

Client:

OneSteel Ltd

Project:

Project Magnet

Project Location:

Whyalla, South Australia

Project Value:

AUD 250M (2006)

Services:

- Feasibility Studies
- Detailed Engineering and Design
- Engineering Support for Construction
- Commissioning and Start Up Assistance

1. Project Overview

ProMet has completed feasibility studies, detailed design engineering and assistance for the construction, commissioning and ramp up of production for OneSteel's Steelwork operations in Whyalla, South Australia. Together with Thiess Pty Ltd, ProMet was part of an EPC contract to deliver Project Magnet for OneSteel.

Whyalla was built to operate with hematite ore from its tied mines, Iron Duke, Iron Duchess and Iron Baron, but with just 34 Mt of hematite reserves, was facing closure after 2020.

Project Magnet involves the conversion of the Whyalla Steelworks to produce steel from magnetite which holds a number of key value added benefits to the client, while the hematite mining operation produces product for sale.

2. Scope of Work

The scope for Project Magnet consisted of:

- Extending the life of the steelworks
- Providing additional revenue streams
- Lowering the cost of producing steel
- Offering environmental improvements

Prior to Project Magnet the hematite ore mining operations produced 3 Mt/a of ore.

Project Magnet now produces over 9 Mt/a of both magnetite and hematite ore at less than 32 mm size, with crushing and screening at the mine site.

The works are located at the South Middleback Range (SMR) mine site approximately 60 km from Whyalla.

ProMet's scope of work for the Project Magnet process plant included the following:

- Brownfield tie-ins
- Ore handling
- High Pressure Grinding Rolls (HPGRs)
- Wet screening
- Ball milling
- Cyclone plant
- Intermediate magnetic separation (DIMS)
- Concentrate storage
- Cleaner magnetic separation (CMS)
- Concentrate thickener
- Tailings thickener
- Positive displacement pumping station

- Coarse tailings
- Fine tailings
- Utilities

3. Project Schedule

- Project approval Jun 2005
- Site establishment Feb 2006
- Mechanical completion Apr 2007
- Commissioning of all plant units mid 2007

