Providing Global Mineral Processing Solutions

GR ENGINEERING SERVICES
ENGINEERING CONSULTANTS AND CONTRACTORS

NOVA NICKEL PROJECT

SCOPE OF WORK

GR Engineering was engaged by Sirius (now IGO) to undertake the engineering, procurement and construction (EPC) of the Nova Nickel Project concentrator plant, underground paste backfill plant and non-process infrastructure. The 1.8 Mtpa concentrator was constructed to treat underground ore mined from the Nova-Bollinger Mine located 120 km east of Norseman, WA. The concentrator was designed to produce 331,000 tonnes of nickel and 83,000 tonnes of copper concentrate each year.

The plant included single stage crushing, with conveyors that deliver the ore to a coarse ore bin. Coarse ore is ground in a two stage grinding circuit that comprises a SAG and ball mill. The ore/slurry from the grinding circuit is classified via the mill cyclones and the cyclone overflow undergoes differential flotation. The nickel and copper flotation circuits have dedicated regrind, cleaning and recleaning processes to optimise metal recovery in each circuit.

Plant tailings are pumped to a cemented paste back-fill plant with the paste product delivered underground via a borehole and underground distribution system, or plant tailings can be pumped to a tailing storage facility when paste fill is not required in the mine.

Commodity: Nickel
Region: Australia
Location: Goldfields-Esperance Region of Western Australia
Project Type: Greenfields, EPC

Client: Independence Group NL (ASX: IGO)
Award Date: June 2015
Completion Date: December 2016
Project Manager: Geoff Tanner
Process Manager: Bill Gosling