# **AOD**





# Extraction and Filtration Technology for Oil and Emulsion Mist





# You Should Always See Clearly — Even at 1,000 Revolutions per Minute

During metal-cutting manufacturing fast rotating machining tools or work pieces generate finest droplets of oil and cooling lubricants. The same applies to shop floors, where oil is used in cooling baths, as in hardening plants. In the air these droplets form an aerosol mist, which can be hazardous.

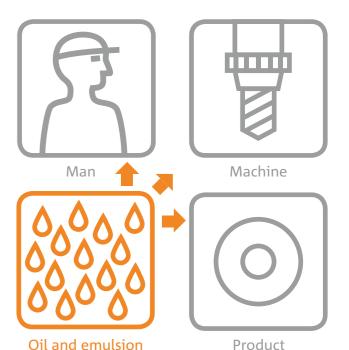
#### Oil and emulsion mist

Oil and emulsion mists irritate eyes and airways and their presence in the workplace atmosphere can be harmful. They can transform entire workshops into dangerous slides or cover equipment. Combined with dust and swarf, oil and emulsion mist contaminates machined parts – or even irreversibly damages them.

# Extraction and filtration technology

ULT's AOD type extraction and filtration technology removes oil and emulsion mist reliably without residue from the air at the workplace – directly at the source. The product portfolio considers typical differences in working conditions, concerning for example machine running times and composition of pollutants.

# The threefold damage effect of oil and emulsion mist



## mist pollutant

## Typical fields of application

- » Drilling, turning or milling machines
- » Mechanical machining centres
- » Grinding machines
- » Erosion machines
- » Quenching, immersion and cooling baths in hardening plants

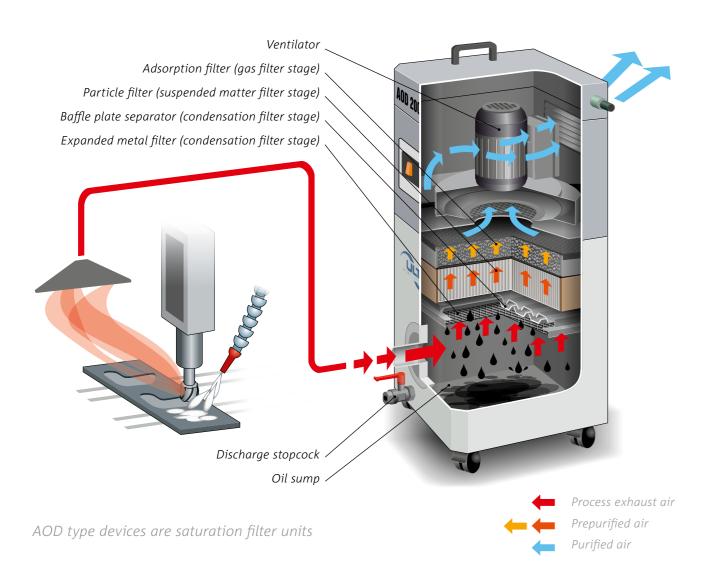
# Extraction and Filtration in Two Performance Classes

#### Filtration system

To be able to capture all kinds of air pollutants from oil and emulsion mist, calls for a three-stage filtration system. In the initial condensation filter stage it starts with retaining liquids and rough particles. Oil and emulsion residues are dripping into a sump, which can be drained via a discharge stopcock without using tools. The following suspended matter filter stage serves for deposition of finer particles.

Finally, the gas filter stage captures gases and vaporous impurities. The purified air can then be re-circulated back into the working room, greatly enhancing energy management.

The gas and suspended matter filters are saturation filters, which can easily be exchanged and partly regenerated.



#### Performance classes

ULT offers extraction and filtration units with different air performance and accessory equipment. Proper selection depends on operating conditions; with cutting manufacturing, the selection highly

depends on the type of machined material and the cooling lubricant used. It is also critical, whether the equipment must run in a multi-shift operation.

Performance class	Max. volume flow [m³/h]	Max. vacuum [Pa]	Nominal capacity [m³/h at Pa]
AOD 200 MD.14	635	3,200	250/2,000
AOD 200 MD.40	420	1,100	200/900
AOD 200 HD.10	210	20,700	120/13,000
AOD 1000	1,700	2,600	1,000/1,800

AOD 200 and AOD 1000 – a small and a large solution to master oil and emulsion mist





# **AOD: Perfect Serial Products.** Built on Sophisticated Engineering.

AOD stands for a sophisticated series of units for oil and emulsion mist removal according to user requirements. Smart engineering concepts enable a perfect adaptation to individual local demands making the units an integral part of the production equipment.

### From compact to large

ULT's solutions range from mobile equipment for individual work places to complete solutions for entire production halls. For environments with a lack of space.

### Particularly user friendly

Low noise level and low energy consumption. Simple operation and maintenance. Recirculation operation possible. Easy filter exchange and disposal of remaining oil.



### Safety for automated production lines

The filter systems' long service life significantly reduces down time and maintenance costs.

#### Individual extraction solutions

The design of the extraction point gets adapted to the individual work place condition.

## Open to special requirements

Systems can be configured suitable for ESD or with explosion protection. They are also available with stainless steel housing, for corrosive gases, special supply voltage and frequency, digital control for pressure stabilisation, timer function, filter analysis and interfaces for external control.

## **Exceptional service**

On-site installation and commissioning by ULT. Functional warranty included.

Central oil mist extraction with pre-separator

#### **ULT AG**

ULT AG provides extraction and filtration technology that really works; in-house developed these excellent series units can be adapted to individual requirements by sophisticated engineering.

From single work places to hall solutions. Permanent research ensures that even the latest production processes are safely served.

























ULT AG, headquartered in Löbau/Germany, provides extraction and filtration systems for customers all over the world

6

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ULT is certified according to ISO 9001:2008
The plants are designed meeting
international standards. If required, they
will be certified according to ATEX and W3
and tested to meet H requirements.

In addition, the plants always comply with current EC directives on energy efficiency (ErP directive: Total energy efficiency of ready-to-use ventilation systems or minimum energy efficiency of electric motors).

Detailed technical information can be found on device specific data sheets or on our website. All technical data is general and not binding and does not guarantee the suitability of a product for a specific application.



www.ult.de/en



Webshop: Extraction arms and accessories

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