

MM Oil mist mechanical filter



Description

MistMagician (MM) is designed for stationary installation, direct on a machine tool with no need for ducting or additional use of floor space. The filter will effectively collect coolant smoke or mist from the machine process, and if necessary, return the recovered coolant back to the machine. The filter unit is provided with a range of options for a quick and easy installation.

Applications

MM oil filters are suitable for almost all types of CNC machines that use oil based coolants and generate oil mists and fumes during the operation.

Features and advantages

- Efficient filtration of oil mist and light smoke
- Return the recovered coolant back to the machine
- Indicator showing clogging level
- Easy replacement of filter cartridge
- Compact, lightweight design

Restrictions



- Not recommended for processes with big amounts of smoke.

- Quick and easy installation at low cost
- Low energy consumption
- Low operation cost
- Fan is mounted directly on the filter

Technical characteristics

Article №	Capacity, m ³ /h	Filtering surface area, m ²	Pressure drop for cartridge replacement, PA	Filtration class	Inlet diameter, mm	Outlet diameter	Weight (w/out fan), kg
5310	500	10	1000	F9 (DIN EN 779), MERV15 ASHRAE 52.2	160	160	14

Fans for installation on the filter

	Article №	Model	Description
	5780	VMA-1100 (preferred)	Radial fan; 150 – 800 m ³ /h; 1100 – 400 Pa, 0.37 kW, 380 V, 3-ph, 50 Hz
	5044	VMA-1800	Radial fan; 300–1300 m ³ /h; 1500 – 700 Pa, 0.55 kW, 380 V, 3-ph, 50 Hz
	5049	VMA-2100	Radial fan; 400–1500 m ³ /h; 1550 – 650 Pa, 0,75 kW, 380 V, 3-ph, 50 Hz
	6794	MM-F-Set	Parts for installation of the fan on the filter

3-stage cleaning principle:







Step 3. The smallest particles (less than 1 micron) of the emulsion are stopped and separated by the fine filter. Clean air leaves the filter.

Step 2. Remaining particles are mainly captured in the pre-filter.

Step 1. The oil mist is forced to twist, and heavy particles (up to 1 micron) are removed in a selfcleaning centrifuge.



Accessories and spare filter media

	6793	MM-HOLD/W	Wall mounting bracket
	6792	MM-HOLD/W	Support brackets
	6795	MM-INL	Inlet Inlet for connection of MM filter with machine chamber or extraction arm (in case of mounting next to machine tool). Sizes 2 x 160mm
	6791	MM-AD	Mounting adapter for installation of MM filter on sPA support column
	6796	BAG-CART	Replaceable filter cartridge with bag pre-filter Filtering surface area – 10 m ² . Replaced at 1000 Pa pressure drop
	6797	MM-BAG	Bag pre-filter for replaceable filter cartridge CART
	6059	sPA-110	Support column for mounting on extraction arm on MM filter, L=110 cm
	6060	sPA-220	Support column for mounting on extraction arm on MM filter, L=220 cm

Recommended installations

- Direct mounting on metal processing CNC machine tools with closed chamber
- Installation on a separate stand near closed, semi-closed or open type machines
- Installation on a wall next to the closed, semi-closed or open type machines

