

## TECHNICAL SHEET ARPX SERIES

The trolley-mounted air cleaner of oil mist, fumes and micro-dust for machine tools, manual deburring and welding operations.



## THE ULTIMATE SOLUTION

for the filtration of oil mist in metalworking workshops.

VISIT OUR WEB SITE www.arfiltrazioni.com

# STRONG POINTS

# SERIE ARPX









Over 26,000 units installed!

Powerful! Up to 3.200 m³/h Up to 1880 CCFM







Modular and flexible



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**

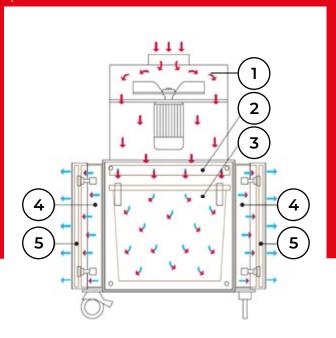
- Easy and simple maintenance, once a year; high operational reliability
- Robust mechanical parts, low space requirement
- · Recovery of 80% of the re-consensed oil
- · Total compliance with Italian and European regulations
- Energy saving of 415,00€/year for each air cleaner
- Reduction of CO<sub>2</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

# WORKING PRINCIPLE

Suitable for the suction and purification of dust and oil mist generated in dry and wet processes, especially in cases where good air flow rates are necessary and in the absence of great loads of dust.

The series is suitable for cleaning particles of different granulometry through the simple use of interchangeable filters with different filtration performance.





# **ARPX**

# 1° STAGE CENTRIFUGE SELF-CLEANING CENTRIFUGAL CONDENSER

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

## **2°STAGE** METALLIC FILTER

PREFILTRATION CELL IN GALVANIZED STEEL
European standards ISO EN 16890
Filtration officiancy > 0.5% - Darticles with

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

## **3°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
- · In case of dust suction, it works as a container

# **4°STAGE** COALESCENCE FILTER BLACK PANEL FILTER BY COALESCENCE EFFECT

- · Washable
- · Diffusor
- · Silencer

#### **5°STAGE** 2 HEPA FILTERS

FINAL FILTRATION WITH VERY HIGH (HEPA) EFFICIENCY

European standards EN1822 Filtration efficiency up to 99.995%. Particles with volume ≥ 0.15µ

· Replacement every 24/36 months

# 6°STAGE ACTIVE CARBON CELL

For the reduction of odors, fumes, VOCs and formaldehyde.

# 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; analogue/digital pressure gauge 4.0
- Drainage tube for the recovery of re-condensed coolant (about 80%, if neat oil)
- Up to HEPA H13 final filter, with very high filtration efficiency
- Dust collection bag

## AR 2PX

1500 / 1700 m<sup>3</sup>/h 880 / 1000 CFM

## AR 3PX

2600 / 3300 m<sup>3</sup>/h 1530/ 1940 CFM



## SUITABILITY FOR POLLUTANT

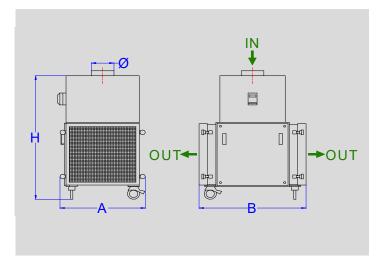
- DUST / MICRODUST
- MICRODUST / FUMES / OIL MIST
- VOC / FORMALDEHYDE / FUMES
- > SERIE ARPX
- > SERIE ARPX AE AEM
- > SERIE ARPX CA

## TECHNICAL DATA AND DIMENSIONS mm

MODEL ARPX		SUCTION INLET	MAX. AIR FLOW	POWER	TENSION FREQUENCY	NOISE	WEIGHT
		Ømm	m³/h - CFM	kW	V Hz	dBa	Kg
AR2PX - AR2PX A	Æ	150	2400 - 1410	1,5	230/400 50	72'	110 -120
AR2PX AE M		150	2400 - 1410	1,5	230/400 50	72'	130
AR2PX CA		150	2000 - 1170	1,5	230/400 50	72'	160
AR3PX - AR3PX A	Æ	200	3200 - 1880	2,2	230/400 50	76'	120 -130
AR3PX AE M		200	3200 - 1880	2,2	230/400 50	76'	140
AR3PX CA		200	3000 - 1760	2,2	230/400 50	76'	170

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In the AE/AE M version, each air cleaner is equipped with two highefficiency filters (EPA Ell filter) – in accordance with European standards EN 1822 – suitable for the abatement of micro-dusts and fumes, and therefore complying with the Technical Attachment n.32 published in the official bulletin of Lombardy n.2 of 10th January 2012 - D.d.u.o. n.12772 of 23/12/11 – concerning the emissions sucked and treated with a filter on the machine and re-introduced into the workplace.

In the CA version, the ARPXCA series is suitable for the purification of fumes, exhalations and smells generated by different types of processing (EDM, presses, induction hardening, ovens, molding, welding, etc.). The pollutant sucked in goes through a sequence of special filters, depositing almost all its solid particles. The final stage is constituted by two active carbon cells that abate gases, exhalations and smells.

In the N version, a standard predisposition allows the drainage of the re-condensed liquid, with a recovery of 78%.

The ARPX series is equipped with a low energy consumption I3 class motor, a cutout switch and a visual filter clogging detector.

M M	MODEL ARPX	Α	В	н
2	AR2PX - AR2PX AE	700	950	1200
0	AR2PX AE M	700	1400	1200
S	AR2PX CA	700	950	1200
Z Z	AR3PX - AR3PX AE	700	950	1200
Σ	AR3PX AE M	700	1400	1200
Ω	AR3PX CA	700	950	1200

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**



#### DOUBLE STAGE OF ABSOLUTE FILTRATION

For a long-lasting absolute filtration with sieve effect.



#### **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.



#### WHEEL KIT





ARTICULATED SUCTION ARM

#### 2 ACTIVE CARBON CELLS

They eliminate odours, fume, VOCs and formaldehyde.

Total amount 40 Kg

#### **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 microdusts generated during the machining processes.

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

# INSTALLATION

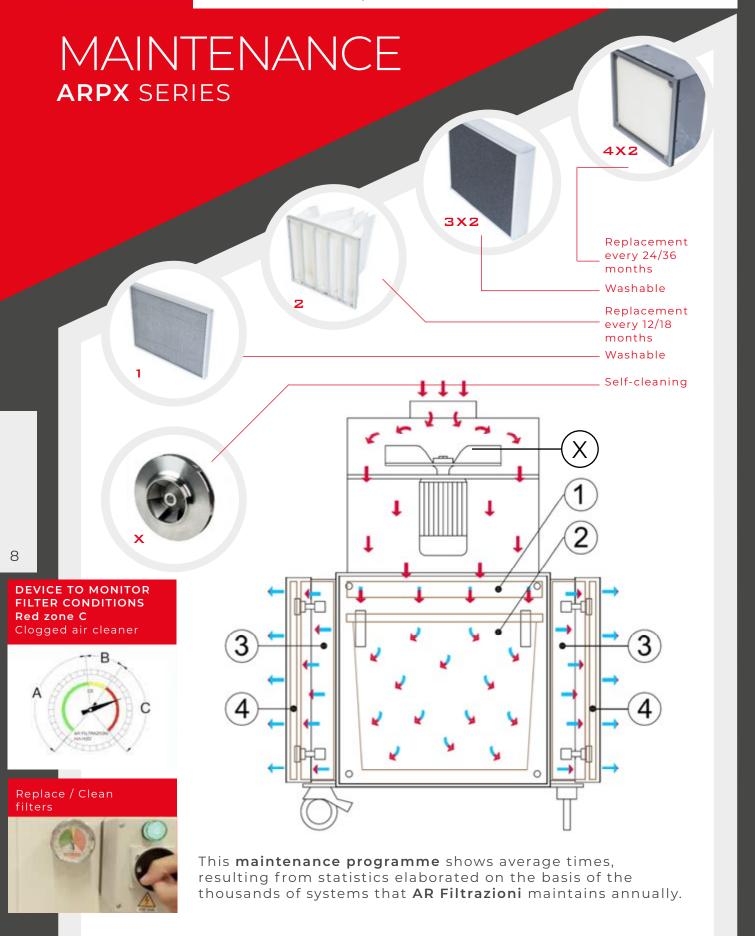
At **AR Filtrazioni** we always offer turn-key solutions, installing the filters at the customer 's premises thanks to our specialized personnel.

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.











EN 1822

D.d.u.o. n.12772

- 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 99.995% of particles with 0,15 µ 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 99.995% of particles with volume ≥ 0.15µ (micro-particles)





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### REFERRING TO THE ITALIAN EFFECTIVE RULES:

The ARPX 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/m³)	Reference levels (TLV/TWA) (mg/m³)				
	Mineral oil / oil mist	0.04	5				

Room temperature 18.5 °C / 63.5 °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.

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

# **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.
- Outsorcing 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

























CONTATACT US

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