

UGL Limited, Roy Hill – Western Australia

CUSTOMER	UGL Limited
LOCATION	Roy Hill, Western Australia
DESCRIPTION	Penske Australia has supplied, commissioned and managed the installation of three diesel-powered containerised gensets from MTU for the diesel power station, as part of Alinta Energy's power supply to the Roy Hill Iron Ore mine
OPERATIONAL DATE	August 2015



Roy Hill Iron Ore mine, the only independent iron ore project with West Australian majority ownership, is a 655 million tonne per annum iron ore mining, rail and port development in the Pilbara region. Situated approximately 115 kilometres north of Newman, Roy Hill is a world-class, low phosphorus iron ore deposit.

The operation consists of a conventional open pit mine and wet processing plant. There is a single rail line for heavy haul cartage and a purpose built two-berth iron ore port facility at Port Hedland that is capable of stockpiling, screening and exporting mined product.

Roy Hill enlisted the services of Alinta on the two-phase construction project to provide a 121 km 220 kV transmission line and substation with 6 MW diesel back-up power. Alinta partnered with Penske Australia customer UGL Engineering, under a turnkey design and construction contract.

CONFIGURATION

As part of the project with UGL, Penske Australia has installed and commissioned three state-of-the-art containerised gensets from MTU to deliver critical power solutions for the mine infrastructure.

The generators are configured to run in various operational modes including blackstart operation, island operation and grid parallel mode.

FEATURES

The DP 2870 D5C diesel gensets feature the 20V 4000 G63 engine and deliver 2.5 MW prime power at 50 degrees ambient, critical for the harsh heat and aridity of the Pilbara. Importantly, the MTU system does not de-rate at high ambient temperatures.

Featuring a 3B prime rating, these German-made gensets are housed in 45-foot (13.7 metres) high cube, CSC certified containers that meet the stringent requirements of Alinta Energy, and also boast auxiliary air filters for dust purification.

The Penske Australia package offers an integrated radiator package and compact design for minimal footprint. Delivering optimised fuel consumption, the Series 4000 is renowned for its best-in-class power density, and load acceptance.

MTU's system features complex controls technology that alerts the operator to any instance of power failure. The genset also allows for up to 1,000 hours of unmanned station operation at high load profiles.

For more information contact our Energy Solutions team on 1300 688 338.