



Ernest Henry Mine – Magnetite Tailings Dredging

Principal: Ernest Henry Mine (Xstrata Cooper)

Location: Near Cloncurry, Queensland

Overview of Project

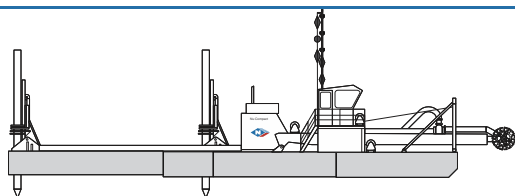
Ernest Henry Mining commissioned our 300mm CSD Nu Compact to reminer tailings from the Tailings Storage Facility to recover magnetite. Nu Compact pumped the reclaimed tailings via a 1000 metre long HDPE pipeline directly into a processing circuit in which the magnetite was concentrated.

Scope of Work

Supply and operate dredging equipment on a 24/7 basis. Dredge and pump a consistent feed density to the processing plant.

Innovations

- The dredge is fitted with an RTK navigation system to ensure the mining plan is followed accurately. Flow and density meters are fitted to the slurry line to help ensure a steady tonnage is pumped into the magnetite circuit. In addition, slurry density was controlled via the addition of dilution water into the suction pipe, automated via a PLC against the dredge's density meter.



Nu Compact Cutter Suction Dredge

Length (short/extended): 17.53/27.53m
 Nominal Production Rate: 220m³/hr
 Total Power/Power at Pump: 634/375 kW (850/500 hp)
 Pipeline Diameter: 300 mm
 Maximum Digging Depth (short/extended): 8/15m
 Gross Weight: 115 Tonnes