

## Challenge

### Issue

The cyclones of an industrial dryer system required effective protection of the stainless steel substrate.

### Goal

Provide a competitive, high performance alternative to ceramic tiles.

### Anticipated FMEA\*

Severe abrasion is a normal issue in such systems. The flow of hard particulates is exacerbated by high temperature corrosive containing gases.

\*Failure Mode Effects Analysis



After cleaning, ARC 855 primer was applied by roller and ARC BX1 and ARC BX2 were trowel applied

## Solution

### Preparation

- Prepped components in workshop
- Abrasive blast clean surfaces to Sa 2.5 with 3 mil (75 µm) angular profile
- Remove chlorides and contaminants

### Application (To select cyclone internal surfaces)

- Prime surface: ARC 855 at 12 mils (300 µm) DFT
- Trowel apply ARC BX1\* at 6 mm (.25") DFT
- Trowel apply second layer of ARC BX2\* at 3 mm (.12") DFT
- Repeat

\*ARC BX1 is the "Bulk" package size of ARC 890

\*ARC BX2 is the "Bulk" package size of ARC 897



Nearly 100% of coating performed in work shop in 2.5 weeks by 3 applicators working 8-hour shifts

## Results

### Evaluation

- Client selected ARC coatings based on third-party testing against ceramic tiles and competitive coatings
- Preparation and coating completed in 2.5 weeks by 3 applicators working 8-hour shifts

### Benefits

- ARC solution saved installation time
- ARC track record supports a higher MTBR
- Production uptime anticipated to be superior to alternative technologies



After assembly on site, repeat priming and coating on ID of flanges and weld seams