



**Name:** Comalco Alumina Refinery - Laboratory Extensions HVAC Systems

**Client:** Comalco

**Site Location:** Gladstone, Queensland

**Year Completed:** January 2007

**Value at Completion:** \$250,000

**Project Description:**

The Comalco Alumina Refinery located in Gladstone Queensland currently produces upwards of 1.4 million tonnes of alumina per year, using bauxite from Comalco's mine in Weipa, North Queensland.

The Rockhampton and Brisbane branches of Haden worked closely together to design and construct (to consultant brief) the specialised air conditioning systems for the laboratory extension for the Red Mud Testing laboratories:

- Unusual requirements for the laboratory process required 100% fresh air delivery with an extremely low specific airflow.
- Dehumidification control to maintain laboratory minimum environmental criteria.
- Digital control including interface to the refinery dial-out alarm system.
- Split package air conditioning equipment was heavily re-engineered to include independent refrigeration and control circuits, safety features, and adaptability for varying ambient conditions.
- Close liaison with the client project officer to co-ordinate installation programme, tasks, and special requirements.

This project re-inforces Haden's position as a "whole of solution provider", from servicing office and facility air conditioning systems, through to switchroom and substation cooling systems, ship loader air conditioners, and Design and Construct delivery of specialist services.

**Safety Initiatives:** Our award winning safety system was adapted to meet the refinery's safety requirements.

**Referee:** Mr Bert Bouman, BECHTEL / Comalco Alumina Refinery Project Engineer

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& MECHANICAL  
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