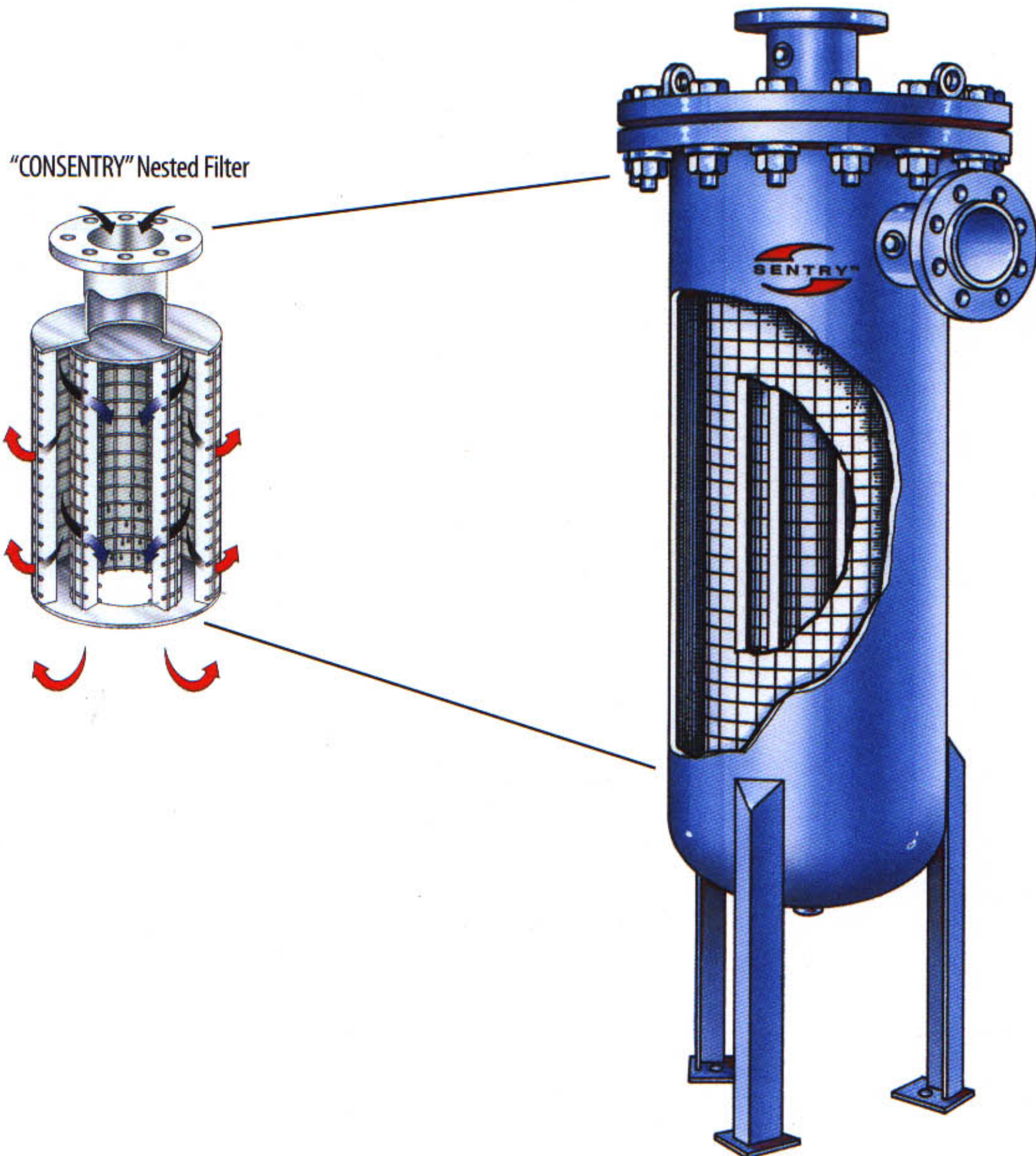




# Sentry Mist Eliminators

## THE SENTRY SOLUTION FOR COMPRESSED AIR

- **High Efficiency** – 99.5% removal of liquids, 99.5% particle reduction
- **Long Element Life** – 10 to 20x greater than conventional coalescers
- **Low Operating Cost** – Low pressure drop reduces energy costs
- **Low Installation Costs** – Vessel height permits indoor installation



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# The Sentry Solution

## The Problem - Water and Oil Contamination in Compressed Air

Conventional cartridge-type coalescing filters are not designed to handle excessive liquid loads of water and oil. The amount of liquid leaving compressor aftercooler separators frequently exceeds 200 PPMw. Considering that most cartridge-type coalescing filters are designed only for liquid loading of less than 50 PPMw, it is easy to understand how water and oil foul compressed air systems.

### The Sentry "Mist Eliminator" Solution

Sentry Mist Eliminators remove 99.5% of all liquid loads up to 30,000 PPMw. This far exceeds the capability of conventional cartridge-type filters.

Sentry Mist Eliminators use a thick, packed-bed filter design that continuously drains itself as liquids coalesce and quietly drop to the sump for draining. Because face velocities are incredibly low, the possibility of liquid re-entrainment is virtually eliminated.

### Particulate Removal

Not only is the Sentry Mist Eliminator outstanding at removing liquids, it is also a highly efficient particulate filter. The Sentry Mist Eliminator removes 100% of all particles 3 micron and greater, which means that all dirt, rust and pipe scale will be removed. Additionally, all particles down to 0.1 micron in size are removed at 99.5% efficiency.

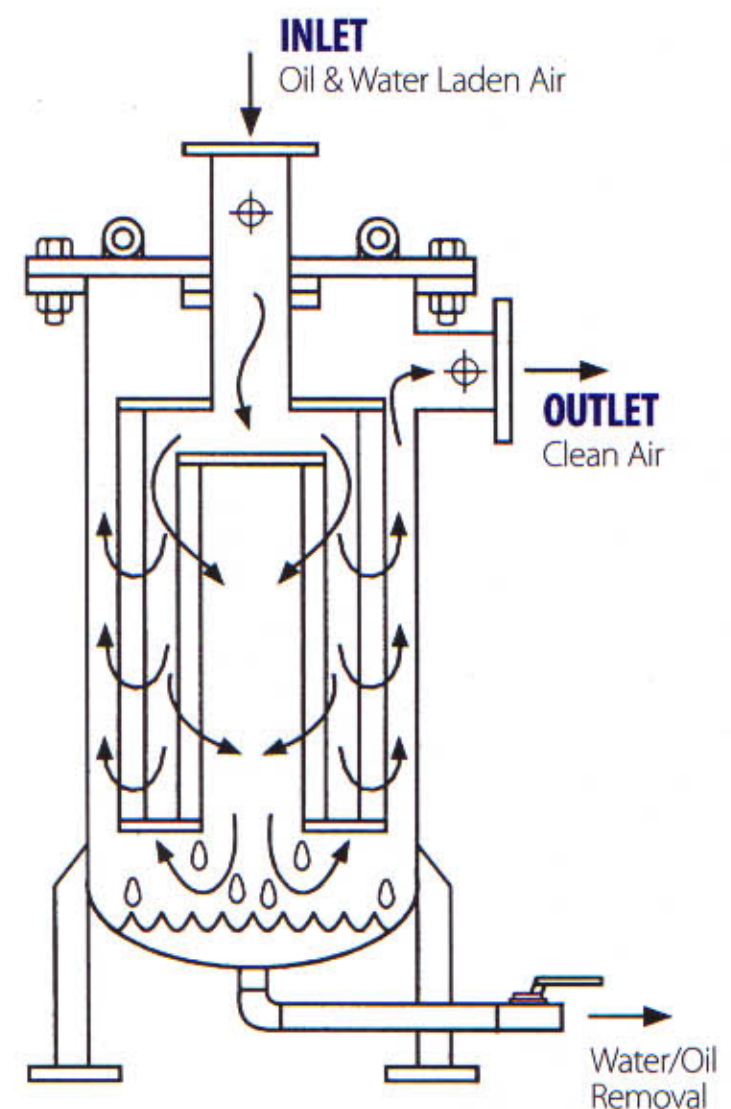
The result is an unparalleled ability to remove both liquid and particulate from a compressed air or gas stream.

### Low Pressure Drop

Most cartridge-type coalescing filters have saturated pressure drops in the 2 to 3 PSID range when the elements are clean. Because of low dirt-holding capacities, differential pressure often increases to 5 to 10 PSID within the first year of operation, at which time the elements are usually changed. By contrast, Sentry Mist Eliminators have pressure drops of less than 1 PSID, often for 10 years or more. **The result is that Sentry Mist Eliminator elements usually last 10 to 20 times longer than conventional cartridge-type coalescing elements.**

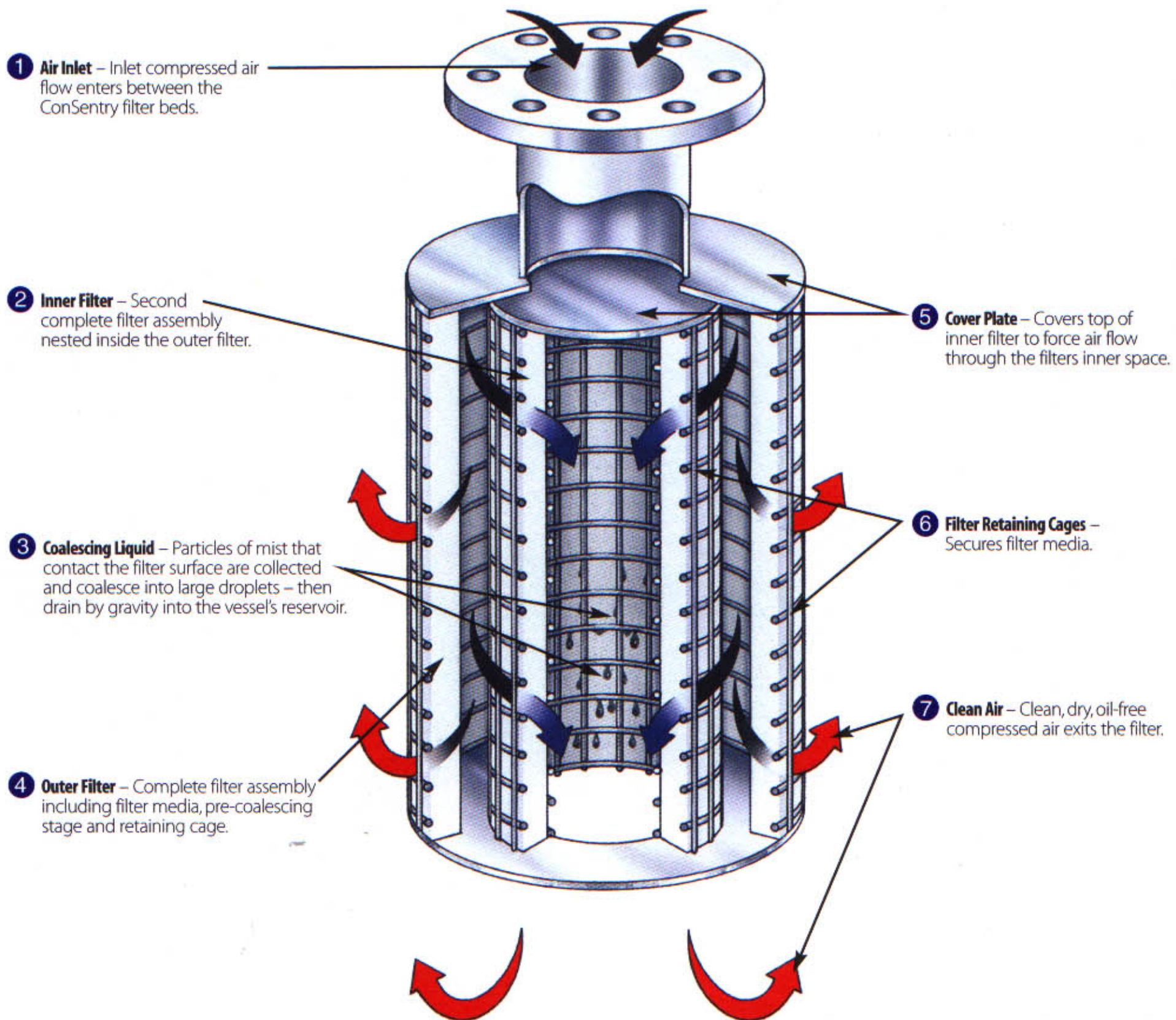
### Low Operating Cost

Low pressure drop also means low operating cost. In most compressed air systems, every 2 PSI of pressure drop requires the air compressors to consume 1% additional electrical energy. Using a conservative assumption that Sentry Mist Eliminators will reduce pressure drop an average of 3 PSID as compared to conventional cartridge filters, a 1.5% efficiency gain can be easily achieved. For a typical 5,000 SCFM system, energy savings can easily exceed \$6,000 per year and more, depending on the cost of energy.



# The "ConSentry" nested filter element

Concentric fiber bed design reduces installation size and cost in systems 2500 SCFM and larger



The "ConSentry" nested filter element provides more filtration surface area with reduced vessel height. The unique "filter-within-a-filter" element design on 2500 SCFM and larger Sentry Mist Eliminator systems allows for a shorter vessel height and simplifies maintenance.

Ordinary mist eliminator designs often require outdoor installation due to overhead height restrictions. They may be as tall as 18 feet high. Sentry Mist Eliminators, with the ConSentry nested elements, are considerably shorter and may often be installed indoors. This can reduce installation and maintenance costs, as well as prevent possible freeze-ups during winter operation.

## Standard Equipment

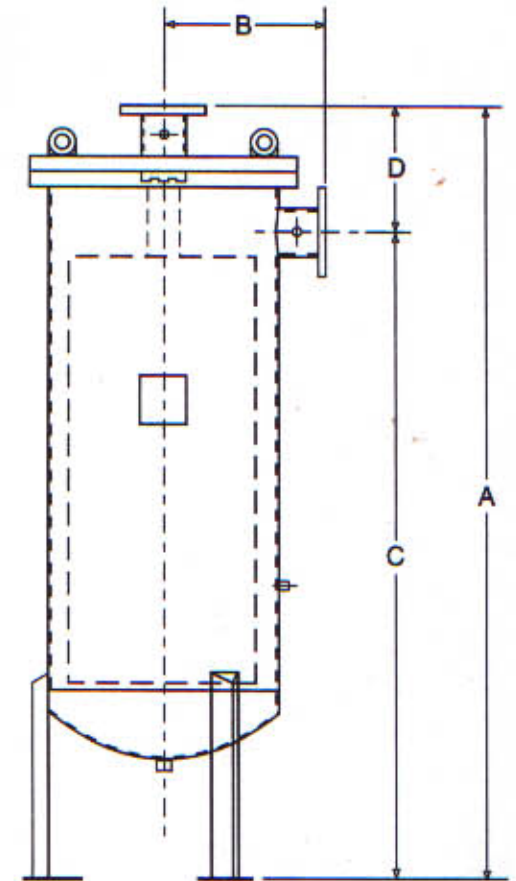
- Coalescing element for oil & water removal
- Removal rates approaching 100% efficiency
- Industrial enamel exterior coating
- Standard vessel design: 1/16" corrosion allowance

## Options

- Stainless Steel Element Construction
- Stainless Steel Vessels
- High Pressure Vessels
- Special Painting/Coatings
- Application-Specific Media
- Drain Valves
- ΔP Gauges

## Dimensions & Specifications – Inches and Pounds

MODEL	A HEIGHT	B INLET TO OUTLET	C HEIGHT TO OUTLET	D OUTLET TO INLET	CONN. SIZE	DRAIN CONN.	WT. WITH ELEMENT
MES 370	46 1/2	14	32 1/2	12	2	1" FPT	326
MES 550	46 1/2	14	32 1/2	12	2	1" FPT	331
MES 1100	66 1/2	14	52 1/2	12 1/4	2 1/2	1" FPT	417
MES 1600	72 1/2	15	57 1/2	12 1/4	3	1" FPT	576
MES 2000	80	16	64	14	4	1" FPT	750
MEC 2600	80	16	64	14	4	1" FPT	793
MEC 3400	76	18	58	14	4	1" FPT	1126
MEC 4400	90	18	72	14	4	1" FPT	1258
MEC 5200	100	18	82	14 1/2	5	1" FPT	1382
MEC 6200	114	18	96	14 1/2	5	1 1/2" FPT	1518
MEC 7800	106	21	85	15 1/2	6	1 1/2" FPT	2158
MEC 9300	118	21	97	15 1/2	6	1 1/2" FPT	2336
MEC 10100	124	21	103	15 1/2	6	1 1/2" FPT	2426
MEC 11400	120	24	96	18	8	1 1/2" FPT	3328
MEC 12400	126	24	102	18	8	1 1/2" FPT	3452
MEC 14500	141	25	116	19	8	1 1/2" FPT	4157
MEC 15500	147	25	122	19	10	1 1/2" FPT	4275
MEC 18100	163	25	138	19	10	1 1/2" FPT	4658
MEC 20200	175	25	150	19	10	1 1/2" FPT	4932
MEC 23000	177	27	150	21	12	1 1/2" FPT	6400



\*Flanges are ANSI Class 150#. Electronic or demand drain recommended. Weight includes element. Due to our policy of continuous improvement, dimensions and specifications may change without notice. Request certified drawing before pre-piping.

## Maximum Capacities – SCFM

Filter Model #	0 PSIG	15 PSIG	30 PSIG	45 PSIG	60 PSIG	75 PSIG	90 PSIG	100 PSIG	110 PSIG	120 PSIG	130 PSIG	140 PSIG	150 PSIG	165 PSIG
MES 370	70	130	180	220	260	300	340	<b>370</b>	390	420	450	470	500	540
MES 550	110	200	270	330	380	450	510	<b>550</b>	590	630	670	710	750	810
MES 1100	210	390	530	660	760	890	1010	<b>1100</b>	1200	1300	1300	1400	1500	1600
MES 1600	300	570	780	960	1100	1300	1500	<b>1600</b>	1700	1800	1900	2100	2200	2400
MES 2000	380	730	1000	1200	1400	1700	1900	<b>2000</b>	2200	2400	2500	2700	2800	3000
MEC 2600	480	910	1300	1600	1800	2100	2400	<b>2600</b>	2800	3000	3200	3400	3500	3800
MEC 3400	610	1200	1700	2100	2500	2800	3100	<b>3400</b>	3600	3900	4200	4400	4600	5000
MEC 4400	810	1600	2200	2700	3100	3600	4100	<b>4400</b>	4700	5100	5400	5700	6000	6500
MEC 5200	950	1800	2600	3200	3700	4200	4800	<b>5200</b>	5600	6000	6300	6700	7100	7700
MEC 6200	1100	2200	3100	3800	4400	5100	5800	<b>6200</b>	6700	7200	7600	8100	8500	9200
MEC 7800	1400	2700	3800	4800	5500	6300	7200	<b>7800</b>	8400	8900	9500	10100	10600	11500
MEC 9300	1700	3300	4600	5700	6600	7600	8600	<b>9300</b>	10000	10700	11400	12100	12700	13800
MEC 10100	1800	3500	5000	6200	7100	8200	9300	<b>10100</b>	10900	11600	12400	13100	13800	14900
MEC 11400	2100	4000	5600	7000	8100	9300	10600	<b>11400</b>	12300	13100	14000	14800	15600	16800
MEC 12400	2300	4400	6100	7600	8800	10100	11500	<b>12400</b>	13400	14300	15200	16100	17000	18400
MEC 14500	2600	5100	7200	8900	10300	11800	13400	<b>14500</b>	15600	16700	17800	18800	19800	21400
MEC 15500	2800	5500	7700	9500	11000	12700	14400	<b>15500</b>	16700	17900	19000	20100	21200	22900
MEC 18100	3300	6400	8900	11100	12800	14800	16800	<b>18100</b>	19500	20900	22200	23500	24800	26800
MEC 20200	3700	7100	10000	12400	14300	16500	18700	<b>20200</b>	21700	23200	24700	26200	27600	29800
MEC 23000	4200	8100	11300	14100	16200	18700	21200	<b>23000</b>	24700	26400	28100	29800	31400	33900

Capacities based on 100° F inlet temp.

Maximum inlet temp. = 350° F

MAWP = 165 PSIG

For other temperatures and pressures, contact your local representative or Sentry Filters



To place an order, or for more information on our complete product line, contact your local representative.