temperature application.



# Air Filtration

## Pleated Aramide Bags – Features

- Filter area 3 to 4 times Larger than traditional filter bag
- Open Pleat Spacing
- Low consumption of compressed air (for cleaning)
- High efficiency due to surface filtration
- Reduction in downtime & maintenance
- Easy to install & remove
- Leak proof design
- Very stable; do not break or fall through sheet
- Cages & venture are integral part of bags, hence no cages or venture required



# Air Filtration

## PU Moulded Bags

- Filter area 3 to 4 times Larger than traditional filter bag
- Cages & venture are integral part of bags, hence no cages or venture required
- Open Pleat Spacing
- Very stable; do not break or fall through sheet
- Low consumption of compressed air (for cleaning)
- High efficiency due to surface filtration
- Reduction in downtime & maintenance
- Easy to install & remove
- Leak proof design



# Air Filtration

## Pleated Dust Collection Cartridges

Pleated dust collection cartridges are made up of 100 % spun bonded polyester media, like pleated dust collection bags media with different coatings on it, as per the requirement of applications.

- Low Consumption Of Compressed Air (For Cleaning)
- High filtration area up to 20 m<sup>2</sup>
- Universal Fixing arrangements
- Open Pleat Spacing
- High Efficiency Due To Surface Filtration
- Very High Air To cloth Ratio
- Very high filtration efficiency



# Air Filtration

## GT Air Intake Filters

Gas Turbine Air Intake Filter cartridges are modern and reliable for air intake applications. They ensure high efficient filtration of dust and other contaminants even in the most polluted environments. These media have much better pleat ability & dimensional stability. Pleated filter media offer high filtration efficiency, very fine retention level, easy clean ability & aesthetically good product than other normal filter media.



# Air Filtration

## GT Air Intake Filters - Features.

- Easy to clean
- All polyester materials are washable
- High flow efficiency
- High Air to cloth ratio
- Large spacing
- Cleanable without damaging filter media
- Retrofit for most standard makes



# Air Filtration

- Dust Collection Non Woven Bags
- Pocket Filters
- Panel Filters
- Hepa Filters
- Sintered Multilayer Wire mesh

# Air Filtration

## Dust Collection Non Woven Filter Bags/Non Woven

### Conventional Bags

Filter bags are manufactured for achieving optimum filtration performance.

They are effective in reducing dust emission levels as per requirement of industries. These bags are placed in dust collector with supporting filter cages. Contaminated air takes path of outside to inside filtration.





# Air Filtration

## Dust Collection Non Woven Filter Bags/Non Woven

### Conventional Bags – Features

- Highly efficient filtration level
- Depth type filtration
- Wide range of chemically compatible media
- High flow efficiency
- High air to cloth ratio
- Various coatings are available



# Air Filtration

## Pocket Filters

Pocket filter are made up of non woven synthetic fiber media to ensure retention of solid particles up to the stipulated micron rating.

### Pocket Filters- Features & Benefits

- » Pocket filters offer high air volume
- » Low pressure drop
- » High dirt holding capacity
- » Good mechanical strength
- » Made of selective fibrous material
- » Easy to install
- » Retrofit to any standard make



# Air Filtration

## Panel Filters

Panel filters are used in industries to retain particles ranging from 1 micron to 50 micron. These filters are basically air intake filters, which is working with negative pressure of systems. These filters are further classified as.

- » Primary Filters
- » Secondary Filters

## Filter media

- HDPE Media /  
Synthetic Fiber Media /  
Spun bonded polyester media



# Air Filtration

## Hepa Filters – Features

- Low pressure drop due to pleated configuration
- Easy to install
- No bypassing
- High dirt holding capacity
- High filtration efficiency
- Good mechanical strength
- Retrofit to any standard make



# Air Filtration

## Hepa Filters

Hepa filters are designed to meet requirement of very fine filtration up to 0.3 micron at high efficiency of 99.99 %. We have added a new feature in conventional hepa filters by using spun bonded polyester media which is cleanable in nature. These are available with different coatings like PTFE coating, PTFE lamination & more for better dust releasing.



# Air Filtration

## Sintered Multilayer Wiremesh

Sintered multilayer wire mesh bags are designed for high temp application of industries. **IT CAN BE USED FOR HIGH TEMPERATURE UP TO 480°C.** It has one standard combination of 5 Layers sintered wire mesh made from stainless steel which is brought together through vacuum sinter, compression and rolling and made into a kind of porous material.



# Air Filtration

## Sintered Multilayer Wire mesh - Features & Benefits

- Easy to wash, specially back washing
- Easy to wash, specially back washing
- Heat resistance , Heat resistance up to 480°C
- Corrosion resistance
- Tractability, suit to cut, punching, wrap



# Air Filtration

## Sintered Multilayer Wiremesh

### Applications

- Polymer Filtration
- Cross Flow Filtration
- Gas Filtration
- Analytical Devices
- Medical devices
- Oil Filtration
- Aerosol Application
- Gas – Liquid Separation
- Hot Gas Filtration
- Fuel & Hydraulic Oil Filtration
- R.O. Pre Filtration





# Air Filtration

## Compressor Filters

Filter Concept offers a complete range of compressor OEM filters.

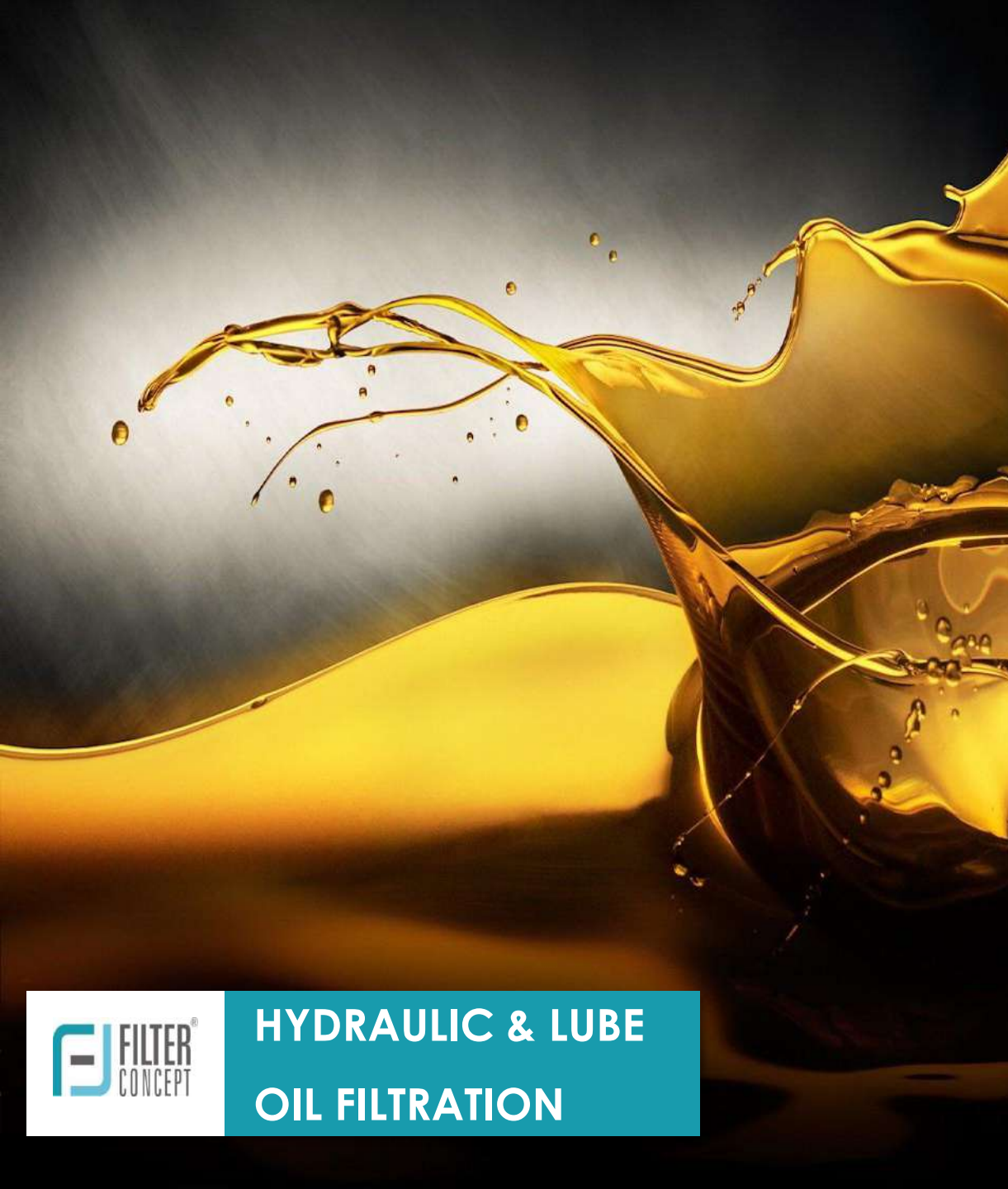
» Air Filter

» Oil Filter

» Air Oil Separator

Retrofit Equivalent To : Reputed make





## HYDRAULIC & LUBE OIL FILTRATION

### ■ Hydraulic & Lube Oil

#### Filters

Hydraulic & Lube Oil Filtration Segment with removal of suspended particles from oil. It deals with high pressure filtration requirement.



# Hydraulic & Lube Oil Filtration

## Hydraulic & Lube Oil Filter

Hydraulic filters are used in demanding applications of filtration of oil at any operating conditions. Irrespective of operating conditions like high pressure, low pressure, highly viscous oil, or highly contaminated oil, we have best adequate solution for these applications. We have filters which can remove moisture contents from oil.



# Hydraulic & Lube Oil Filtration

## Hydraulic & Lube Oil Filter- Applications

- Aeronautics
- Heavy Earth Moving
- Hydraulic
- Ceramic
- Power Plant
- Refineries







## ■ Compressed Air Filters

Compressed air filtration segment deals with removal of suspended particles from compressed air. It offers filtration from 0.01 micron to 100 microns. This segment offers some special filter elements which are designed to remove moisture and oil from compressed air.



# Compressed Air Filtration

## Compressed Air Filter

Compressed air is a very common source of energy. For effective utilization of compressed air, it has to be clean. Filter Concept offers a range of compressed air filters for removal of dirt, dust, rust, condensates, moisture contents, oil impurities & exhaust fumes.

## Applications

- Pharmaceuticals
- Chemicals
- Food & Beverages
- Steel & Power
- Cement
- Breathing Application



# Compressed Air Filtration

## Features & Benefits

- High flow rate
- Low pressure drop due to pleated configuration
- High efficiency due to surface filtration
- Reduction in downtime & maintenance
- Easy to install & remove
- Choice of filter media & filter housings





## Gas Filtration

- Gas Filter Systems
- Coalescers
- Separator/Knock-Out Drum
- Metering Skid
- Gas Service Regulator Module

### Gas Filter Consumables

- Particle Removal Filter
- Coalescing Filter Element
- Sintered Multilayer Wiremesh



# Gas Filtration

We offer a range of gas filtration systems for removal of dirt, dust, rust, condensates, moisture contents, oil impurities & exhaust fumes. Filtered gas results low down time & reduces the production loss. These filtration systems are designed depending on their flow requirement, line size, working pressure, working temperature & level of filtration rating.

## Applications

- Natural gas filtration
- CNG & LPG Filtration
- Oxygen Gas
- Nitrogen Gas
- H<sub>2</sub>S Gas



# Gas Filtration

## Features & Benefits

- High flow rate
- Low pressure drop due to pleated configuration
- High efficiency due to surface filtration
- Reduction in downtime & maintenance
- Easy to install & remove
- Choice of filter media & filter housings



# Gas Filtration

## Coalescer

Filter-Concept is keen to deliver highest level of quality product to their customer & with endeavour to that FCPL has introduced Coalescer to cater demanding application of gas filtration segment.



# Gas Filtration

## Coalescer - Features & Benefits

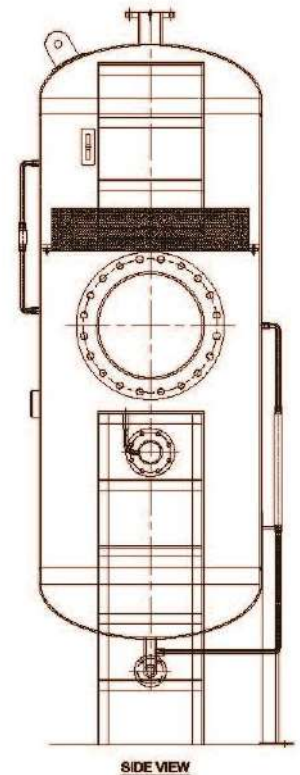
- Low pressure drop
- High dirt holding capacity
- Easy to clean
- Positive sealing arrangement to avoid bypassing
- High temperature & high pressure design are available
- Easy to install & No bypassing
- High filtration efficiency & Good mechanical strength
- Retrofit to any standard make



# Gas Filtration

## Seperator / Knock-Out Drum

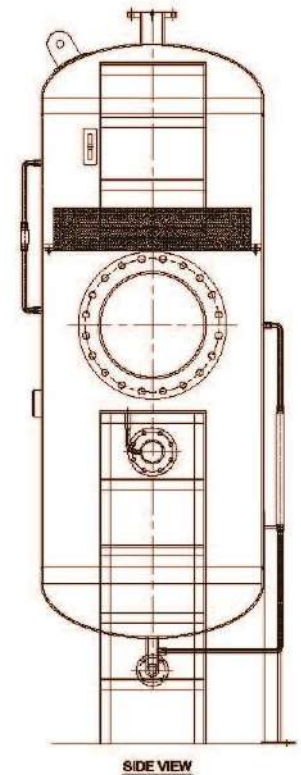
Seperator / Knock-Out Drum Used for separate the liquid & vapors in any application. The vessels are design tangential inlet which allows to “scrub out” the vapors/Liquid in gas application The liquid to collect bottom of the vessels while the gas flows at the upstream. Demister pads are provided to increase the filtration efficiency. We also provide level indicator to indicate the level of liquid present in the vessel.



# Gas Filtration

## Seperator / Knock-Out Drum - Features & Benefits

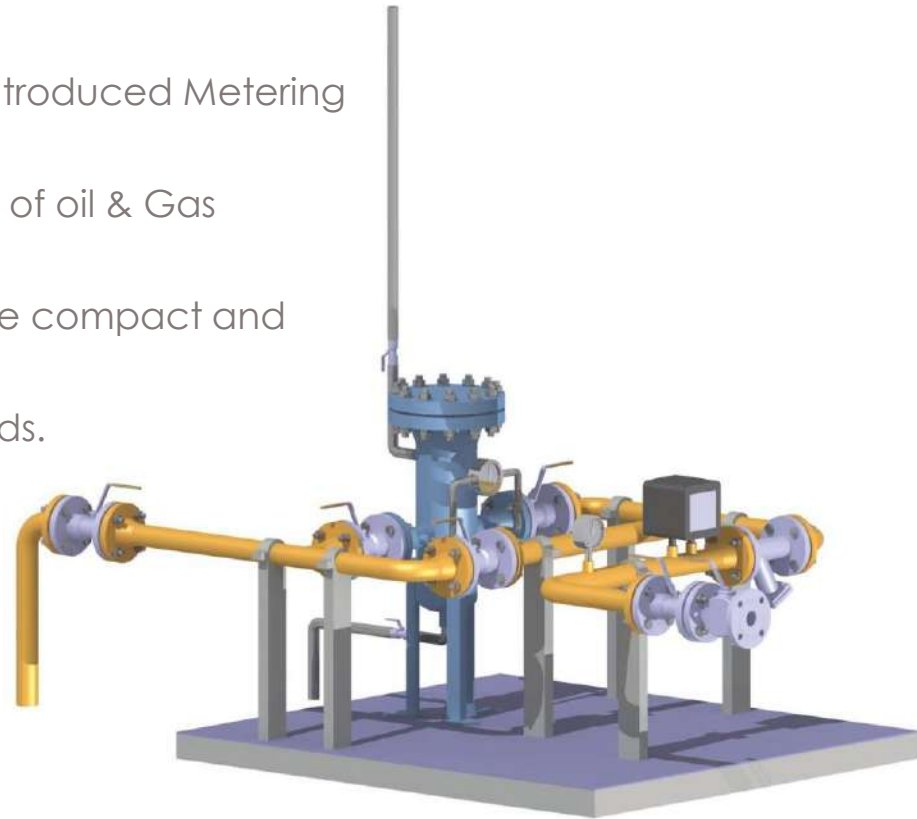
- High flow rate
- High efficiency due to tangential design & provision of demister pad
- Reduction in downtime & maintenance
- Easy to install & remove
- Easy to install
- ASME code stamp available



# Gas Filtration

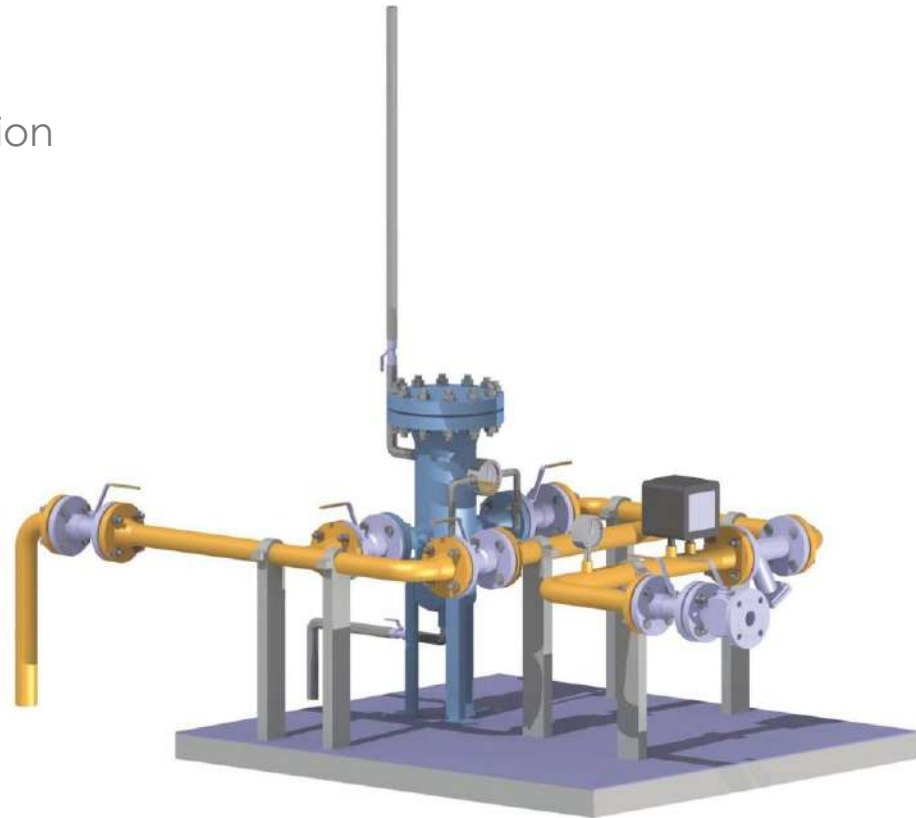
## Metering Skid Filtration Systems

Filter-Concept is keen to deliver highest level of quality product to their customer & with endeavor to that FCPL has introduced Metering Skid Filter Systems to cater demanding application of oil & Gas Industry. We offers an array of filters vessels that are compact and immediate turnkey solutions for many filtration needs.



## Metering Skid Filtration Systems- Features & Benefits

- High flow rate
- Low pressure drop due to pleated configuration
- High efficiency due to surface filtration
- Reduction in downtime & maintenance
- Easy to install & remove
- Choice of filter media & filter housings





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