

Ravensthorpe Nickel Mine, Western Australia

CUSTOMER	First Quantum Minerals (FQM) Ltd
LOCATION	Ravensthorpe Nickel Mine, Western Australia
DESCRIPTION	Penske Power Systems supplied, installed and commissioned five MTU Onsite Energy generator sets to deliver continuous power to the Ravensthorpe Nickel Mine
OPERATIONAL DATE	2011



Operating multiple mines including the Ravensthorpe Nickel Mine, First Quantum Minerals Ltd is a metals and mining company that produces copper, gold, nickel and zinc.

Located in Western Australia, the Ravensthorpe Nickel Mine relies on three 18MW steam turbines operating 24/7 to generate power and provide heat for the mine's leaching process.

Penske Power Systems supplied MTU Onsite Energy diesel generators to deliver the prime power required to run the turbines.

CONFIGURATION

Penske Power Systems delivered five diesel power systems that were based on MTU Onsite Energy's 20V 4000 G63 continuous rated generator drives.

Designed for maximum reliability, availability and maintainability, the generator drives provide a robust solution for Ravensthorpe Nickel Mine.

The power systems include a customised control system allowing for various operation modes including black start, base load and paralleling to the steam turbine on site.

The lube oil system includes an automatic oil top-up process combined with a maintenance-free oil filter and oil centrifuge, allowing for best-in-class oil service intervals.

Rated to 85dB(A) at 1m, the enclosure and radiator noise attenuation include heavy duty air filtration with access platforms and a maintenance gantry.

FEATURES

The generator sets installed at Ravensthorpe Nickel Mine feature a host of must-have characteristics such as lower fuel consumption rates, better accessibility, less maintenance at reduced intervals, improved engine performance under transient load, and no derating of power in high ambient conditions.

This allows the mine to maintain operations under any conditions.

MODEL SPECIFICATION

5 x MTU Onsite Energy 20V 4000 G63 diesel power systems in 40' ISO container with remote radiator

For more information contact our Power Generation team on 1300 688 338.