### NAPCA Bulletin 17-98

### FBE Anomalies Trouble-Shooting Guide

NAPCA has produced pictures of different FBE Anomalies commonly found in coating plants. We have also narrowed down the areas where we believe these anomalies may be found. This is a guide to be only used to help locate the source of the anomaly.

The National Association of Pipe Coating Applicators assumes no responsibility for the interpretation or use of this trouble-shooting guide.

### **FBE Contaminants and Possible Causes**

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POSSIBLE CAUSES	POSSIBLE CONTAMINANTS IN FBE								
	WATER	OIL	RUBBER	B-STAGED POWDER	IMPACTED POWDER	SILICONE	OTHER CONTAM- INANTS	EQUIP- MENT	
Air Hoists		X							
Air-Lock Seals			X						
Airborne Particles							X		
Airlocks				X	X				
Atmospheric Air	X								
Bearings		X							
Blast Machine Seals			X						
Bugs							X		
Compressed Air Stream - Air Compress	X	X							
Condensation in bin	X								
Condensation in ducting	X								
Conveyor		X		X					
Couplings			X	X				X	
POSSIBLE CAUSES	POSSIBLE CONTAMINANTS IN FBE (continued)								
	WATER	OIL	RUBBER	B-STAGED POWDER	IMPACTED POWDER	SILICONE	OTHER CONTAM- INANTS	EQUIP- MENT	

Dust							X	X		
Dust Collector				X						
Fog	X									
Forklift		X								
Gaskets - Seals						X				
Heat Affected Powder										
High Humidity moisture in powder booth	X									
High Temp				X						
Hoses					X					
Insulation							X			
Lubricants						X				
Manufacturer					X					
Paint Chips							X			
Pipe Handling Equipment		X		X						
Powder Booth				X						
Powder gun Tips - electrostatic				X						
Powder Guns					X					
Powder gun Tips - Electronic Grease		X								
Powder Pumps					X					
Powder-duct work	X			X						
POSSIBLE CAUSES	POSSIBLE CONTAMINANTS IN FBE (continued)									
	WATER	OIL	RUBBER	B-STAGED POWDER	IMPACTED POWDER	SILICONE	OTHER CONTAM- INANTS	EQUIP- MENT		
Powder-process	X									
Powder-storage	X									
Rain	X									
Release Agents						X				
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Rust					X	X
Scale						X
Squeegee		X				
Steam Quench water couplings	X					
Storage - improper			X			
Transfer Systems				X		
Vibratory screener				X		
Wheels		X				

## **B-STAGED POWDER**



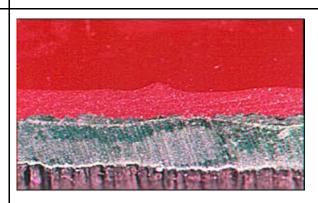


### PLACES WHERE B-STAGED POWDER MAY **BE FOUND:**

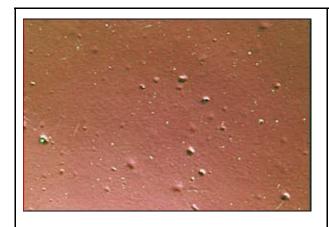
## **Powder System** -Dust Collector

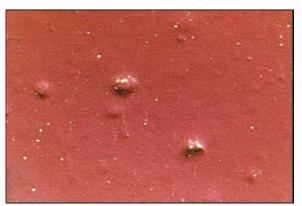
- -Powder Booth
- -Air Lock
- -Duct Work
- -Gun Tips (electrostatic)
- -Transportation

- Improper Storage
  -High Temp
  -Heat Affected Powder
  -Pipe Handling
- -Couplings -Conveyor



## **IMPACTED POWDER**



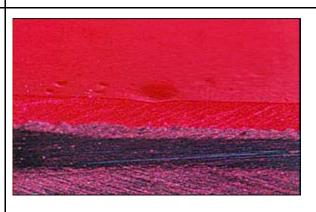


#### PLACES WHERE IMPACTED POWDER MAY BE FOUND:

# Impacted Powder - Powder Pumps

- Hoses
- Hoses
   Guns
   Transfer Systems
   Airlocks
   Duct Work

- Vibratory Screener
- Manufacturer



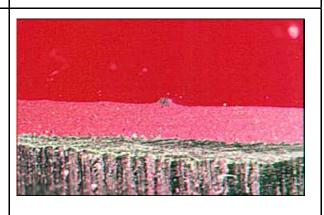
## **RUBBER**





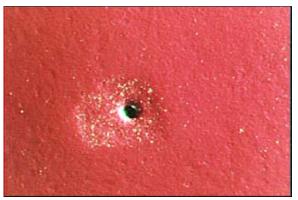
### PLACES WHERE RUBBER MAY BE FOUND:

- Wheels (conveyor)Blast Machine Seals
- Air-Lock Seals- Squeegee- Couplings



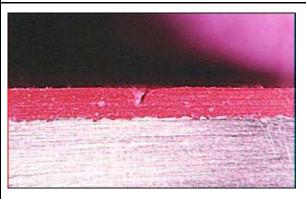
## OIL



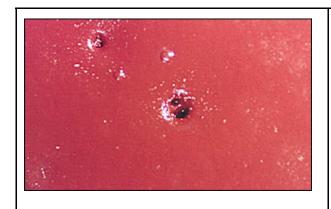


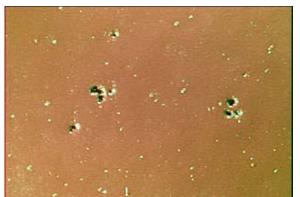
### PLACES WHERE OIL MAY BE FOUND:

- Compressed Air Stream (Air Compressor)
  Powder Guns (Electronic Grease)
  Hydraulic Oil
  Conveyor
  Air Hoists
  Bearings
  Pipe Handling Equipment



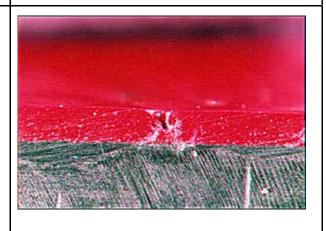
## SILICONE



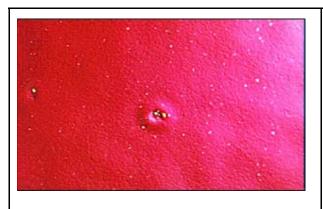


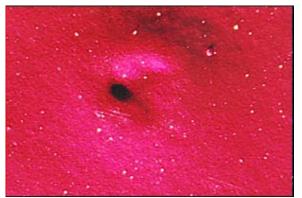
### PLACES WHERE SILICONE MAY BE FOUND:

- Gaskets Seals
- LubricantsRelease Agents



### WATER





### PLACES WHERE WATER MAY BE FOUND:

- Compressed Air Stream
   Atmospheric Air (high humidity moisture in powder booth bin and ducting)
- Rain (fog)
   Steam Quench Water (couplings)
- Powder
- Process
- Humidity Moisture
- StorageTransportation

