ATMOS C-MAX

Centralized oil mist purification solution

TAILOR-MADE
SCALABLE

FILTRATION
HEPA 13

HEAT
RECOVERY

ATMOS C-MAX

CENTRALIZED OIL MIST PURIFICATION SOLUTION

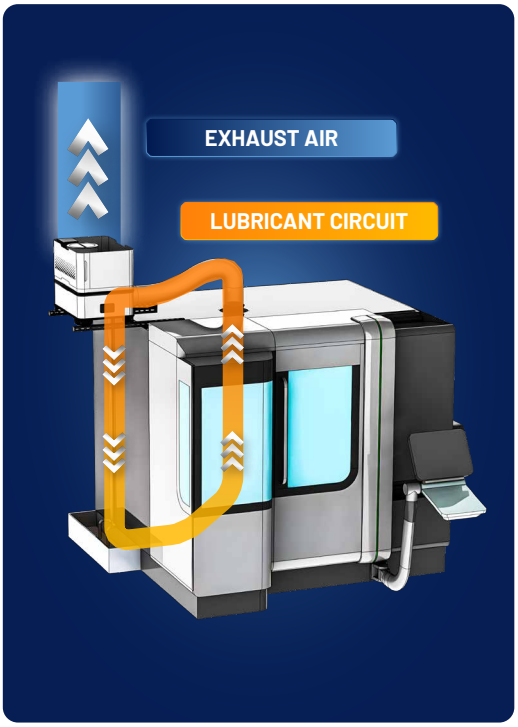
Tailor-made centralized purification

The ATMOS C-MAX™ solution represents an innovative centralized network of oil mist scrubbers designed to route air extracted from machining equipment directly outside, eliminating any risk of contamination of the working environment.

The EUROVENT®-certified counter-current exchanger guarantees optimum renewal of stale air with fresh air, with energy recovery in excess of 80%.

Air and lubricant are separated as close as possible to the machine, thus limiting the electrical power required.

The lubricant-free air is then centralized and discharged to the outside via the heat exchanger. The quantity of fresh air injected is adjusted according to the number of machines in operation, ensuring optimum system efficiency.



Air and oil separation

The ATMOS™ centralized network of industrial purifiers stands out for its ability to effectively separate air from lubricant :

EXHAUST AIR CIRCUIT

After separation, the air is collected, centralized and discharged to the outside, ensuring a healthy workshop environment. As the exhaust air is free of lubricant particles to be transported, the electrical power required by the network is minimized.

LUBRICANT SEPARATION CIRCUIT

Oil mist suction as close as possible to the point of emission, with separation of air and lubricant using our patented ATMOS multi-cyclone technology. The lubricant is then returned directly to the machine tank, for reuse without operator intervention.

Illustrations and data are not contractual.

Benefits of air/oil separation directly at source :

Multicyclonic separation

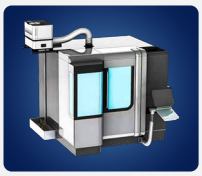
Our system uses multi-cyclone mechanical separation technology with no moving parts or consumables, thanks to our ATMOS patent. This revolutionary approach guarantees efficient separation of air and oil without the need for frequent maintenance or replacement of expensive parts.

Optimizing energy consumption

Thanks to its innovative design, this system eliminates the need to transport oil through the entire network. Lubricant is collected locally, reducing transport-related power consumption and ensuring optimum energy efficiency throughout the process.

Cost-effective management of consumables

With very few consumables required, our system offers an economical and sustainable solution for oil mist management. You reduce costs associated with maintenance and consumables, while maintaining peak performance on a consistent basis.



Adaptable power

This flexibility guarantees optimal fog treatment for each machine, while simplifying the centralized network, which does not require complex balancing to manage variable production.

Direct return of the collected oil

Once collected, the oil is returned directly to the machines, providing a direct and efficient return of the collected oil to its original use. This closed, loss-free process ensures optimum use of cutting oil, while maintaining a healthy and safe working environment.

The benefits of an oil-free air circuit :

Reduced power consumption

Less power required than oil-laden air conveying, reducing operating costs.

Simplicity and savings

Simple structure, similar to double-flow CMV ventilation, so less costly to install and maintain.

Heat recuperation

Allows heat to be recovered before the air is discharged to the outside, improving the overall energy efficiency of the system.

Flexible application

Can handle machines using different types of oil, simplifying plant management.

Easy maintenance

No oil-related complications or leaks in the network, reducing downtime and optimizing system availability.

Illustrations and data are not contractual.

The key points of the ATMOS™ C-MAX

Healthy environment

Our system ensures a clean and safe working environment by effectively removing oil mist from the air, guaranteeing a healthy atmosphere for your operators.

Optimized power consumption

Thanks to an energy-efficient design, our plant minimizes power consumption, contributing to lower operating costs and a smaller environmental footprint.

Recovery of calories

Before the air is released to the outside, our system recovers calories, offering optimum energy efficiency and reducing your environmental impact.

Few consumables required

With a design focused on durability, our plant requires few consumables, reducing the costs associated with servicing and maintenance.

Easy maintenance

Thanks to our robust design and advanced technologies, maintenance of our plant is simplified, reducing downtime and optimizing your company's productivity.

Environmental responsibility

By reducing energy consumption, minimizing waste and promoting sustainability, our plant is part of an eco-responsible approach, helping to preserve the environment.

ATMOS C-MAX

Exchanger type	Horizontal counter-current double-flow heat exchanger
Number of machines simultaneously	2 to 12 machines
Effective air flow rate (m^3/h)	1000 - 6000
Extraction flow rate (m^3/h)	1000 - 6000
Envelope*	Mechanical resistance : D2 Envelope air leak : -400/+700 Pa Filter bypass leak : F10 Thermal transmittance : T3 Thermal bridge factor : ErP2018 compliant
Design*	45 mm double-skin panel, RAL9002 exterior / Galvanized interior
Filtration*	Fresh Air : ePM1 55% (F7) Return Air : ePM10 75% (M5)
Recovery*	Exchanger efficiency : 80.3% according to EN308 (86.6% on T°) Eurovent-certified counter-current plate heat exchanger N°11.07.006 Motorized bypass : 0-100%
Ventilation*	Fans : High-efficiency freewheel type Motorization : EC Low consumption (IE4) Three 400 V - 1230 W (x2)
Regulation*	On-board cabinet, protection with regulator Speed / flow / constant pressure control Integrated temperature sensors / Control of battery options Remote E3-DSP display (max. 100 m) for control and parameter setting Communication : Modbus / BacNet as standard
Connections, Dimensions and Weights*	4 connection orifices : 1220 x 535 mm at tip Dimensions : Length 2160 mm x Width 1330 mm x Height 1220 mm + feet 100 mm Weights : 296 kg

**Specifications for a system with 6 simultaneous machines, 3000 m^3/h 200 Pa*

SIEBEC SAS contact@siebec.com
SIEBEC Ltd sales@siebec.co.uk
SIEBEC S.L. ventas@siebec.com
SIEBEC SRL commerciale@siebec.com
SIEBEC GmbH info@siebec.de
SIEBEC LDA info.pt@siebec.com

We are here to help.
Contact-us!