

**ENGINEERING APPLICATIONS – PROJECT DESCRIPTION****Queensland Bulk Terminals – Design & Fabrication of Grain Handling Facility**

**Client:** Queensland Bulk Terminals, Murrarie

**Project:** Grain Modernisation Project

**Duration:** July 2010 to December 2010

**Man Hours:** Design - 825

Fabrication – 4530

On-site Construction – 3810

**Description of ENAP's Scope:**

ENAP's scope was the detailed design, fabrication and installation of mechanical equipment and associated structural supports to convert the existing sugar handling facility for the receiving, storage and load-out of grain. The client had developed basic engineering layouts and supplied specific grain handling equipment, with ENAP responsible for the detailed design, including structural, mechanical and civil. ENAP's scope included:

- Truck receival facilities, including upgrading structural supports, drive-over grating and dust baffles and modifying conveyor loading zone for grain handling
- Fabrication and installation of pneumatically actuated slide gates and conveyor loading chutes for twenty-one load points to an existing underground conveyor from the Grain Storage Shed
- Installation of two new Rotex suspended screens, including design and fabrication of new structural supports in the existing transfer tower
- Fabrication and installation of transfer chutes for Rotex screens, including internal ceramic wear tile lining
- Civil works for the six main footings for the Bulkweigher and Bucket Elevator support structure with galvanised screw piles.
- Fabrication and galvanising of Bulkweigher and Bucket Elevator support structure, including access stairs and ladders, gridmesh and handrails complying with AS1657
- Mechanical assembly and installation of client-supplied enclosed belt conveyor, bucket elevator and bulkweigher
- Fabrication and installation of access walkways, stairs and ladders around Bulkweigher and Bucket Elevator
- Fabrication and installation of all grain transfer chutes, which were internally lined with ceramic wear tiles.
- All structural items fabricated in accordance with AS1554.1SP, with structural items galvanised and all chute work externally blast and painted.





