

The *Forefront* of Technology

CROMAR

EST 1955



3NINE BLUE LINE OIL MIST SEPARATORS

Accessories

Providing a healthier and safer working environment,
allowing you to focus on your production.

www.cromar.co.uk

LINA™ 500

Suitable for cabin size	<5m ³
Air flow	500m ³ /h
Operating conditions	<50°C
Power supply	16 A, 230/460 V/3/50 Hz
Motor rating	0.55 kW
Rated current	1.35 A
Weight	54 kg
Height	840 mm
Diameter	Ø 480 mm
Inlet pipe	Ø 125.5 mm
Sound level	< 65 db (A)



CLARA™ 1000

Suitable for cabin size	<10m ³
Air flow	1 000m ³ /h
Operating conditions	<50°C
Power supply	16 A/400 V/3/50 Hz
Motor rating	1.5 kW
Rated current	3.2
Weight	89 kg
Height	1 145 mm
Diameter	Ø 640 mm
Inlet pipe	Ø 161 mm
Sound level	<65 db (A)



EMMA™ 2500

Suitable for cabin size	<20m ³
Air flow	2 500m ³ /h
Operating conditions	<50°C
Power supply	16 A/400 V/3/50 Hz
Motor rating	5.5 kW
Rated current	11.3 A
Weight	131 kg
Height	1 145 mm
Diameter	Ø 670 mm
Inlet pipe	Ø 316 mm
Sound level	<70 db (A)



PETRA™ 1000

Suitable for cabin size	<10m ³
Air flow	1 000m ³ /h
Operating conditions	<50°C
Power supply	16 A/400 V/3/50 Hz
Motor rating	1.5 kW
Rated current	3.2 A
Weight	96 kg
Height	1 145 mm
Width	Ø 500 mm
Inlet pipe	Ø 160 mm
Sound level	<70 db (A)



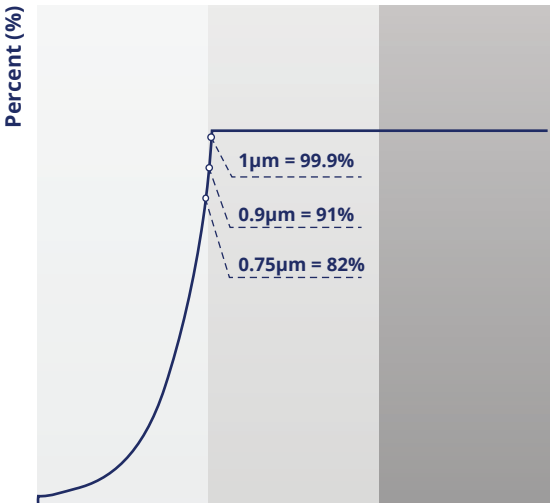
THE BLUE LINE SERIES - OIL MIST SEPARATORS WITH HIGH PURIFICATION, LOW MAINTENANCE AND OUTSTANDING OPERATION ECONOMY

The Technology

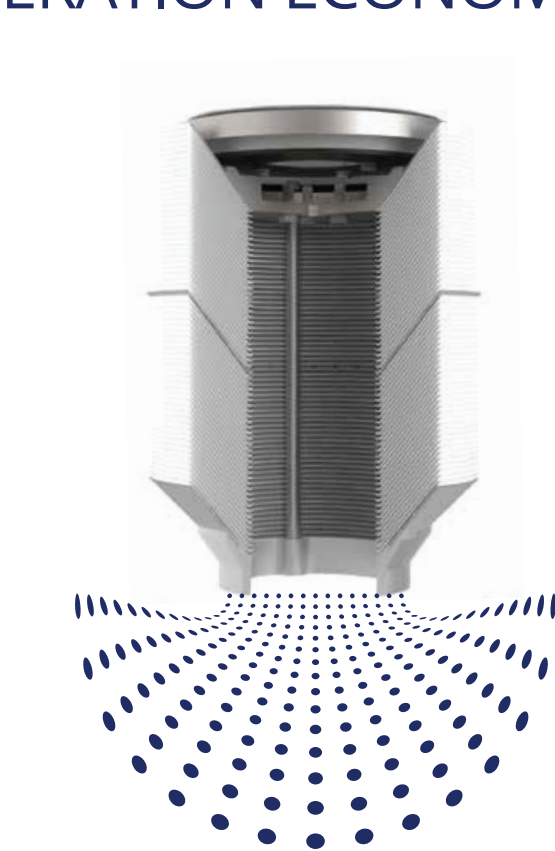
Liquid to gas separation technology was invented over 100 years ago. Based on that technology, 3nine has been developing oil mist eliminators since 2001. Since then, 3nine has been awarded with a large share of the global patents within centrifugal separation technologies.

3nine offers the only technology that separates mist particles from processed air and returns them for reuse as a liquid without using a filter. Our unique centrifugal separation technology purifies the air by separating the oil mist particles down to 1µm with a 99.9% efficiency.

The BLUE LINE units are our classic series of oil mist eliminators with thousands in use around the world. They produce 500-2500m3/h and can handle machine tool cabins up to 20m3 with 1 unit.



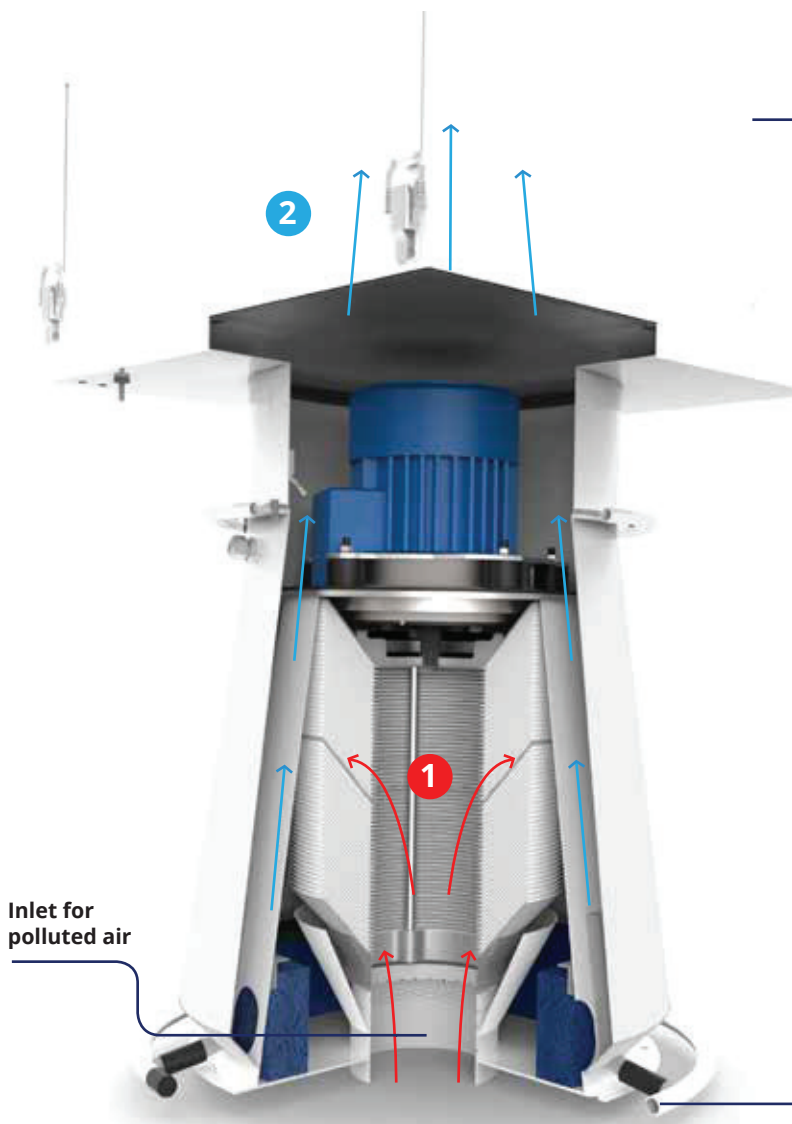
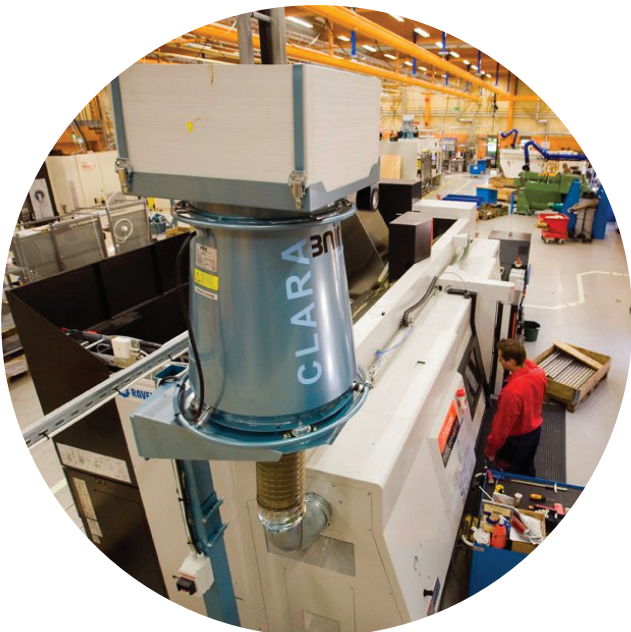
The diagram shows the performance as a function of the particle diameter.



SEPARATION EFFICIENCY

The BLUE LINE series of units separate 99.9% of all fluid particles down to 1µm, 91% down to 0.9µm and 82% down to 0.75µm. In order to capture the finer particles that are <1µm, 3nine uses a HEPA filter (H13) to ultimately clean the air to 99.95%.

With most of the particles separated in the disc stack, only 1% of the particles are collected in the HEPA filter.



99.95% particle free air

RECYCLE, REUSE & REDUCE

mist eliminator is 99.95% particle-free and can be recycled directly back into the workshop. The separation technology also allows for reuse of oils and coolants.

By separating instead of collecting oil and cutting fluid in a filter, you will be able to reduce your company's CO₂ footprint.

1 DISC STACK SEPARATION

Fluid particles will enter the disc stack to be separated to 99,9% down to 1µm. On the discs, the small particles coalesce and form larger particles. The bigger the particle, the faster they move towards the edge of the spinning disc to be thrown off and onto the inner wall of the rotor chamber to be returned to the machine tool for reuse.

2 FINAL STAGE HEPA FILTER H13

The particles smaller than 1µm, will be collected by the final stage HEPA filter. With most of the particles separated in the rotor, the HEPA filter has a life expectancy of 12-18 months*. We use a high quality HEPA filter at grade H13 from Freudenberg, a filter with outstanding filtration performance that ensures a 99.95% particle free air - a performance equal to what is prescribed in hospitals.

CLEAN IN PLACE (CIP) "YOUR MAINTENANCE PARTNER"

With our CIP (Clean in Place) particle buildup on the rotor is avoided. The CIP system uses clean cutting fluid from the machine tool to automatically and continuously clean the rotors.

* 12-18 months filter life is based on 1 shift per day, 5 days a week and normal operating conditions.



“With 3nine’s oil mist separators we’re sure to minimize our maintenance costs.”

Åke Falk, Production Manager, Sandvik Coromant AB, Sweden

SECURE WORKING ENVIRONMENT

Oil mist exposure can cause severe health issues for the operator. If not handled properly, the oil mist will coat the surfaces in the shop, causing risk of injuries by slippery surfaces, an increased need of cleaning and damages on electrical devices. With an oil mist separator from 3nine, this will not be a problem. The air coming out of a BLUE LINE oil mist eliminator is so clean that it can be recycled right back into the workshop and guarantees an optimal working environment for the operator.

ADVANTAGES

- ✓ Life Cycle Cost - Low
- ✓ 99.95% Particle free Air!
- ✓ Minimal Maintenance
- ✓ Minimal Filter Change
- ✓ Suitable for applications with high degree of solid particles
- ✓ Minimal Duct Work
- ✓ Recycling of cutting fluids
- ✓ No Oily Surfaces in the Workshop
- ✓ Compact and Direct Installation
- ✓ Low energy use

LEADING COST SAVING TECHNOLOGY PROVIDING A HEALTHIER AND SAFER WORKING ENVIRONMENT, ALLOWING YOU TO FOCUS ON YOUR PRODUCTION.

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