

# Murrin Murrin



## Nickel/Cobalt Production Facility

### Fast Facts

*Customer:*

Murrin Murrin Holdings  
(Minara Resources Limited, (60%)  
and Glenmurrin Pty Ltd, a wholly  
owned subsidiary of Glencore  
International AG, (40%.))

*Location:*

Western Australia

*Project:*

Brownfield process control  
optimisation project.

*Date:*

2001 - 2002

*Plant Details:*

Mining and processing of  
lateritic ore for the production  
of up to 45,000tpa of nickel  
and 3,000tpa of cobalt  
briquettes.

*Control System:*

Yokogawa Centum CS



### Project Overview:

Dry laterite Nickel-Cobalt Pressure Acid Leach Plant & Refinery. Design rate of 45,000 tonnes per annum (tpa) Nickel and 3,000 tpa Cobalt

### MIPAC Scope:

- Maintain and support DCS / PLC / Instrument systems
- Development and trouble-shooting across plant areas.
- Implementation of sequencing, batch and auto control strategies.
- Operator and engineer training
- Process optimisation

### Technical Highlights:

- High pressure acid leaching
- Natural gas reformer
- H<sub>2</sub>S sulphide precipitation
- Power generation from steam turbines & gas turbine
- Hydrogen reduction based nickel/cobalt refinery
- Organic based solvent extraction
- Air separation plant
- Oxygen based sulphide leach
- Misc materials and process handling system

### Results:

- Implementation of process improvement recommendations
- Implementation of advanced sequencing, batch & auto-control strategies