Adhesion failure

Adhesion failure refers to the phenomenon that a paint film develops lift or peeling. Adhesion failure is either peeling from the ground or separation between paint films.

Q1:

Was there a workpiece change?

A1:

Review the control standards that cover processes from pretreatment to baking in the oven. Adhesion varies greatly with workpiece material.

Q2:

Is the workpiece thick?

A2:

Review the baking conditions.

If drying failure occurs, baking finishes tend to result in adhesion failure.

Q3:

Are draining and drying after pretreatment adequate?

A3:

Review the draining and drying conditions.

Q4:

Is the draining air blower contaminated?

A4:

Remove moisture and oil content.

Q5:

Is the time interval between pretreatment and coating appropriate?

A5:

If some time has elapsed after pretreatment, dry the substrate again.

Q6:

Is the film thickness appropriate?

A6:

Review the coating conditions to achieve the appropriate film thickness.

Q7:

Is any foreign matter on the substrate?

A7:

Remove the foreign matter.



Troubleshooting

Powder Paints

Adhesion failure

Is it recoating?

A8:

Be careful about the baking temperature and film thickness. Consider also the use of a sanding process.

Q9:

Is there any airborne dust or oil in the paint booth?

A9:

Clean the areas near the booth. Set up an outer booth.

Q10:

Are the baking conditions normal?

A10:

Measure the oven temperature.

Correct the time, temperature, and temperature rising curve appropriately.

Adjust the airflow opening.

Q11:

Has the substrate shape substantially changed from the previous ones?

A11:

The condition of a baked paint film is subject to change depending on how it receives hot air or infrared rays.

Q12:

Are coated workpieces stored in a good environment?

A12:

Conduct maintenance of the storage environment.

Place coated workpieces in a low-temperature and low-humidity place with a relatively small variation in these conditions.