

ME-41/ME-42

MIST ELIMINATOR; 5- AND 6-STEP FILTRATION

The MistEliminators ME-41 and ME-42 are stationary filter units for mainly oil mist applications, to be used in machine tool processes. This comprises basically any process that uses metal working fluids like oil or an emulsion to cool or lubricate the operation.

The ME-41 is based on a 5-step filtration method which allows for exhaust to the atmosphere. In case of recirculation, it is recommended to use the ME-42 which is fitted with an additional HEPA filter.



APPLICATIONS

The ME-41 and ME-42 are intended to be used for the following applications:

- metal working processes with "clean" or recyclable low viscosity oil as a residue; e.g.
 - CNC machining centers for cutting, boring, drilling and honing
 - machines for metal forming operations like cold heading and stamping
 - oil mist produced by heat and surface treatments like hardening and wet grinding



Do **not** use the ME-41 and ME-42 for the following applications or in the following circumstances:

- oxy-fuel cutting
 - aluminium laser cutting
 - arc-air gouging
 - paint mist
 - extraction of hot gases (more than 45°C/113°F continuously)
 - grinding aluminium and magnesium
 - flame spraying
 - extraction of cement, saw dust, wood dust, grit etc.
 - explosive environments or explosive substances/gases
- Note: this list is not all-embracing.*



SPECIFICATIONS

Physical dimensions and properties

Housing:	electro-zinc coated steel (according to DIN EN 10152)
• steel grade	• DC01+ZE
• steel grade no.	• 1.0330
Colour:	
• air inlet module	• grey RAL 7011
• filter modules	• grey RAL 7035
Weight (net):	
• ME-41	• 104 kg (229 lbs)
• ME-42	• 138 kg (304 lbs)

Filters

Filter efficiency	ISO ePM1 90% according to EN ISO 16890
• ME-41	
Filter class	H13 according to EN 1822
• ME-42	
Pressure drop:	
• ME-41	• 1300 Pa (5.1 in. WG)
• ME-42	• 1500 Pa (6.0 in. WG)

Negative pressure	max. 4000 Pa (16 in. WG)
Performance	
Airflow ¹	max. 2000 m ³ /h (1175 CFM)
Ambient conditions	
Operating temperature:	
• min.	• 5°C (41°F)
• nom.	• 20°C (68°F)
• max.	• 45°C (113°F)
Max. relative humidity	80%
Outdoor use allowed	no
Storage conditions	• 5-45°C (41-113°F) • relative humidity max. 80%
Options and accessories	
CFD	constant flow damper
ME-F1/F2	fan module
FUA fan series	for direct mounting on MistEliminator
FF-DUCT-250	duct connection Ø 250 mm (9.8 in.)
FF-FAN-S/1300-2100	filter-fan adapter
FF-FAN-B/3000-4700	filter-fan adapter
FF-RACK	floor rack
Scope of supply	
Assembled filter unit - Duct cap Ø 250 mm (9.8 in.) - Oil container	
Order information	
MistEliminator:	Article no.:
• ME-41	• 0000100795
• ME-42	• 0000100800
Number/package	1

¹ Max. airflow is a ceiling value and generally not recommended as a design value for operating the ME unit, as it might lead to short lifespan of filters. The performance of the ME unit is next to airflow influenced by other variables like amount and composition of metal working fluid, process, temperature and pre-treatment. Ask your local expert on the recommended airflow for your system design.

■ Shipping data	
Gross weight (incl. pallet):	
• ME-41	• 134 kg (295 lbs)
• ME-42	• 172 kg (379 lbs)
Max. number/pallet	1
Harmonized Tariff Code	8421.39.2090
Country of origin	Netherlands

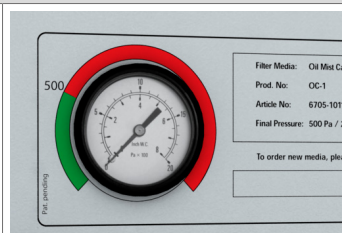
FILTER STAGES



1	Air inlet module; pre separator that distributes the air and prevents large particles from entering the filter package
2	HydroFilter; impinger to separate oil droplets and coalesce oil mist into droplets
3	Aluminium mesh pre filter to keep larger particles
4	OC-1; self-draining cassette filter that coalesces oil mist to droplets and collects <i>medium sized</i> particles
5	OC-2; self-draining cassette filter that coalesces oil mist to droplets and collects <i>fine</i> particles
6	HEPA filter for final filtration (ME-42 only)

FEATURES

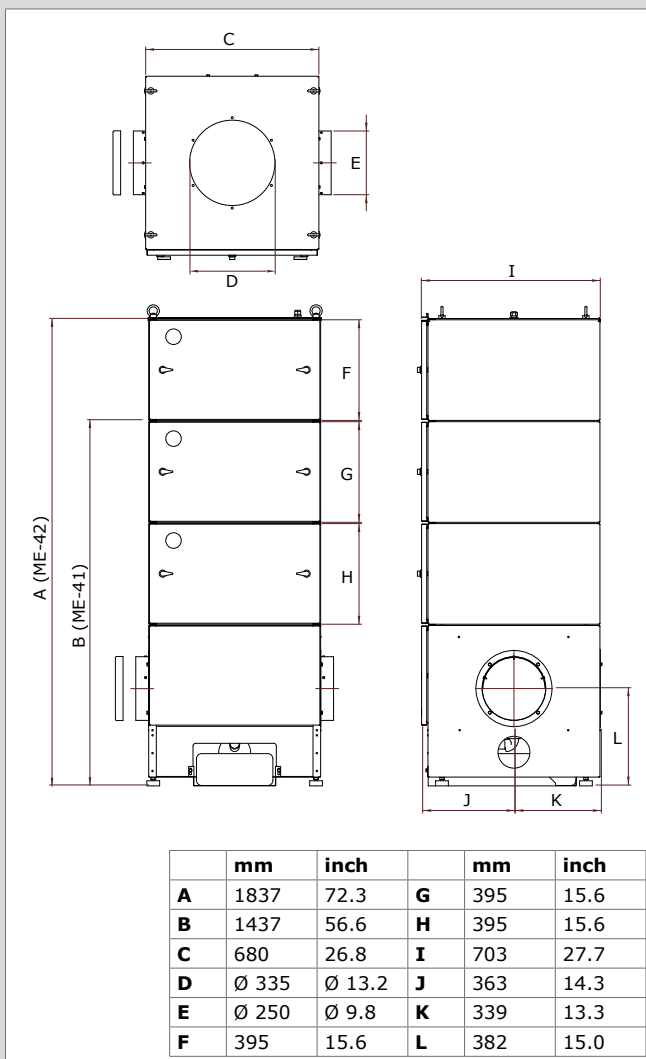
A differential pressure gauge on each filter module indicates status and need for filter replacement.



Easy to handle oil container.
Volume: 8 liters
(2 gallon).



DIMENSIONS



Product type
Article no.
Product category
Version

ME-41 / ME-42
refer to order information
oil mist filters
100821/E

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