MACHINEMASTER™

Oil & Water Mist Collectors

Standard Features

- Systems available in 2,000, 4,000, 6,000, 8,000 and 12,000 CFM capacities.
- MachineMaster, Jr. sizes range from 400 CFM to 1000 CFM
- Welded 12 and 14 gauge mild steel construction, primed and finish painted with Durethane mastic on both the interior and exterior of all cell sections.
- Hinged door access on each module and modular cell housing construction allows for easy system maintenance and the addition of optional cells with minimal system down time.

Optional Features

- Magnahelic guage pressure indicator, 0-3"
- NEMA or IEC motor controls
- Drain kits
- Silencers with flanges
- Inlet Plenums cut
- Inlet and exhaust ductwork transitions
- External fans for use in higher pressure applications

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MachineMaster™ Mist Collectors provide a total solution for control of oil or vapor mist pollutants.

The primary filter cell provides the filtration necessary for removal of mists, vapor and particulate in most wet machining applications and is required as an initial filtration stage in applications where optional HEPA filter cells are utilized.

The Basic Primary Filter Cell System consists of the following:

- STAGE 3: 10 pocket, lofted fiberglass V-bag filter, 95% (ASHRAE 52-76) 24" x 24" x 36", provides final air filtration prior to exhausting back into plant. 126 sq. ft. of area per filter.
- STAGE 2: Aluminum mesh pre-filter, 24" x 24" x 1", traps larger oil or water mist particles, which drain down into plenum.
- STAGE 1: Aluminum chevron type mist eliminator, 24" x 24" x 4" prevents swarf, shavings, large particles and large fluid droplets from entering filters.

Wet Machining Operations require mist collection to contain the process. MachineMaster™ and MachineMaster™ Junior Oil and Water Mist Collectors provide continuous duty "single source" capture of machining oil, coolant mist, water mist and other air pollutants in vapor or particulate form. All systems follow a vertical, upward flow pattern through complex filter stages. Gravity assists in continuous drainage of the filter media and allows for longer filter life. MachineMaster™ systems are available from 400 to 12,000 CFM to efficiently prevent oil or water vapor contamination of the plant environment or final product. All systems have the universal racking system which allows for customer specific filter arrangements based on application.

Magnahelic Gauge provides pressure readings for ease in determining needed filter replacement and maintenance.

MACHINEMASTER	Oil Mist Collector Specfications				
Model	**MM-2000**	**MM-4000**	**MM-6000**	**MM-8000**	**MM-12000**
Air Volume, CFM	2000	4000	6000	8000	12000
Static Pressure, Total wg	9"	9"	9"	7"	9"
Static Pressure, External wg	7"	7"	7"	5'"	7"
Motor, HP	5	10	15	15	25
Motor, RPM	3450	3450	3450	1750	1750
Stage 1, Impinger	1	2	3	4	6
	24" x 24" x 4" Aluminum, Washable				
Stage 2, Mesh Pre-Filter	1	2	3	4	6
	24" x 24" x 1" Galvanized, Washable				
Stage 3 Final Filter	1	2	3	4	6
Media, Sq Ft	126	252	378	504	756
Media, Type	10 pocket, lofted fiberglass V-bag filter, 95% (ASHRAE 52-76) 24" x 24" x 36", provides final air filtration prior to exhausting back into plant. 126 sq. ft. of area per filter.				
Flanged Inlet	12"	(2) 12"	(2) 15"	(2) 17"	(2) 20"
Dry Weight, lbs	900	1300	1500	1800	2400
Electrical	460 Volt/3 Phase/60 Hertz				
Motor Controls	NEMA 12, Start/Stop with overload protection				
Fan Wheel & Inlet Cone	TEK355	150BC Full	165BC Full	270BC 60%W	300BC 66%W
	Injection Molded from high strength GRP Polymide, Spark Resistant - AMCA-B Rated, Corrosion-Proof, Super Quiet, Highly Efficient	AMCA Rated, High Efficiency, Non-Overloading, Backward Curved, Single Width, Mild Steel			
Filter Housing & Fan Assembly Construction	12 & 14 gauge, Solid Welded, Mild Steel. Optional Stainless				
Coating	Durethane DTM by PPG is a direct-to-metal Urethane Mastic coating that is chemically resistant and extremely durable. It provides excellent corrosion resistance and has superior color and gloss retention, excellent adhesion, UV protection, and is abrasion and mar resistant.				
Drain	Bottom of unit cross broken and tapered to center drain, 3/4" bulkhead fitting, plastic				
Optional HEPA Filtration Cell	1 Hepa Filters	2 Hepa Filters	3 Hepa Filters	4 Hepa Filters	6 Hepa Filters
	HEPA Cell with Single Door, with 24 x 24 x 12 high capacity, HEPA Filters 99.97% to 0.3 micron, Urethane, 1/4 x 3/4 (180°F) & Loc Seal Clamping Mechanisms				
Optional Carbon Filtration Cell	11 Carbon Panels	22 Carbon Panels	33 Carbon Panels	44 Carbon Panels	66 Carbon Panels
	Carbon Filtration Cell, installed atop primary filter cell, 2-door access to refillable panels with approximately 9 lbs activated carbon each				
Other Optional Accessories	Drain Hose with 5 Gallon Bucket, Magnehelic Gauges, Dampers, Silencers, Transitions, Elbows, Ductwork				

Inlet plenum cell is a sealed and leak-free inlet plenum design. A 1" NPT drain connection is supplied for customer hook-up. Optional Inlet Cuts, duct work transitions and drain kits are available on all model sizes. The inlet plenum cell is not intended to be load bearing and is typically shipped pre-assembled to the leg and primary filter cell of the machine.

Motor/blower cell AMCA rated, Class II steel constructed, centrifugal flat-bladed, backward curved fan packages include inlet cones to reduce horsepower consumption. All blowers are pre-mounted. Motors are wired to a NEMA-12 junction box (MM-6000, MM-8000, MM-12000 only). Optional NEMA or IEC motor controls are available on all systems.

Carbon filter cell is used in cases where odors, gases, and vapors are associated with a process . Filter trays are removable and refillable. Activated carbon may be replaced with potassium permanganate. Available only on the MM-2000 MM-4000 and MM-8000 models.

Before Installation

After Installation