Sagging

Refers to the sagging of a paint film immediately after coating of during drying.

Q1:

Did you achive a thick paint film in a single coating operation?

A1:

Adjust the paint film to the specified thickness.

If it is necessary to form a thick paint film, recoat after a time interval.

Q2:

Is the flow delivery too high?

A2:

Adjust the flow delivery appropriately.

Q3:

you use a thinner that is slow to evaporate?

A3:

Use an appropriate thinner.

Q4:

Is the viscosity of the paint low?

A4:

Adjust to appropriate viscosity.

Q5:

Is the paint film thick due to high paint viscosity or due to rough surfaces resulting from the paint film's fast dryness when tested by touch-dry?

A5:

Adjust to appropriate viscosity.

Use an appropriate thinner.

Q6:

Is the solvility of the thinner appropriate?

A6:

Use a thinner with high solvility

Q7:

Is atomization good?

A7:

Fully check the specifications for the coating equipment and reconfigure the coating conditions.

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Q8:

Is the air velocity in the paint booth too high?

A8:

Adjust the air velocity because higher air velocities tend to disturb the spray pattern and cause a nonuniform film thickness distribution.

Q9:

Is the paint booth temperature low?

A9:

Use care when the ambient temperature is low in the early morning and late afternoon in the cold season.

Use a thinner that evaporates fast.

Provide air conditioning.

Q10:

Is the paint film partially defective?

A10:

Adjust the flow delivery and also the hanging of the substrate and the position of thecoating equipment to be in equilibrium.

Q11:

Is the cause the swinging of the substrate?

A11:

Eliminate the swinging. Control the jerk of the conveyor.

Q12:

Is the hanger pitch well balanced?

A12:

Paint/coating tends to sag at ends in particular.

Ensure an appropriate pitch.

Q13:

Is the setting time short?

A13:

In the case of baking , if the setting time is short, the paint/coating may sag during the early phase of drying.

Use a thinner that evaporates fast.

Reconfigure the coating conditions. (The standard setting time is approximately 10 min.)

Q14:

Is the solvent concentration high in the setting chamber?

A14:

Provide sufficient ventilation.

If the solvent vapor concentration or humidity is high, thesolvent contained in the paint film evaporates slowly, causing the paint/coating to sag.

Q15:

Does the substrate have a complex shape?

A15:

Use extra care for raised or sunken portions.

Review the coating sequence. If necessary, change the sequence.

Q16:

Is the conveyor speed too fast?

A16:

Fast conveyors require a large flow delivery quantity.

Reconfigure the coating conditions.

Q17:

Is the spray pattern width narrow?

A17:

Use an appropriate spray pattern width for coating.