FILTER HOUSINGS

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Since 2002, Safna has serviced a variety of customers and its products have proven to be reliable and durable. Now, as a division of Heateflex Corporation, Safna renews its commitment to excellent products, fast response and exceptional customer service. Call today to find a filter housing that will best fit your project.

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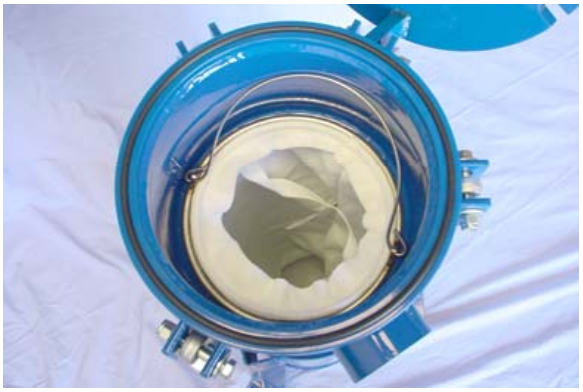
Model ESBF-200 Single Bag Filters

Safna Engineering's filtration strainer/filter housings are manufactured in many sizes and configurations, and serve as basket strainers or bag filters. In all cases, covers are easily removed without any special tools. Bags or baskets are replaced or cleaned. Model ESBF-200 single bag filter housings are offered in two standard sizes with a variety of pipe connection styles and sizes. Flanged connections are also available.

MODEL	BAG SIZE	SURFACE AREA Ft^2	INLET/OUTLET CONNECTIONS INCHES	BASKET LENGTH INCHES	A INCHES	VESSEL DIA-D INCHES
ESBF200-30	2	4.4	2	30	45	8.6
ESBF200-15	1	2.2	2	15	30	8.6

Standard Features:

- Gauge Ports 1/4" NPT
- Drain Port
- Vent Port 1/4" NPT
- Adjustable Stands
- Buna N O-Rings
- Perforated Basket



Options:

- Flanged Connection
- Micron Rated Strainer Basket
- O-Ring Material: Neoprene, EPT, Silicon, Viton, Teflon
- Pressure Gauge
- Drain and Vent Valves
- Construction Material: Carbon Steel, Stainless Steel
- Powder Coating and Electropolishing are available

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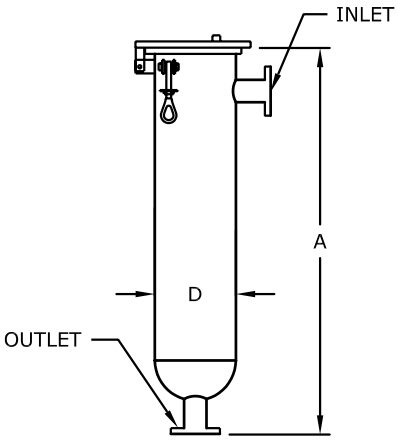
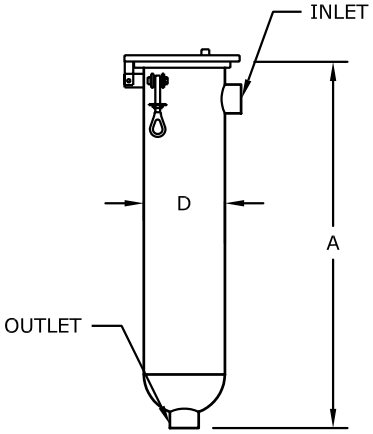
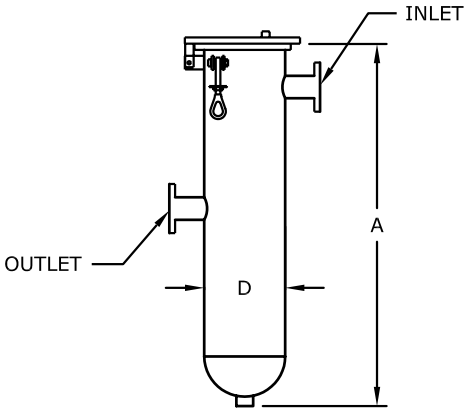
SINGLE BAG FILTER
MODEL ESBF200

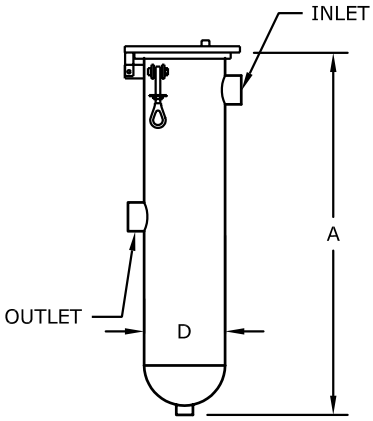
STYLE A

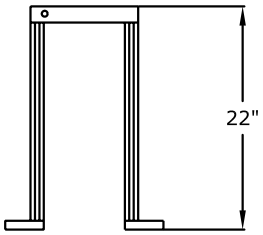




STYLE B







STAND

NOTES: DIMENSIONS FOR REFERENCE ONLY. CERTIFIED DRAWINGS FOR EXACT DIMENSIONS AVAILABLE ON REQUEST.

A.S.M.E.

Model ESBF-50 Single Bag Filters

Safna Engineering's filtration strainer/filter housings are manufactured in many sizes and configurations, and serve as basket strainers or bag filters. In all cases, covers are easily removed without any special tools. Bags or baskets are replaced or cleaned. Low-cost single bag filter housings are offered in two standard sizes with a variety of pipe connection styles and sizes. Flanged connections are also available.

MODEL	BAG SIZE	SURFACE AREA Ft^2	INLET/OUTLET CONNECTIONS INCHES	BASKET LENGTH INCHES	A INCHES	VESSEL DIA-D INCHES
ESBF50-6	3	0.5	1	6	18	4.5
ESBF50-12	4	1.0	1	12	24	4.5

Standard Features:

- Gauge Ports 1/4" NPT
- Drain Port
- Vent Port 1/4" NPT
- Adjustable Stands
- Buna N O-rings
- Perforated Basket

Options:

- Flanged Connection
- Micron Rated Strainer Basket
- O-Ring Material: Neoprene, EPT, Silicon, Viton, Teflon
- Pressure Gauge
- Drain and Vent Valves
- Construction Material: Carbon Steel, Stainless Steel
- Powder Coating and Electropolishing are Available

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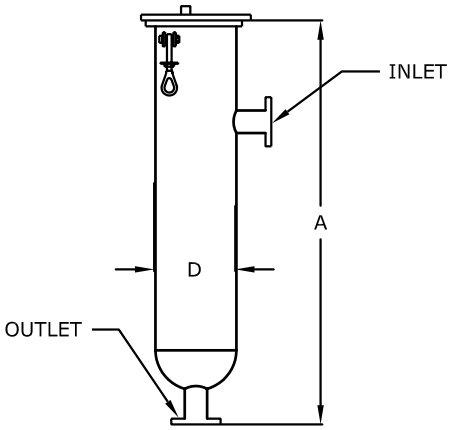
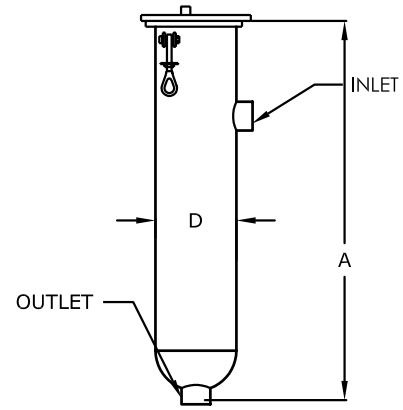
SINGLE BAG FILTER
MODEL ESBF50

STYLE A





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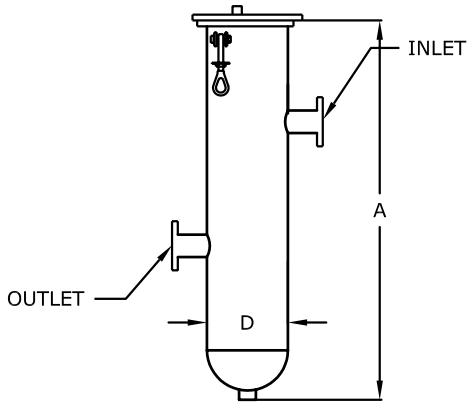

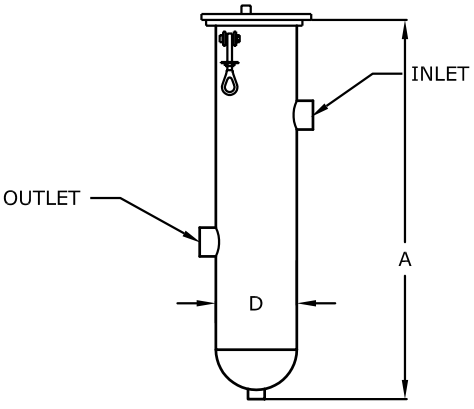

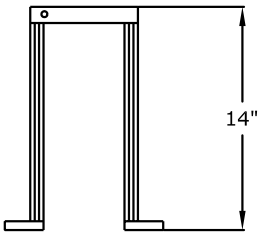

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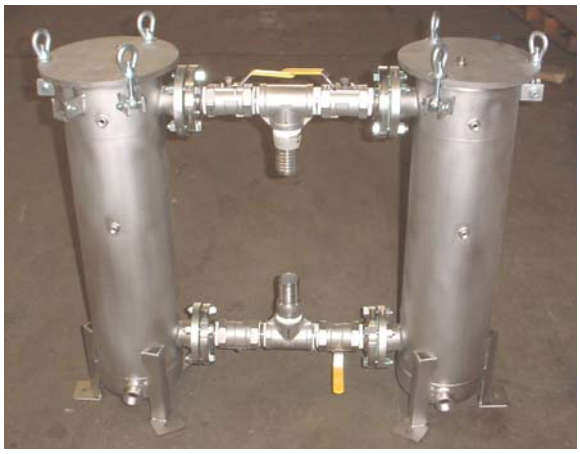
A.S.M.E.

Duplex Filtration Skid

Duplex filters consist of two filter vessels connected in parallel to a common header. Duplex filter systems can handle very high flow-rates. To eliminate down time and permit continuous operation, each filter housing can be independently valved to allow one side to be serviced while the other is in operation.

Options:

- Systems can be ordered with Single Bag Filters, Multiple Bag Filters or Cartridge Filters
- Manual or Automatic Valving
- Construction Material: Carbon Steel, SS 304 or SS 316
- Steel or Plastic Valve and Piping
- Different Material can be ordered for all seals
- Strainer Basket
- Micron Rated Mesh Lining for Baskets
- Variety Cartridge Elements



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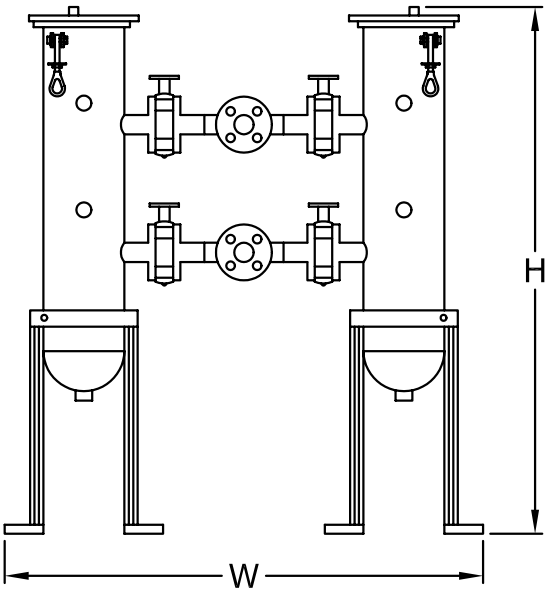
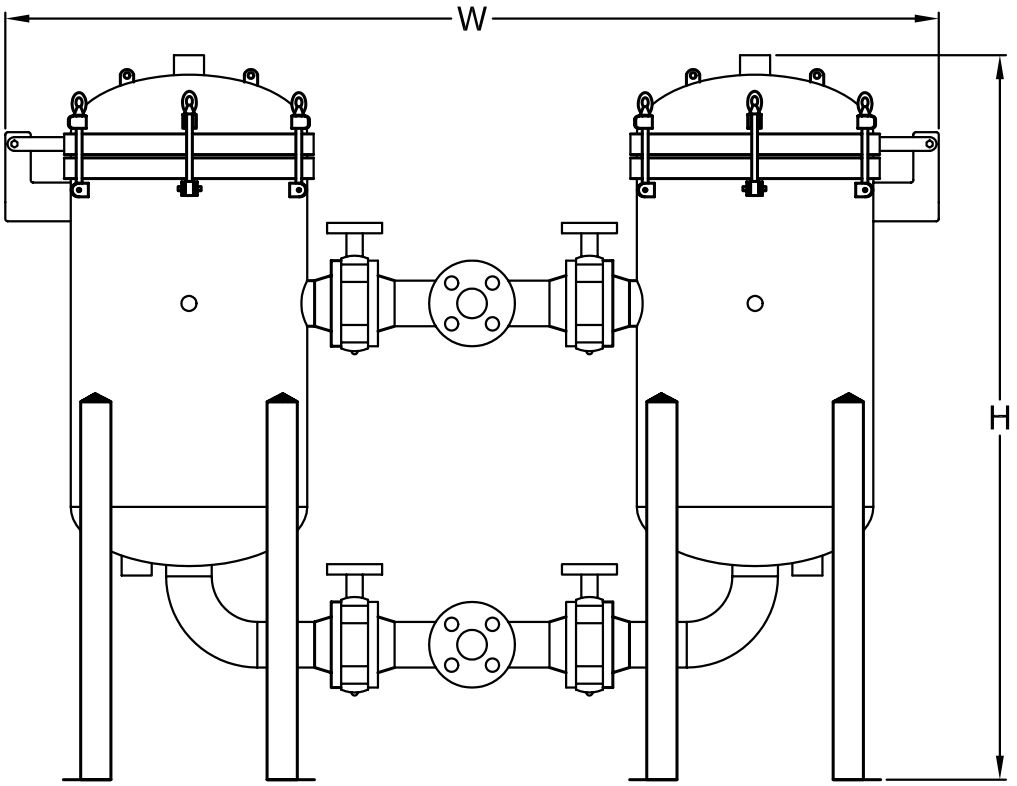
DUPLEX FILTER SYSTEM





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A.S.M.E.

Multi-Plex Filtration Skid

Multi-Plex liquid filtration vessels from Safna Engineering provide continuous non-stop filtering. Vessels can be used with filter bags for filtering as fine as one micron, with perforated strainer, or mesh-lined baskets. Each unit has inlet and outlet valves, gauge ports, and drain ports to permit on-line system servicing.

Options:

- Systems can be ordered with Single Bag Filters, Multiple Bag Filters or Cartridge Filters
- Manual or Automatic Valving
- Construction Material: Carbon Steel, SS 304 or SS 316
- Steel or Plastic Valve and Piping
- Different Material can be ordered for all seals
- Strainer Basket
- Micron Rated Mesh Lining for Baskets

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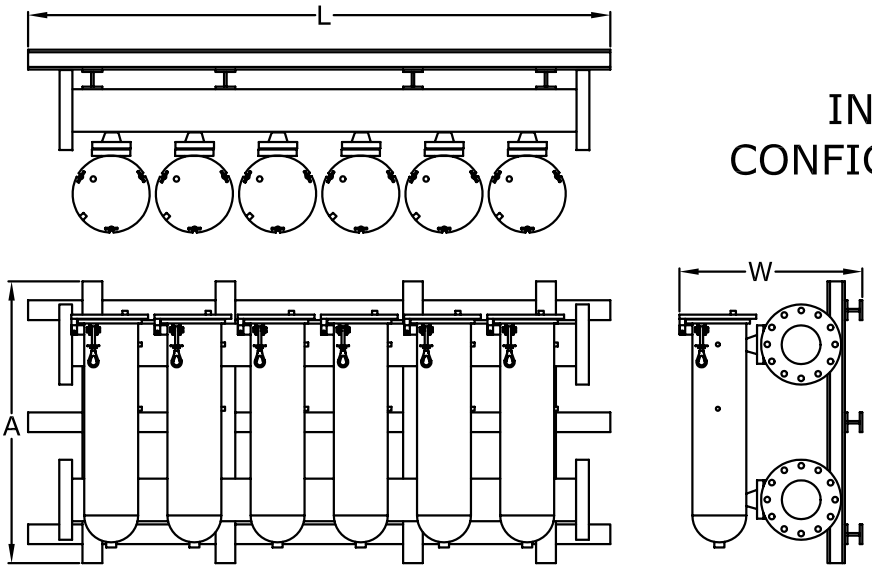
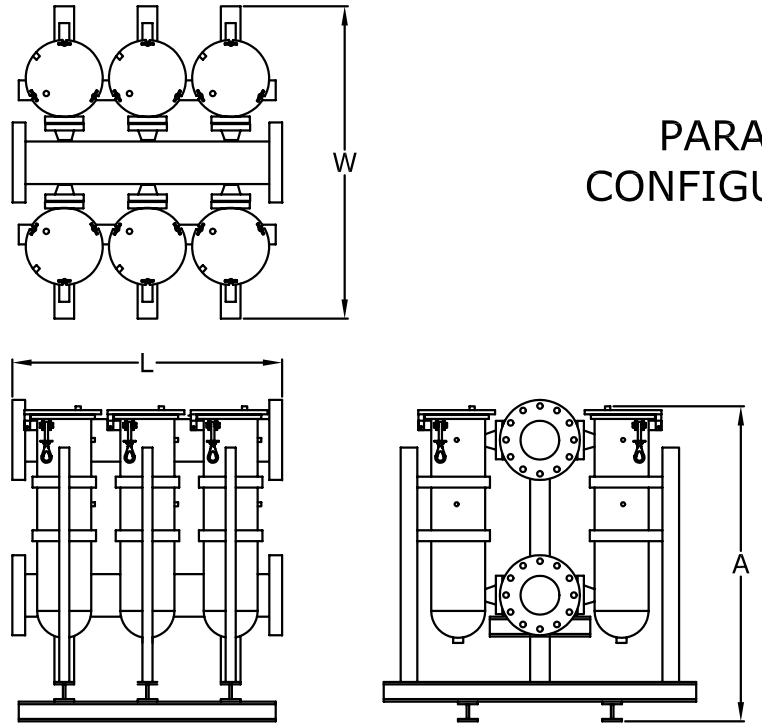
MULTI-PLEX FILTRATION SKID



IN LINE CONFIGURATION



PARALLEL CONFIGURATION

NOTES: DIMENSIONS FOR REFERENCE ONLY. CERTIFIED DRAWINGS FOR EXACT DIMENSIONS AVAILABLE ON REQUEST.
OPTIONAL VALVING NOT SHOWN.

A.S.M.E.

EMBF Multi-Bag Filter Housings

A multiple-bag filter system (EMBF) consists of several individual filter bags (2 - 32) housed in a single vessel. Theses filters handle high flow-rates (400 - 4800 gpm), while occupying minimal floor space.

Safna's strainer/filter housings are manufactured in many sizes and configurations, and serve as basket strainers or bag filters. In all cases, covers are easily removed while baskets or bags are easily cleaned or replaced. The standard pressure rating for all models is 150 PSI. All housings can be supplied with an ASME code stamp, if required.

Standard:

- Gauge, Drain, and Vent Ports Fixed Legs
- Buna N O-Rings
- Perforated Basket
- Flanged Connections

Options:

- Three Different Styles
- Micron Rated Strainer Basket
- O-Ring Material: Neoprene, EPT, Silicon, Viton, or Teflon
- Pressure Gauges
- Drain and Vent Valves
- Lifting Mechanism: Hydraulic, Hinged, or Hand-Crank
- Construction Material: Carbon Steel or Stainless Steel
- Powder Coating and Electropolishing are Available

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EMBF Multi-Bag Filter Housings

Multi-Bag Vessel Specifications

MODEL	NUMBER OF BASKETS	FLOWRATE[2] (GPM)	INLET / OUTLET (INCHES)	SURFACE AREA PER VESSEL (SQ FT)	SHELL DIAMETER[1] D (INCHES)	OVERALL HEIGHT[1] A (INCHES)
EMBF2	2	400	2, 3, 4	8.8	18	64
EMBF3	3	600	2, 3, 4	13.2	20	64
EMBF4	4	800	2, 3, 4	17.6	22	66
EMBF5	5	1000	3, 4, 6	22.0	22	66
EMBF6	6	1200	3, 4, 6	26.4	24	66
EMBF7	7	1400	4, 6, 8	30.8	28	75
EMBF8	8	1600	4, 6, 8	35.2	30	75
EMBF9	9	1800	4, 6, 8	39.6	32	75
EMBF10	10	2000	6, 8, 10	44.0	34	82
EMBF12	12	2400	6, 8, 10	52.8	38	81
EMBF14	14	2800	8, 10	61.6	38	81
EMBF16	16	3200	8, 10, 12	70.4	42	90
EMBF18	18	3600	8, 10, 12	79.2	46	92
EMBF20	20	4000	10, 12	88.0	46	92
EMBF22	22	4400	10, 12	96.8	46	92
EMBF24	24	4800	10, 12	105.6	46	92
EMBF32	32	6400	12, 14	140.8	60	110

[1] Dimensions for reference only. Actual dimensions may vary.

[2] Max flow based on clean water flow 1.0 PSI pressure drop

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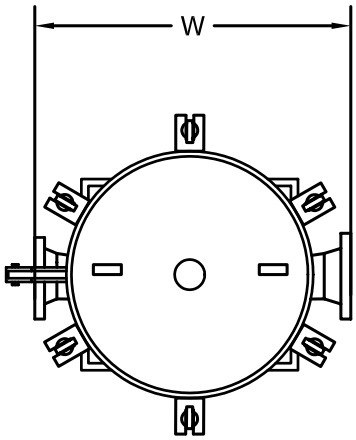
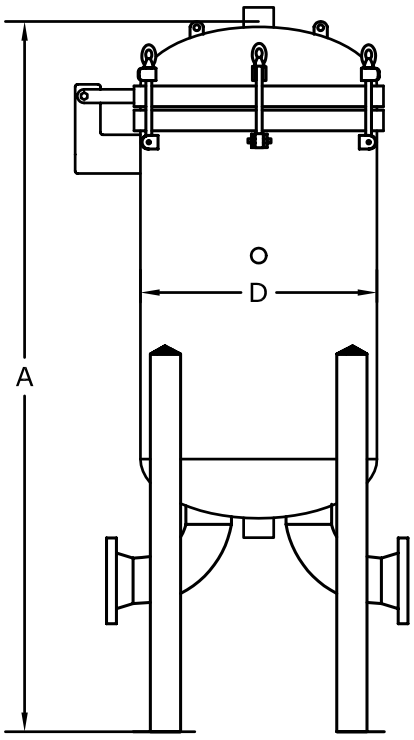
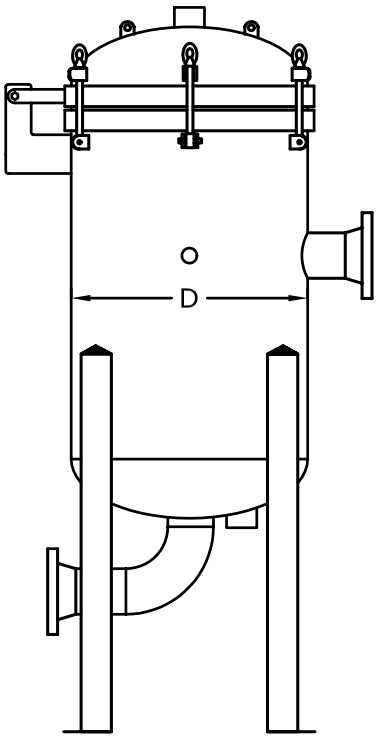
MULTIPLE BAG FILTERS
MODELS EMBF2 - EMBF4







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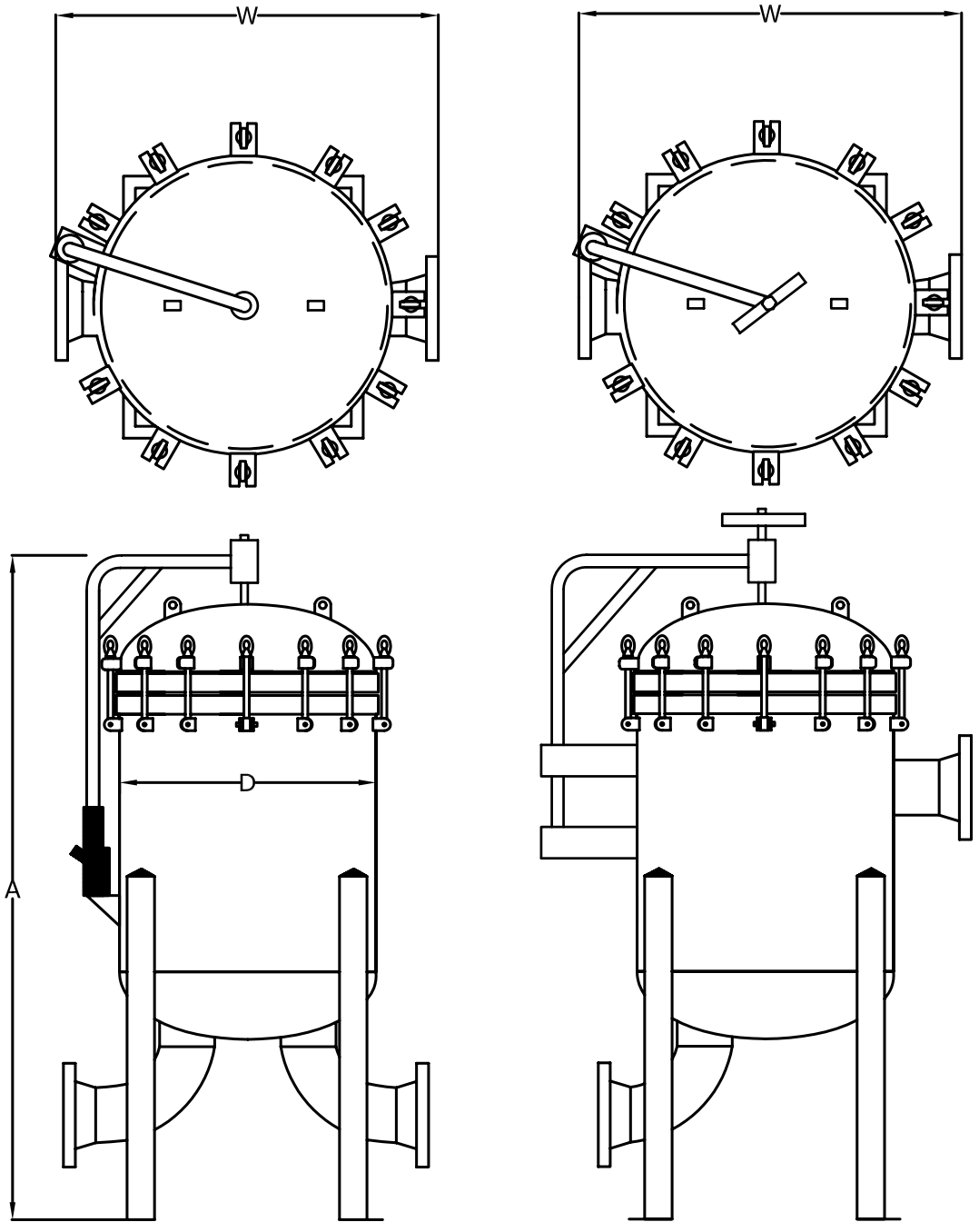
MULTIPLE BAG FILTERS
MODELS EMFB5 - EMBF32



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U
A.S.M.E.

Low Flow Multi-Cartridge Filter Housings

Safna manufactures a wide range of cartridge filter housings offering a variety of flow capacities. Housings accommodate from 1 to 15 cartridges. These housings are the preferred choice to use in applications where low micron retention is required. The standard pressure rating for all models is 150 PSI. All housings can be supplied with an ASME code certification.

Standard:

- Gauge, Drain, and Vent Ports
- Adjustable Stand
- Buna N O-Rings
- SS V-Post, Cup and Spring & Cap Assembly
- NPT Connections
- Swing/Hinged Lid

Options:

- Two Outlet Styles
- Accommodates 10, 20, 30 or 40-inch Cartridges
- Buna N, EPR, Viton, or Teflon O-Rings
- Flanged Connections
- V-Post or Threaded Center Post
- Construction Material: Carbon Steel or Stainless Steel
- Powder Coating and Electropolishing are Available

MODEL	NUMBER OF ELEMENTS	CARTRIDGE LENGTH (INCHES)	EQUIVALENT 10-INCH LENGTH	AVAILABLE PIPE SIZE (INCHES)	SHELL DIAMETER D (INCHES)
ERFC-1	1	10 20 30 40	1 2 3 4	3/4 or 1	4.50
ERFC-3	3	10 20 30 40	3 6 9 12	3/4 or 1	6.60
ERFC-6	6	10 20 30 40	6 12 18 24	1 - 2	8.60
ERFC-10	10	20 30 40	20 30 40	2 - 3	10.75
ERFC-12	12	20 30 40	24 36 48	3 - 4	12.75
ERFC-15	15	20 30 40	30 45 60	3 - 4	14.0

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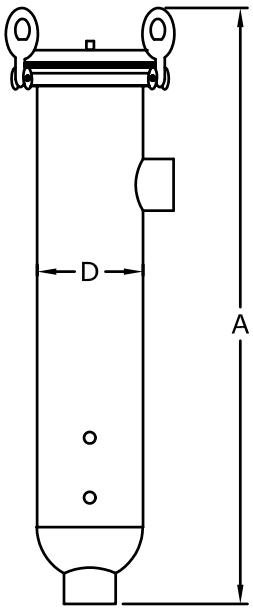
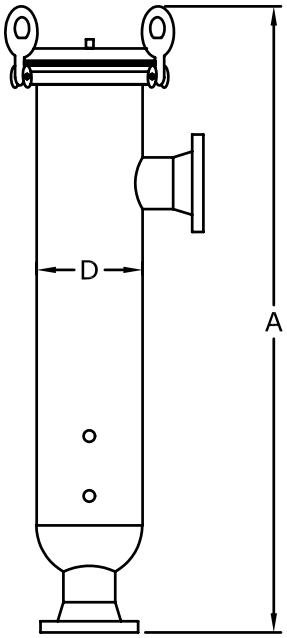
VERTICAL CARTRIDGE VESSELS
MODEL ERFC1 - ERFC6

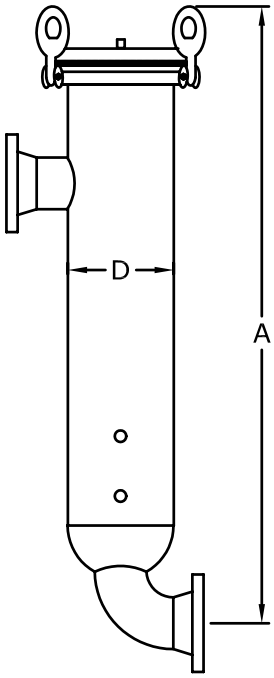
STYLE A

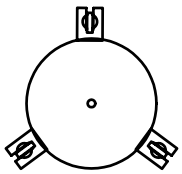


STYLE B

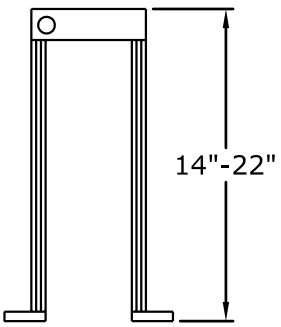


STYLE C





COVER



STAND

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A.S.M.E.

High Flow Multi-Cartridge Filter Housings

Safna manufactures a wide range of cartridge filter housings, offering a variety of flow capacities. Housings accommodate from 18 - 205 cartridges.

These housings are the preferred choice for use in applications where low micron retention is required. The standard pressure rating for all models is 150 PSI. All housings can be supplied with an ASME code stamp, if required.

Standard:

- Gauge, Drain, and Vent Ports
- Fixed Legs
- Buna N O-Rings
- Flanged Connections

Options:

- Two Outlet Styles
- Accommodates 20, 30 or 40-inch Cartridges
- Buna N, EPR, Viton, or Teflon O-Rings
- V-Post or Threaded Center Post
- Lifting Mechanism: Hydraulic, Hinged, or Hand-Crank
- Construction Material: Carbon Steel or Stainless Steel
- Powder Coating and Electropolishing are Available
- Air Vent Valve

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High Flow Multi-Cartridge Filter Housings

Cartridge Vessel Specifications

MODEL	NUMBER OF ELEMENTS	CARTRIDGE LENGTH (INCHES)	EQUIVALENT 10-INCH LENGTH	AVAILABLE PIPE SIZE (INCHES)	SHELL DIAMETER* D (INCHES)
ERFC-18	18	20 30 40	36 54 72	3, 4	14
ERFC-20	20	20 30 40	40 60 80	4	16
ERFC-27	27	20 30 40	54 81 108	4, 6	18
ERFC-30	30	20 30 40	60 90 120	4, 6	20
ERFC-36	36	20 30 40	72 108 144	6	20
ERFC-40	40	20 30 40	80 120 160	6	22
ERFC-48	48	20 30 40	96 144 192	6	24
ERFC-55	55	20 30 40	110 165 220	6	26
ERFC-82	82	30 40	246 328	8	30
ERFC-116	116	30 40	348 464	8	36
ERFC-158	158	30 40	316 632	8, 10, 12	42
ERFC-186	186	30 40	558 744	10, 12	44
ERFC-205	205	30 40	410 820	12, 14	48

*Dimensions for reference only. Actual dimensions may vary.

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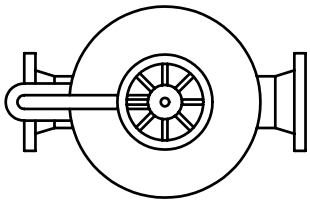
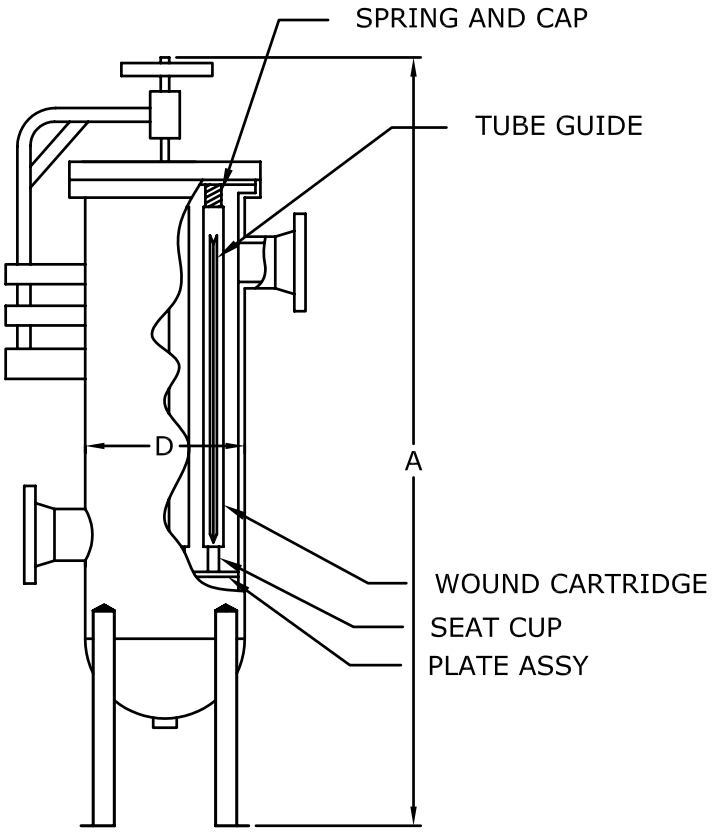
VERTICAL CARTRIDGE VESSELS





NOTES: DIMENSIONS FOR REFERENCE ONLY. CERTIFIED DRAWINGS FOR EXACT DIMENSIONS AVAILABLE ON REQUEST.

A.S.M.E.

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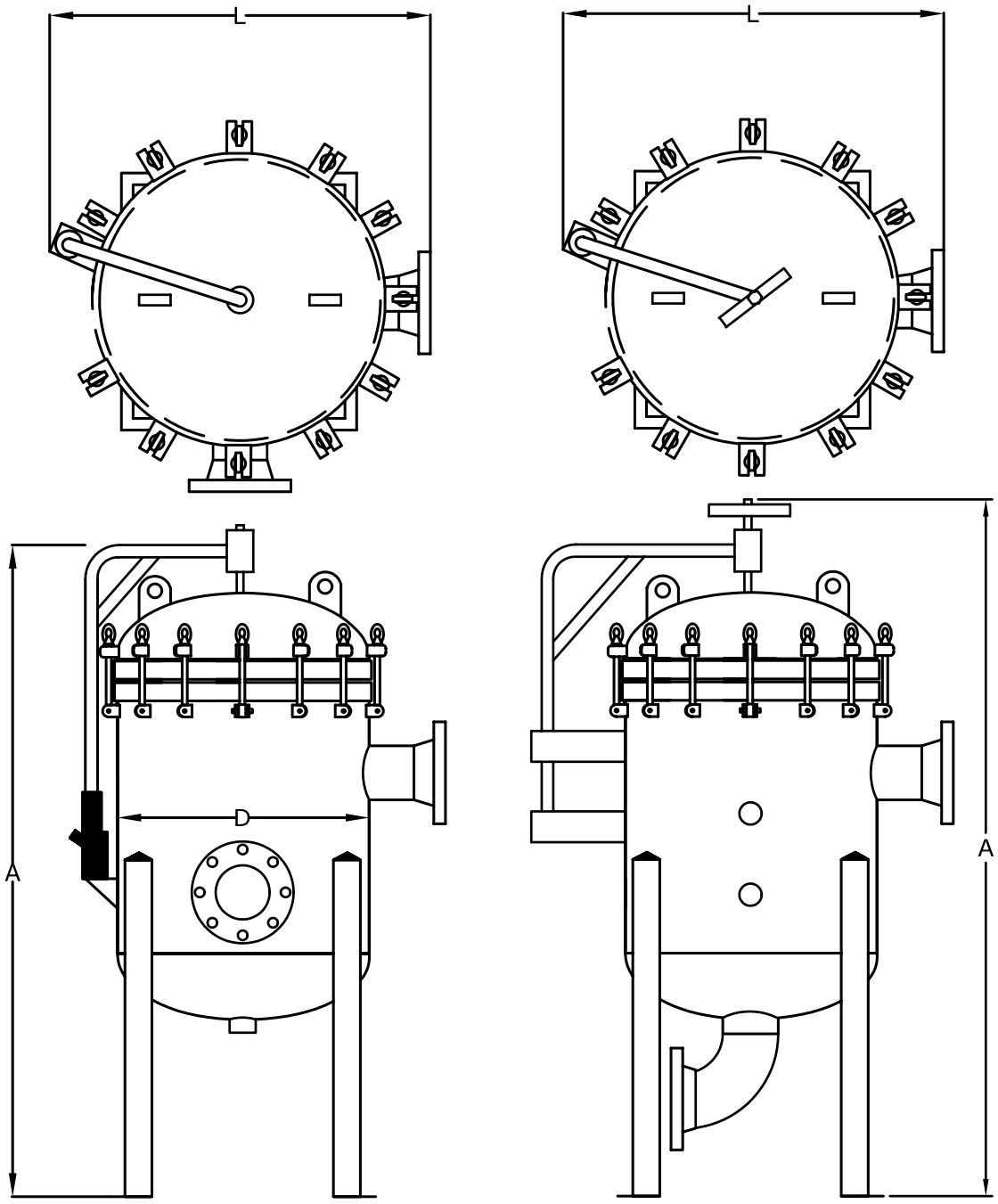
VERTICAL CARTRIDGE VESSELS
MODEL ERFC18 - ERFC205

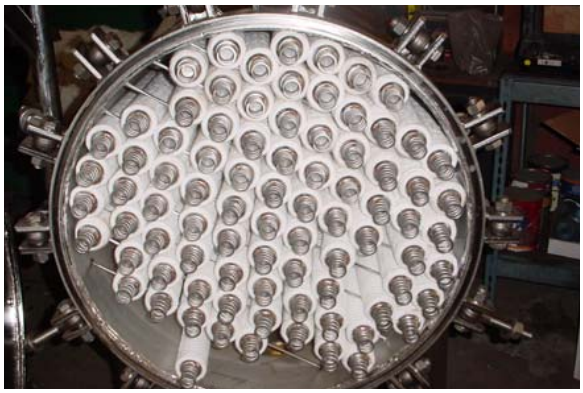


NOTES: DIMENSIONS FOR REFERENCE ONLY. CERTIFIED DRAWINGS FOR EXACT DIMENSIONS AVAILABLE ON REQUEST.

A.S.M.E.

Horizontal High Flow Multi-Cartridge Filter Housings

Safna manufactures a wide range of horizontal cartridge filter housings offering a variety of flow capacities. Housings accommodate from 55 to 205 cartridges. These housings are the preferred choice to use in applications where low micron retention is required. The standard pressure rating for all models is 150 PSI. All housings can be supplied with an ASME code stamp, if required.



Standard:

- Gauge, Drain, and Vent Ports
- Fixed Legs
- Buna N O-Rings
- Flanged Connections
- Cartridge Elements Support Bracket

Options:

- Accommodates 30 or 40-inch Cartridges
- Buna N, EPR, Viton, or Teflon O-Rings
- V-Post or Threaded Center Post
- Lifting Mechanism: Hydraulic, Hinged, or Hand-Crank
- Construction Material: Carbon Steel or Stainless Steel
- AL6XN and Other Alloys also Available
- Powder Coating, Glass Bead Blast and Electropolishing are Available

Cartridge Vessel Specifications

MODEL	NUMBER OF ELEMENTS	CARTRIDGE LENGTH (INCHES)	EQUIVALENT 10-INCH LENGTH	AVAILABLE PIPE SIZE (INCHES)	SHELL DIAMETER D (INCHES)
ERFCH-55	55	30 40	165 220	6	26
ERFCH-82	82	30 40	246 328	8	30
ERFCH-116	116	30 40	348 464	8	36
ERFCH-158	158	30 40	316 632	8, 10, 12	42
ERFCH-186	186	30 40	558 744	10, 12, 14	44
ERFCH-205	205	30 40	410 820	10, 12, 14	48

Dimensions for reference only. Actual dimensions may vary.

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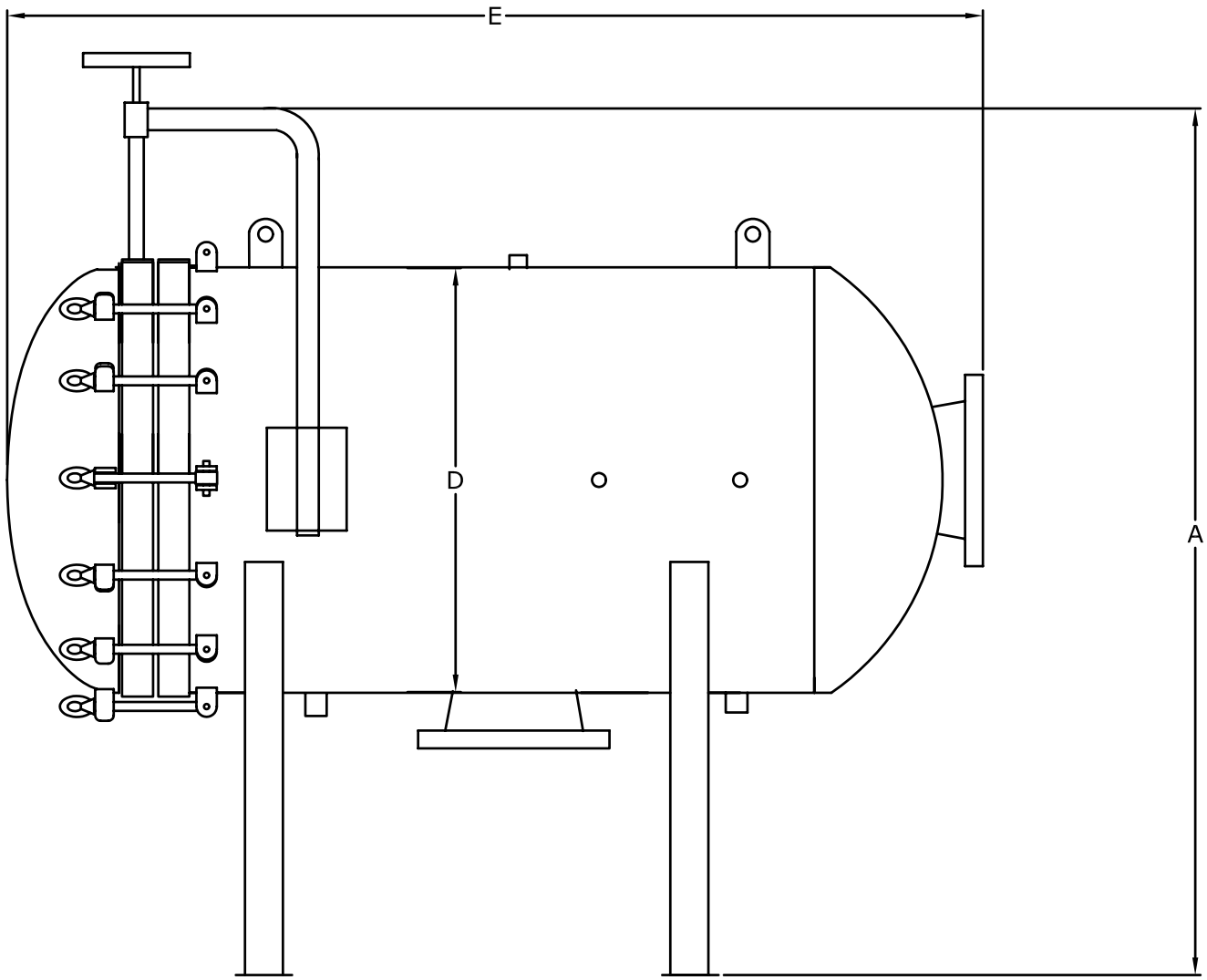
HORIZONTAL HIGH FLOW MULTI CARTRIDGE FILTER VESSEL MODELS ERFCH55 - ERFCH205



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A.S.M.E.

Sample Application: Cooling Tower Water Filter

PROBLEM

Airborne dust, sand, pollen, and grit are drawn in by cooling tower fans. These contaminates circulate through heat exchangers, chillers, and compressors which significantly reduce a system's cooling ability. Dirt particles in the water foul the system by settling on warm surfaces. Precipitated solids are formed by heating/cooling, and evaporation. Scale formation reduces the heat transfer rate and increases water pressure drop through the heat exchanger, condenser, and pipes.

SOLUTION

Filtration is one of the simplest and most convenient methods for reducing contaminates. Safna's low cost Bag Filters provide the ultimate solution where dirty water is a problem. The filters are compact in size and designed to meet a variety of industrial applications.

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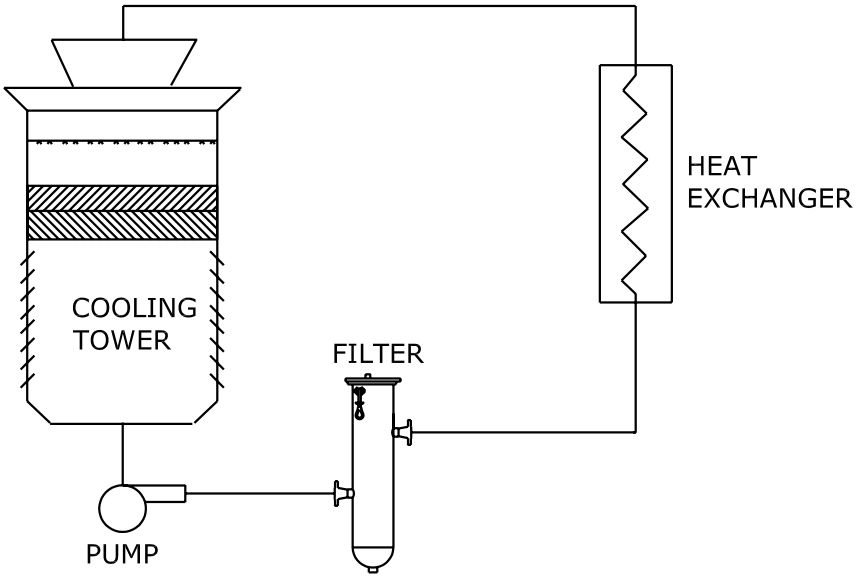
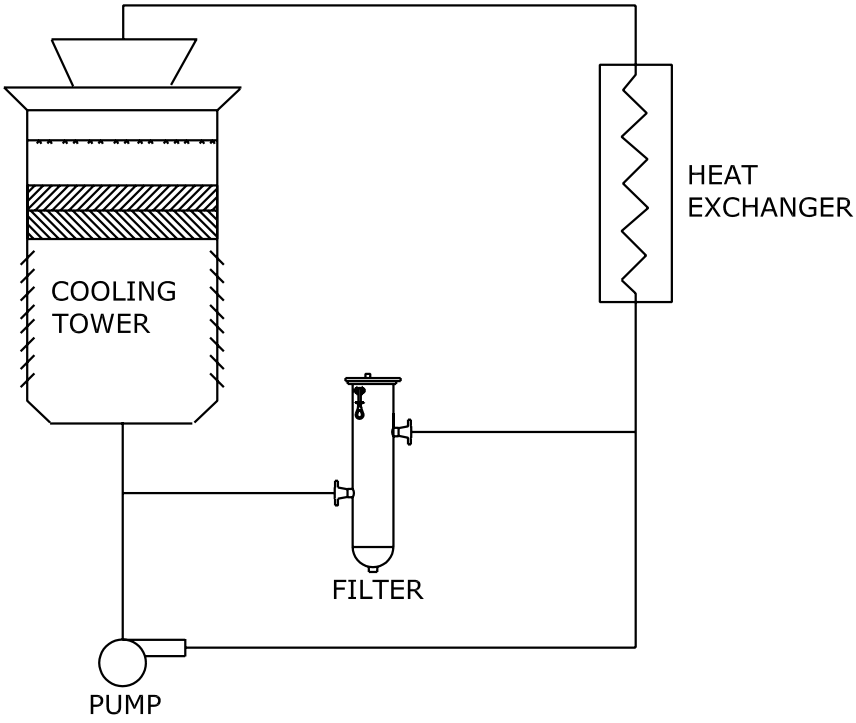
SAMPLE APPLICATION: COOLING TOWER WATER FILTER



FULL FLOW



SIDESTREAM

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A.S.M.E.

Model ELC Bag Filter Housing
Low Cost Strainer of Bag Filter Housing

The LC series are high capacity, low cost single bag filters. ELCF series is offered in carbon steel and SS304. ELCT series is offered in carbon steel only. Both series use a new design and unique machined cover that is easily removed and far more advantageous over the clamp cover style which are prone to leakage and loss of O-ring &band clamps.

ELCF SERIES:

- No Clamp, No Stamped Lid, No Leak
- Quick Opening Cover
- Genuine Removable Lid.
- No Tools Required
- Machined Sealing Face with O-Ring Grove
- Phenolic Knob Bolt
- Rated for 100 gpm @ 100 psi
- 2” Connections
- Two Basket Depths: 15 & 30 inches
- 1⁄4” NPT Gauge and Vent Ports
- Buna N O-Ring Material
- Perforated Basket
- Available only in Carbon Steel with Black Lacquer
- Anchor Pad

ELCT200 SERIES:

- No Clamp. No stamped lid. No Leak
- Quick Opening Cover
- Genuine Removable Lid
- No Tools Required
- Machined Sealing Face with O-Ring Grove
- Phenolic Knob Bolt
- Rated for 100 gpm @ 100 psi
- 2” Connections
- Two Basket Depths: 15 & 30 inches
- 1⁄4” NPT Gauge and Vent Ports
- Buna N O-Ring Material
- Perforated Basket
- Available in Carbon Steel or SS304 with Black Lacquer and Sand-Blasted Finish
- Adjustable Stand

MODEL	BAG SIZE NO.	SURFACE AREA (SQ. FT.)	DIAMETER (INCHES)	CONSTRUCTION MATERIAL	DIMENSIONS A (INCHES)	DIMENSIONS D (INCHES)
ERFC-1	1	2.3	6.7	CS & S304	24	8.6
ERFC-3	2	4.4	6.7	CS & S304	41	8.6
ELCT200-15	1	2.3	6.7	CS ONLY	24	8.6
ELCT200-30	2	4.4	6.7	CS ONLY	24	8.6

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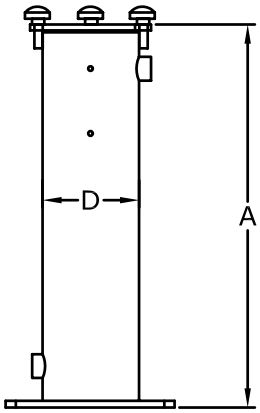
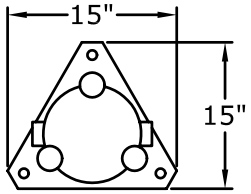
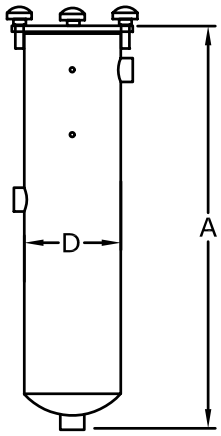
MODEL ELC LOW COST BAG FILTER HOUSING

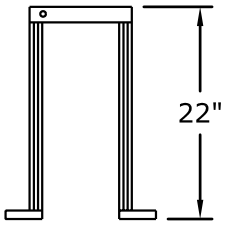


MODEL ELCF





MODEL ELCT



STAND

NOTES: DIMENSIONS FOR REFERENCE ONLY. CERTIFIED DRAWINGS FOR EXACT DIMENSIONS AVAILABLE ON REQUEST.

A.S.M.E.

Portable Liquid Filter and Pump Cart

Safna Engineering recently introduced a portable filter and pump cart. This portable unit is ideal for transferring and filtering liquids from tanks, drums and sumps. The unit can be easily moved around the facility. These portable units are extremely effective for batch processing.

A standard #2 or #1 single industrial bag filter housing removes particulate from liquids. The single bag filter accommodates a 15" or 30" long oil absorbing log, making the unit ideal for removing tramp or free oil from liquids.

Typical Applications

Coolants	Metal-Working Fluids	Bulk Chemical	Fuel Oils	Hydraulic Oils
Cooling Oils	Cutting Fluids	Wastewater	Slurries	Acids
Paints	Varnish	Process Water	Inks	Resins

Model EPFC-200:
Complete packaged unit, easily operated by a single-bag filter housing Suction hose-10 ft. long with quick disconnect Discharge hose-10 ft. long with quick disconnect Suction strainer

Specifications:

- Model EPFC-200-30-D: 2 x #2 bag filter (8.8 sq. ft. filtration area)
- Model EPFC-200-30: 1 x #2 bag filter (4.4 sq. ft. filtration area)
- Model EPFC-200-15: 1 x #1 bag filter (2.2 sq. ft. filtration area)
- Uses a single disposable bag filter swing bolt and eye nuts. Do not require special tools SS316 perforated basket

Options:

- Air-Operated Diaphragm Pump
- Self-Pumping Centrifugal Pump
- Four-Wheel Platform Pump
- Two-Wheel Hand Truck
- Polypropylene 20" Long Cartridge Post Filter
- Stainless Steel Filter Housing
- Oil Absorbing Logs or Bags

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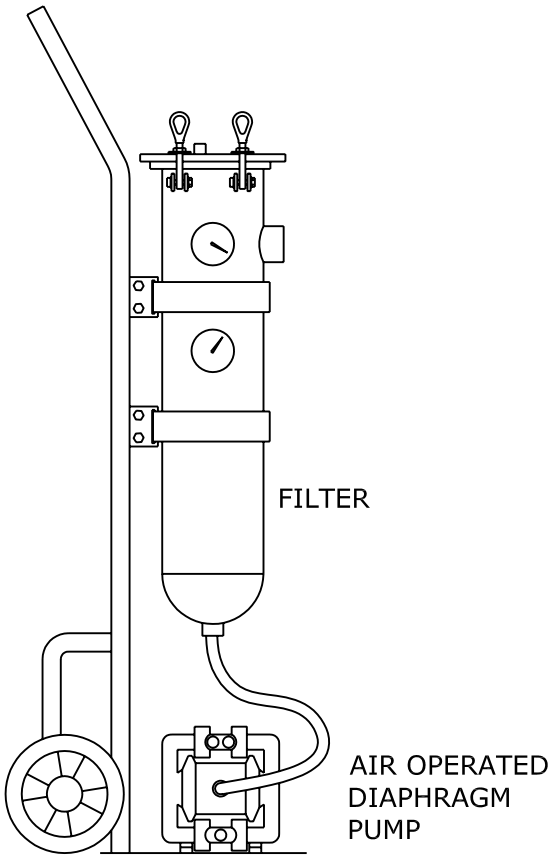
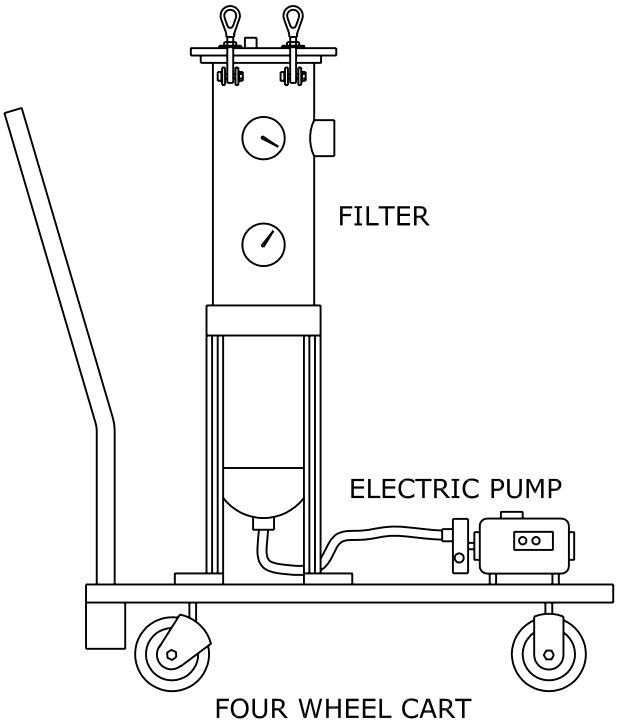
PORTABLE LIQUID FILTER AND PUMP CART



TWO WHEEL CART



FOUR WHEEL CART

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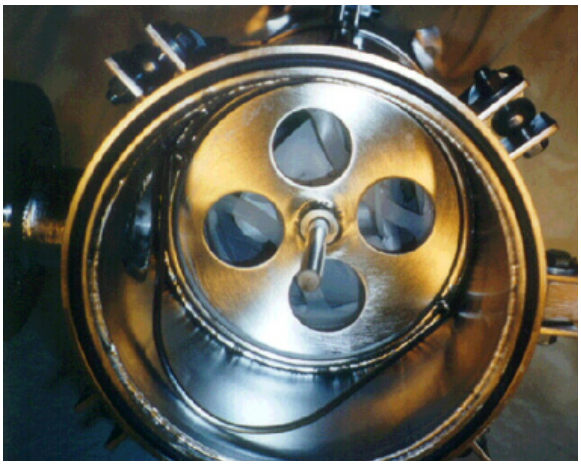
A.S.M.E.

Filter Accessories

Safna Engineering offers a large selection of perforated baskets/strainers. Perforated baskets can be ordered with stainless steel micron rated mesh linings. Adjustable stand and basket holders are also available.

Baskets/Strainers:
Stainless 316 Construction
Perforation Diameters:
1/4", 3/16", 9/64" and 1/16"
Micron-Rated Mesh Linings from 2 microns to 800 microns



Baskets/Bag Holders:
Heavy Duty Stainless Steel Construction
Adjustable plate will hold basket/bag firmly, preventing any by-pass.

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Custom Filtration Skids

Safna Engineering is capable of building custom specified skid mounted filtration systems. These systems incorporate bag filters, strainers, cartridge filters, solid/liquid separators, pumps, instrumentation, & control and electrical.

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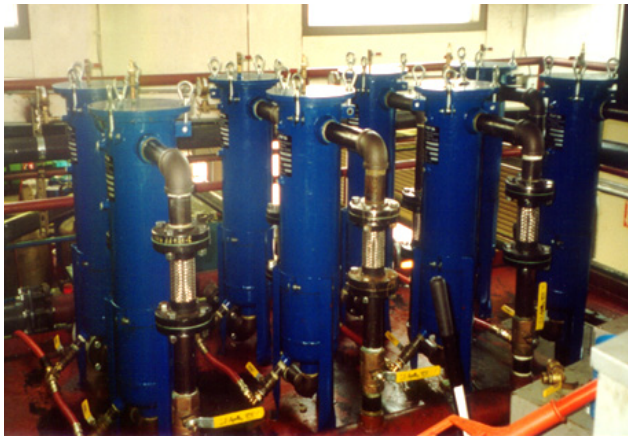
Sample Application: Coolant Filter Vessels

Safna engineering has installed a wide number of coolant filtration systems throughout metal working and aerospace manufacturing industries. Filtering fines in coolant sumps boost quality and cut costs. Safna's rugged industrial filters prevent metal chips, grinding fines, and debris from contaminating coolants and cutting oils.

These filters can be used in all metal working machines including milling, boring, grinding, drilling and turning. Micron rated disposable bags (1-250 micron) can be inserted depending on the level of purity needed. Safna will engineer and customize any coolant filtration system required for your application.



Advantages:

- Better Product Tolerance
- Longer Machine Life
- Better Product Finish
- Longer Tool Life
- Longer Coolant Life
- Less Heat
- Lower Maintenance and Operating Costs

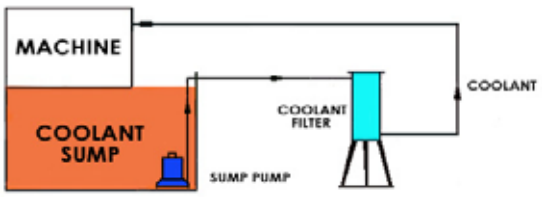
Safna Engineering offers a wide range of filter bags, including oil absorbing bags and logs, high temperature bags, high capacity bags, and absolute micron rated bags.

Typical Coolant Characteristics

	DIRTY COOLANT	FILTERED COOLANT	NEW COOLANT
pH	8.08	8.04	8.02
Turbidity	45,000+	15	7.02
Relative Conductivity	2,210	1,508	1,863
Viscosity	0.73	0.67	0.76

Typical Applications

Tapping	Milling	Grinding	Hobbing	Drilling
Turning	Honing	Lapping	Machining	



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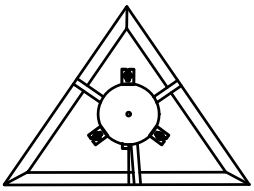
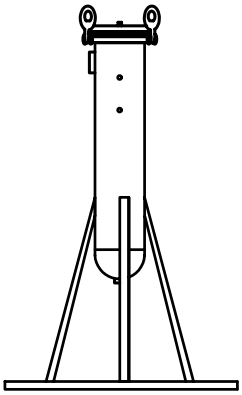
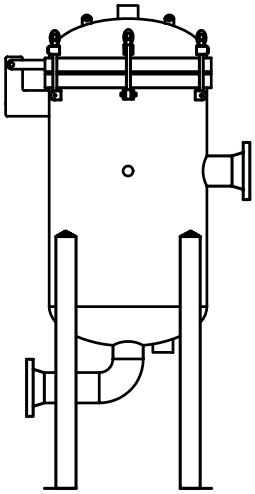
COOLANT FILTER VESSELS

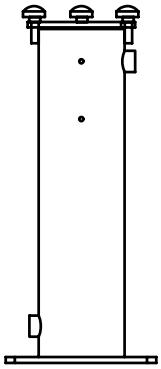
SINGLE BAG FILTER VESSEL WITH TRIPOD

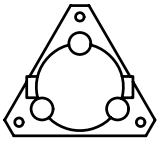




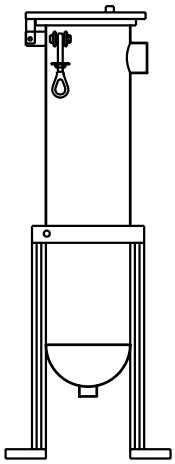
MULTI-BAG FILTER VESSEL FOR FLOW RATE OF 200+ GPM







LOW COST SINGLE BAG FILTER VESSEL



SINGLE BAG FILTER VESSEL WITH ADJUSTABLE STAND

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A.S.M.E.

More Filter Housings

Heated Jacketing:
Safna Engineering filter vessels can be fitted with heated jacketing. The jacketing is covered with fiberglass insulation to reduce heat loss. A final paper backed-aluminum cover protects the insulation from outside elements such as dust and moisture.

Application for these filters include: resins, adhesives, coatings, viscous fluids, vegetable oils, beverages, water, dairy, other foods, and pharmaceuticals.

Sanitary Filter Housings:
All Safna Engineering filter housings can be ordered to conform to USDA/3A standards. Housings can be outfitted with regular flanged connections or sanitary flanged connections. Housings are electropolished stainless steel. All internal surfaces can be visually inspected and cleaned. Application for these filters includes vegetable oils, beverages, water, dairy, pharmaceuticals and other foods.

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High Pressure Filter Vessels

Safna's high pressure filters can be designed and tested to withstand pressures up to 3,000 psi, with a wide range of flow rates and temperatures. Filter housings can accommodate either filter bags or filter cartridges.

All high pressure filter vessels are ASME code designed, constructed and "U" stamped.

Standard Features:

- Gauge Port
- Drain Port
- Vent Port
- Fixed Welded Stand
- Buna N O-Rings
- Perforated Basket for Bags Filters
- V-Post and Cup for Cartridges

Options:

- Flanged Connection
- Micron Rated Strainer Basket
- O-Ring material: Neoprene, EPT, Silicon, Viton, Teflon
- Pressure Gauge
- Drain and Vent Valves
- Construction Material: Carbon Steel or Stainless Steel
- Powder Coating and Electropolishing are also available

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Filter Bags

Safna Engineering offers a wide range of filter bags for all types of filter housings. Custom sizes, tie-ons, and adapter-head filter bags are also available to suit your needs.

Finishes and covers for felt filters:
Plain: As manufactured, without Treatment or covers.

Glazed: The outermost surface fibers are melted binding them together to reduce migration.

Covers: Woven covers are available to encase the bag. They contain any fiber that may separate the filter bag.

Filter Bag Material

CONSTRUCTION	FIBER	AVAILABLE MICRON RATING
Turning	Polyester Polypropylene Nylon	1 thru 200
Multifilament	Polyester Nylon	75 thru 800
Monofilament	Polyester Polypropylene Nylon	25 thru 800
Microfiber	Polyester Polypropylene	1 thru 10 1 thru 25

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Filter Bags

Bag Size

BAG SIZE NO.	DIAMETER (INCHES)	DEPTH NOMINAL (INCHES)	SURFACE AREA (SQ. FT.)
1	7.0	17.0	2.2
2	7.0	32.0	4.4
3	4.0	8.0	0.5
4	4.0	14.0	1.0
7	5.0	15.0	1.8
8	5.0	21.0	2.0
9	5.0	32.0	3.4

Operating Temperature Limits for Bag Media

MEDIA	TEMPERATURE (DEG °F)
Polypropylene	225
Polyester	300
Nylon	325
Nomex	475
Woven Teflon	370

Operating Temperature Limits for Seals

MEDIA	TEMPERATURE (DEG °F)
Buna N	220
White Neoprene	229
EPT	300
Viton	400
Silicon	450
Teflon	325

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Filter Cartridges

Safna Engineering offers a complete line of filter cartridges: String-Wound, Spun-Bonded, Activated Carbon, Resin-Bonded, Stainless Steel Elements and Pleated Cartridges.

String-Wound

- Wide Assortment of Continuous-Wound Cartridge Elements
- Material: Polypropylene, Cotton, Acrylic, Nylon, Polyester
- Lengths: 3" - 70"
- Micron Rating: 0.5 - 200 micron

Spun-Bonded

Spun-bonded filter cartridges are 100 % pure polypropylene fibers spun into a rigid structure

- Lengths: 5" - 40"
- Micron Rating: 1 - 75 micron

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Filter Cartridges

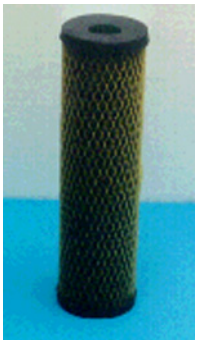
Style PSCC (Porous Shell Carbon Cartridges)

Porous shell carbon cartridges are used to remove organics and particles from plating, acids, alkaline and hydrocarbon solutions. Cartridges consist of a pre-filtering strong poly-ethylene outer shell, low sulfur activated carbon granular, and a 3 -micron inner-wound layer of polypropylene for polishing.

Pleated Cartridge Elements

Filter cartridges manufactured from 100% synthetic filter polyester and polypropylene media. Cartridges are comprised of pleated material to maximize dirt-holding capacity with extended life.

Used in car washes, spas, swimming pools and light industrial water filtration systems.



Style PSCC

Carbon impregnated cellulose cartridges are composed of an outer polyethylene sheath and synthetic fibers, which remove solid particles and protect the inner carbon layer.

Style 3P

Carbon cartridges remove undesirable taste, odor, sediment, discoloration and chemicals from water. Cartridges provide filtration through an outer winding, layer of activated carbon, and, through a 5- micron polishing inner winding.

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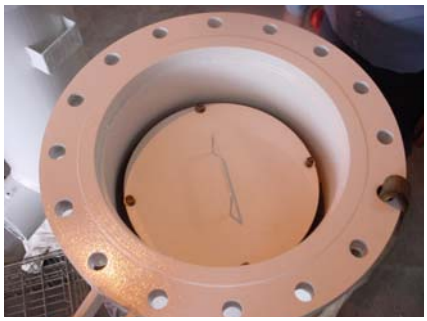
Visit us at www.safna.com

Industrial Air & Gas Filters

Safna Engineering designs and manufactures air and gas filtration products using pleated elements and ASME Code vessels. Our filters are used in chemical processing, natural gas, power generation, and industrial gas production. In addition to a wide range of standard filters and vessels, Safna specializes in custom engineered solutions to meet specific application requirements.

Features:

- ASME Code Design and Constructed
- Low-Pressure Drop-Low Energy Loss
- High Flowrate Capability Available from 500-40,000 CFM
- Inline Connections for Ease of Installation
- Large Sump Area for Collection of Contaminates Below Filter Elements
- Large Dirt Holding Capacity for Long Element Life
- Pressure Taps on Inlet and Outlet Connections
- Effective High-Pressure Filtration of Air/Gas Stream
- Filtration of Solid Particles from 0.3 - 800 Micron Range
- Filter Efficiency to 99.97%



Element:

Safna offers replaceable and cleanable elements. Radial fin or pleated elements offer maximum filtration area, large dirt holding capacity, and long life. Standard elements are furnished in polyester. Alternative materials, such as polypropylene, Nomex, rayon, and wool are available.

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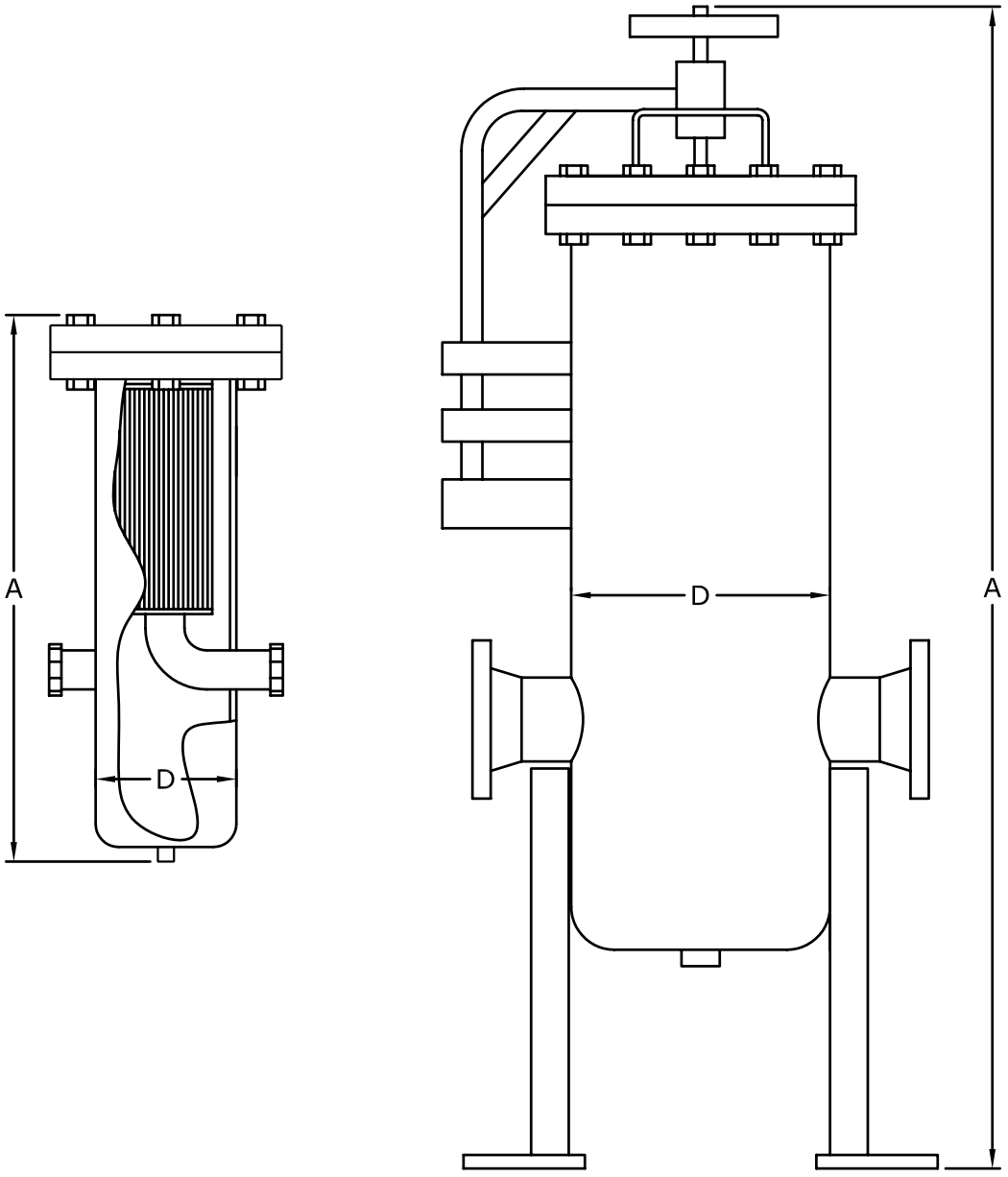
COMPRESS AIR/GAS FILTER



NOTES: DIMENSIONS FOR REFERENCE ONLY. CERTIFIED DRAWINGS FOR EXACT DIMENSIONS AVAILABLE ON REQUEST.

A.S.M.E.

Industrial Gas/Liquid Separator

Safna Engineering designs and manufactures air/ gas Mist elimination products using woven wire mesh and ASME Code vessels. Mist eliminators remove oil and water aerosols from compressed air and gas systems.

Rising vapor from the inlet to the outlet carries liquid entrainment. Large liquid drops fall freely from the inlet stream. Mist eliminator pad eliminates the entrained mist by turning it into large liquid droplets whereby they fall freely from the mist eliminator pad. All mist eventually falls to bottom of the vessel to be drained. Clean dry vapor exits the outlet.

Our Mist eliminators are used in numerous industries such as chemical processing, natural gas, power generation and industrial gas production. In addition to a wide range of standard vessels, Safna specializes in custom engineered solutions to meet specific application requirements.

Options:

- ASME Code Design and Constructed
- Low-Pressure Drop-Low Energy Loss
- High Flowrate Capability Available
- Inline Connections for Ease of Installation
- Large Sump Area for Collection of Contaminates
- Long Mist Pad Life
- Pressure Taps on Inlet and Outlet Connections
- Effective High-Pressure Mist Removal of Air/Gas Stream

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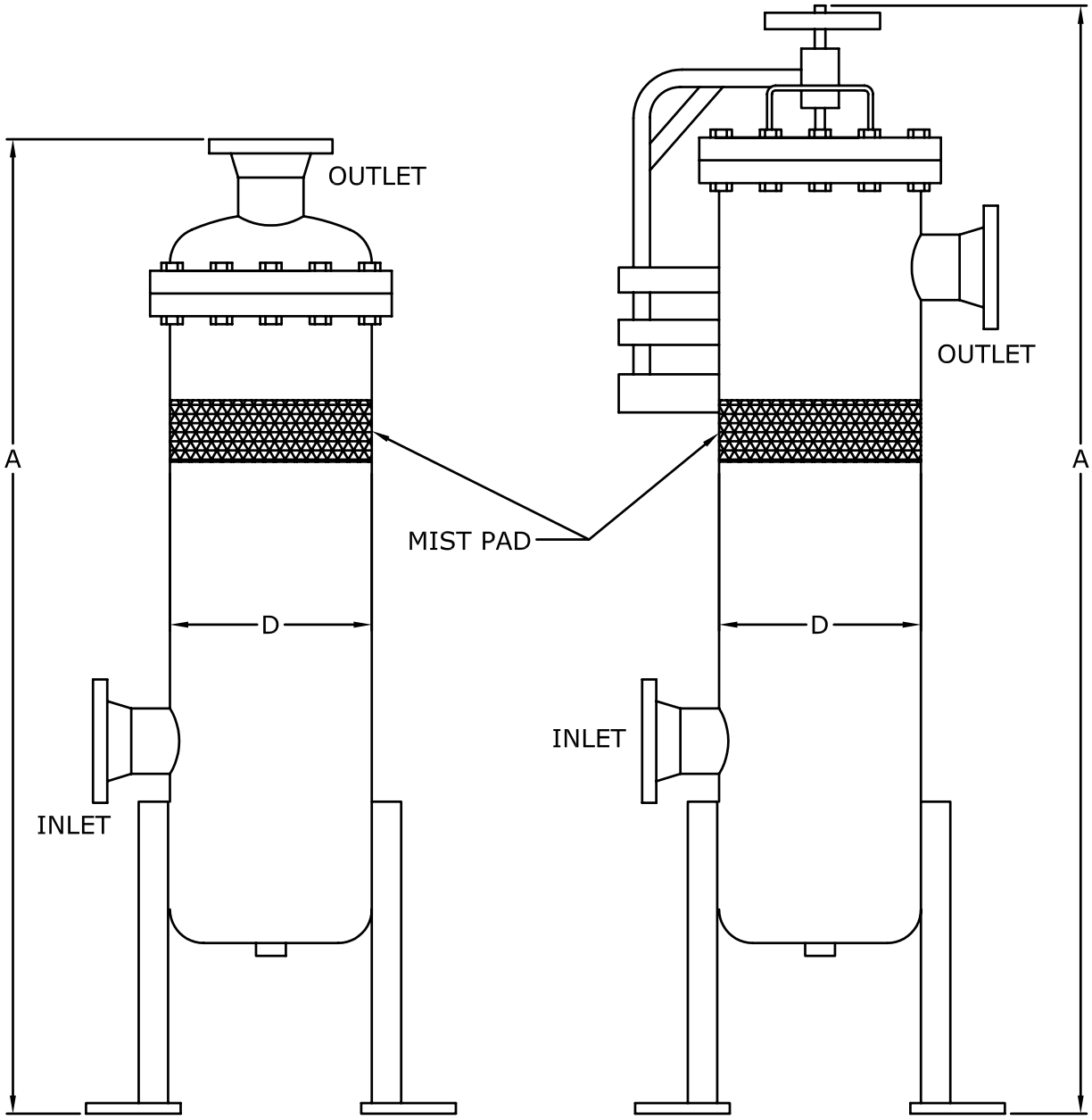
GAS/LIQUID SEPARATOR

STYLE A

STYLE B



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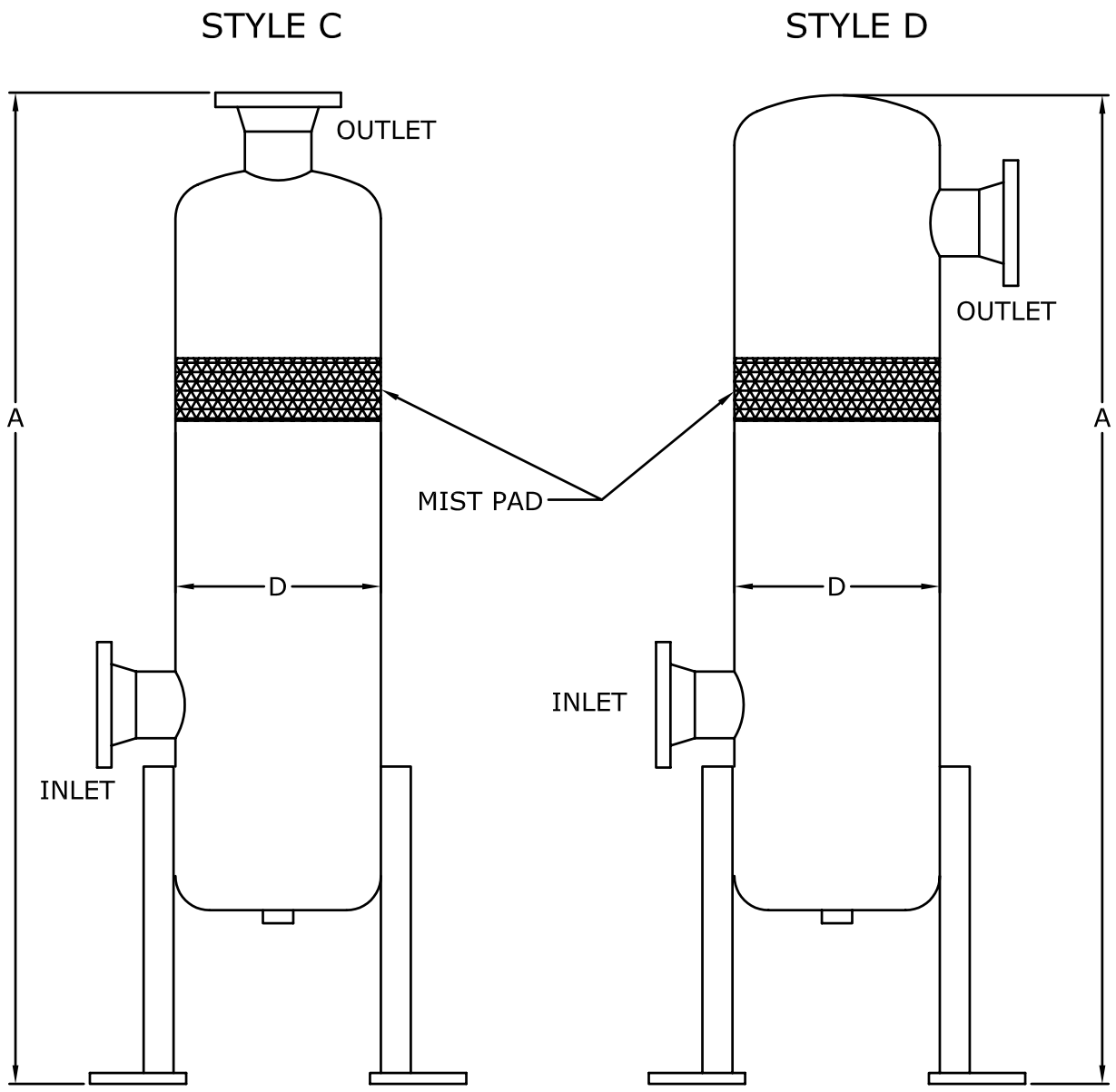
GAS/LIQUID SEPARATOR



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A.S.M.E.

Filter Basket Data

BASKET STYLE	STRAINER BASKET AREA (SQ. FT.)	FILTER BAG BASKET AREA (SQ. FT.)	STRAINER BASKET VOLUME (GAL)	FILTER BAG BASKET VOLUME (GAL)
ESBF50-6	0.5	0.5	0.30	0.30
ESBF50-12	1.0	1.0	0.60	0.60
ESBF200-15	1.7	2.0	1.87	2.31
ESBF200-30	4.4	4.2	4.71	4.63

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Conversion Information U.S. Mesh to Micron Particle Size

U.S. MESH	INCHES	MICRONS	U.S. MESH	INCHES	MICRONS
3	0.265	6730	40	0.0165	420
3.5	0.223	5660	45	0.0138	354
4	0.187	4760	50	0.0117	297
5	0.157	4000	60	0.0098	250
6	0.132	3360	70	0.0083	210
7	0.111	2830	80	0.0070	177
8	0.0937	2380	100	0.0059	149
10	0.0787	2000	120	0.0049	125
12	0.0661	1680	140	0.0041	105
14	0.0555	1410	170	0.0035	88
16	0.0469	1190	200	0.0029	74
18	0.0394	1000	230	0.0024	63
20	0.0331	841	270	0.0021	53
25	0.0280	707	325	0.0017	44
30	0.0232	595	400	0.0015	37
35	0.0197	500	400	0.0015	37

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