

PROTECH

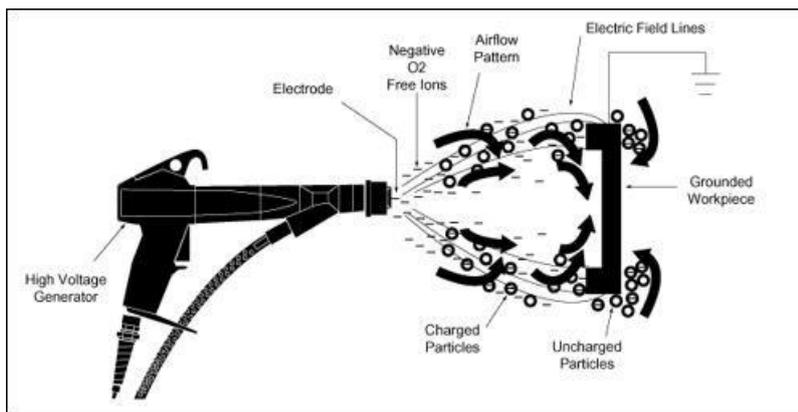
OXYPLAST



Good2know Tuesday

GOOD2KNOW – 27/10/2015
Powder coating equipment

Good2know that... ... the difference between tribo and corona spraying systems. Understanding the differences between corona and tribo charging, assists in deciding which technology is best for an application.



CORONA GUNS:

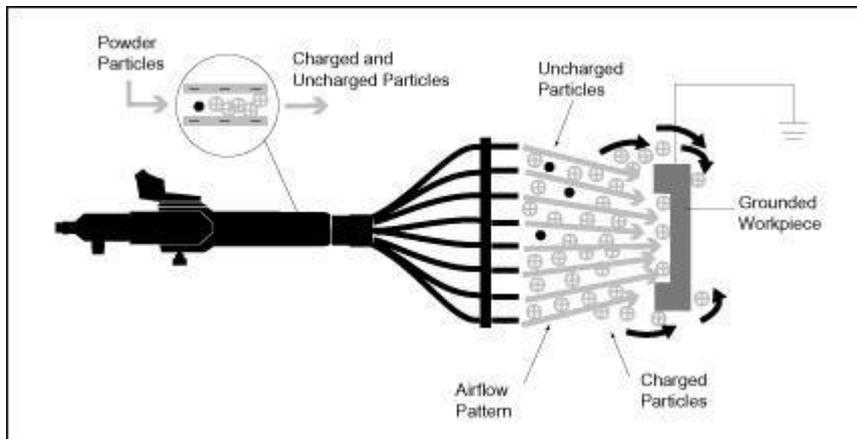
In corona charging, a high voltage potential is developed at an electrode located in or near the powder stream. The powder particles become negatively charged and are

attracted to the grounded substrate.

Corona guns:

- are very successful in achieving a consistent film build especially with thin film thicknesses, thanks to consistent charging
- finishing problems such as orange peel & back ionization are possible because of the high electrostatic charge
- powder output per gun can easily be adapted
- ability to adapt to conveyor line speed (both low and high speeds) with the same amount of guns, as powder output per gun can easily be adapted
- compatible with most powder coating types

TRIBO:



When tribo spraying, contact between the gun and the powder particles causes friction. The powder coating gun is internally covered with a negatively charged material (eg. Teflon) that

positively charges the powder particles and has them release their positively charged energy.

Tribo guns:

- easier to use in case of higher layer thickness needed. No back ionization or orange peel (because there is no electrostatic field)
- operate at lower powder output
- more guns needed to obtain the same result of corona spraying at high speed conveyor lines, due to the gun operating only at a low(er) powder output
- only a limited range of powders can be used for tribo spraying
- specially designed for complicated part forms (edges, corners, ...) (see: the effect of Faraday cage)
- advantage in gun cleaning

In every step of your search for the best way of spraying, we can assist. We are available for you at:

Direct help: **+32 9 326 79 30** (Europe)
 +1-800-361-9364 (North America)