

## TROUBLE SHOOTING GUIDE - PART III

# SURFACE VARIATIONS IN THE POWDER COAT

### 3.1 COLOUR DIFFERENCE

Continuous or suddenly appearing changes in colour or effect compared to original sample.

Possible Causes	Explanation
Film thickness varies greatly	Change hose diameter, shorten hose
Differing substrates and substrate colours	Add virgin powder
Film thickness too thin	Adjust frequency of booth cleaning
Not sufficient or wrong pigmentation in the formulation	Test grounding, check diameter or hoses
Over curing of powder coating	Observe curing parameters of powder manufacturer
Varying film thickness with over coating	Assure even film thickness
Colour deviations due to curing technique or oven atmosphere	Use suitable powder coatings, control oven, use outside air supply for burner

### 3.2 CLOUD FORMATION

Uneven light to dark or matte to glossy effect of the coating on the work pieces.

Possible Causes	Explanation
Gun distance from part too great or small	Test distance
Uneven powder transport	Introduce sufficient virgin powder
Manual touch-up	If possible pre coat
Uneven charging	Test application
Uneven grounding of parts	Test grounding
Strongly varying film thickness	Optimize film thickness

# SURFACE VARIATIONS IN THE POWDER COAT

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## 3.3 INSUFFICIENT COVERAGE

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Possible Causes	Explanation
Film thickness too low	Assure appropriate film thickness
Film thickness varies greatly	Optimise system parameters
Differing materials and material colours	Use same materials for comparison

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