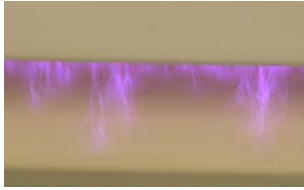




Design of a direct treatment station



The substrate to be treated is introduced directly into the discharge gap at the direct treatment.

Electrode design

symmetric e.g. for sheets, textile webs
asymmetric e.g. for film and work pieces
(seemingly only one electrode / counter electrode)

Direct pretreatment requires at least one dielectric barrier!

A direct corona treatment results in best effect with lowest energy input!

Components of a corona station

1. Treatment tool

with treatment area.
Adapted to substrate, working speed and required treatment effect
here: 50 cm wide film up to approx. 150 m/mi



2. Generator



supplies high voltage in the medium frequency range between 20 and 50 kHz at different power levels from 100 W up to 50 kW.

here: research generator 2 kW. Continuous pulse/pause and pulse with display of voltage and more specific options.

3. Blower and ozone-filter in different sizes.



Each application requires a specific solution.
We treat also your substrate!

Ceramic electrodes

Our standard electrode bars are made of a special high-dense Al₂O₃-ceramic, which are impregnated after production.



Corona electrode Y2B with two electrode bars

Different dimensions of the electrode bars:

circular – rectangular
different diameter

Gas-electrode:



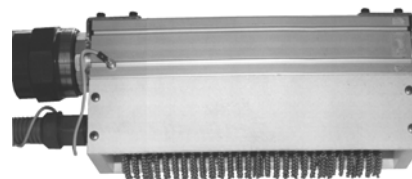
A pretreatment in controlled atmospheres is possible with our electrode GY. The gas consumption is low, due to an internal cooling of the electrode bars!

Metallic electrodes

Metallic electrodes need a dielectric barrier!



Corona electrode Y2M with two electrode bars



Electrode formed of chains

One electrode contains 2, 3 or 4 electrode bars.

Three electrode types:

Corona electrode Z:
2/3 ceramic bars, 40 up to approx. 350 mm long

Corona electrode Y:
2/3 bars, 300 up to 2500 mm long

Corona electrode X:
2/3/4 bars, 300 up to 3500 mm long

Optionally, the bars can be provided with high voltage separately.

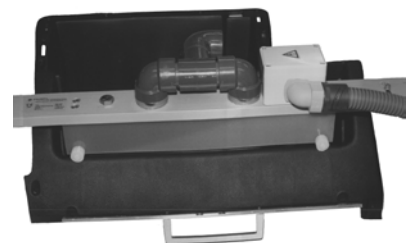
Examples, work pieces

Metallic tap:



The metallic tap is the counter electrode of a barrier discharge.

Glove compartment:



Metallic electrodes are placed at both sides of the surfaces to be treated of this complicated part. The part itself is the dielectric barrier.