Back ionization



Back ionization refers to the mutual repellence between charged paint particles in an area of excessive film thickness. Back ionization causes hollows, resulting in a substantially uneven surface.

Q1:

Is the spray gun too close to the substrate?

A1:

Adjust to an appropriate spray gun distance.

Common standard values lie between 150 and 200 mm.

Q2:

Is the substrate adequately grounded?

A2:

Provide adequate grounding for the paint booth, coating machine, and primary and secondary hangers.

Q3:

Did the coat exceed the critical film thickness?

A3:

Perform control to adhere to the specified film thickness.

Q4:

Did you recoat a previously electrostatically charged substrate?

A4:

For recoating, it is necessary to take the following antistatic measures.

① Provide adequate grounding for static elimination.

② Install a static eliminator.

③ Allow a sufficient period of time for self-discharge.

④ Wipe the substrate lightly with a cloth dampened with alcohol.