



Pinholing/Hollows/Cratering refer to craters on a coated surface, with a small hole or depression at the center of each crater.

Reworking is required starting from the sanding process because recoating is not effective for correcting this defect.

Also, they refer to the forming of crater-like depressions on a coated surface.

Q1:

Was there any water or oil residue on the substrate?

A1:

Improve degreasing power and rinsing, draining and drying processes.

Q2:

Does the substrate surface have small holes?

A2:

Incorporate a process to fill up the holes.

Switch to an anti-pinhole paint.

Q3:

Is the substrate galvanized or made by casting?

A3:

Bake the substrate before coating (to avoid pinholing due to outgassing).

Switch to an anti-pinhole paint.

Q4:

Is the substrate temperature 45°C or higher during coating?

A4:

Reduce the substrate temperature.

Q5:

Has any different type of paint or foreign matter mixed in?

A5:

Replace the paint with fresh powder.

In the case of inclusion of foreign matter, remove it by filtering.

Q6:

Has blocking of the paint occurred?

A6:

Replace the paint with fresh powder.

Filter the paint to remove blocking.

Raising the coating air pressure is a somewhat effective solution.

**Q7:**

Has any water or oil content mixed in the air used for coating?

A7:

Inspect, and conduct maintenance of, the air dryer and oil filter.

Q8:

Is the coating air pressure too low?

A8:

The requirement is 0.15 MPa (or in the range from 0.05 to 0.25 MPa).

Q9:

Is the baking condition such that the temperature increases sharply?

A9:

Measure the oven temperature.

Adjust the temperature condition.

Q10:

Do you use the baking oven for both solvent base paint and powder paint lines?

A10:

Purge the interior of the oven.

Alternatively, ensure a sufficient interval when changing from solvent base paint to powder paint.

Q11:

Is silicone used in areas near the paint booth?

A11:

Examples show that the defect occurred even when a caulking agent or lubricant was used 50 m away from the paint booth, so be careful.