

North Parkes

**RIO
TINTO**

\$120k Grinding and Flotation Optimisation

Fast Facts

Customer:
NorthParkes Copper Gold
Mine (Joint Venture: Rio Tinto, 80%
and Sumitomo Group 20%)

Location:
Parkes, NSW, Australia

Project:
\$120k Brownfield Grinding and
Flotation Optimisation

Date:
2001 -2005

Plant Details:
Commenced opencut mining in
1994, and have undertaken
underground block caving
mining since 1997. The copper
concentrate produced is
shipped to smelters in Japan
(67%), Australia (14%) and
other countries (19%).

Control System:
Schneider PLC, Citect HMI



Project Overview:

Improve the stability of the grinding (SAG / Ball Mills) and flotation plant (conventional and Jameson cells), through improved instrumentation and control strategies

MIPAC Scope:

- Design, install and commission control loop in grinding and flotation plants
- Specify novel instrumentation solutions (Flash flotation density control)
- Training site personnel on practical loop-tuning techniques

Technical Highlights:

- Design and commissioning of stable SAG mill power / load control
- Averaging-level control on all sumps
- Accurate hydrocyclone pressure control
- Flotation level control (including feedforward control)
- Successful transfer of process control skills to site personnel

Results:

- Improved plant performance through:
 - Increased plant throughput
 - Improved circuit stability
 - Increased SAG Mill liner life

Postal:
PO Box 3129
Hendra Q 4011
Australia

Tel: +61 7 3212 5600
Fax: +61 7 3212 5699

Email: email@mipac.com.au
Web: www.mipac.com.au

ACN 097 111 772 • ABN 66 097 111 772