

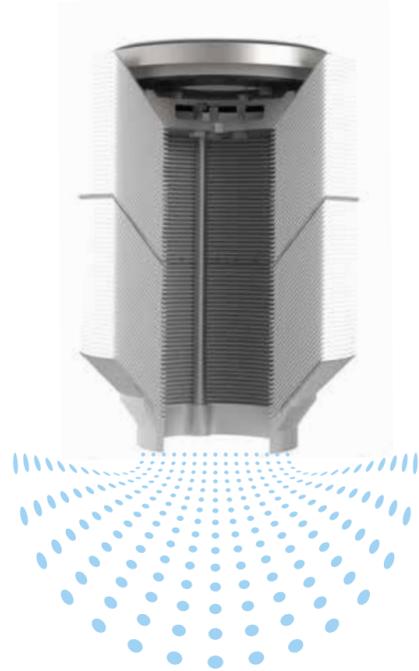
# THE BLUE LINE SERIES - OIL MIST ELIMINATORS WITH HIGH PURIFICATION, LOW MAINTENANCE AND OUTSTANDING OPERATIONAL ECONOMY

## 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 over 100 global patents using centrifugal separation technologies.

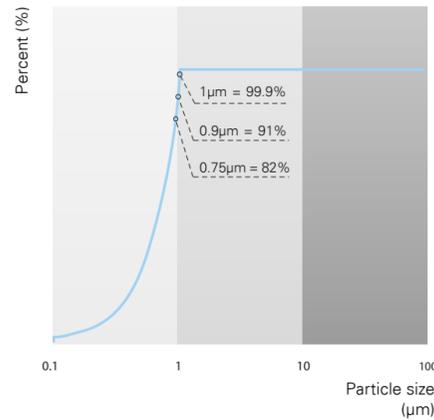
3nine offers the only technology that separates mist particles from processed air and returns them for reuse as a liquid without using a filter. Our unique centrifugal separation technology purifies the air by separating the oil mist particles down to 1µm with a 99.9% efficiency.

The BLUE LINE units are our classic series of oil mist eliminators with thousands in use around the world. They produce 300-1500 CFM and can handle machine tool cabins up to 710 CF with 1 unit.

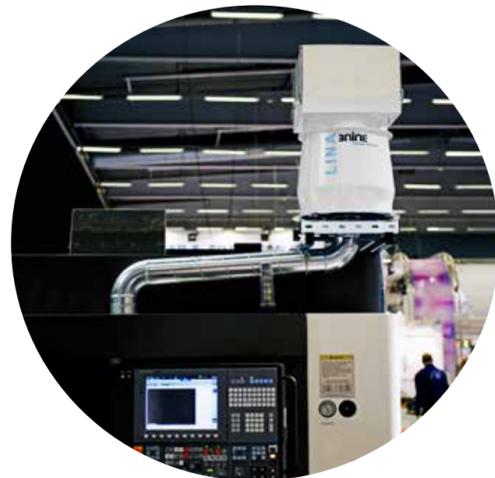


## SEPARATION EFFICIENCY

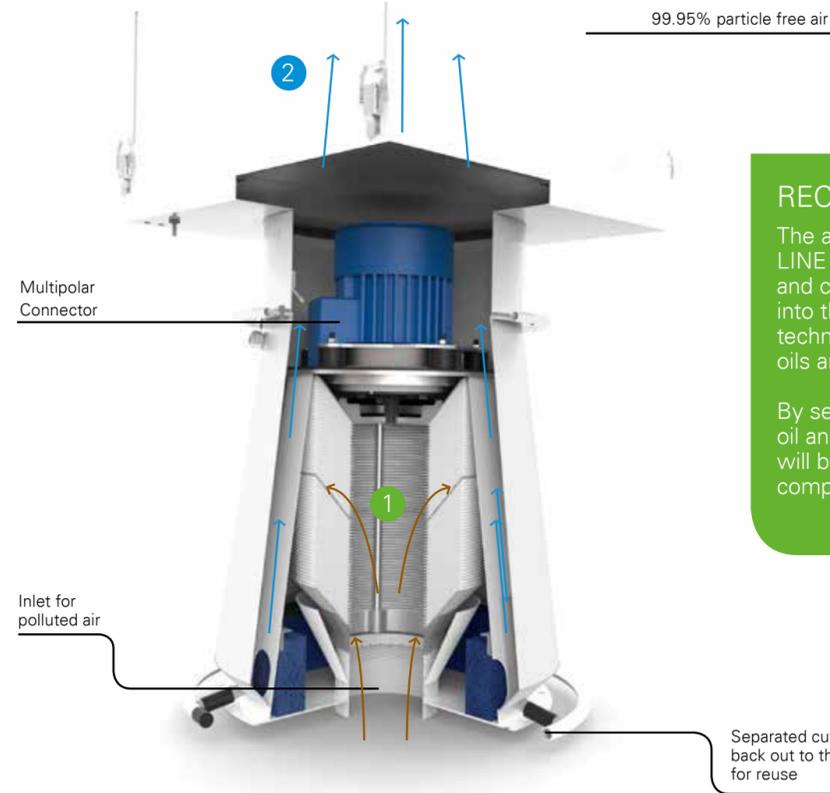
The BLUE LINE series of units separate 99.9% of all fluid particles down to 1µm. In order to capture the finer particles that are <1µm, 3nine uses an H13 grade HEPA filter to ultimately clean the air to 99.97%. With most of the particles separated in the disc stack, only 1% of the particles are collected in the HEPA filter.



3NINE'S LEADING COST SAVING TECHNOLOGY PROVIDES A HEALTHIER AND SAFER WORKING ENVIRONMENT, ALLOWING YOU TO FOCUS ON YOUR PRODUCTION.



## OPERATING PRINCIPLE



### RECYCLE REUSE REDUCE

The air coming out of our BLUE LINE Series is 99.97% 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 environmental footprint.

### 1 DISC STACK SEPARATION

Oil mist enters the disc stack where the fluid particles are separated from the air at 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 discs to be thrown off and onto the inner wall of the rotor chamber to be returned to the machine tool for immediate reuse.

### 2 FINAL STAGE HEPA FILTER

The particles smaller than 1µm, will be collected by the final stage HEPA filter. With most of the particles separated in the disc stack, the HEPA filter has a life expectancy of 12-18 months\*. The final stage HEPA filter is a grade H13 and produces 99.97% particle free air.

### CLEAN IN PLACE (CIP) "YOUR MAINTENANCE PARTNER"

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



## NEW HEPA FILTER MONITOR

All BLUE LINE oil mist eliminators can be equipped with our new pressure gauge. It monitors and informs you on the HEPA-filter saturation level. You can set your own warning and alarm for the pressure drop levels, so you know when it is time to order a new filter.

## 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 with slippery surfaces, increased house cleaning and damage to electrical components. With an oil mist eliminator from 3nine, these problems are greatly reduced. 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 for optimal working environment.

## ADVANTAGES

- Life Cycle Cost - Low
- 99.97% 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

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

**LINA™ 500**

Suitable for cabin size	<176 CF
Air flow	300 CFM
Operating conditions	<122°F
Power supply	15 A, 230/460 V/3/60 Hz
Motor rating	0.66 kW
Rated current	2.6 A (230V), 1.7 A (460V)
Weight	66 lbs
Height	33"
Diameter	Ø 18.9"
Inlet pipe	Ø 4.9"
Sound level	< 65 db (A)

**CLARA™ 1000**

Suitable for cabin size	<353 CF
Air flow	600 CFM
Operating conditions	<122°F
Power supply	30/15 A, 230/460 V/3/60 Hz
Motor rating	1.5 kW
Rated current	5.6 A (230 V), 3.6 A (460 V)
Weight	154 lbs
Height	45"
Diameter	Ø 25.2"
Inlet pipe	Ø 6.3"
Sound level	<65 db (A)

**EMMA™ 2500**

Suitable for cabin size	<710 CF
Air flow	1500 CFM
Operating conditions	<113°F
Power supply	30/15 A, 230/460 V/3/60 Hz
Motor rating	5.5 kW
Rated current	11.7 A
Weight	231.5 lbs
Height	45"
Diameter	Ø 26.4"
Inlet pipe	Ø 12.44"
Sound level	<70 db (A)

**PETRA™ 1000**

Suitable for cabin size	<353 CF
Air flow	600 CFM
Operating conditions	<122°F
Power supply	30/15 A, 230/460 V/3/60 Hz
Motor rating	2.2 kW
Rated current	8 A (230V), 5.2 A (460V)
Weight	166 lbs
Height	51"
Width	Ø 19.7"
Inlet pipe	Ø 6"
Sound level	<70 db (A)

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**OIL MIST SEPARATORS**

NEW COLOR, NEW FILTER  
MONITORING SYSTEM  
SAME GREAT EFFICIENCY!



3nine is a Swedish company that develops solutions for the purification of processed air for the Metal Working Industry. Our revolutionary technology is based on centrifugal separation, using a disc stack which produces an extremely high degree of purification in a very compact format and requires a minimum of maintenance.