



## TECHNICAL DATA ARF SERIES

The mist collector for fumes and micro-dust for dry and wet processing.



### THE ULTIMATE SOLUTION

For the filtration and collection of fine dust and fumes in metalworking workshops

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

SINCE  
**1995**

# STRONG POINTS

# ARF SERIES

Very high filtration efficiency

Energy-efficient motor!



UNI 11304-3



100%

Units tested according to EN: 1822 D.d.u.o.n 12772 UNI 11304-3

100%

With relevant test certificate for each unit

100%

Dedicated to dry and wet processing

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 the machining processes 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
- Robust mechanical parts
- Total compliance with European regulations
- Reduction of CO<sub>2</sub> emissions
- Protection of sensitive machine tool parts
- Health-conscious and environment-friendly

# WORKING PRINCIPLE

The ARF series is suitable for the suction and purification of dust generated in manufacturing processes with dry and wet processing.

The ARF series is equipped with energy-efficient IE2/IE3 class motors and motor-saving magneto-thermal switch.

## ARF

### 1°STAGE METALLIC 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

### 2° STAGE SYNTHETIC FILTER

#### WAVY FILTER FPS/FOU/FOS

### 3°STAGE HEPA FILTER

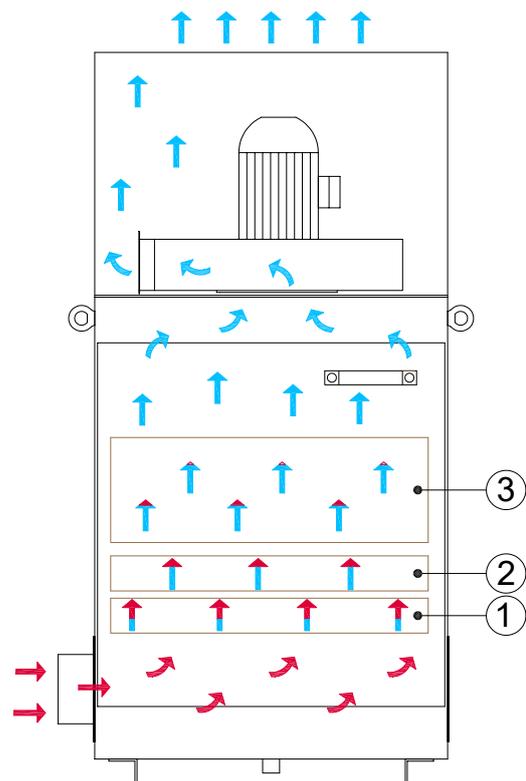
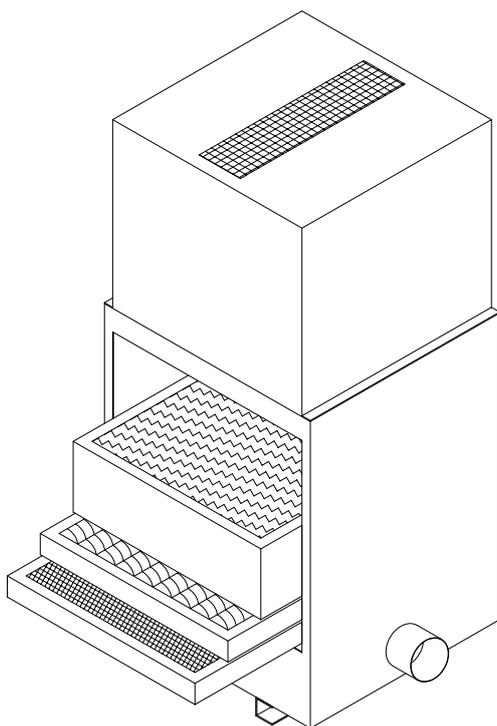
#### FINAL FILTRATION WITH VERY HIGH (HEPA) EFFICIENCY

European standards EN1822

Filtration efficiency up to 99.95%

Particles with volume  $\geq 0.15 / 0.3 \mu$

Suitable for the abatement of micro-mists, micro-dusts and fumes



# WORKING PRINCIPLE

The ARF series is suitable for suction and purification of dust generated in manufacturing processes with dry and wet processing.

The ARF series is equipped with energy-efficient IE2/IE3 class motors and motor-saving magnetothermal switch.

Due to its modularity, the ARF series can be equipped with activated carbon stage (ARF FA) for the abatement of fumes and odors.

## ARF FA

### 1°STAGE METALLIC 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

### 2° STAGE SYNTHETIC FILTER

#### WAVY FILTER FPS/FOU/FOS

### 3°STAGE HEPA FILTER

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

European standards EN1822

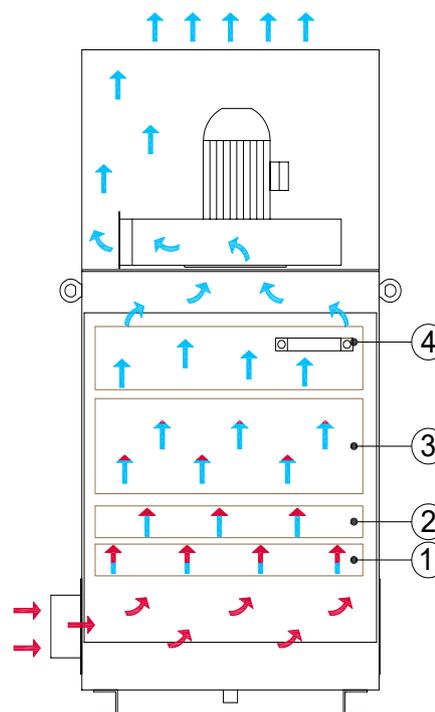
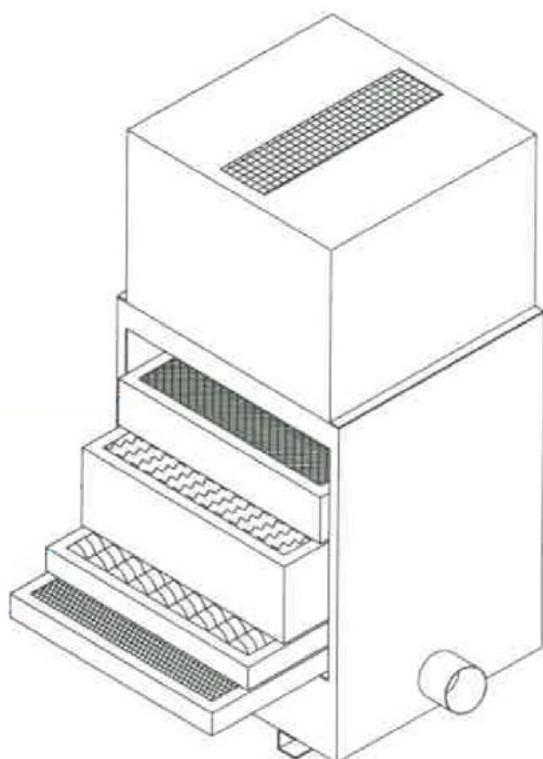
Filtration efficiency up to 99.95%

Particles with volume  $\geq 0.15 / 0.3 \mu$

Suitable for the abatement of micro-mists, micro-dusts and fumes

### 4°STAGE ACTIVE CARBON

12,5 kg



## TECHNICAL DATA

### EACH UNIT IS EQUIPPED WITH:

- Low consumption motor **IE2 / IE3** class (ULCSA on request)
- **ABB / SIEMENS** overload cutout switch (ULCSA on request)
- Filter clogging detector / Digital pressure gauge
- **HEPA H13** final filter, with very high filtration efficiency



### ARF

**ARF 700** 700 m<sup>3</sup>/h

**ARF 900** 900 m<sup>3</sup>/h

### SUITABILITY FOR POLLUTANT AND MICRODUST

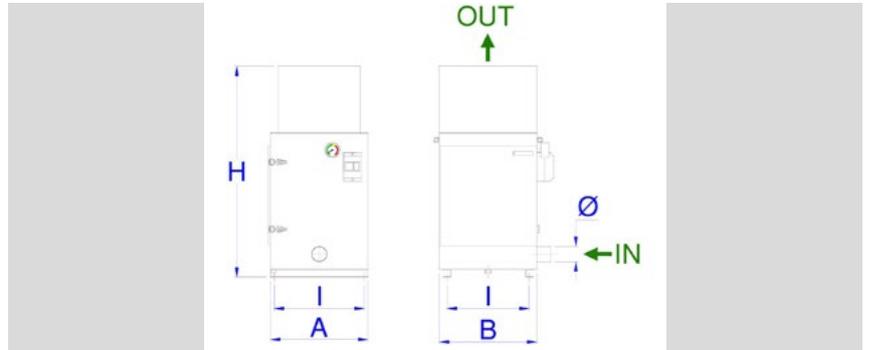
- DESIGNED FOR WET AND DRY FUME EXTRACTION

MODEL	SUCTION INLET Ømm	MAX. AIRFLOW m <sup>3</sup> /h	PREVALENCE mm/H <sub>2</sub> O	POWER kW	TENSION FREQUENCY V Hz	NOISE dB
ARF 700	100	700	180	0,55	230/400 50	61
ARF 700 FA	100	700	180	0,55	230/400 50	61
ARF 900	100	900	170	0,75	230/400 50	61
ARTF 900 FA	100	900	170	0,75	230/400 50	61

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.

## TECHNICAL DATA

## ARF SERIES



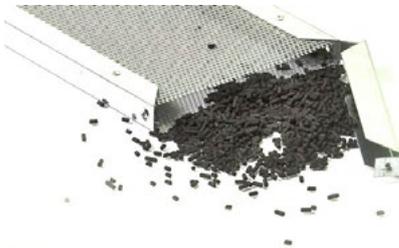
MODEL	A mm	B mm	I mm	H mm	WEIGHT Kg
ARF 700	460	500	420	1050	80
ARF 700 FA	460	500	420	1050	95
ARF 900	460	500	420	1050	85
ARF 900 FA	460	500	420	1050	100

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.

## OPTIONAL

**DIGITAL FILTER CLOGGING CONTROL DEVICE**

As an alternative to the analog pressure gauge, our digital pressure gauge sends a signal to the machine tool, alerting you to do maintenance.

**ACTIVE CARBON**

Activated carbon breaks down odors, fumes, VOCs and formaldehyde

**SELF-SUPPORTING ARTICULATED ARM**

Portable and flexible arm for all manual and occasional operations

**SELF-ADJUSTING CONTROL OF THE REQUIRED AIR FLOW RATE, THROUGH INVERTER**

AR FILTRAZIONI Technology

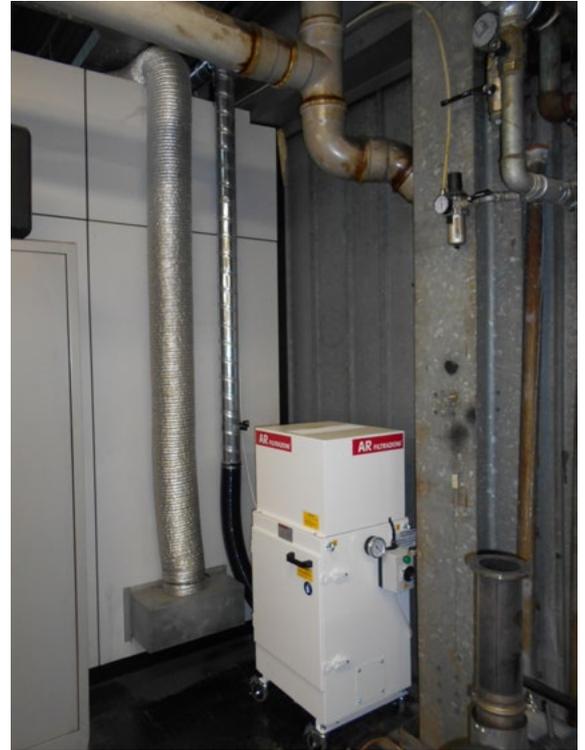
**R&D OFFICE**

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 mist collectors and accessories have a "Made in Italy" certificate.

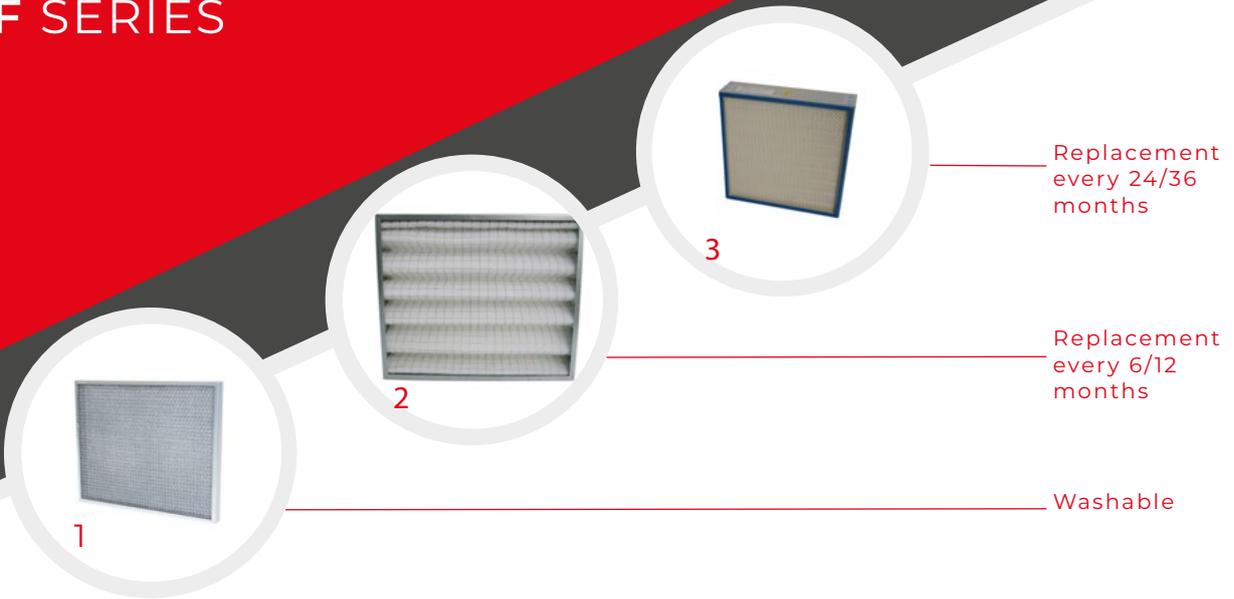
# INSTALLATION

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: each system comes complete with an installation kit and an instruction manual, which make the installation of our filter units incredibly intuitive all over the world.

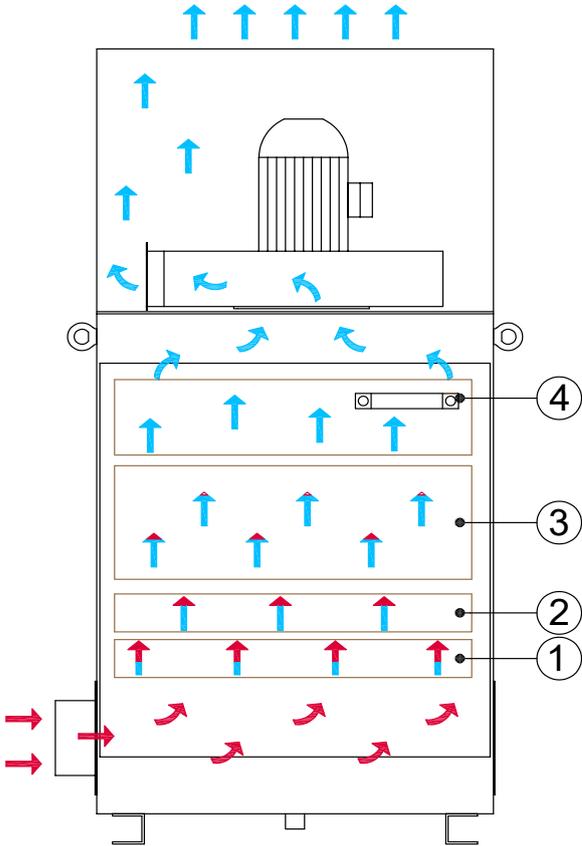


# MAINTENANCE

## ARF SERIES



Replace as needed



**REPLACE / CLEAN SPARE FILTERS**  
when the red LED light turns on



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

# REGULATIONS



EN 1822 - ISO 29463

UNI 11304-3

D.d.u.o. n.12772

- **UNI 11304-3:** Filtration units for oil mist, to be treated with a machine-mounted filter for the re-introduction of the air inside of the workplace
- European Standards **ISO EN 16890** (ex EN779) with a filtration efficiency of  $\geq 95\%$  - Particles with volume  $\geq 0.4 \mu$
- Final filtration stage according to **EN1822** and Italian standards, with High (EPA) or Very High (HEPA) filtration efficiency up to 99.95% of particles with  $0.15 / 0.3 \mu$  volume (micro-mists, micro-dusts, fume)
- Device to monitor filter conditions
- Overload cutout switch (in accordance with CE standards)
- Test certificate for each unit

## HEPA Filter H13 EN 1822

Very high efficiency filter

Filtration efficiency up to 99.95% of particles with volume  $\geq 0.15 / 0.3 \mu$  (micro-particles)




99.95%

## REFERRING TO THE ITALIAN EFFECTIVE RULES:



The **ARF** series complies with the **Technical Annex n.32** of 10 January 2012 - **D.d.u.o. n.12772 of 23/12/11** referring to extracted and filtered emissions by on-board filter with clean air returned to the workshop, through the top of the unit.

### FILTER UNIT TEST BY *Studio Ambiente S.N.C*

#### MIST COLLECTOR'S OUTPUT ON AUTOMATIC LATHE 6/32

Parameter	Determined values (mg/m <sup>3</sup> )	Reference levels (TLV/TWA) (mg/m <sup>3</sup> )
Mineral oil / oil mist	0.04	5
Room temperature 18.5°C / 65.3°F		

Specific sampling to evaluate the efficiency of the suction and filter system after periodical maintenance with filter replacement (ARNO 2CF filter unit no. 13 serial no. 04607/2007 with new ABSOLUTE HEPA filter) placed to control an automatic lathe for machining the bar in AVP with neat oil coolant.

## VALUE

Forty-year-long  
know-how

Free consultancy

Free of charge, technical  
inspection and analysis

Sales and Assistance with  
non-binding quotation

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.

- **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 mist collectors



MIST COLLECTORS OF OIL MIST, FUME AND DUST FOR MACHINE TOOLS

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Member of CISQ Federation



CERTIFIED MANAGEMENT SYSTEM  
ISO 9001



[www.mistcollector.com](http://www.mistcollector.com)

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