

AIR TREATMENT OIL MIST ELIMINATOR

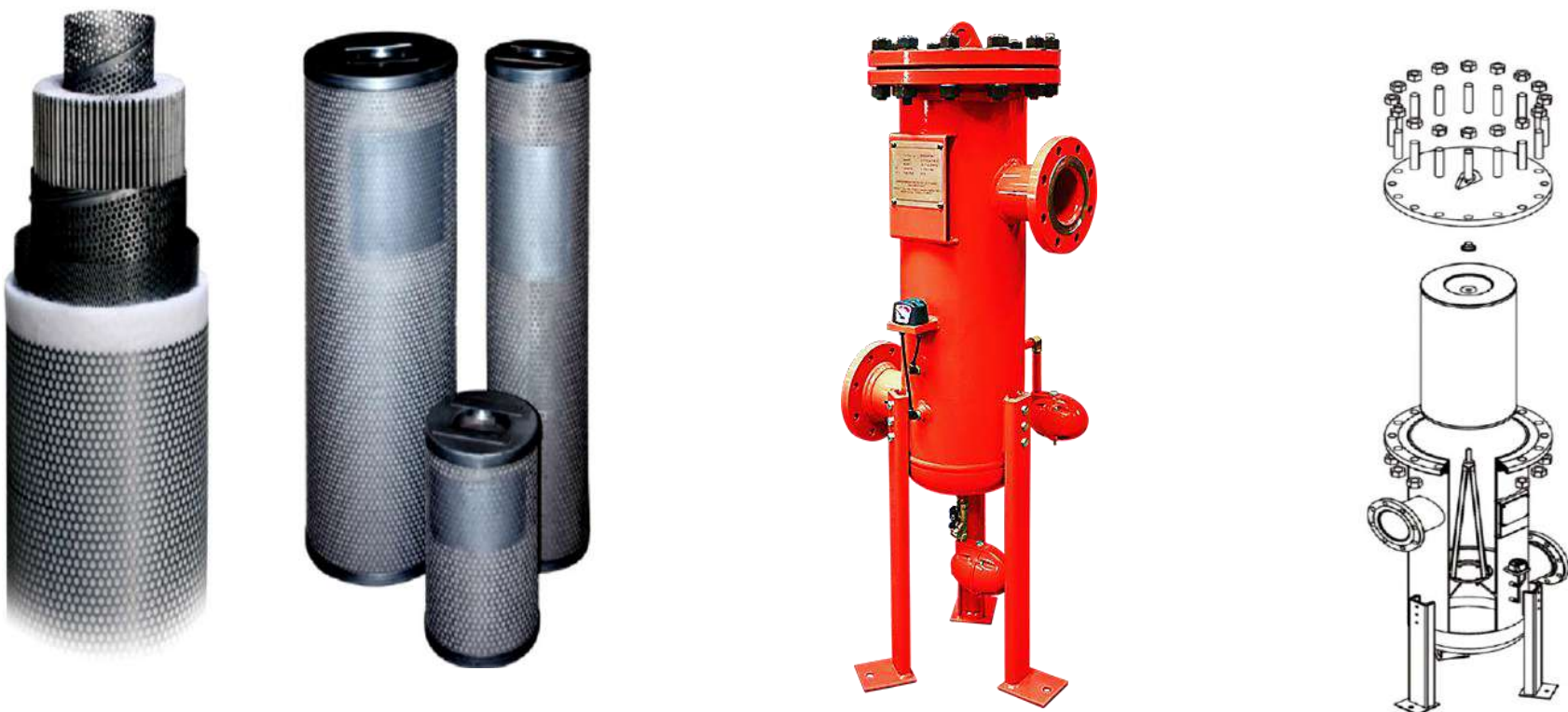
Products Catalog



SAVE THE ENERGY WITH BEST QUALITY PRODUCTS RANGE

Excellent filtration and protection with extremely low differential pressure.

Oil Mist Eliminators (OME) from SUN IN offer an economical and effective way to filter oil aerosols and water droplets from compressed air systems, protecting both products and critical equipment from contamination. The OMEs feature a low pressure drop (0.5 to 1 psi), a long cartridge life, and virtually maintenance-free performance. Elements carry a 5-year warranty.



Ultra Clean Air

The SUN IN Oil Mist Eliminator is a coalescing filter with oversized pressure vessel and filter, designed to provide excellent filtration and protection with extremely low differential pressure. In a typical 100 psig air system, 72% of the aerosols (by weight) present are less than 5 microns in size and 50% are below 1 micron in size. Droplets of this size pass right through mechanical separator and many air-line filters. SUN IN OMEs have been specifically designed to remove these oil aerosols down to 0.5 ppm w/w.

Mist Eliminator Compressed Air Filter

Applications

- ❖ Capturing oil fog, mist, or smoke from exhaust and pressure unloading vents on oil flooded compressors, vacuum pumps and blowers
- ❖ Any application requiring Low Delta P coalescing of large air volumes
- ❖ Vacuum Freeze Drying
- ❖ Vacuum Out – Gassing
- ❖ Vacuum Coating
- ❖ Food Processing
- ❖ Mailers/Staplers
- ❖ Industrial Vacuum Processes
- ❖ Cement & Paper Processing

Design

- ❖ Mist Eliminators are designed to meet the demand for:
- ❖ Efficient removal of oil-mist carryover from piston or oil flooded rotary compressors
- ❖ Long service life
- ❖ Strength to withstand strenuous operating conditions
- ❖ Protection from oil slugs or compressor Air/ Oil separator failure



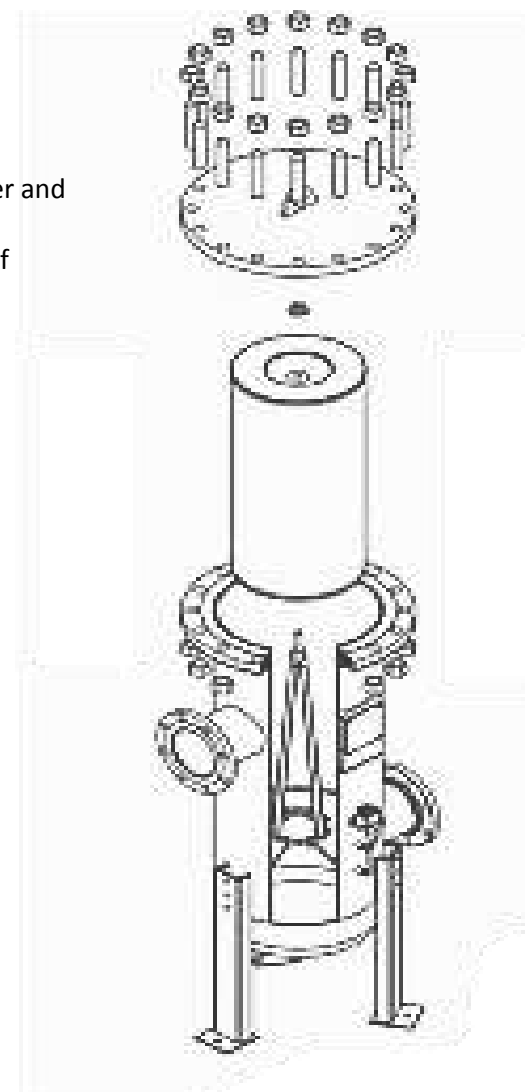
Features

- ✓ Very Low pressure drop
- ✓ Large oil catching efficiency
- ✓ Easy field cleaning
- ✓ Positive sealing O-rings
- ✓ Temperature (continuous) 4°C (40°F) min. 80°C (176°F) max.
- ✓ Auto Float Drain is Standard
- ✓ Multiple drain Style Options Available
- ✓ Pressure Rating of 14 bar (200 psig)
- ✓ Removal of particles down to 0.01 micron including coalesced liquid water and oil providing a maximum remaining oil aerosol content of 0.01 ppm
- ✓ Increased surface area in a given volume allows low velocity separation of ultra-fine oil mist
- ✓ Elements are grounded to canister minimizing static electricity problems

1. Removal of particles down to 0.01 Micron including coalesced liquid water and oil providing maximum remaining oil aerosol content of 0.01 ppm.
2. Increase surface area in given volume allows low velocity separation of ultra-fine oil mist
3. Filter element are grounded to canister minimized static electricity.

MIST ELIMINATOR ELEMENT

1. Ultra-low pressure drops reduce energy coast.
2. Positive gasket seals eliminate media bypass.
3. Filter changes different 2.5 Psig (170 mbar).
4. Air/oil separator.
5. Long service





Mist Eliminator Compressed Air Filter

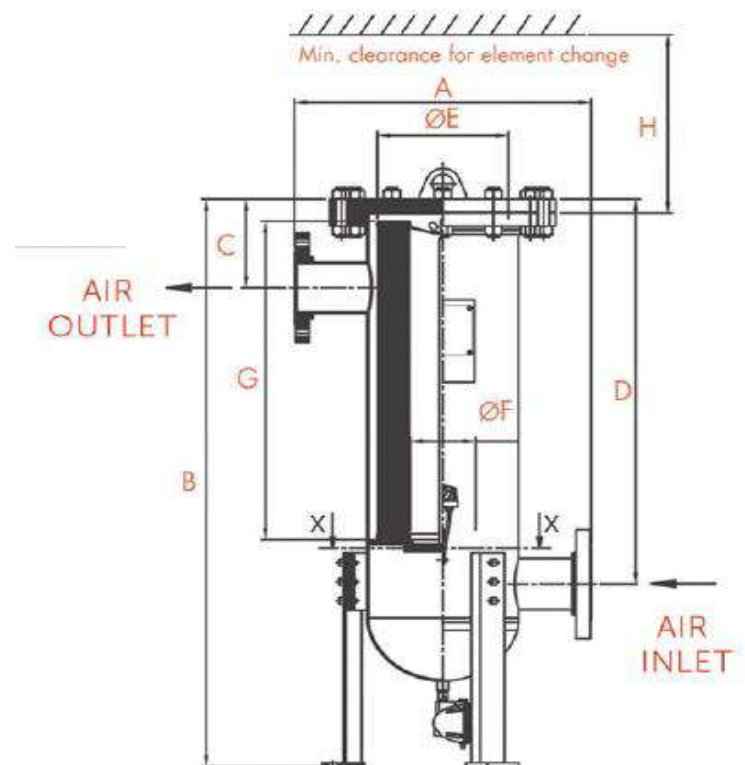
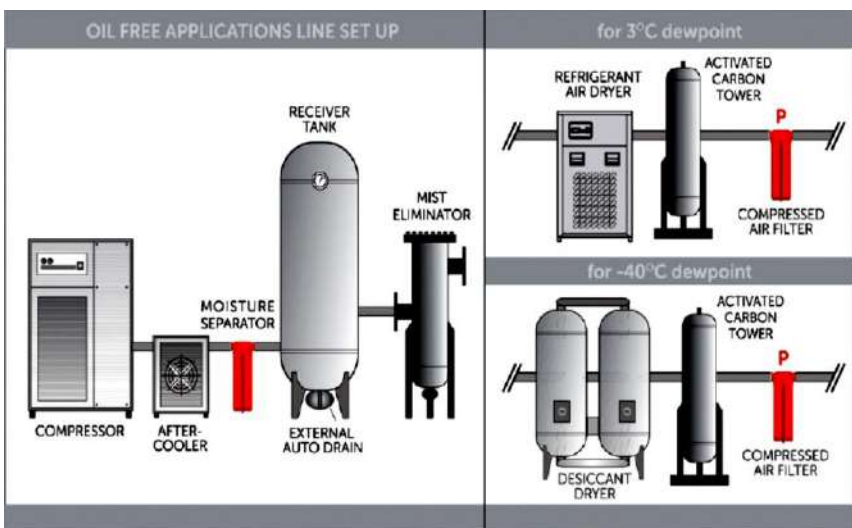
TECHNICAL DATA

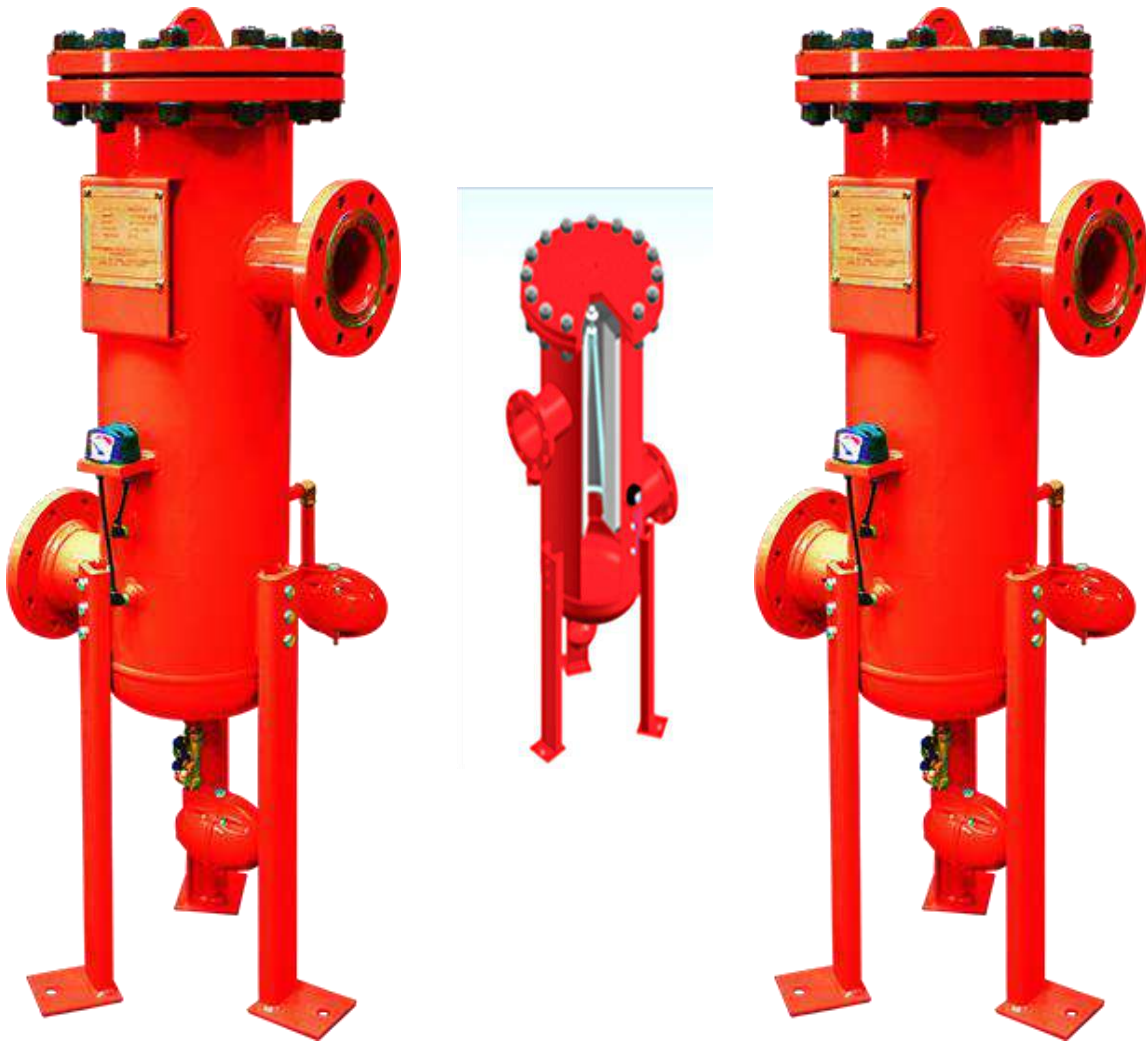
TECHNICAL SPECIFICATION													
MODEL	DRAIN	Inlet/Outlet	FLOW RATE		Max Working Pressure	DIMENSION mm							
	SIZE	SIZE	m ³ /h	Scfm	Bar	A	B	C	D	E	F	G	H
SM150	1/2"	DN50	255	150	14	500	1003	209	459	203	103	305	330
SM300	1/2"	DN50	510	300	14	500	1105	209	559	203	103	407	435
SM600	1/2"	DN50	1020	600	14	500	1461	209	916	203	103	762	790
SM800	1/2"	DN80	1360	800	14	500	1655	279	1084	203	103	915	950
SM1200	1/2"	DN80	2040	1200	14	600	1520	281	931	254	103	762	790
SM1600	1/2"	DN80	2720	1600	14	600	1671	281	1086	254	103	915	950
SM2100	1/2"	DN100	3570	2100	14	700	1575	355	953	300	129	762	790
SM2570	1/2"	DN100	4675	2570	14	700	1726	355	1100	300	129	915	950
SM4200	1/2"	DN150	7140	4200	14	800	1670	393	983	365	181	762	790
SM6000	1/2"	DN150	10200	6000	14	800	1925	393	1238	365	181	950	1045
SM8000	1/2"	DN200	13600	8000	14	850	2020	417	1277	386	233	1016	1045
SM10000	1/2"	DN250	17000	10000	14	1000	2118	417	1307	407	337	1016	1045
SM12000	1/2"	DN300	20400	12000	14	1000	2688	497	1847	437	337	1524	1550

CORRECTION FACTOR								
Operating Pressure (barg)	1	3	5	7	9	11	13	14
Psig	15	44	73	100	131	160	189	200
Correction Factor	1,5	0,71	0,87	1	1,12	1,22	1,32	1,38

- DRAIN TYPE
- Electronic-Adjustable
- External Float Type
- Zero-Loss Drain
- Manual

For maximum flow rate, multiply model flow rate show in the above diagram. By the correction factor corresponding to the working pressure





Low Operating Costs

The OME has a pressure drop of 0.5 to 1 psid. Other coalescing filters

typically lose 3 to 6 psid. Operating the air compressor at higher pressures to compensate for this increases power consumption 1% for every 2 psi increase in pressure. The OME's extremely low pressure drop yields a 1 to 2.5% energy advantage. In addition, its large in-depth bed provides much longer element life than in conventional oil removal filters. With a minimum 5-year warranty and filter life up to 15 years, the OME is virtually maintenance free!

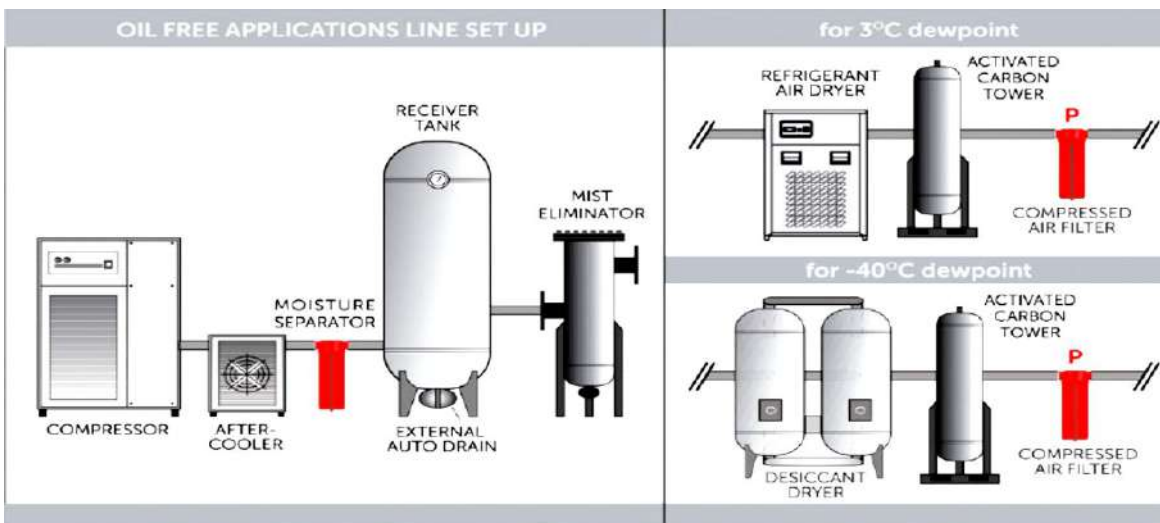
Extra Breakthrough Protection

The OME's large vessel is designed to capture and retain large volumes of oil and water if present, thus protecting downstream equipment from contaminant caused by oil or water slugging.

Advanced Technology

Compressed air is directed through a loosely packed bed of highly engineered, water resistant glass fibers. Water droplets and oil aerosols entrained in the air stream are captured by the filter

fibers through direct interception, inertial impaction, and diffusion interception resulting from Brownian motion. The captured liquids move along the fibers and coalesce into larger droplets that fall to the bottom of the housing where they are removed by a condensate drain (sold separately).



Sizing

Maximum air flow at 100 psig is indicated in the Specifications Table. To determine maximum air flow at pressures other than 100 psig, multiply the flow @ 100 psig by the multiplier in the Multiplier Table that corresponds to the minimum operating pressure at the inlet of the filter.

Request a Quote

We can help you optimize your compressed air installation. Contact us for a quote or to talk to a SUN IN representative about our products.

