

Principal:

BHP Billion Iron Ore Pty Ltd

Contractor:

McConnell Dowell Constructors Pty Ltd

Engineer:

AECOM

Date:

2009 - 2011

Scope/Product:

Steel tubular piles for marine foundation application



Background:

Rapid Growth Project (RGP) stage 3, 5 and 6 are part of BHP Billiton's iron ore expansion in Western Australia's Pilbara region. The projects comprise the construction of new mining, rail and port infrastructure to facilitate increased export capacity.

Key Requirements and Scope:

Manufacture and deliver steel tubular piles to be used in the construction of new port facilities in Port Hedland, totalling approximately 25,000 MT.

Solutions and Benefits:

- Up to OD1350mm, and up to 60m long spirally welded piles in single length (unspliced). This eliminated the requirement to splice piles at the port which would have had associated quality and time risks

- Engagement of full time certified inspect team (independent of the manufacturer) at the manufacturing facility to ensure that approved ITP's and other procedures are strictly adhered to, including witness and testing at agreed hold points, eliminating the risk of inferior material quality or non conforming product
- Independent third party Australian certified inspectors in attendance to undertake training, inspection and audit
- A comprehensive quality management system that ensured client's inspection and sign off prior to release of piles to the port
- Use of a fully integrated in-line manufacturing facility (including pile forming, shoe splicing, blasting, coating, marking, inspection), to reduce the requirement for handling and transportation
- Construction of a fully enclosed and ventilated coating facility to protect the piles during coating, and to ensure coating and curing activities were carried out in a controlled environment
- Use of polypropylene ropes to protect the piles during transportation
- Delivery of piles to specification and on schedule

"We confirm that J Steel satisfied all our requirements for this work." Paul Broome, Regional Commercial Manager