

## Challenge

### Issue

Severe cold wall corrosion attacked the high nickel alloy of the ducting. The plant was forced to make weld over-layment repairs and re-cladding every 6 – 8 months.

### Goals

Extend reliability over eight months. Lower overall maintenance costs.

### Root Cause

Elevated sulfur levels accelerated rate of corrosion.

## Solution

### Preparation

Surfaces were decontaminated and grit blasted to SP10 cleanliness with 3+ mil angular profile.

### Application

Two coats of **Chesterton ARC S7 AR** at a total DFT of 30 – 40 mils. **ARC S7 AR** is a protective coating for high temperature, chemical exposures where erosive particulates and thermal cycling conditions may be present.

## Results

### Client Reported

Trial area inspected after nine months exposure and found to be unaffected by exposure.

Client is scheduling expanding trial area to full reline of raw gas ducting. During spring 2020 outage 2000 ft<sup>2</sup> was lined with **ARC S7 AR**.



Fossil Power Plant.



**ARC S7 AR** was selected.



Test area of duct after nine months in service.