

CASE STUDY

CAPE LAMBERT B STOCKYARD AUTOMATION

PROJECT PROFILE

Greenfields development as a 50 MTPA expansion of nearby port facilities.

The land is owned, and the port operated by Rio Tinto.

First of two stages for site expansion, with the next to begin immediately following completion of the first.

The second stage will add 50 MTPA capacity.

CAPACITY

- First stage rated for 50 MPTA
- Second stage to increase capacity by 50 MTPA
- 2 car dumper facilities, servicing up to 12 trains per day
- Stockyard capacity of 2.4 million tonnes

PRODUCTS HANDLED

- Iron ore fines and lump

PRODUCTS USED

- GE RX7i PLCs
- R720 and R820 rack mounted servers
- RFM communication hardware with fibre optic links
- Ethernet network using Modbus communication packets



SCOPE OF WORKS

- Establishment of new iron ore stockyard with ship loading capabilities
- Construction and commissioning of 2 car dumpers, 2 stackers, 2 reclaimers, 1 shiploader, 1 screenhouse and all associated conveyors and transfers
- Construction of rail facilities, 3 stockpile canyons, EPCM facilities and all required site access roads
- Wharf with sea floor dredging and MSIC facilities
- Site communications infrastructure

OUR INVOLVEMENT

- Perth based configuration and testing of site Anti-Collision System (ACS), Stockpile Management System (SMS), Collision Avoidance and Optimisation System (CAOS) and Quality Management System (QMS)
- Site control system hardware installation, commissioning and testing
- Integration between managed control systems and external control
- ACS, SMS, CAOS and QMS commissioning of stockyard with 2 stackers, 2 reclaimers and 1 shiploader
- Site Commissioning supervision and roster scheduling
- Performance monitoring and off-site support