



THUNDERBIRD MINERAL SANDS PROJECT

SCOPE OF WORK

GR Engineering was appointed by Kimberley Mineral Sands, a 50:50 Joint Venture between Sheffield Resources Ltd and YGH Australia Investment Pty Ltd to undertake the Thunderbird Mineral Sands Project. The Project is located on the Dampier Peninsula, midway between Derby and Broome, Western Australia. The Project consists of a large-scale zircon and ilmenite open cut mine and mineral concentration and separation plant. It is a long life mining project with a predicted mine life of over 30 years.

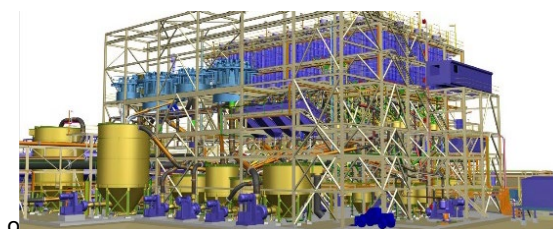
GR Engineering's scope of work included the design, engineering, procurement, construction and commissioning of the Wet Concentrator Plant, Concentrate Upgrade Plant, borefield and associated services and facilities.

The 11.6 Mtpa Wet Concentrator Plant uses a wet gravity separation process to produce a heavy mineral concentrate (HMC), followed by a magnetic separation process to separate the HMC into three saleable concentrates. The ilmenite rich magnetic concentrate, the zircon rich non-magnetic concentrate and a paramagnetic concentrate. The 1.2 Mtpa of concentrates produced by the process plant will be loaded directly into trucks for bulk shipment out of Broome.

The majority of steel and platework for the Project was fabricated off shore in China, four break bulk project logistics ships were used to deliver major Chinese vendor and steel fabrication packages into Dampier.

The Project at its peak had 165 people on site and was completed with over 500,000 hours LTI free.

GR Engineering mobilised to site in April 2022 to commence construction and the Project was successfully commissioned and operating by October 2023. The Project was delivered to the client on budget and 4 weeks ahead of schedule.



Client: Kimberley Mineral Sands
Commodity: Mineral Sands
Project Type: Greenfields, lump sum contract, design and construct

Region: Australia
Location: Dampier Peninsula, WA
Award Date: January 2022
Completion Date: October 2023