# ECOVAC with rotating brush

Ionizing and vacuuming dedusting system



The ECOVAC with rotating brush allows antistatic removal of wood chips and other polluting particles. This system, made to measure, can be adapted for strip, sheet or plate. The following actions are inseparable to allow the dedusting:

- Mechanical force to separate the particles from the support
- Air ionization to eliminate the electrostatic attraction
- Suction for the evacuation of the particles

We find these three actions jointly linked in the ionizing dedusting system.

- Performance
  - Compact
  - Robust
- Proven reliability
- Standard version in stainless steel
- Adapted to the most demanding specifications
  - Custom-made and fast delivery

## The system

*The mechanical action,* provided by the rotating brush, lifts the particles from the support, making their electrostatic charge appear. The position and the adjustments guarantee an optimum quality of dust removal.

Air ionization eliminates the phenomenon of electrostatic sticking. It is achieved by the CORONA effect. Each ionizing tip connected to high voltage generates an electric field charged with positive and negative ions (electrons). When the material to be treated is under the influence of this electric field, a transfer of electrons (negative ions) takes place until the charges on the surface of the material are neutralized. In dedusting system, the ionization tips are connected to the high-voltage source by a capacitive device, which limits the current to a few micro-amperes. This means that there is no danger of the operator meeting the live tips.

The large suction diameter is calculated in correlation with the specificities of the surface to be dedusted.



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### **TECHNICAL DATA:**

**Length:** Made to measure.

Materials used for the suction box: 304L stainless steel for food, pharmaceutical and cosmetic industries, or painted steel.

**Cylindrical brush:** gasket and size adapted according to the application.

**Moto-reducer:** Rotation of the brush according to the needs.

**Suction connection:** Sleeves diameter 80 to 200 mm according to the length of the active part.

**Static bars:** 2 capacitive static bars type ECA 88 B.

**Connection cable to the generator:** Set delivered with two high voltage shielded cables of 3 meters length.

Other lengths on request. Connection to high voltage on terminal block.

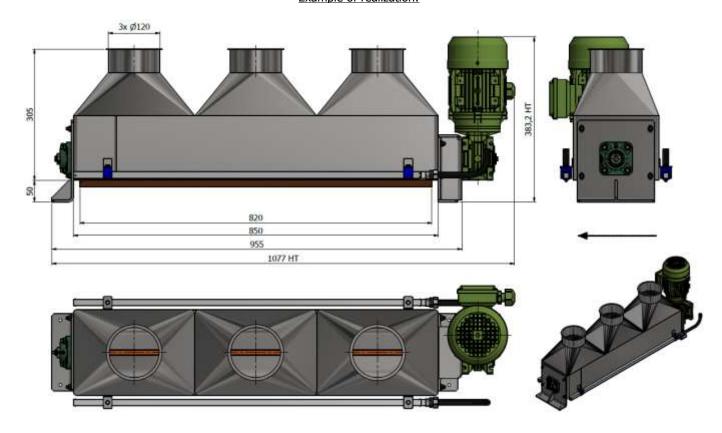
**Vacuum cleaner:** To be determined.

Recommended high voltage generator: SC 04 B SIB

# This equipment must not be used in flammable or explosive environments!

A good grounding of the antistatic bar and the generator is essential for a good operation of the equipment.

### Example of realization:





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