

Beating world competition

Xstrata Rolleston Mine Coal Stacker

The significant cost savings and advantages of using local steel are clear in the new Xstrata Rolleston Coal Mine demonstrating the competitiveness of the Australian steel industry.

Situated 300 kilometres inland from Gladstone in Central Queensland, the eight million tonnes per annum Rolleston mine produces high-volatile bituminous thermal coal for the domestic and export markets.

Steelwork was used intensively in the coal handling plant and associated infrastructure including the giant 150 tonne coal stacker which has a 53.5 metre boom, consisting of a 40 metre cantilever component and 13.5 metre backspan. The project was entirely designed and fabricated in Australia, utilising the nation's best capabilities.

The design and construction team consisted of national engineering group Monadelphous and engineers Connell Hatch with the structural steel fabricated in Brisbane by ASI fabricator member Gay Constructions.

The majority of other coal stackers in Australia have been imported from manufacturers in Asia or Europe as "off the shelf" items. In this case, the local team was able to design and build the stacker 20 to 25 percent cheaper than one from offshore. This confirmed that Australian industry can be more than competitive with offshore manufacturers if given the opportunity to design a purpose built item to suit local conditions.

Gay Constructions General Manager Karle Vogt said: "It was a pleasure to work with Monadelphous on this project and show that we are up with the best in the world when it comes to this equipment."

Key advantages for using local steel fabrication

- Firm prices free from foreign exchange fluctuations
- Ease of ordering extra materials from local suppliers
- Multiple suppliers and delivery points reduce risk
- Reduced levels of handling of goods and services
- Larger sizes of fabricated modules can be economically delivered to site
- Technological sophistication
- High level productivity
- Political stability
- Industry sector prepared to work collaboratively, and
- High occupational health and safety standards.

Project Team

Building & Engineering Contractor: Monadelphous

Structural Engineer: Connell Hatch

Steelwork Contractor: Gay Constructions

Steel Detailer: G and D Drafting

Coating Contractor: Allied Protective Coating

Coating Supplier: International Protective Coatings



Coal stacker

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