Eaton delivers intrinsically safe underground communication system for Turkish coal mine

Location: 
Imbat Madencilik- Turkey

Market served: 
Mining

Challenge: 
Turkish mining company Imbat required an underground communication system, that was able to communicate with the dispatcher on the surface, as well as from one communication line to another

Solution: 
Eaton’s FBT – WL200 dispatching and communication system.

Background: 
Imbat Inc was established in 2002 with the company initially focusing on coal trade and marketing activities. In 2004, Imbat commenced underground coal mining operations in its own right. It is now one of the largest producers of coal in Turkey. The coal mine is located in Soma Manisa area of Turkey and operates with an inclining shaft.

Challenges: 
Communication is one of the most important factors in a mine and plays a critical role in ensuring the safety of its operations and miners. This is even more crucial in the case of coal mines as many areas within them are considered hazardous owing to the risk of explosion caused by the possible presence of explosive gas and dust. To this end Imbat selected suppliers able to offer superior capability, quality and operational performance.

The key factors for the WL200 product selection were our intrinsically safe loudspeaker communication, that is able to continue operating even in presence of a high methane gas concentration, and a dispatching system that allows for the connection of different lines.

Solution: 
The Eaton FBT WL200 solution is able to integrate within one system all the functional requirements needed by the mining company:

- Intrinsically safe loudspeaker system – LV30
- Intrinsically safe power supply – dNG3.1
- Dispatching system WL200
- Operator panel with Visualization – VX300

All systems were subjected to an extensive set of pretests within the Eaton facility to minimize onsite installation and commissioning costs in Turkey.

Result: 
Eaton FBT delivers a complete turnkey solution that fits the customer requirements and meets time schedule of the end customer.

This was achieved via the close cooperation of the Eaton FBT project engineering team with all client sub-contractors and the end customer.

For more information on how Eaton can provide mining solutions to your project, contact info@fhf-bt.de