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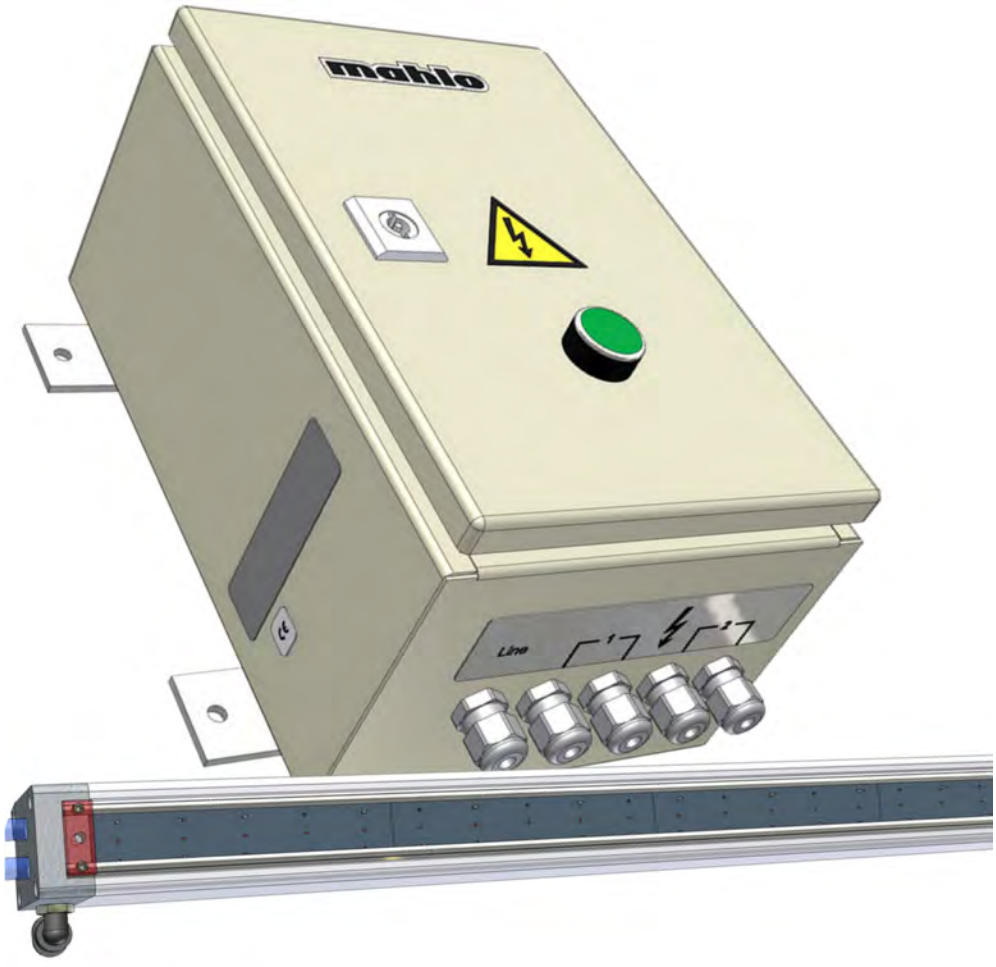
ANTISTAT AMW-12

Online air ionizer



Quality made
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TEXTILE
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ANTISTAT AMW

Effective against static charge

Static electricity is a nuisance, and a hazard, and attracts dirt!

Area of application

Customer benefits

- ✓ *Troublefree operation*
- ✓ *Greater product quality*
- ✓ *Reduced risk of accidents*

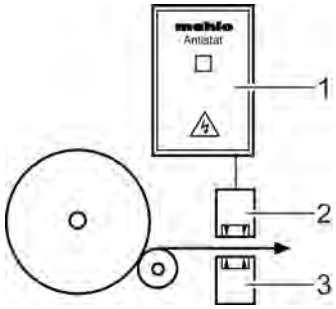
Electrostatic charges may significantly interfere with various production processes and become rather troublesome. If the polarity of the charges differs, their attractive and repulsive forces not only affect the warp threads. They cause sheets of papers to cling together, feathers and fibres develop lumps and attract dirt particles from everywhere onto surfaces that should be clear and clean. Sudden discharges of highly charged coils, rollers, spools, bales or carts when touched accidentally are unpleasant and may trigger hazardous reactions.

Product highlights

- ✓ *Suitable for high and low product speeds*
- ✓ *Complete ionisation of the air*

The elimination of electrostatic charges is therefore indispensable for many production processes to ensure troublefree operation!

Principle of operation



Electrostatic charges are created through friction and subsequent separation of two materials if their positive and negative charge carriers (ions) cannot be discharged from the respective object because it is non-conducting.

1 Generator
2 Ionizer 1
3 Ionizer 2 (only for thick products)

Electrically conducting air

Discharge must therefore create an electrically conducting bridge from the isolated charge carrier islands to the ground or general mains. Ionized air – that is, electrically conducting air – is ideal as such a bridge because it touches the charged islands everywhere and without fail.

The Antistat AMW generates such conducting air. High alternating voltage, applied through large series resistors to the needles of the ionizer rods, creates strong electrical fields around the needle tips. The molecules of the air are split (ionized) in the area of these fields ; the air around the tips becomes conductive and can discharge the electrical charge from the charged object when reaching it.

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TYPICAL APPLICATIONS

Three vital aspects

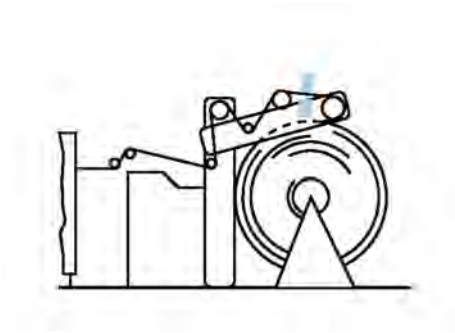
- The ionizer bars should be fixed so that they almost touch the surface of the material (no farther away than 20 mm).
- Heavyweight material may have to be discharged at both sides (see diagram below).
- Static can be generated again wherever there is friction or separation. It should be discharged, therefore, at that point where it is proving troublesome.

Ionizer bar

Typical applications

Winding

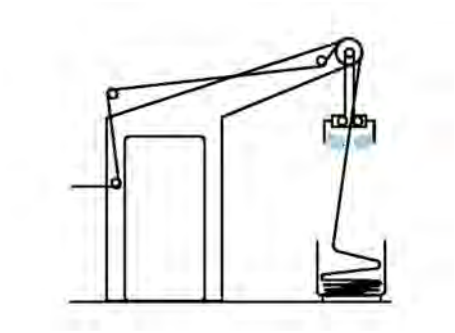
When winding fabric, especially in case of synthetic products, the materials may become electrostatically charged due to friction. Discharge is absolutely required to allow processing the product further without defect and hazard-free for the machine operator.



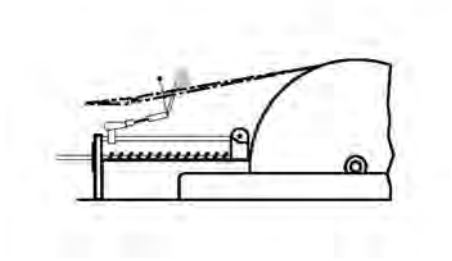
This is the case, for example, after the stenter. Double-sided discharge is required for heavy products.

Plaiting unit, tucker

The product may continue becoming statically charged while running through the production line. To avoid risks for workers and damages to the material, the product should be discharged once more during plaiting. The ends of the swivel range are a suitable location, for example.



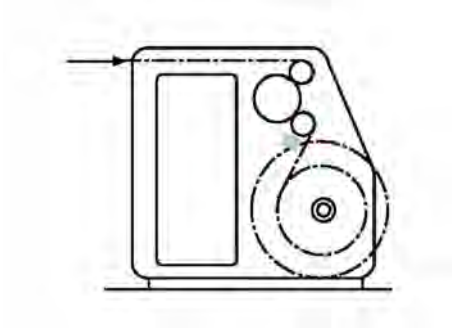
2 ionizers at both ends of the swivel range



Discharge after the comb

Warping machine

The warping machine is used to prepare loom beams for the weaving mill. During this process the fibres normally run through eyes or combs. There they become charged and can therefore repel one another. Fibre breaks or irregular entry into the shear rod are the result when the product is not discharged.



Discharge immediately before the loom beam

Sizing machine

When the product is sized, the threads become electrostatically charged while drying on drum driers or by rubbing against each other. Threads may tear as a result or run unevenly. Discharge immediately before the loom beam makes sure that the weft threads can be wound without problem.

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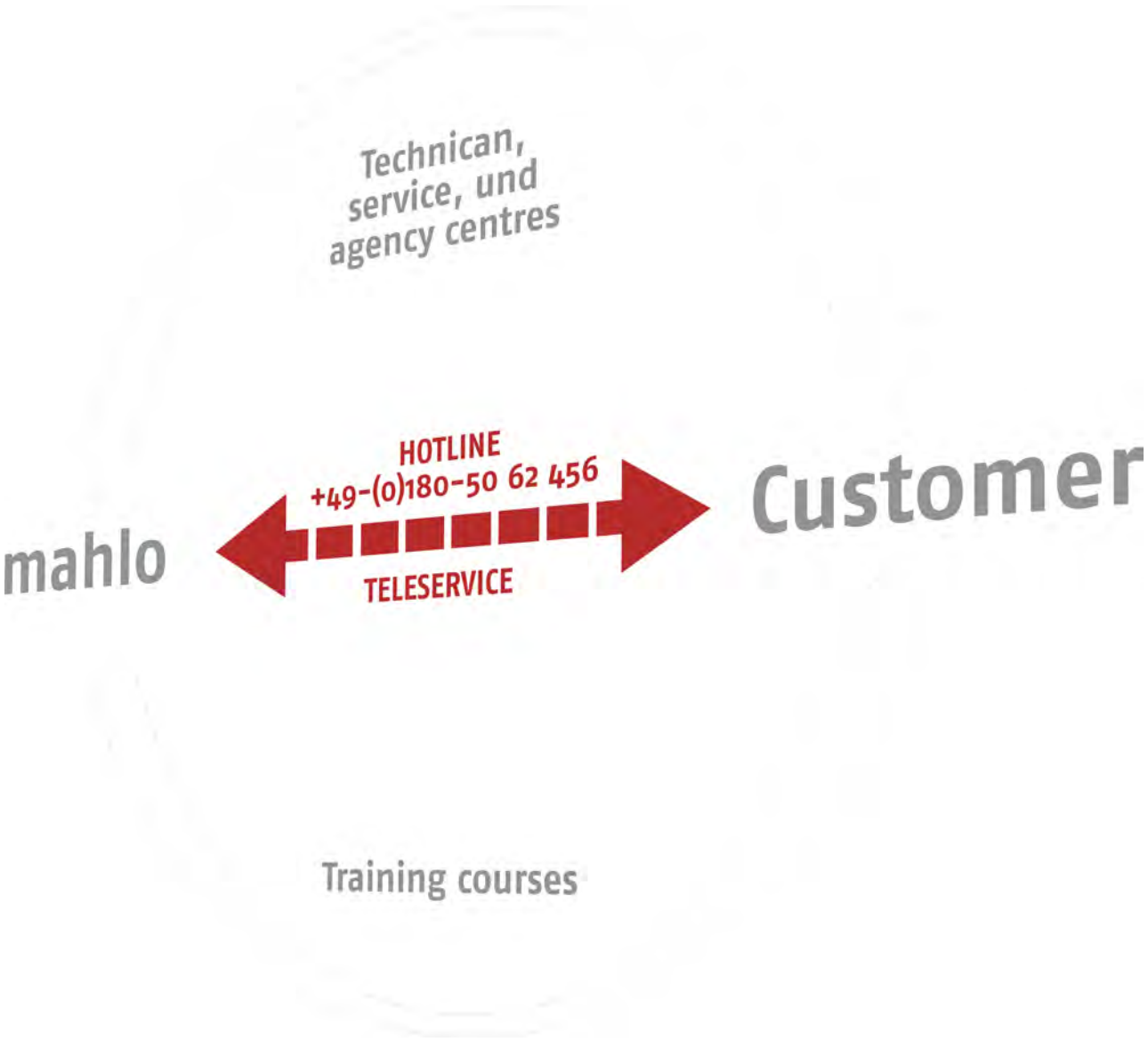
SERVICE AND SUPPORT



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TECHNICAL DATA

Device	Antistat AMW
Voltage Generator	
Version	High-tension transformer, totally enclosed in a block of hardened resin, and doubly protected by series-connected resistors. Impervious to heat
Outputs	Two 2 x 5 kV secondary outputs to feed up to a maximum of two 10 kV ioniser bars
Dimensions	210 mm x 150 mm x 130 mm
Weight	5.1 kg
Power supply	1 x 125 / 230 VAC
Line frequency	50 / 60 Hz
Power consumption	10 VA
Ioniser bars	
Version	A series of synthetic blocks joined together on a supporting rail; two 3 m long high-tension cables, permanently connected to the blocks
Dimensions	Length: working width + 100 mm, Cross-section: 22 mm x 40 mm
Weight	0.7 kg/m

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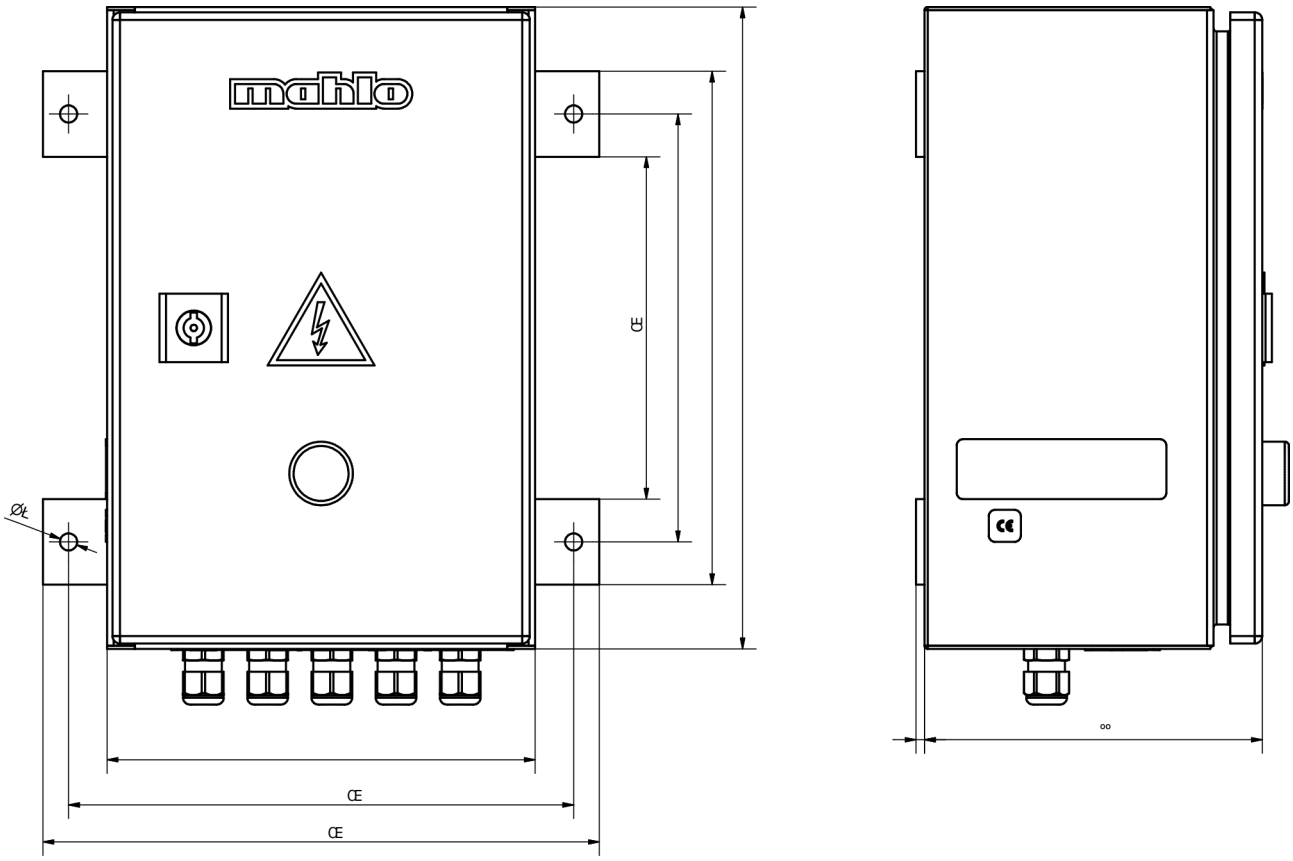
Dimensions



Antistat AMW (91-015371)

PERSONALITY

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01/2018 Subject to revision!