



Overview

CASE STUDY:

Ermaden Coal Mine in Zonguldak

PRODUCT:

2 x 12M33G1650/5

DUTY:

Stand-by

POWER OUTPUT:

1650 kVA

APPLICATION:

Coal Mine

PARTNERS:

Arken

Ermaden Coal Mine Project

The Zonguldak province is one of Turkey's major coal production centers. At its heart is the Ermaden Coal Mine, which is now operating with essential standby power thanks to the installation of Baudouin powered generators.

Founded almost 85 years ago, Erdemir Maden is the largest iron mine owner and producer in Turkey with a total of 11 mines including nine iron sites, one coal site and one manganese site. The company alone accounts for 34% of Turkey's iron ore output and meets 12% of the country's iron ore demand. It is also listed among Turkey's 500 Largest Industrial Enterprises..

To replace the old standby generator setup at their Ermaden Coal Mine, Erdemir Maden worked alongside Baudouin and local partner, Arken Jenerator.

This collaboration of our companies saw the successful installation of two Baudouin PowerKit Engines inside two 1925 kVA Arken generators. The project panel was produced using three synchronized generator groups. While the project generators are 400V, this voltage is increased to 15.8 kV via two pieces of 1650 kVA step-up transformers, and synchronization is made at 15.8 kV.

There are two mains in the system, supplied by Arken, along with their step-up transformers, neutral resistors and medium voltage breakers. The entire system is fed by a cylindrical 12-ton main fuel tank which also features automatic fuel filling and monitoring.

The successful installation ensures that the Ermaden Coal Mine is now able to stay up and running with standby power should the main feed suffer a failure. It means no ceasing operations at the mine, and increased efficiency and productivity for Erdemir Maden.

The Turkish coal mine is just one of the latest applications for Baudouin's PowerKit engines, which are used around the world to power construction and agriculture, and also to support hospitals and data centers.

Leading the market, Baudouin's comprehensive range of engines with the PowerKit M33 platform spans 400-2100 kVA. Over the life of every Baudouin engine, reliability is guaranteed by strong European quality standards, and access to a global service and support network. This includes trained partners worldwide who can provide aftercare and access genuine spare parts, shipped within 24 hours of ordering. Baudouin PowerKit also provides exceptional cost-efficiency, with extended mean time between overhauls (MTBO).

Client testimonial

"We are so glad to be partners with Baudouin – such an outstanding and reliable company. We have spent time productively exchanging ideas and brainstorming what we could do better to serve our customers. Along with passion and solid contribution we will overcome the challenge together. Life goes on with Arken and Baudouin."

Alaadtin Birkan, CEO, Arken Jeneratör

