



TECHNICAL DATA

ART / ARTU' SERIES

The mist collector for dust and micro-dust generated by dry processing



THE ULTIMATE SOLUTION

To filter and collect dust in metalworking workshops

VISIT OUR WEB SITE
www.arfiltrazioni.com

SINCE
1995

STRONG POINTS

ART / ARTU'

Very high Head

Powerful!
Up to 3.800 m³/h



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 machining

50%

Self-cleaning filters with shaker

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.

VANTAGGI



- Easy and simple maintenance, once a year
- Robust mechanical parts, high operational reliability
- Recovery of the re-condensed oil
- Total compliance with Italian and European regulations
- Energy saving
- Reduction of CO₂ emissions
- Protection of sensitive machine tool parts
- Health-conscious and environment-friendly

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

AR FILTRAZIONI S.R.L.
Via dell'Industria 59/61
Bergamo BG 24126

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www.arfiltrazioni.com
www.mistcollector.com

WORKING PRINCIPLE

The ARTU' M series is suitable for the suction and purification of dust generated by dry machining processes. With its dedicated hopper, it is also suitable for processing graphite.

Special pockets retain the dust on the external surface. A cleaning system by means of a manual mechanical shaker keeps the suction and filtration efficiency constant. An electro-pneumatically controlled cleaning system can be fitted on request.

Dust is collected in an easily removable container.

This series can be equipped with a hopper and a collecting dust drawer, on request. The modular set-up of this series allows each model to be equipped with a High (EPA filter) or Very High (HEPA filter) Efficiency filtration stage - in accordance to European standards EN 1822 - suitable for the reduction of micro-dust and fumes, which is already standard in ARTU models.

The ART series (excluding AR1T) is equipped with IE3 class motors with low energy consumption and an overload cutout switch. For specific requirements it is possible to equip the AR4T with a suitable impeller.

ART + FAE

X°STAGE

COLLECTING DUST DRAWER

1° STAGE POCKET FILTER

RIGID POCKET FILTER IN POLYPROPYLENE

- Self-cleaning with manual/pneumatic jolting system

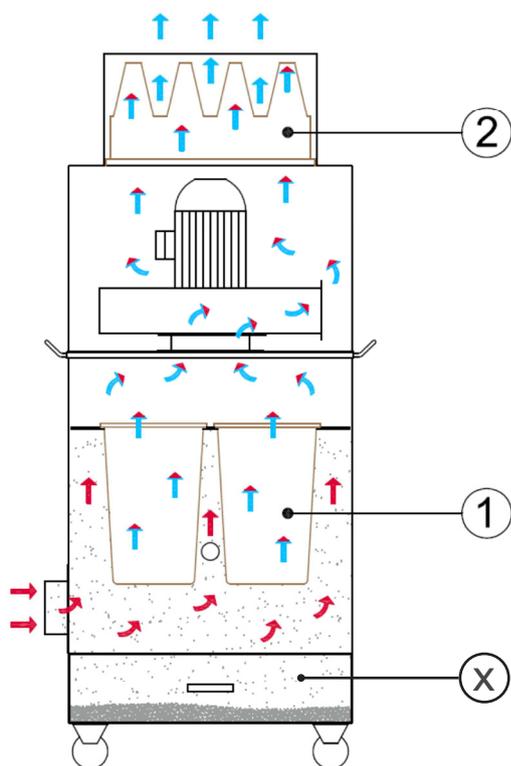
2°STAGE HEPA FILTER

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

European Norm EN1822

Filtration efficiency up to 99,95%

Particles with volume $\geq 0,15 / 0,3 \mu$



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Special pockets retain the dust on the external surface. A cleaning system by means of a manual mechanical shaker keeps the suction and filtration efficiency constant. An electro-pneumatically controlled cleaning system can be fitted on request.

Dust is collected in an easily removable container.

Each model is equipped with a final filtration stage with High (EPA) or Very High (HEPA) efficiency of filtration, in accordance to European standards EN 1822, suitable for the reduction of micro-dust and fumes.

For specific requirements, it is possible to equip the ARTU' M series with a suitable impeller.

ARTU' M

X STAGE

DUST COLLECTION HOPPER

1° STAGE POCKET FILTER

RIGID POCKET FILTER IN POLYPROPYLENE

- Self-cleaning with manual/pneumatic jolting system

2° STAGE HEPA FILTER

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

European Norm EN1822

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TECHNICAL DATA

EACH UNIT IS EQUIPPED WITH:

- Low consumption motor **IE2** class (ULCSA on request)
- **ABB / SIEMENS** overload cutout switch (ULCSA on request)
- Filter clogging detector; analogue/digital pressure gauge
- Up to **HEPA H13** final filter, with very high filtration efficiency
- 100% designed for dry machining



ART

ART1 700 m³/h

ART2 1000 m³/h

ART3 2200 m³/h

ARTU' M

ARTU' M3 3000 m³/h

ARTU' M4 2700/3800 m³/h

POLLUTANT SUITABILITY

- EXCLUSIVELY DESIGNED FOR DRY MACHINING OF NON-HAZARDOUS MATERIALS
- SUITABLE FOR CAST IRON / GRAPHITE POWDER

MODEL	SUCTION INLET Ømm	MAX AIR FLOW RATE m ³ /h	HEAD mm/H ₂ O	POWER kW	TENSION FREQUENCY V Hz	NOISE dB
ART1	80 / 100	700	180 - 190	0,55	230/400 50	65
ART2	100 / 120	1000	150 - 210	0,75	230/400 50	67
ART3	150 / 200	2200	230 - 360	3	230/400 50	76
ARTU' M3	200	3000	230 - 360	3	230/400 50	76
ARTU' M4	150 / 200	2700 / 3800	290 - 400	4	230/400 50	79

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

THIS MIST COLLECTOR IS NOT SUITABLE FOR THE SUCTION OF POTENTIALLY EXPLOSIVE DUST.

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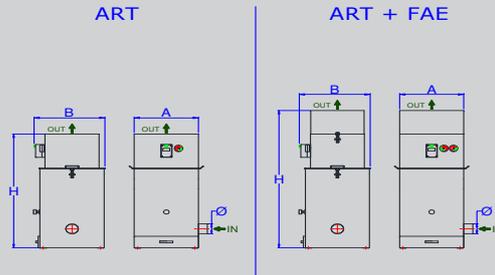
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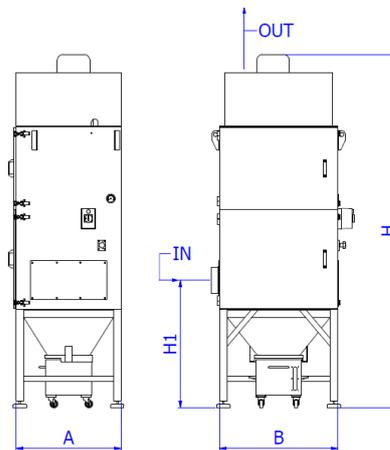


ART SERIES



MODEL	A mm	B mm	H mm	WEIGHT Kg
AR1T	500	470	1400	85
AR2T	600	500	1450	120
AR1T+EPA/HEPA	600	500	1700	95
AR2T+ EPA/HEPA	600	500	1750	130

ARTU' M SERIES



MODEL	A mm	B mm	H* mm	H1 mm	WEIGHT Kg
ARTU' M3	800	900	2765	1075	390
ARTU' M4	800	900	2815	1075	400

* the height depends on the size of the rotor

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OPTIONAL

PNEUMATIC SHAKER + TIMER

For electropneumatic cleaning with timer



OPTIONAL HOPPER (STANDARD FOR ARTU M)

With special lock gate

Rotary round valve



OPTIONAL HEPA FILTER

Filter efficiency up to 99.95% for particles with volume $\geq 0,15 / 0,3 \mu$



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



DOUBLE-OUTLET PLATE WITH LOCK GATES

Double outlet layout:

: One outlet with 150/200 mm diameter
(for machine tool)

: One outlet with 60 mm diameter
(for manual cleaning with suction hose)



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

AR FILTRAZIONI Technology

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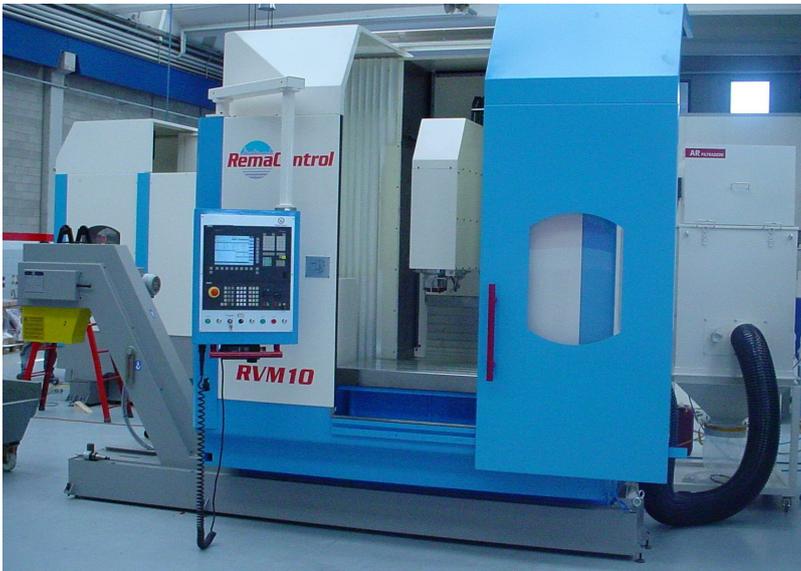
R&D OFFICE

AR Filtrazioni also 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 machining processing 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 is equipped with an installation kit and instruction manual, which makes the installation of our filter units incredibly intuitive all over the world.



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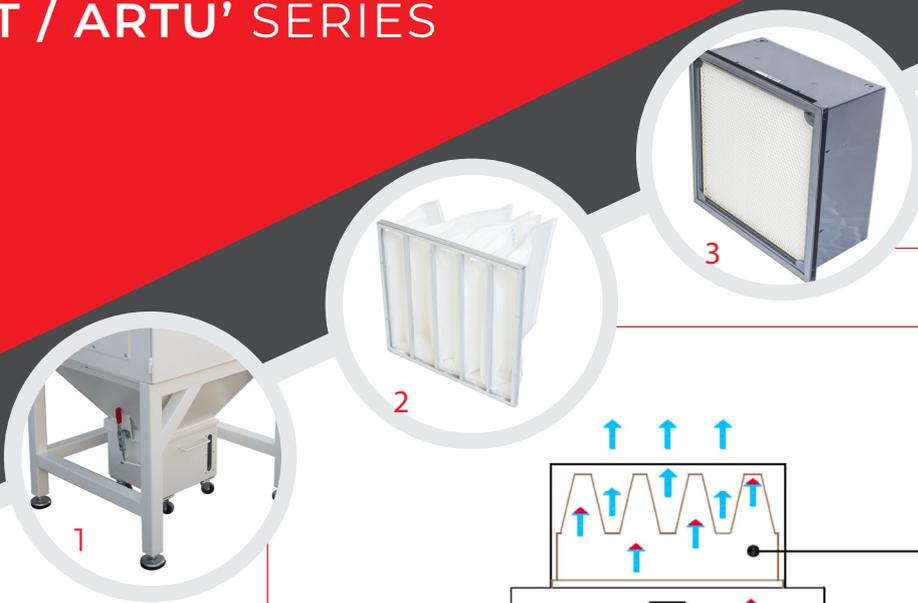
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MAINTENANCE

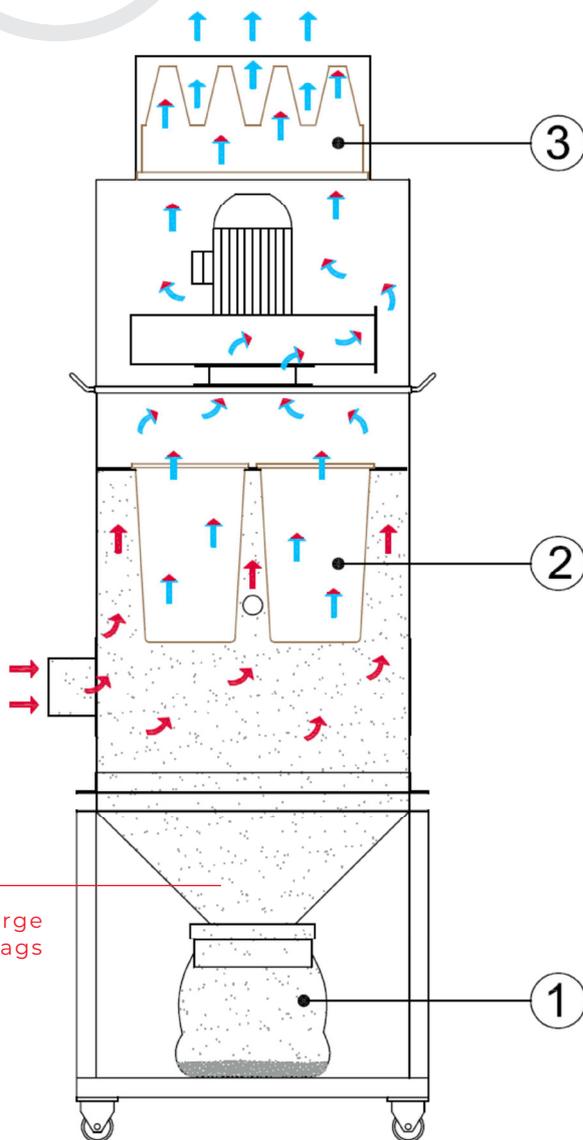
ART / ARTU' SERIES



Replacement every 24/36 months

Self-cleaning with shaker

Replacement every 12/24 months



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



Dust discharge hopper in bags for easy collection

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

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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 up to 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)



REFERRING TO THE ITALIAN EFFECTIVE RULES:

The **ART** 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 ³)	Reference levels (TLV/TWA) (mg/m ³)
Mineral oil / oil mists	0.04	5

Room temperature 18.5 °C

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.
- **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 mist collectors



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Member of CISQ Federation



CERTIFIED MANAGEMENT SYSTEM
ISO 9001



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