

Experience  
**PORTFOLIO**  
Construction

## Sulphuric acid plant

In a drive to reduce H<sub>2</sub>S emissions, the plant operator has designed and constructed a wet sulphuric acid plant that converts sulphurous feed from waste gas streams into sulphuric acid. Together with a team of mechanical engineers the complete plant was punched and certified mechanical complete.

### *Combustor*

The first piece of equipment in the process train is a waste gas burner. The vessel is brick lined on the inside for thermal protection and isolation. Air and steam inlet piping is equipped with bellow components to provide flexibility during high temperature operation.

### *Electrostatic precipitator*

A low pressure vessel with a high voltage charged honeycomb arrangement inside and a corrosion resistant lining for protection of the inside wall.

### *Field Constructed Fans & Ducting*

Field erected air fans were installed to provide air to the combustor and the condenser vessel. The fans were equipped with auxiliary cooling system.

Large diameter ducting of +/-2 metres in diameter was installed. Special supports were fabricated to support these ducts and allow for thermal expansion.

## Curing oven refurbishment

A temperature distribution analysis was done on the oven to measure the overall performance. In accordance with the profile deviations, problem areas were identified.

- General corrective solutions were provided and some components were made waterproof.
- The geometry inside the oven was corrected to ensure even air flow distribution.
- Improved performance on actuator dampeners.
- The fan performance was tested, the fan blades corrected & balanced.

