www.EIF.ae

الإمارات الصناعية للفلاتر

EMIRATES INDUSTRIAL FILTERS

The Leading Manufacturer of
Industrial and Environmental Filtration Solutions



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About EIF

Since 1999, we have been the leading manufacturer of Industrial Dust and Liquid, Process and Environmental Filtration Solutions in the Arabian Gulf and the Middle East.

We represent **Donaldson Advanced Membranes (Manchester, United Kingdom)** for our Surface Dust Filtration media. The brand **Tetratex®** has been synonymous with quality for years and now EIF brings local manufacturing and support of Tetratex® backed up with local technical support to the Middle East.

Filtration products are supported by a combined warranty from Donaldson and EIF for the media, manufacturing, performance and service life.

Emirates Authority For Standardization & Metrology

PLANT & MANUFACTURING CERTIFIED BY UAE MINISTRY OF HEALTH & PREVENTION

Industrial and Environmental Filtration Solutions



LIQUID FILTRATION



DUST FILTRATION



HVAC FILTRATION

For more information, please call us at **+97167437093**
or send your inquiries to **info@eif.ae**
or visit **www.eif.ae**

Liquid Filtration Vessels

www.eif.ae/product/vessels



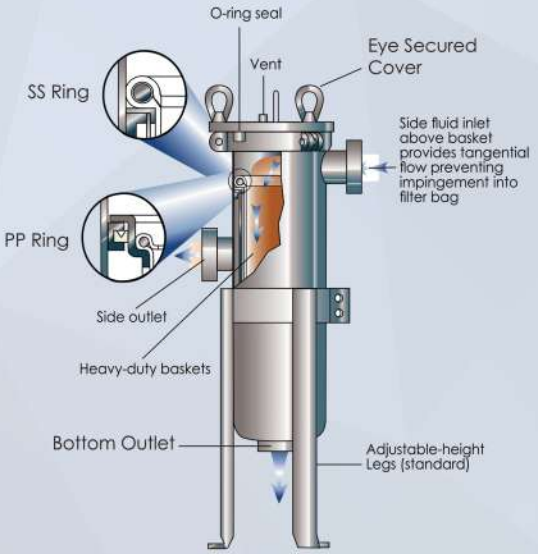
UVPP and PVC Vessels

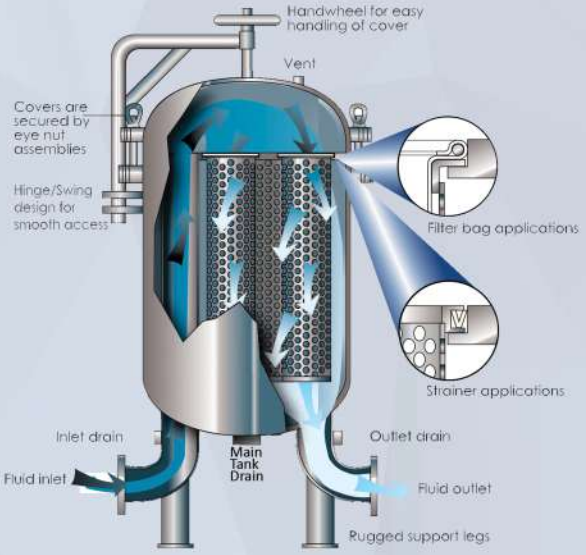


Stainless Steel Vessels

EIF implements ISO 9001 Quality Management System and the ASME/GB150 pressure vessel code involving design, fabrication and inspection standards. It is made of premium materials, has excellent chemical resistance, high safety reliability, structural durability and fine workmanship. Much more economic filter media consumption than filter cartridges and quick bag change outs.









Liquid Filtration Vessels

www.eif.ae/product/vessels

EIF offers a range of customized Industrial Filtrations Skids to suit the requires process application.

Industrial Filtration Skids are made of corrosion-resistant 100% Stainless Steel 316L and provide a mobile filtration solution for conveying fluids within the plant in a clean, safe and efficent manner.



Mobile Skid

Liquid Filtration Accessories



Balloon
To minimize residual fluid



Magnet
To remove ferrous dust (rust) without overloading the filters



DP Gauge
To monitor the service life & replace filters only when necessary



Strainer
A cleanable solution for rigid dust particles

www.eif.ae/liquid-filtration-accessories



Liquid Filtration - Applications & Industries

- Adhesives
- Bitumen
- Chemical Process
- Coatings
- Cooling and Heating Water
- Cosmetics
- Food & Beverage
- High Viscosity Fluid
- Inks
- Lacquers
- Magnetic Media
- Metal Finishing
- Metal Working
- Oil Refinery
- Paints
- Petrochemicals
- Pharmaceuticals
- Photographic
- Potable Water
- Pulp and Paper
- Pure Water Filtration
- Resins
- Vegetable Oils
- Water Treatment

Scan me
to know more about
EIF Liquid Filtration

Liquid Filtration Bags

www.eif.ae/liquid-filtration-solutions



- **EIF** manufactures standard and custom Liquid Filtration Bags made from Felt or Mono-filament and Multi-filament Mesh to allow for either Surface or Depth Filtration as needed.
- Felt is made from man-made or natural small fibers which are matted, condensed and pressed together.
- Nylon/Polyester/Polypropylene/Monofilament Mesh is made from long continuous strands of nylon woven together in the form of mesh.
- Multifilament mesh is increasingly less utilized due to its lower efficiency.



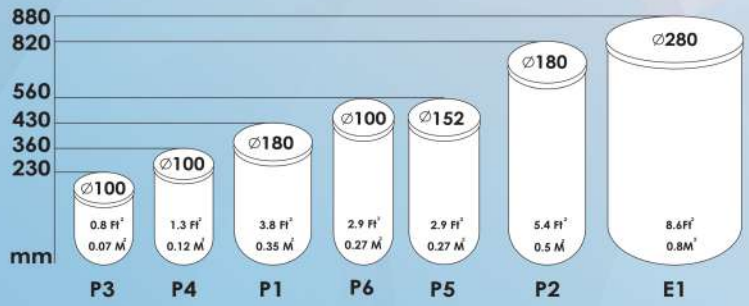




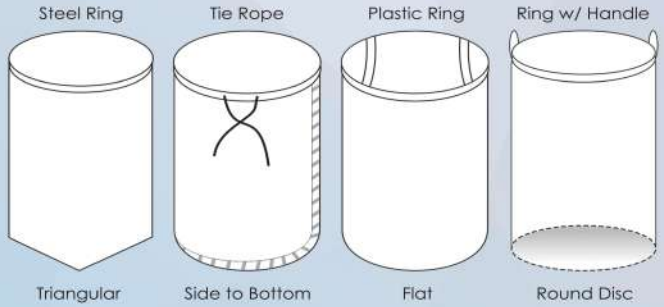




Standard Liquid Filtration Bags



Customized Liquid Filtration Bags



- **EIF** has the capability to provide various types of standard and customized liquid filtration bags that can be used in any kind of liquid filtration housing or vessel made by any OEMs including Eaton, FSI, GAF, Pentair, Rosedale, Cuno and Parker Filters. **EIF** also offers different kind of top and bottom constructions.

Liquid Filtration Cartridges

www.eif.ae/liquid-cartridges-filters

EIF Liquid Filtration Cartridges provide the finest in Nominal and Absolute cartridge microfiltration to meet a variety of industrial processing needs.

EIF also offers Standard and Customized Cartridges

Filter Cartridges are best for the removal of fine sediments especially for domestic and industrial applications.



Applications & Industries

- Adhesives
- Amines
- Coatings & Inks
- Chemical Process Industry
- Emulsions & Waxes
- Glycol Solutions
- High Temperature Fluids
- Hydrocarbon (Kerosone)
- Lacquers
- Metal Working
- Petrochemical & Potable Water
- Return Condensate
- Solvents & Aqueous Based Paints
- Water Filtration

Diameter		Length							
Millimeter	Inches	10"	20"	30"	40"	50"	60"	70"	80"
59 to 76mm	2.50"	O	O	O	O	O	O	O	O
109 to 116mm	4.50"	O	O						

*Customized dimensions are possible.

Liquid Cartridge Designs



Spun/Meltblown | Yarn/Wound | Pleated | Sintered Steel

Cartridge End Designs



Spun/Meltblown Filter Cartridges

www.eif.ae/liquid-cartridges-filters



- **EIF** Liquid Filtration Cartridges are thermally Bonded, 100% Virgin High Quality Food-Grade Polypropylene Polymer, Ultra-high Efficiency. Highly Porous, Rigid, True Depth Filters (Low Density Exterior/ High Density Interior)
- **EIF** also offers Standard and Customized Cartridges
- Filter Cartridges are best for the removal of fine sediments especially for domestic and industrial applications.

Surface Finishes



Equivalent

- **3M Beta-Pure**
- **EATON LofWind**
- **PALL Claris**
- **ATLAS FILTRI CA**
- **PARKERSpunFlo/Domnick Hunter**
- **VEOLIA-SUEZ**
- **PENTAIR PENTEK Pseries**
- **GLOBAL FILTER GWTB**

Specifications

- **Filtration Material:** 100% Meltblown Microfiber Polypropylene
- **Efficient Particle Size Removal:** Ranging from 0.50 µm to 100 µm
- **Filtration Efficiency:** Absolute 99% Efficiency/Nominal
- **Maximum Operating Temperature:** <85°C
- **Maximum Operating Pressure:** 2.0 Bar
- **Length Options:** 10", 20" 30", 40" ,50", 60", 70", 80"
- **Diameter Options:** Select from 2.5" and 4.5"
- **End Caps:** DOE, 222/SolidEnd Cap , 222/Bayonet ,226/Bayonet
- **Customized Sizes:** We accept customized sizes to meet your specific needs or applications.



Yarn/Wound Filter Cartridges

www.eif.ae/liquid-cartridges-filters



EIF Yarn Liquid Filtration Cartridges are made 100% Polypropylene or Cotton with Superior Filtration Efficiency, Greater Dirt Holding-Longer Life and Supports a Wide Range of Industrial & Chemical Applications

EIF also offers Standard and Customized Cartridges

Our Filter Cartridges are Cost-Effective, ECO-Friendly and has a Versatile Application Range

Winding Patterns



Equivalent

- 3M Beta-Pure
- EATON LofWind
- PALL Encore
- PARKERSpunFlo/Texflo
- Atlas Filtri FA
- GLOBAL FILTER



Specifications

- **Filtration Material:** 100% Polypropylene/Cotton
- **Core Material:** Polypropylene/Stainless Steell
- **Efficient Particle Size Removal:** Ranging from 0.50 µm to 100 µm
- **Filtration Efficiency:** Nominal
- **Maximum Operating Temperature:** <85°C
- **Maximum Operating Pressure:** 2.0 Bar
- **Length Options:** 10", 20" 30", 40" ,50" 60", 70", 80"
- **Diameter Options:** 2.5" and 4.5"
- **End Caps:** DOE, 222/Solid End Cap , 222/Bayonet , 226/Bayonet
- **Customized Sizes:** We accept customized sizes to meet your specific needs or applications.



Press Filters

www.eif.ae/liquid-filtration-solutions

EIF offers a wide range of press filter cloth and well designed for different filter press models. Good water and air permeability and non-revealed sludge, acid-resisting, alkali-resisting and heat resistance.

Our high-quality press filter cloths are designed for durability and efficiency across various industrial applications.



Main Benefits

- High Filtration Efficiency
- Durable Materials / Enhanced Strength
- Customizable Options
- Versatile Compability

Key Factors to Consider When Choosing a Press Filter Cloth

- Acidity and Alkalinity
- Temperature and Pressure Resistance
- Filter Cake Shape
- Filter Cake Release

Applications

- Mining and Mineral Processing
- Wastewater Treatment
- Food and Beverage Industry
- Chemical Industry
- Pharmaceuticals
- Pulp and Paper Industry
- Textile Industry
- Environmental Remediation



Dust Filtration Systems

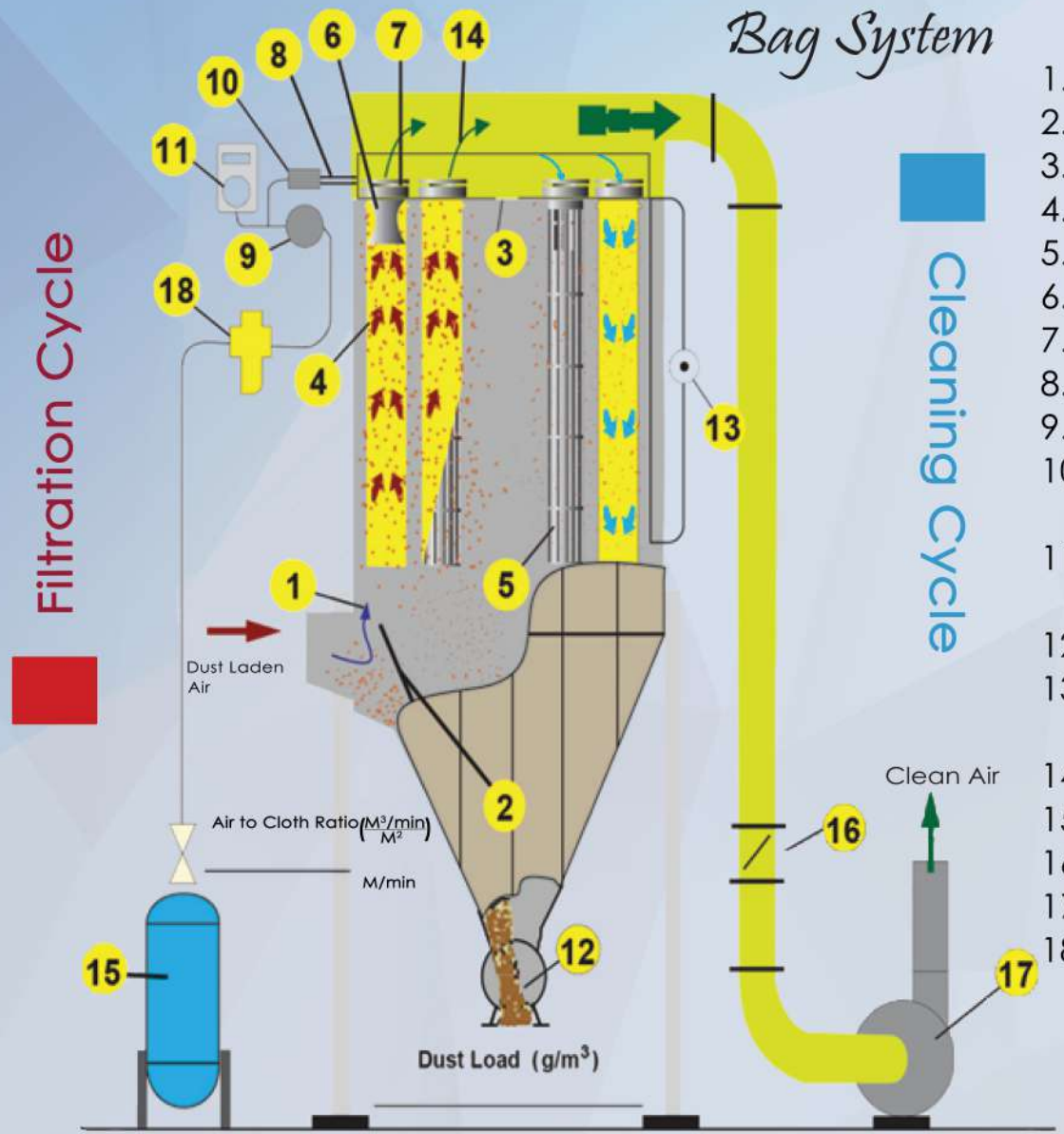
www.eif.ae/dust-filtration-equipment

- **EIF** provides single collectors or multi-faceted collection systems that improves efficiency, raises performance and increases value. **EIF** offers unparalleled filtration systems, ancillary parts and replacement filters from central, source and ambient systems to baghouses.
- Customized Process and Environmental De-Dusting Bag Filtration Systems and Cartridge Collectors
- Customized Dust Collectors with capacity from 1,000 - 100,000 m^3/hr. (including Silo Top Filters)
- ATEX-Rated Anti Explosion Considerations

EIF Dust Collector System *improves air quality used in industrial, commercial, and residentials fields to improve air, purity, and safety for breathing by removing particles from the air and the environment of production shops.*



Bag System



1. Dust Laden Air
2. Diffuser
3. Tube Sheet
4. Filter Bag
5. Bag Cage
6. Venturi
7. Filter Bag Top/Neck Construction
8. Blowpipe 1", 1.5" & 2"
9. Header (Compressed Buffer Air Tank)
10. Diaphragm Pulse Valve 1", 1.5" & 2" (24V DC,AC, 110V AC, 220V AC)
11. Pulse Control Time (Pulse Duration____ Pulse Period ___)
12. Rotary Valve_____M^3/Hour
13. Differential Pressure Gauge _____ Units, Range)
14. Can Velocity _____ M/Minute
15. Compressed Air Bin
16. Regulation Damper Valve
17. Fan ____M^3/Min, ΔP _____
18. Compressed Air Filter Regulator with Input Pressure Gauge Cleaning Pressure (Depth -6 Bar, Surface -4 Bar)

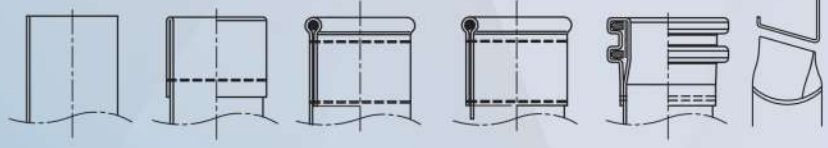
Dust Filtration Bags

www.eif.ae/products/dust-filter-bags



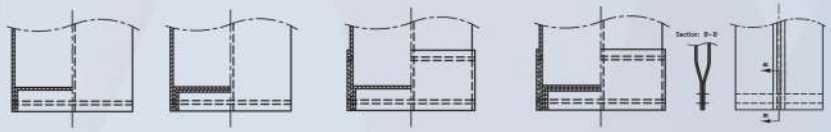
- **EIF** Dust Filter Bags come with Donaldson Tetratex Media that enhances the filtration performance by utilizing surface filtration technology as opposed to traditional depth filtration methods.
- Customized Designs as per industry requirement
- Suitable for a wide range of Operating Conditions
- Extended Bag Life - Surface Filtration

Top Construction



Smooth Cut | Fold | Inside Fold (with Rope, Steel Ring or Rubber O-Ring) | Outside Fold (with Rope, Steel Ring or Rubber O-Ring) | Snap Band | Loop (with Hook)

Bottom Construction



Single Round Disc | Double Round Disc | Reinforced Single Round Disc | Reinforced Double Round Disc | Flat

The Benefits of Donaldson Tetratex Advanced Membranes

- Increased filter element life
- Reduced emmissions
- Reduced baghouse pressure drop
- Reduced baghouse downtime
- Increased productivity
- Reduced energy consumption







PTFE Laminated Filtration Media from

Donaldson

Tetratex

Multi-Pocket Filter Bags

www.eif.ae/dust-filtration-solutions

EIF Multi-pocket Filter Bags are designed for optimal performance in various applications. With multiple pockets, it enhances dust collection and filtration efficiency, ensuring cleaner air and longer equipment life.

Our innovative multipocket design increases the surface area for dust collection, enabling the bag to capture a larger volume of particulate matter. This ensures cleaner air and a healthier working environment.



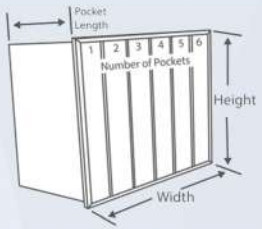


Main Benefits

- Advanced Filtration
- Durable Construction
- Enhanced Airflow
- Versatile Compability
- Customizable Options
- Cost-Effective Solution
- Resistance to Chemicals
- Longer Filter Life

Key Factors to Consider When Designing Multi-Pocket Filter Bag

- Filtration Efficiency
- Capacity and Volume
- Application
- Airflow Dynamics



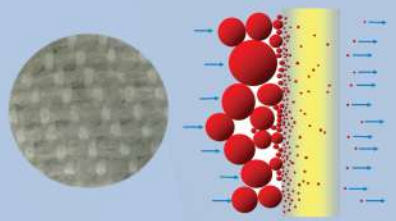
Applications

- Manufacturing
- Woodworking
- Food Processing
- Pharmaceuticals
- Construction
- Mining
- Metalworking
- Textiles
- Cement and Aggregates
- Chemical Processing
- Power Generation
- Agriculture



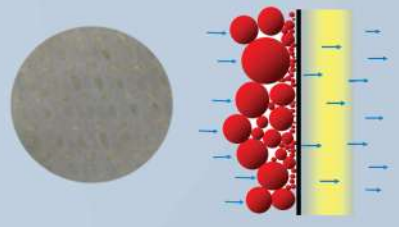


DEPTH FILTRATION (Woven/Neddled Felt)



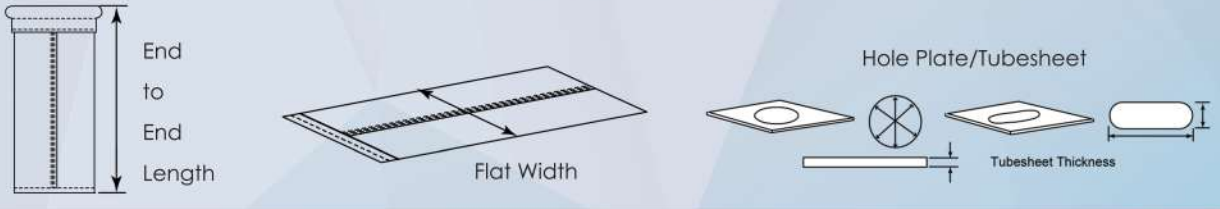
- Efficiency relies on cake formation therefore dust cake restricts air flow
- Requires higher cleaning energy hence high energy cleaning imparts mechanical stresses
- Fine particles migrate into media therefore particles in the structure cause abrasion damage leads to blinding - high pressure drop

SURFACE FILTRATION (Tetratex®)



- Membrane acts as permanent primary dust cake which requires no pre-coat and inhibits particle migration
- Low cake formation allows reduced cleaning and less mechanical stresses
- Higher cleaning efficiency gives higher constant airflow
- Excellent cake release means low pressure drop

How to Measure the Exact Bag Dimensions



Dust Filtration - Applications & Industries

- Agriculture
- Alkali Bypass
- Aluminium
- Asphalt Mixing Plants
- Cement
- Chemical
- Clay
- Clinker Cooler
- Coal Preps
- Finish Mills
- Food
- Glass
- Gypsum
- Industrial Machines
- Iron Foundries
- Jewellery and Precious Metal
- Kilns
- Lime
- Lumber and Wood Products
- Metal
- Paint
- Pharmaceutical
- Plastic
- Power Plants
- Raw Mills
- Rubber
- Stone
- Textile
- Waste Incinerators

Scan me
to know more about
EIF Dust Filtration

Dust Filtration Cartridges

www.eif.ae/product/dust-cartridge-filters

TOP

- Round
- Rectangular Flange
- Screw Mount with gasket
- Lugs (3 or 4)

BOTTOM

- Open
- Closed
- Closed with Bolt Hole
- Flat
- Oval

FILTER MEDIA

- 100% Cellulose
- 80/20 Cellulose Polyester
- 50/50 Cellulose/Polyester
- 100% Cellulose Flame Retardant
- 100% Spun Bond Polyester
- 100% Spun Bond Polyester with PTFE membrane
- 100% Polyester Hydro/Oleophobic
- 100% High Temperature PPS - Ryton®

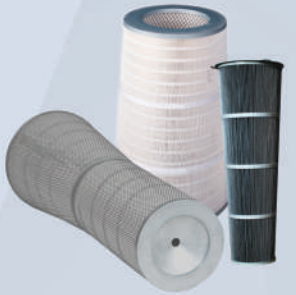
EIF Dust Filter Cartridges provide large surface area available for efficient filtration and intermittent cleaning while maintaining a hermetic seal to sustain a healthy differential pressure accross the filter media.

EIF customized cartridges can accommodate OEM Designs

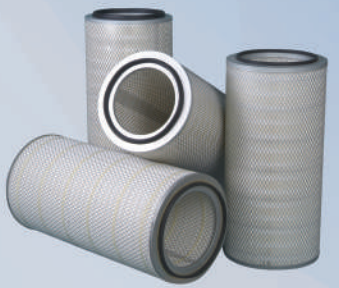
Total Filtration Surface Area is a factor of the number of pleats and the depth of each pleat



Flat



Conical



Cylindrical



Rectangular Flange



Round



Lugs



Antistatic

Dust Filtration Accessories

www.eif.ae/product/dust-filters-accessories

- **EIF** offers various dust filtration accessories to increase capacity and improve the performance of a dust collector system.
- **EIF** Dust Collector Parts and Accessorries ensure the efficiency and effectivess of a system and help extend its lifespan.
- Standard and Customized Designs as per industry requirement



Dust Filtration Accessories



Pulse Controllers



Solenoid Valves



Diaphragm Kit



Leak Detection Powder



Cap, Hooks & Clamps



Explosion Proof Devices



Pneumatic Hammer



Venturi



Flat Type Cages



Filter Bag Cages

Conveying Solutions

www.eif.ae/product/dust-conveying-solutions



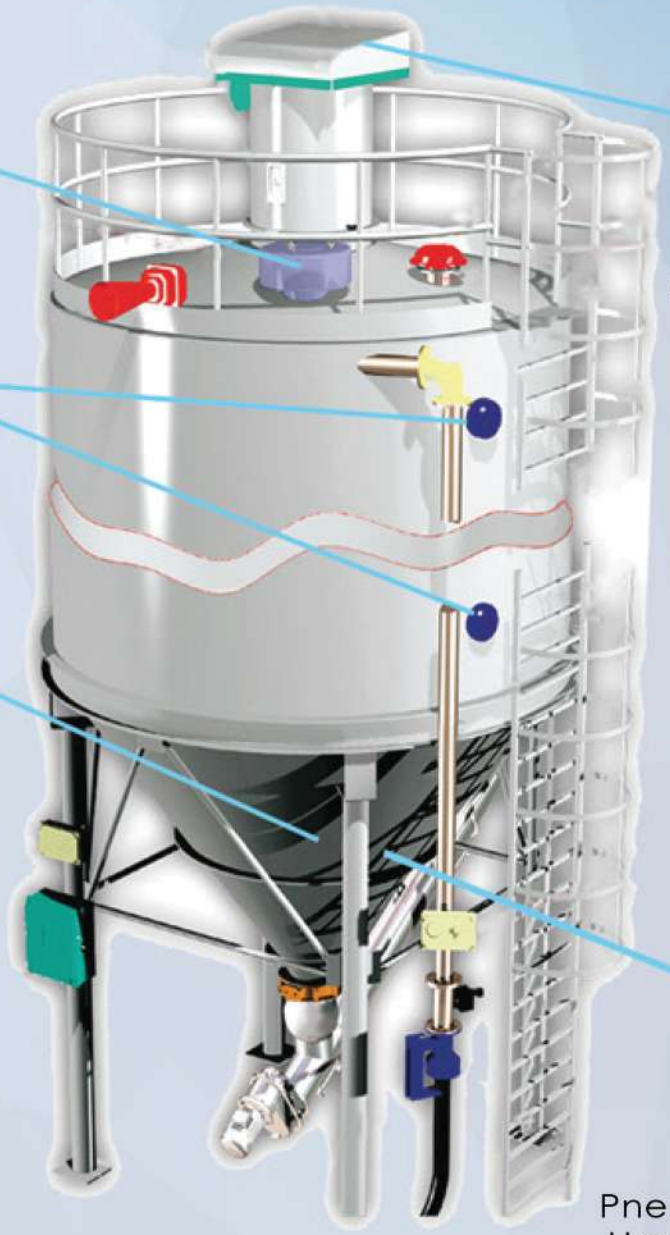
Pressure Relief Valve

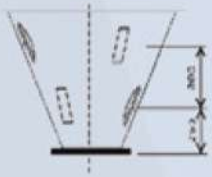


Silo Top Filter

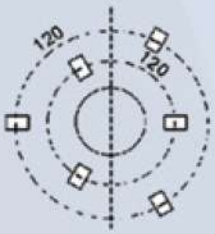


Silo Level Indicator









Silo Aeration Accessories

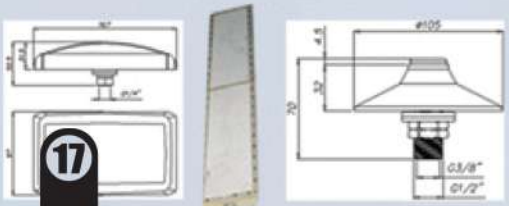


Hopper



Pneumatic Hammer

To Prevent
Tunneling/Piping
Bridging
Arching
Irregular Flow and
Flooding



Hydraulic/Coalescer/Separator/Air and Oil Filter Elements



- **EIF** provides many kind of filter products widely used in petrochemcial, electronics, machinery, manufacturing, engineering machinery and other systems.
- **EIF** also offers the industry's largest selection of replacement hydraulic, lube and gear oil filtration products for contamination
- These products are replacement for foreign filter element, air compressor three filter element, Engineering mechanical filter element, Coal mine special filter, filter series, Filter oil machine series, Hydrauilic accessories series, Precision filter, air filter, water filter and filter mesh.





Filter Element Replacement

• PALL	• ARGO	• HILCO	• ZINGA	• BOSCH REXROTH	• REINTJES
• HYDAC	• FILTREC	• EPE	• MANN	• UFI	• CJC
• MAHLE	• STAUFF	• TAISEI KOGYO	• DONALDSON	• HIFI	• MASUDA
• INDUFIL	• PECO	• EATON	• HY-PRO	• FLUIDTECH	• SMC
• PARKER	• VICKERS	• VOKES	• MP-FILTRI	• LEEMIN	• OTHERS

HVAC Filtration

www.eif.ae/hvac-filtration



Pre Filter

Washable and reusable heavy duty steel with bonded expanded aluminum media pre filter.



Carbon Fume Panel Filter

Excellent choice in commercial and industrialsettings for remediation of minor odor problems.



Heavy Duty Panel Filter

Stainless Steel frame grease filter is resistant to acid and alkali well for long service life.



Corrugated Panel Filter

Pre-efficiency corrugated type panel air filters for commercial and industrial central air conditioning systems, clean rooms and related industries.



Pocket Filter

Semi-rigid and high dust holding capacity bag filter with ultrasonically sealed linear stitched pockets.



Cylindrical Carbon Filter

Eco-friendly filter that is used primarily to remove odours in the ventilation of office and industry but also concentrations of solvents, ozone and nitrous fumes.



Disposable Corrugated Panel Filter

Medium-efficiency pleated panel filter with 100% synthetic and hydrophobic (non-moisture absorbing) fibers.



SS Baffle Filter

Durable and practical filter for good aeration, reducing the damage degree of the blower, filter grease and make the air clean.



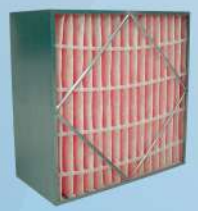
Mini Pleat Filter

Energy efficient mini-pleat filter with very high ratio of media to nominal face area and also oil and water repellant.



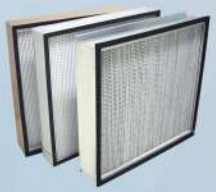
Paper Filter & Synthetic Media Roll

These media filters are used to filter the particulates of the solid and liquid in the air to reach the uniform flow effect.



Rigid Box Filter

Rigid Box Filter with urethane seal and moisture-resistant micro-fine fiberglass paper.



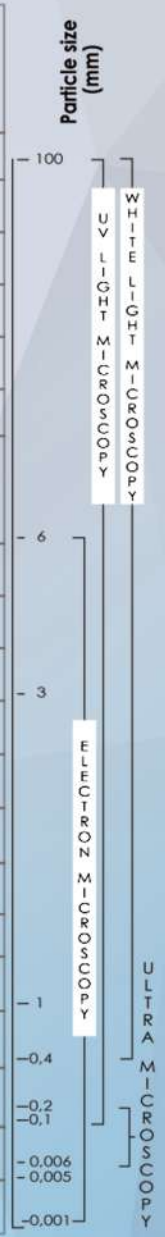
Hepa Filter

HEPA filters are designed for HVAC applications requiring cleaner air and used in hospitals and related industries.

Filter Efficiency Guide

www.eif.ae/hvac-filtration

Arrestance	PSE Partical Size Efficiency	Merv Minimum Efficiency Reporting Value	European Efficiency Class	Filter Type
60-80%	Less Than 20%	MERV 1-4	G1, G2	Disposable Panel Filters
80-90%	Less Than 20%	MERV 5	G3	Disposable Panel Filters
				Ring Panel Filters
				Synthetic Media
				Automatic Roll Filter Media
90-95%	20-30%	MERV 6	G4	Cube Filters
95%	25-30%	MERV 6-7	G4	Extended Surface Bag / Pocket Filters
				Pleated Panel Filters
95-98%	30-40%	MERV 8	G4	Pleated Panel Filters
				Extended Surface Bag / Pocket Filters
				Extended Suface Rigid Cell Filters
98%	40-50%	MERV 8-9	F5	Surface Bag / Pocket Filters
99%	50-60%	MERV 9-10	F5	Surface Bag / Pocket Filters
99%	60-70%	MERV 10-11	F6	Pleated Panel Filters
				Surface Bag / Pocket Filters
				Surface Rigid Cell Filters
99%	70-80%	MERV 12-13	F6	Surface Bag / Pocket Filters
99%	80-90%	MERV 13-14	F7	Extended Surface Rigid Cell Filters
99%	90-95%	MERV 14-15	F8	Extended Surface Rigid Cell Filters
N/A	95% -99.97% DOP	MERV 16	H11-H12	Extended Surface Rigid Cell Filters
N/A	99.97%-99.99% DOP	N/A	U13-U15	HEPA/ULPA Filters



Arrestance

The percentage of test dust, by weight, that a filter is able to capture.

Minimum Efficiency Reporting Value (MERV)

A numerical system for comparing filters based on the particle size efficiency. A MERV 1 is least efficient and MERV 16 is the most efficient.

Particle Size Efficiency (PSE)

The filter's ability to remove airborne particles in specific size ranges from 0.30 to 10.0 microns in diameter, using controlled aerosol consisting of potassium chloride (KCl).

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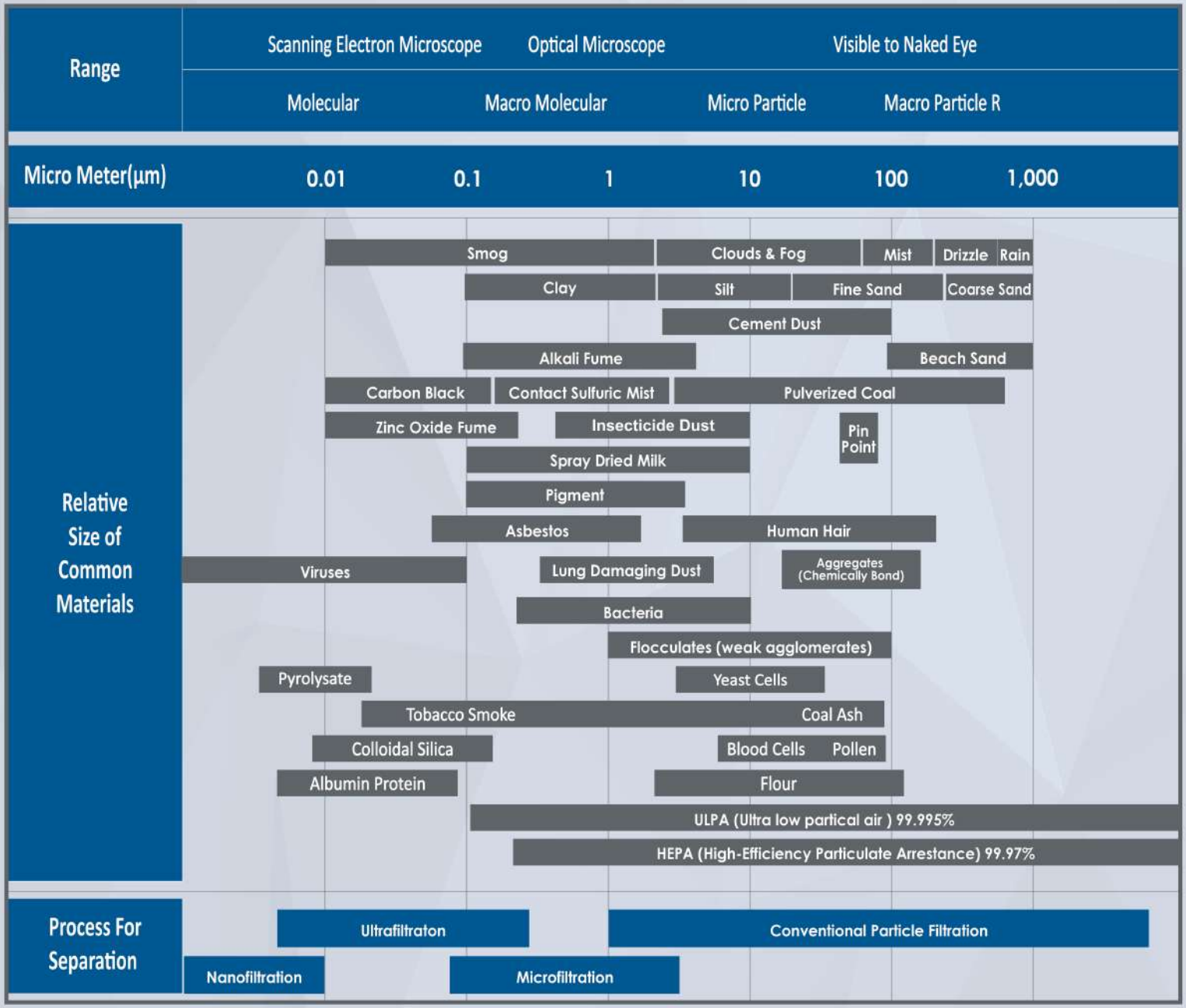
EIF HVAC Filtration

Relative Particle Size Table



Fabric Media by Operating Conditions

Fabric	Brand Name	Temperature		Moist Heat	Alkalines	Mineral Acids	Filtration Properties
		Operating (°C)	Surge (°C)				
Polypropylene	Novolen®	77	90	Excellent	Excellent	Excellent	Good
Acrylic	Dolanit®	135	145	Excellent	Fair	Good	Good
Polyester	Dacron®	130	150	Poor	Fair	Fair	Excellent
PPS	Ryton	190	210	Good	Excellent	Excellent	Good
Aramid	Nomex®	204	220	Good	Good	Fair	Excellent
Polymide***	P84®	260-280	290	Good	Fair	Good	Excellent
Fiberglass (PGS)*	Hyglass®	260	280	Excellent	Fair	Fair	Good
Fiberglass (PTFE)**	Tetratex®	260	280	Excellent	Fair	Fair	Excellent
PTFE**	Teflon®	260	290	Excellent	Excellent	Excellent	Good

*Sensitive Bag-to-Cage Fit. Chemically treated with PTFE, Graphite & Silicon

**Sensitive Bag-to-Cage Fit. Laminated with PTFE Membrane

***Must Oversize bag for shrinkage for temperatures above 232 °C

APPLICATION AND INDUSTRIES

Adhesives	Clay	Iron Foundries	Paint	Raw Mills
Agriculture	Clinker Cooler	Jewellery	Petrochemical	Resins
Alkali Bypass	Coal Preps	Kilns	Pharmaceutical	Rubber
Aluminium	Finish Mills	Lacquer	Plastic	Stone
Asphalt Mixing Plants	Food	Lime	Photographic	Textile
Coatings	Glass	Lumber Products	Potable Water	Vegetable Oils
Cement	Industrial Machine	Metal	Power Plants	Waste Incinerators
Chemical	Ink	Oil Refinery	Pulp and Paper	Water Treatment

الإمارات الصناعية للفلاتر

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