Case Study

Chelopeh Mining EAD, Bulgaria

BACKGROUND

The Chelopech Mine is located in central-western Bulgaria approximately 70 kilometers east of Sofia, the national capital, on the southern flank of the Balkan Ranges. The deposit lies in the northern part of the Panagyurishte mining district where a number of cupriferous massive sulphide and porphyry copper deposits exist. The operation mined 906,070 tonnes of ore and produced 65,060 tonnes of copper/ gold concentrate in 2007.

CHALLENGES

Improve an aging system to provide site-wide clear communications.

SOLUTIONS

Minecom (now PBE Australia) have developed a strong relationship over the years with the Chelopech Mine as one of our premier clients. The Chelopech Mine is supported by a VHF Leaky Feeder System. The VHF MCA1000 series Leaky Feeder Head End unit is the nucleus, or core, of the Minecom Leaky Feeder system. Its purpose is to combine the RF outputs of up to 64 low powered Transmitters and the RF inputs of up to 64 VHF Receivers and produce up to 16 PAL video channels with a single 50 ohm output, 19 inch 3RU rack unit, providing the necessary interface between the base radios, video demodulators/ monitors etc. and the leaky feeder cable.

The standard MCA1000 Head End is capable of providing up to 8 full duplex channels. Additional channel expansion units can be used to increase the number of useable channels to 16, 24, 32 or 64 respectively.

Chelopech recently upgraded to digital technology using the Motorola MotoTRBO DP3400 which provides clearer audio, lower background noise, and better error correction (less signal drop-outs). The Minecom Leaky Feeder System is the core for the digital two-way radios. The radios can have both digital channels and analogue channels programmed into its channel slots giving the best of flexibility.

PBE

HISTORY

The Pyott-Boone Electronics (PBE) mission has always been to design and build reliable, high tech equipment for mine safety and productivity. Four decades later that tradition continues as we provide mine-wide monitoring and communications equipment all over the world.

PBE has installed its Minecom Leaky Feeder communications systems and proprietary personnel and vehicle tracking system in over 100 underground mines, enabling real-time reporting and tracking information improving mine safety and productivity. The PBE MineBoss™ monitoring system is currently operating in over 300 U.S. mines, and we are the leading U.S. manufacturer of conveyor monitoring and controls, wired and wireless gas monitoring, fire and dust suppression and paging telephone lines, with installations in mining operations all over the globe.

PBE is also the largest Authorized Motorola Two-Way Radio Dealer in the U.S. coal industry. Not only are the Minecom Leaky Feeder and PBE tracking systems suited for post accident applications, they serve as superior productivity tools.

As your 'one-stop-shop' for safety, monitoring and communications systems our customer oriented, global distributor network and dedicated in-house sales and service staff are here to support your mining operations today and for years to come.

OUR SOLUTIONS

PBE was founded to supply eastern U.S. coal mines with quality electronic equipment and we continue to do so, but over the years we have expanded our sales to include many other industries all over the world.

Solutions we provide:

- Underground Radio Communications
- Mine Wide Monitoring and Control
- Personnel and Equipment Tracking
- Gas and Atmospheric Monitoring
- Conveyor and Motion Monitors
- Transient Voltage Suppression
- Fire and Dust Suppression

Industries we serve:

- Surface and Underground Coal Mines
- Metal and Non-Metal Mines
- Natural Gas Producers
- Processing Plants
- Utility and Transit Tunnel Projects
- Construction Industries
- Water Treatment Plants

For more information visit our website or contact your local distributor or a PBE sales representative.

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