SuperCorona[®]

The benefits of the SuperCorona

The low-ionic charge with the retrofittable SuperCorona-head-piece is used in all cases, where thicker coatings and a high optical coating quality is required. Typical areas of use of the SuperCorona are the coating of profiles, wheels, fences, radiators and drawers. A further area of use is the coating with textural powder, where the SuperCorona leads to substantially balanced pattern.



OptiGun with SuperCorona



OptiSelect with SuperCorona



Why does "orange peel effect" occur?

The corona charging principle ejects a large number of electrons with high voltage at the tip of the electrode. The powder is charged negatively and reaches the work piece with the help of the air stream. But 90 to 99% of the emitted electrons do not impact any powder particles and enter the booth space as free ions. These travel at high velocity toward the nearest grounded object (work piece, gun holder, metal booth wall) and settle there. On blank, uncoated metal the ions dissipate immediately via the ground connection. But as soon as the work piece is covered with powder, the free ions no longer find a path to the conductive metal. This produces an induction charge which influences the fresh arriving powder and creates an unequal and uneven powder layer, the so called "orange peel effect".





