

FILTERMIST OIL MIST EXTRACTORS - S SERIES



WHY USE FILTERMIST UNITS

- Oil mist is hazardous to health.
- Oil mist causes slippery floors and can cause damage to electrical switchgear and circuitry.
- Oil mist can lead to coating of ventilation pipes - a potential fire risk.
- Official regulations are becoming increasingly stringent around the world.
- Filtermist units help to reduce energy and heating costs by recycling clean air back into the factory.
- Installation option available.
- Also available S Fusion range. The compact, cost effective way to remove sub-micron neat oil mist particles from workshop air.

APPLICATIONS

- EDM/Spark Erosion
- Grinding
- Machining Centres
- Industrial Saws
- Food Processing
- Lathes

FILTERMIST KITS

UK-KIT

Filtermist unit + High Efficiency AFB Afterfilter (99.95% efficiency at 1 µm). Except S200 which includes AFA Afterfilter.

EUK-KIT

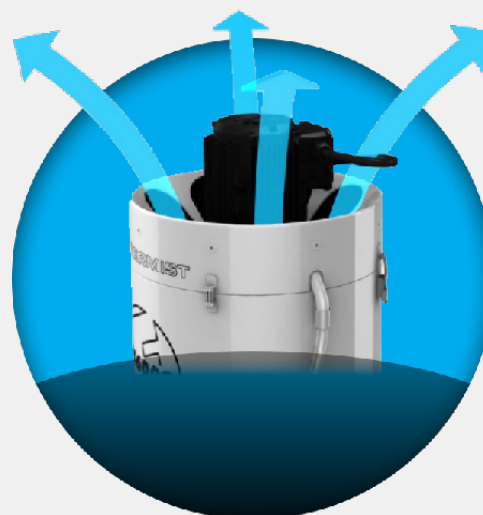
Filtermist unit + High Efficiency AFB Afterfilter (99.95% efficiency at 1 µm) + direct mounting kit (3 metre flex, Hose Clips, Flange Adaptor) & F Monitor. Except S200 which includes AFA Afterfilter.

HOW FILTERMIST UNITS WORK

1. Oil mist is removed at source
2. Oil mist is removed from the air by centrifugal impaction
3. Clean oil is returned to machine
4. Clean oil is returned to workplace
5. Smoke and fume can be removed and efficiency increased with the addition of a clip-on afterfilter

A perforated drum containing four specially designed vanes rotates at high speed. Oil mist is drawn into the drum where it impacts on the vanes at high velocity, causing the mist to coalesce. Special drum pads assist the coalescing process, filter out stray solid particles and reduce noise.

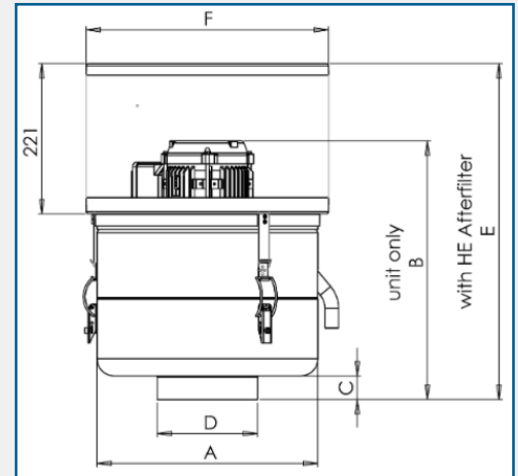
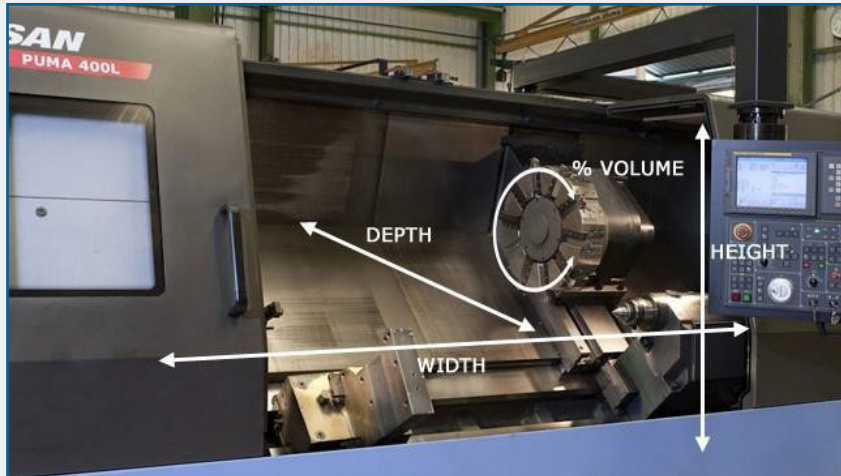
Centrifugal force pushes oil to the unit's outer case where it drains back to the machine for re-use or collection. Clean air is returned to the workshop through the top of the unit.



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TECHNICAL SPECIFICATION



Filtermist uses the following to work out which is the best unit size for each specific application.

Determine volume of space to be extracted:

Volume of enclosure = Width (of enclosure) x Length x Height.

Less volume taken by the internal equipment and configuration (e.g. Turret or Chuck or Slant Bed) = Volume of space to be extracted.

Example:

1.5m (W) x 1.0m (D) x 1.3m (H) = 1.95m³

20% volume for internal equipment = 0.39m³

Volume of space to be extracted = 1.95-0.39 = 1.56m³

From table below = S800 for CNC Internal Volume >2.0m³

Model	Airflow m ³ /h @50Hz	Motor* kW	A mm	B mm	C mm	D mm	E mm	F mm	Weight kg	Noise* dB(A)	For CNC Internal Volume **
S200	180	0.18	260	302	30	73	424	324	12	62	<0.5m ³
S400	425	0.55	325	374	35	148	495	357	17	65	<1.0m ³
S800	800	0.55	325	427	35	148	544	357	18	67	<2.0m ³

* Motor terminal connections will be configured as standard for the motor to run at high voltage 400 volts 50Hz.

** Internal Volume of CNC (Approx 4 -6 air changes per minute). For internal volume >2.0m³ see FX range.

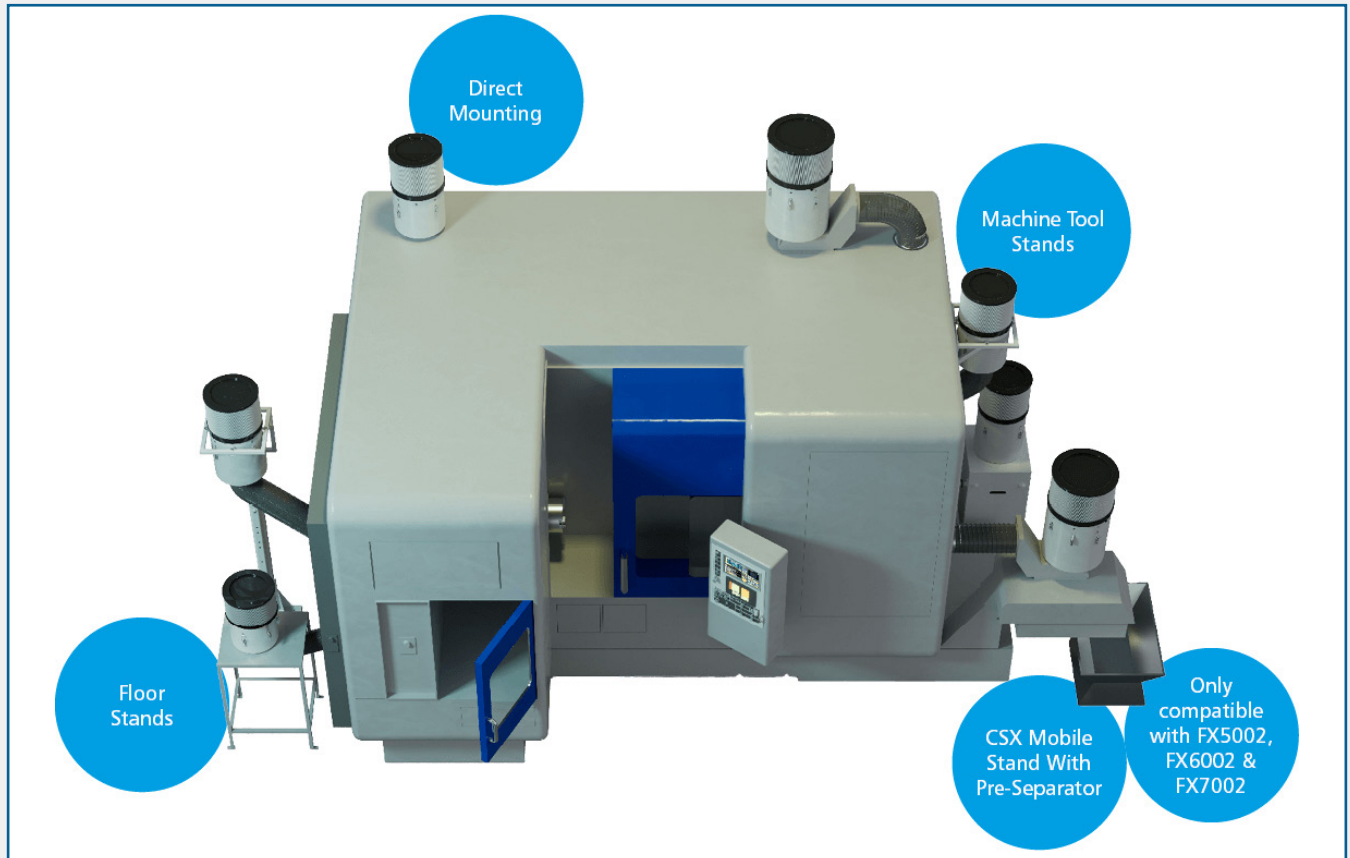
Filtermist generally uses 6 air changes per minute as the standard calculation.

For above example: 1.56m³ (Void) x 6 (Air Changes) x 60 (Minutes) = 562m³/hr unit required = S800

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MOUNTING OPTIONS



DIRECT MOUNTING *

The compact and lightweight design of Filtermist units means they can also be directly mounted on enclosed machine tools - saving valuable floor space and removing the need for additional brackets.

Horizontal Inlet Plenum is designed to enable Filtermist oil mist filters to be connected to both horizontal and vertical extraction points either on or off the machine

FLOOR STANDS

The Filtermist extendable floor stand comes in sections for easy transportation. The stand height is fully adjustable with the base plate pre-drilled for bolting to the workshop floor. The stands are made for the S Series and FX Series with customised fixings to ensure the units are securely mounted.

Filtermist also offers a robust low level stand designed to make servicing simple.

MACHINE TOOL STANDS

These versatile stands are designed to fit directly onto the machine tool where floor space is at a premium. Each installation takes the location, application, access for ongoing maintenance and size of unit into account. Machine tool stands are available for S Series and FX Series units. These versatile stands are designed to fit directly onto the machine tool where floor space is at a premium. Each installation takes the location, application, access for ongoing maintenance and size of unit into account. Machine tool stands are available for S Series and FX Series units.

*** IMPORTANT** - we recommend that FX5002, FX6002 & FX7002 units NOT be Direct Mounted & that a floor stand / top half bracket mount be used for safe lifting and servicing of the unit. If Direct Mounting used, 2 people will be required for servicing.

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FILTERMIST OIL MIST EXTRACTORS - S SERIES - ACCESSORIES



F MONITOR

Filtermist's monitoring system uses coloured warning lights to advise machine operators when an oil mist collector needs servicing, or if any of the filters are blocked. Filtermist advises that its units should be serviced every 2000 hours they are in use.

F Monitors can be retro-fitted and is included with EUK Kits.



AFTERFILTERS

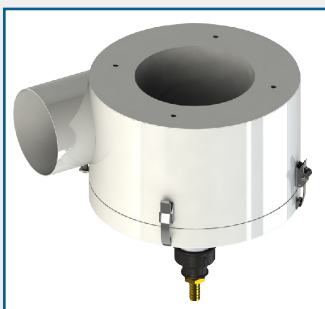
Afterfilters are designed for the removal of oil smoke and any residual fine mist particles. Afterfilters are used in addition to the Filtermist unit on applications where the exhaust air needs final cleaning before being returned to the workshop. High Efficiency AFB Afterfilter (99.95% efficiency at 1 µm) manufactured using a H13 grade filter paper are supplied as standard with all kits except S200.



HORIZONTAL INLET PLENUM

Designed to enable Filtermist oil mist filters to be connected to both horizontal and vertical extraction points either on or off the machine.

The new mount provides a simple 'plug and play' option for customers that have machine tools where direct mount is not an option, but the customer does not want to take up valuable floor space. It also allows Filtermist oil mist collectors to be mounted to chip conveyors or low-level stands – making it easier to service and maintain the unit



COMPACT CYCLONE

Filtermist cyclones are designed to collect dust and swarf before it enters the Filtermist unit. The system is attached to the inlet of the Filtermist unit and the contaminated air passes through it. The low-pressure area within the separator encourages the heavier particles to fall to its base where they can be easily removed.

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