

# FGD Recirculating Slurry Pump

Power-Fossil — Desulfurization
ARC MX1, BX2\*, S2 and 855 Coatings
Case Study 015

# Challenge

#### Issue

This plant's FGD system was experiencing a loss of efficiency in their absorber recirculation pumps. After only 18 months of operation, the motor-driven current values increased from 11.1 Amps to 12.1 Amps - an increase of over 9%.

#### **Root Cause**

Severe corrosion/abrasion of the pump volute and impeller resulted in reduced efficiency, requiring shutdown to repair or replace with new pumps.

# **Solution**

#### **Preparation**

 Abrasive blast to Sa 3 with 5 mil (125 μm) angular profile

### **Application**

- Application of 6mm ARC MX1 on the suction wear plates, and 3-4 mm of ARC BX2\* to protect the volute body
- 2. Topcoat with ARC S2 to provide a smooth flow efficient surface

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

## **Results**

#### Inspection

Pumps are now operating with two years mean time between repair (MTBR) while maintaining the same efficiency level.

**Estimated 2 Year Savings** 

\$5K



New pump casing before application of ARC



Two new pumps protected with ARC

#### \$=USD



Completed application

Sheets, and/or Product Labels for safe use, storage, handling, and disposal of products, or consult with your local Chesterton sales representative.