

## Air Treatment

# Oil Mist Eliminator

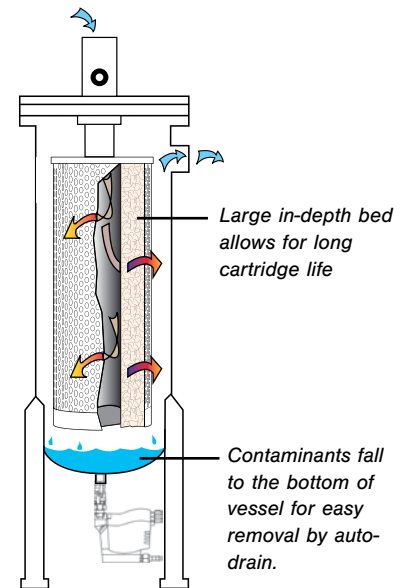


### Ultra Clean Air

The KAESER Oil Mist Eliminator (OME) is a coalescing filter with an oversized pressure vessel and filter, designed to provide excellent filtration and protection with an extremely low differential pressure. In a typical 100 psig air system, 72% of the oil 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. KAESER OME's have been specifically designed to remove these oil aerosols down to 0.5 ppm w/w, and removes 99.98% of particles from 0.1 to 3 microns, and 100% of particles 3 micron and larger.

### 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!



### Features:

- Heavy-duty ASME pressure vessel
- Oversized long-life coalescing filter cartridge for super low pressure drop
- Differential pressure gauge for checking filter life
- Integral steel floor stand simplifies installation

### Optional Features:

High precision differential pressure gauge

### Recommended Accessory:

AMD 6550 or Eco-Drain condensate drain to automatically remove oils, moisture, and other contaminants from the air system

## 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 contamination caused by oil or water slugging.

## In Depth Filtration

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.

## Technical Specifications

| Model    | Flow @<br>100 psig<br>(scfm) | Replacement<br>Cartridge | Dimensions<br>H x W<br>(in.) | Connections    |          | Wt<br>(lb.) |
|----------|------------------------------|--------------------------|------------------------------|----------------|----------|-------------|
|          |                              |                          |                              | Inlet & Outlet | Drain    |             |
| OME 125  | 125                          | OME 1                    | 42.25 x 21                   | 2" NPT         | 1" FPT   | 455         |
| OME 250  | 250                          | OME 2                    |                              |                |          |             |
| OME 500  | 500                          | OME 3                    | 68.25 x 21                   | 3" NPT         |          | 520         |
| OME 800  | 800                          | OME 4                    |                              |                |          | 530         |
| OME 1100 | 1100                         | OME 5                    | 72.32 x 23.5                 | 4" FLG         |          | 660         |
| OME 1500 | 1500                         | OME 6                    | 72.44 x 25                   |                |          | 775         |
| OME 1900 | 1900                         | OME 7                    | 75.75 x 32                   |                |          | 1225        |
| OME 2400 | 2400                         | OME 8                    |                              |                |          | 1245        |
| OME 3000 | 3000                         | OME 9                    | 88.75 x 32                   |                |          | 1385        |
| OME 4500 | 4500                         | OME 10                   | 153 x 32                     | 6" FLG         | 1.5" FLG | 1770        |
| OME 6000 | 6000                         | OME 11                   | 155 x 40                     | 8" FLG         | 2" FLG   | 2460        |
| OME 8000 | 8000                         | OME 12                   | 181 x 40                     |                |          | 2850        |

Maximum working pressure: 150 psig. Maximum operating temperature: 150°F  
Consult factory for higher pressure

Specifications are subject to change without notice.

## Compressed Air System with Oil Mist Eliminator



## Multiplier Table

| Operating Pressure (psig)  | 60   | 80   | 90   | 100  | 110  | 115  | 125  | 145  | 150  |
|----------------------------|------|------|------|------|------|------|------|------|------|
| Capacity Correction Factor | 0.65 | 0.83 | 0.91 | 1.00 | 1.04 | 1.06 | 1.10 | 1.18 | 1.20 |



**Built for a lifetime.**



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