



# ARO-4000 Multi-Stage Oil Mist Collector

**Multi-Stage**  
Progressive  
Separation

**Depth Filters**  
Reduced  
potential of  
plugging

**Cross Flow  
Design**  
Fluid quickly  
drains back to  
sump

**Long filter life**

**Low operating  
costs**

**Low  
maintenance**

**Clean air**

## *For large size machine tools and central systems!*

The ARO multi-stage oil mist collectors separate mist in progressive stages reducing the potential of plugging.

Filters are depth loading and designed to drain, suitable for 24/7 operation.

Cross-flow filter design, air flow is horizontal, oil drains down vertical down

Ideal for high pressure coolant and oil.

Removes mist, smoke and bacteria.

Unique 1<sup>st</sup> and 2<sup>nd</sup> separation stages

### **Separation Stages:**

The innovative 1<sup>st</sup> stage `ME` Mechanical Element separates up to 90% of the oil mist and swarf. The smooth metal surfaces quickly drains fluid back to the sump.

The 2<sup>nd</sup> stage `AG` Agglomerator filter is very unique, manufactured in layers of stainless steel wire mesh weaved with oil attracting fibers. Efficiency is high as the air travels through a bed of coarse and fine fibers at low velocity. The AG media is very durable, lasting 10 – 15 years. Can be washed.

*Used only for coolant applications.*

The 3<sup>rd</sup> stage `CM` Coolant Mist filter is depth loading fiber bed filter that captures small mist particles.

For oil applications, 3<sup>rd</sup> stage `OM` Oil Mist fibre bed pack is an innovative two stage depth loading filter.

Typical life 1 – 3 years.

Final 4<sup>th</sup> stage `HF` HEPA filter captures sub-micron mist, smoke and bacteria.

Efficiency 95% @ 0.3 µm is standard, optional 99.9% @ 0.3 µm.

Typical life 2 – 4 years

*HEPA filter is made with exclusive heavy duty filter media, no other product holds as much or lasts as long.*

### **Specification:**

Air Flow	3400 – 4100 cfm
Machine tool enclosure	Up to 3000 ft³
Filter Pressure, Max	3.5" wg
Motor	7.5 hp
Voltage (amps)	230/3/60 (17.0) 460/3/60 (8.5) 575/3/60 (6.8)
Temperature (max)	160°F / 70°
Weight	1200 lbs
Length	74"
Width	25"
Height	79"
Inlet connection	18" Ø
Sound	74 dB(A)
Clean air measurement	HEPA filter 95% < 0.050 mg/m³ HEPA filter 99.9% < 0.010 mg/m³

### **Options:**

Coolant or Oil filters	Installation Kit	Motor starter
HEPA filter 95% or 99.9% @0.3 µm	Floor stand	VFD motor starter
Right or left hand suction	Wall mount	On-Line Cleaning system



*Shown, left hand suction*

## ARO-4000 Filter Stages

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### **Coolant Filter Stages**

- 1 'ME' Mechanical Element (2)
- 2 'AF' Agglomerator Filter (2)
- 3 'CM' Coolant Filter (2)
- 4 'HF' HEPA Filter (3)



### **Oil Filtration Stages**

- 1 'ME' Mechanical Element (2)
- 2 'DE' Demister Element (2)
- 3 'OM' Oil Mist Fibre Bed Filter Pack (2)
- 4 'HF' HEPA Filter (3)

