



## Kambalda Nickel Concentrator

**Project Category:** Optimisation

**Client:** BHP Billiton Nickel West Pty Ltd

**Location:** Western Australia

**Commodity:** Nickel



### Scope of Work

OMC's scope of work was to aid site personnel in the ramp up of production of the existing comminution circuit. The process plant had operated intermittently for a number of years due to mine closures in the area. With the redevelopment of mines in the area, full utilisation of the plant was required at a higher hourly capacity than currently achieved. Through audit, collection of survey data and modelling, recommended changes to the circuit were made to increase plant capacity.

### Flowsheet

The Kambalda plant comprises a jaw crusher, stockpile, single stage AG mill with recycle crusher and a flotation concentrator. The AG mill is a 26ft 3.5 MW unit.

### Outcomes

Through recommended changes to stockpile management, mill grate configuration and control philosophy the average plant throughput was increased by 15%.

Having successfully aided site personnel in the optimization of the grinding circuit at Kambalda, OMC undertook a desk top study looking at expansion options for 1.5-2.0 times current treatment rates.

This process was undertaken over a three year period with an initial audit and modeling, a follow-up a year later and expansion modeling the year after that