Electrostatic Filter





The EF by CORAL consists of modular units for electrostatic filtering of air from pollutants, such as oil mist, powder, welding fumes and industrial fumes in general. The modular features of the range concern:

Modular capacity : the standard units can handle air delivery from 2,000 m³/h each, can handle over 48,000m³/h.

Modular system construction: the electrostatic filtering units can be connected to mechanical pre-filtering modules(pocket, labyrinth, drip separators, etc.) for filtering course sized pollutants, active carbon post-filtering units for 100% comparable results and modules fitting fans for moving the air.

The EF by CORAL range units is made of environmentally friendly oven painted, bolted, special bent steel. The units are tough and suitable for fitting also in the open air, if the need to save indoor space arises.

All units are equipped with a pre-drilled flange for easily connecting to the suction system. Supporting feet and eyebolts are provided on the upper part of the filter for fastening.

The range units present horizontal and vertical development and are suitable for both dry (powder) or wet (oil mist) filtering. In the latter case, the units are equipped with a collection system and drain holes.

The particles, flowing through the ionizing area A (consisting of tungsten wires powered at 10KV D.C hanging between earthened electrodes) pick up a single-pole electrical charge. carrying on, the particles enter the collecting area B (consisting of pure aluminum plates, powered at 5 KV / 3.5 KV D.C. alternate with earthened plates) where they are rejected by the charged plates and thrown towards the earthened ones, by which they are firmly retained. The particles retained on the filter can be periodically removed by easy operation of maintenance.

Features

The electrostatic filters ensure the purification of air from polluting elements such as fumes, dust, motes, products, from welding processes ,oily fogs etc. generated by industrial processing.

Such pollutants can have a granulometry ranging in value from 10 to 0.01 micron.

The loss of charge of the electrostatic filter can vary from 40 pa (clean filter) to 80 pa (dirty filter)

The concentration of pollutants can reach up to 50 mg/m³.

The temperature of the fluid should not exceed 60C and the relative humidity can vary from 20 to 99%

Control Panel

All electrostatic wires are powered with direct current (10 KV at the ionizing section and 5 KV at the collecting section) through a high voltage circuit equipped with earthing discharge of the voltage, remaining in the filters when the power is cut ogg.

The high voltage circuit is protected against accidental short-circuits and possible jump sparks between the electrodes. Each module is equipped with a safety micro on the door and an electronic control panel run/ stop

The panel is equipped with on/off switch, current on warning light, signaling light for the filter circuit check, adjustable electronic circuit for filter performance with switch-over relay for a possible external warning light indicating the intervention time for the cleaning.

The EF 8 and higher models are equipped with the exclusive ACC (Aernova Check Control)device for continuously monitoring filtering parameters. This device can interface with a PLC and is available as an optional device in all standard modules.

