



PORTABLE AIR CLEANERS

Portable or trolley-mounted air cleaner for local applications

Portable air cleaners are the best solution for aspiration and abatement of dust, welding fumes, gas, oil mist and odors produced in particular conditions such as:

- enclosed places difficult to reach with other abatement systems;
- occasional processing;
- low and medium levels of pollutant emissions

Tecnosida offers standardized models of portable air cleaners (described below), but also designs tailor-made filters that meet customers' needs (read our case history).

AER – PORTABLE COMPACT AIR CLEANER

AER is a portable air cleaner characterized by small dimensions, that can be easily transported and used also in specific and continuous applications. For example, it can be used in conjunction with wire welding systems, treating the fumes directly at source simultaneously with the welding process. The used filtering method makes AER adapt for the aspiration of oil-free fumes generated by welding processes, for relatively limited operating times.

Applications of AER

This kind of portable air cleaner can be used to aspire welding fumes with medium-low concentrations of pollutants. It can be used indoor or in places that are difficult to reach with commonly-used suction systems.

Construction features of AER

- external structure in painted sheet steel, resistant to accidental impact;
- lightweight: this characteristic makes AER easy to transport, also thanks to transport handle or wheels;
- filter section with spark-trap pre-filter, pre-treated paper filters and an activated carbon filter;
- monophase suction fan with brush motor and indicator lamp for correct functioning;
- flexible hose with one plastic suction intake.

UNI – WELDING FUMES CLEANER

UNI is designed to protect the operator from welding fumes ensuring an easy movement for the operator into the working space, without having to install fixed extraction plants. The mechanical filters are easy to be replaced and are not expensive. UNI is the ideal solution to respect the regulations in force on safety at work.

Applications of UNI

UNI is the perfect solution for the fumes extraction in intermittent welding operations, such as spot welding, electrode, wire or MIG-MAG welding. These contexts are characterized by the production of low/medium concentrations of pollutants and particles in suspension.

Construction features of UNI

- 3 meters long articulated arm, having a 160 mm diameter. It also has an aluminum hood complete with damper and multidirectional hinge;
- very compact and easy to handle structure, made of sturdy powder coated steel sheet, complete with casters, handle and lifting eyebolts;



- electrical control panel with power-on and unit operating and filters clogging indicator lights;
- high efficiency centrifugal fan located downstream of the filtering section, into a special soundproof room;
- filter section consisting of a series of acrylic and metal filters. It provides a final filtration efficiency of F9 class according to EN779;
- optionally equipped with an active carbon filter.

ICAF – MOBILE AIR FILTER UNIT

Applications of ICAF

ICAF is a trolley-mounted air cleaner. Thanks to the high filtering surface and to the design characteristics, ICAF is the ideal solution for:

- suction and filtration of welding fumes;

- suction and filtration of fumes from occasional manual thermal cutting;
- adsorption of low concentrations of substances produced by various applications in the industrial and chemical sectors (gases, oil-free vapours, odours...).

The operator's safety is ensured by the high quantity, quality and lifetime of the activated carbon sections and also by the wide filtration surfaces that are employed in ICAF. Another important advantage is represented by the treatment provided to the air around the working area; ICAF filters not only a limited work area, but creates an air change for the entire working ambient by decreasing the levels of present pollutants.



Construction features of ICAF

- self-loading structure in powder painted sheet steel, complete with wheels and handles, and featuring dimensions and weight for an ergonomic use;
- high efficiency extraction unit. This unit is coupled to a structure with plug fan system and centrifugal impeller with welded backward-turned blade, suitable for handling heavily dust-laden air. The system is protected by an electro-welded safety grille;
- multi-stage filter section, designed for heavy duty applications with high loads in severe conditions. Each section contains 4 different types of filters inserted in a battery with progressive and differentiated loading to allow high efficiency and duration through time. The active carbon filters, inserted in flat cells equipped with vibration systems, guarantee a filtration continuity on the whole surface. The value of the crossing speed is low: this allows to obtain high contact times and high filtration efficiencies;
- electrical control panel, with IP65 protection;
- articulated arms complete of adjustable suction hood in coated painted steel, complete of control damper, anti-intrusion grille and a lifting handle. The articulated arms can have a diameter of 160 mm and a length of 3-4 m, or a diameter of 200 mm and a length of 3 m.

ECART – PORTABLE CARTRIDGE UNIT 2000/4000

Applications of ECART

The ECART portable unit can be used for the suction and the filtration of:

- fumes produced in welding or plasma cutting processes;
- dusts produced in sanding, cutting, grinding and others processes;
- very fine dusts and wastes.

Construction features of ECART

The ECART mobile filters are realized with panels made of sturdy bolted galvanized sheet, to maintain the correct relation between weight and robustness.

The main characteristic of this product is the considerable filtering capacity; furthermore, ECART has reduced dimensions and permits an easy access to the cartridges.



It is possible to install various types of cartridges according to the pollutant to be treated. All models can be supplied complete with mobile suction arms having different diameters and lengths, or with different flexible hoses whose length may be up to 20 m.

HDCA 2.0 – CLEANER FOR PAINTING

HDCA 2.0 is a mobile extraction and filtration system, specific for all types of operations requiring an active carbon filtration; it can be used for the filtration of paint mists and exhalations arising from catalysis processes.

Applications of HDCA 2.0

HDCA 2.0 may be used to extract and filter fumes and sprays produced in painting, bonding and resin treatment/lamination processes.

Advantages of HDCA 2.0

- compact and ergonomic design, that permit an easy handling in the working zone;
- the localized aspiration is provided by a flexible hose having a diameter of 200 mm and a length up to 20 - 30 m;
- efficient filtration, carried out by polyester pre-filters followed by an active carbon system;
- wide filtering surface, that allows to obtain adequate values of crossing speed and contact time. These parameters permit an expected adsorption efficiency of 95%;
- reduced environmental noise - 75 dB;
- 220 V - 50 Hz power supply;
- ease of use and maintenance.

Contact us to know prices and special discounts related to these products!

