



## TECHNICAL DATA ECO SERIES

Mist collectors for neat oil, oil-water emulsion, fume and dust on machine tools



## THE ULTIMATE SOLUTION

for the filtration of oil mist in metalworking workshops

VISIT OUR WEB SITE  
[www.arfiltrazioni.com](http://www.arfiltrazioni.com)

STRONG POINTS

ECO SERIES



Over 26,000 units installed!

Compact!

100%

Units tested according to  
EN: 1822  
D.d.u.o.n 12772

100%

With relevant test certificate  
for each unit

80%

Recovery of re-condensed coolant,  
which can be led back into the machine tool

99.995%

Filtration efficiency up to 99.995% HEPA H13  
Particles with volume  $\geq 0.15 \mu$

At **AR Filtrazioni** we are producers of a new generation of mist collectors for the re-condensation and purification of every type of atmospheric pollutant generated during machining processing of machine tools (machining centers, lathes, grinders, laser and washing machines, etc.), working up to three shifts.

## ADVANTAGES



- Easy and simple maintenance, once a year; high operational reliability
- Robust mechanical parts, low space requirement
- Recovery of 80% of the re-consensed oil
- Total compliance with Italian and European regulations
- Energy saving of 415,00€/year for each air cleaner
- Reduction of CO<sub>2</sub> emissions up to 9,000 kg/year, for each air cleaner
- Protection of sensitive machine tool parts
- Health-conscious and environment-friendly

AIR CLEANERS OF OIL MIST, FUME AND DUST FOR MACHINE TOOLS

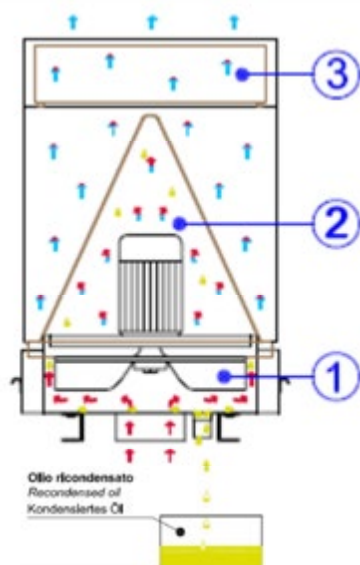
AR FILTRAZIONI S.R.L.  
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Bergamo BG 24126

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www.arfiltrazioni.com  
www.mistcollector.com

# WORKING PRINCIPLE

The air cleaners of the ECO series are suitable for the extraction, re-condensation and purification of oil mist, fume, micro-mist and micro-dust generated by machine tools.



## ECO F

### 1° STAGE CENTRIFUGE

#### SELF-CLEANING CENTRIFUGAL CONDENSER

- Self-cleaning
- Balanced (no vibration)
- It re-condenses 80% of the oil mist, thanks to the centrifugal effect

### 2° STAGE POCKET FILTER

#### COALESCENCE FILTER

European standards ISO EN 16890

Filtration efficiency up to 95% - Particles with volume 0.4  $\mu$

- Replacement every 6/18 months
- Glass-fibre fabric with a wide filtering surface

### 3° STAGE HEPA FILTER

#### FINAL FILTRATION WITH HIGH (EPA) OR VERY HIGH (HEPA) EFFICIENCY

European standards EN1822

Filtration efficiency up to 99.995%.

Particles with volume  $\geq 0.15\mu$

- Replacement every 24/36 months



# ECO

WITH

## PRE-FILTER

### WORKING PRINCIPLE ECO PF

#### X STAGE METAL FILTER

##### PREFILTRATION CELL IN GALVANIZED STEEL

European standards ISO EN 16890

Filtration efficiency > 95% - Particles with volume  $3 \mu$

- Washable (12/18 months)
- Thanks to the robust metal frame with a safety net, it can stop any potential chip
- Its sieve effect exploits gravity to convey the re-condensed oil into the drainage tube

#### 1° STAGE CENTRIFUGE

##### SELF-CLEANING CENTRIFUGAL CONDENSER

- Self-cleaning
- Balanced (no vibration)
- It re-condenses 80% of the oil mist, thanks to the centrifugal effect

#### 2° STAGE POCKET FILTER

##### COALESCENCE FILTER

European standards ISO EN 16890

Filtration efficiency up to 95% - Particles with volume  $0.4 \mu$

- Replacement every 6/18 months
- Glass-fibre fabric with a wide filtering surface

#### 3° STAGE HEPA FILTER

##### FINAL FILTRATION WITH HIGH (EPA) or

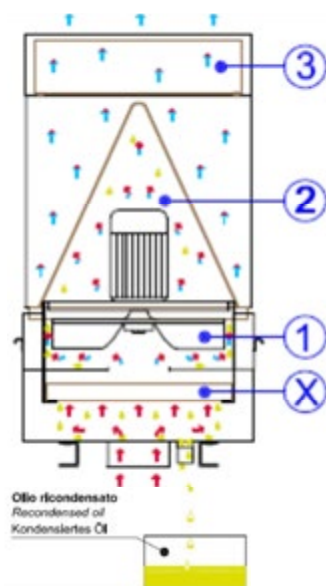
##### VERY HIGH (HEPA) EFFICIENCY

European standards EN1822

Filtration efficiency up to 99.995%.

Particles with volume  $\geq 0.15 \mu$

- Replacement every 24/36 months



# TECHNICAL DATA AIR FLOW AND POWER

## EACH UNIT IS EQUIPPED WITH:

- **ABB / SIEMENS** overload cutout switch
- Filter clogging detector; analogue pressure gauge
- Drainage tube for the recovery of the recondensed coolant (about 80% if neat oil)
- Up to **HEPA H13** final filter with very high filtration efficiency



### ECO

600m³/h / 350 CFM

#### F

550m³/h / 325 CFM

#### P

550m³/h / 325 CFM

#### PF

500m³/h / 300 CFM

#### F

950m³/h / 550 CFM

### ECO TWO

1000m³/h / 600 CFM

#### P

950m³/h / 550 CFM

#### PF

850m³/h / 500 CFM

## TECHNICAL DATA

MODEL	SUCTION INLET Ømm	MAX. AIRFLOW m³/h - CFM	POWER HP - kW	TENSION FREQUENCY V Hz	NOISE dBa	WEIGHT Kg - Lb
ECO	100	600 350	0,5 - 0,37	230 / 400 / 50	67	28 62
ECO F	100	550 325	0,5 - 0,37	230 / 400 / 50	67	33 73
ECO FA	100	550 325	0,5 - 0,37	230 / 400 / 50	67	40 88
ECO P	100	550 325	0,5 - 0,37	230 / 400 / 50	67	38 84
ECO PF	100	500 300	0,5 - 0,37	230 / 400 / 50	67	43 95
ECO PFA	100	500 300	0,5 - 0,37	230 / 400 / 50	67	50 110
ECO TWO	120	1000 600	0,75 - 0,55	230 / 400 / 50	68	40 88
ECO TWO F	120	950 550	0,75 - 0,55	230 / 400 / 50	68	48 106
ECO TWO P	120	950 550	0,75 - 0,55	230 / 400 / 50	68	57 126
ECO TWO PF	120	850 500	0,75 - 0,55	230 / 400 / 50	68	65 143

Air flow capacity may vary based on filters type and combination.

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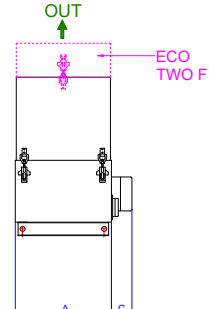
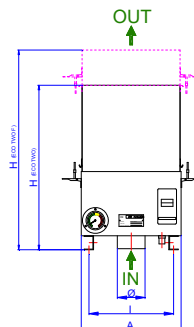
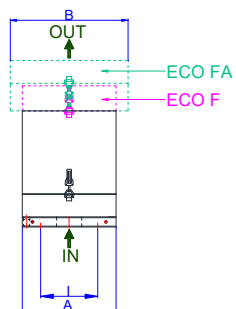
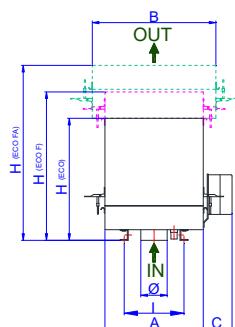
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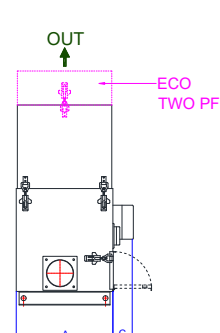
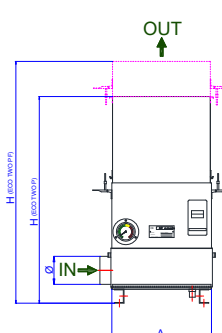
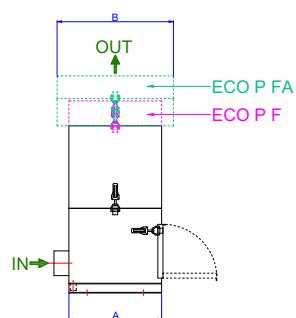
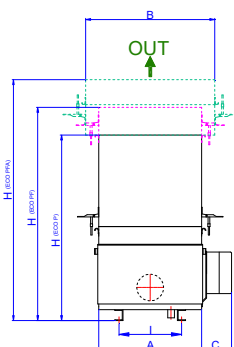
ECO - ECO F - ECO FA

ECO TWO - ECO TWO F



ECO P - ECO PF - ECO PFA

ECO TWO P - ECO TWO PF



DIMENSIONS mm	MODEL	A	B	C	H	I
	ECO					
	ECO	370	-	150	460	225-Ø9
	ECO F	370	-	150	560	225-Ø9
	ECO FA	370	465	150	660	225-Ø9
	ECO P	370	-	150	670	225-Ø9
	ECO PF	370	-	150	770	225-Ø9
	ECO PFA	370	465	150	870	225-Ø9
	ECO TWO	425	-	150	705	360-Ø9
	ECO TWO F	425	-	150	855	360-Ø9
	ECO TWO P	425	-	150	885	360-Ø9
	ECO TWO PF	425	-	150	1035	360-Ø9

AR Filtrazioni reserves the right to make any change necessary to improve its products, at any moment and without notice.  
The technical data of this data sheet are not binding.

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## OPTIONAL



### OVERSIZED FA FILTER

Excellent in case of high quantities of oil mist and fumes.



### HARTING PLUG

It connects the mist collector directly to the PLC of your machine tool.



### PDMF 4.0

In addition to the analogue filter clogging detector, our digital pressure gauge sends a signal to the machine tool, warning you to do maintenance.



### ACTIVATED CARBON CELL

It eliminates odours, fume, VOCs and formaldehyde.

## R&D OFFICE

In addition, AR Filtrazioni stands for constant research. The R&D office is daily engaged in the research and development of innovative technical solutions for the purification of oil mists, fumes and micro-dusts generated during the machining processes of machine tools.

All series of air cleaners and accessories have a "Made in Italy" certificate.



# INSTALLATION

At **AR Filtrazioni** we always offer turn-key solutions, installing the filters at the customer's premises thanks to our specialized personnel. Otherwise, we leave complete autonomy to the customer, since each system comes complete with an installation kit and an instruction manual, which make the installation of our filter units all over the world incredibly intuitive.



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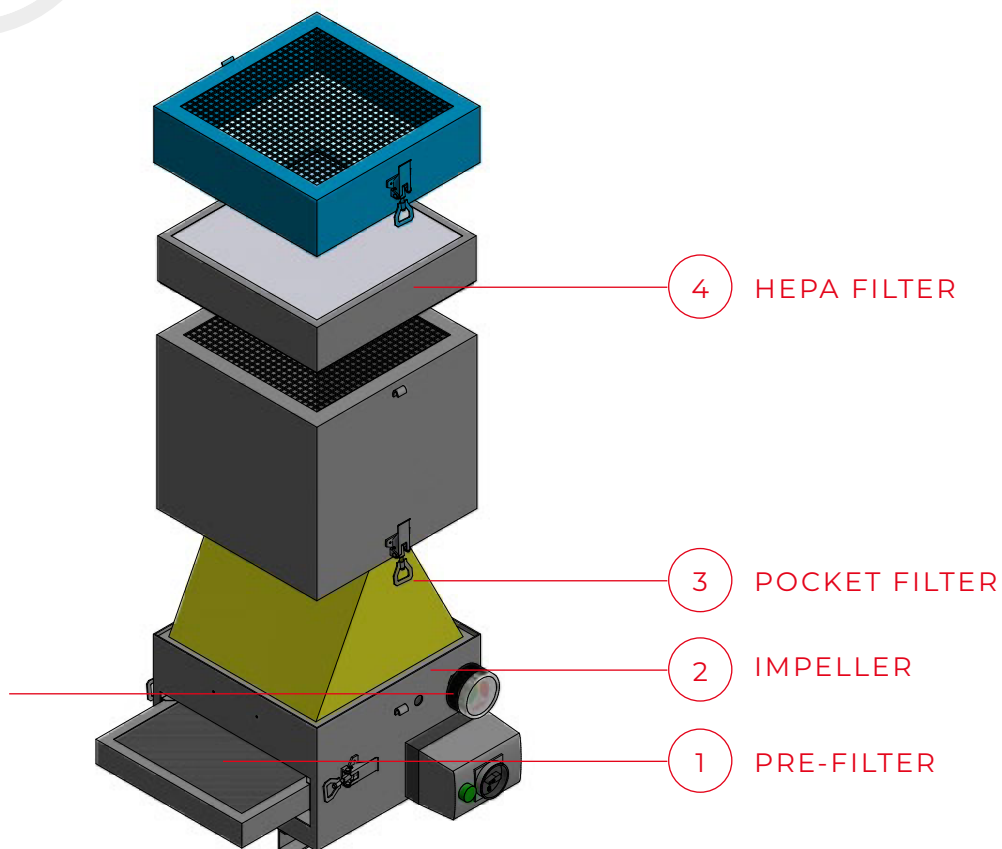
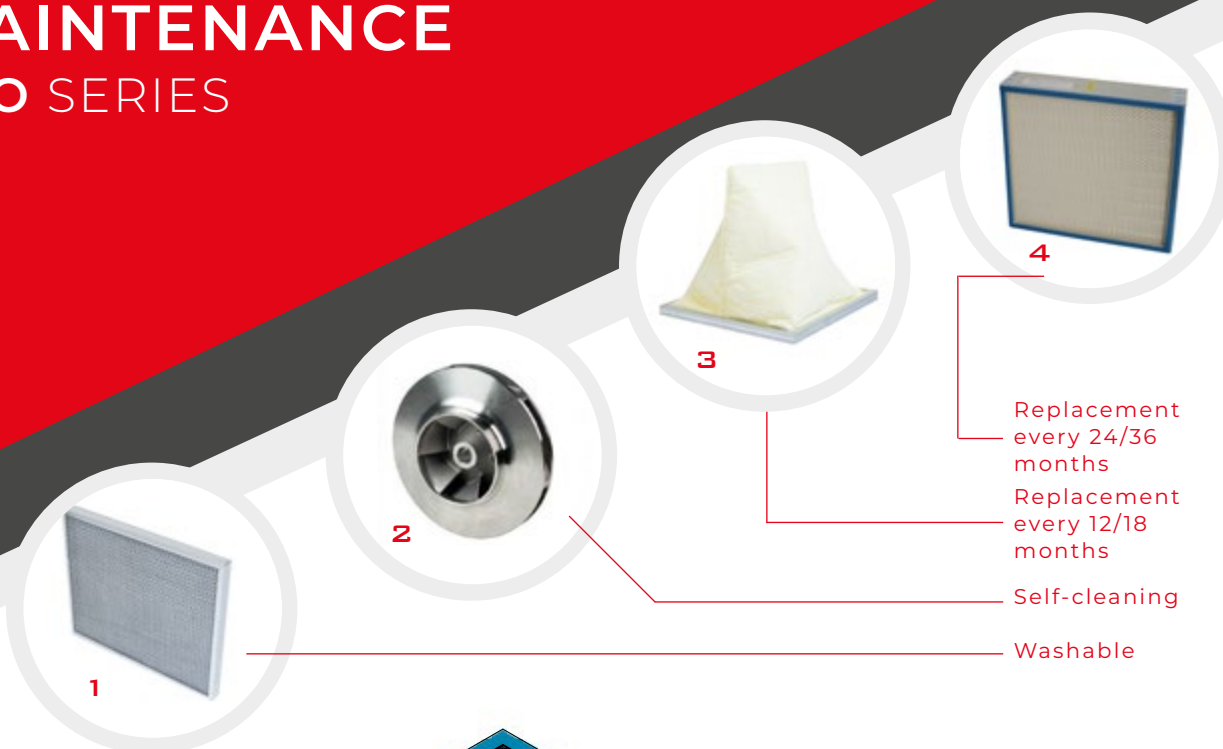
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# MAINTENANCE

## ECO SERIES



DEVICE TO MONITOR  
FILTER CONDITIONS  
Red zone C  
Clogged air cleaner



This **maintenance programme** shows average times, resulting from statistics elaborated on the basis of the thousands of systems that **AR Filtrazioni** maintains annually.

# VALUE

Forty-year-long  
know-how

Free consultancy

Free of charge technical  
inspection and analysis

Sales and Assistance with  
non-binding quotation

60-day test

After-sales  
assistance

Installation

24 months warranty

Maintenance contract

# PLUS

- **Filters and spare parts supply time:** always in stock and ready for delivery
- **Environmental and technical consultancy:** free of charge, both during the order phase and throughout the life of the plant
- **Delivery time:** 2 to 4 weeks
- **State-of-the-art technology** is not enough for AR FILTRAZIONI: the service capability and the proximity to our customers guarantee an optimal and technically sophisticated solution, even for special customer needs.
- **Test:** Do you have an important investment to make? Put one of our systems to the test! We offer a money back guarantee

- **Design, study and realization of ad hoc industrial filtration systems with an on-the-spot investigation and data collection of the various machine tools and study of the most suitable system for your needs.**
- **Outsourcing maintenance.** We carry it out and we are responsible! We release a maintenance certificate with legal value for each one of our units.
- **Do you use non-original spare parts for your mist collectors? Do not lose the guarantee on the air cleaner and the filtering efficiency. Contact us and find out how to save money.**



# REFERENCES

Some customers who chose AR Filtrazioni air cleaners

TESLA



brembo

DMG MORI



ERBA S.p.A.



LIEBHERR



SIEMENS



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