

Arkon's Case studies The Bluetooth communication solution

Mina Maricunga, Gold mining at 4500m Balance de Agua project

The Maricunga open pit mine in Chile is a gold mine belonging to Kinross, one of the largest gold mining companies in the world. It had a gold equivalent production of 236,249 oz. in 2011.

It is located at 4500 meters above sea level which can result in **extreme weather conditions** with minimum temperatures of -30°C. Those conditions turn easy standard operations like checking flowmeters readings into extremely inconvenient situations for Maricunga operators.

For that reason, Superintendent of metallurgy and development Mr. David A. Navarrete Fuentes asked Riegel EIRL, the Arkon distributor in Chile, for a solution that would allow the operators to work on the flowmeters minimizing the exposure to low temperatures.



Bluetooth communication, our solution

After evaluating the situation, Riegel EIRL engineers recommended installation of the Arkon MAGX2 electromagnetic flowmeter model using the **Bluetooth communication module**.

Bluetooth module's range is up to 200m outdoors and up to 50m indoors. That allows Maricunga operators to establish wireless connection with the flowmeters from their vehicle in the order to check or download data from the flowmeters and to make any changes in the flowmeter's settings avoiding icy climatic conditions at the mine.

Maricunga were very satisfied with the proposal and more than 30 MAGX2 both compact and remote configuration have been successfully installed since end of 2010.

Technical information:

Country: Chile Location: Maricunga district, Chile Conditions: 4500m above sea level

Temperatures of -30°C

Ownership: Kinross Mining: Open pit Processing: Heap leach 2011 gold equivalent

production: 236,249 oz. **2011 cost of sales:** US\$457/oz.



"MAGX2 Bluetooth communication option allows to improve safety conditions and decrease workers exposure to extreme environmental conditions"

David A. Navarrete Fuentes
Superintendent of Metallurgy and
Development. Maricunga Mine Company

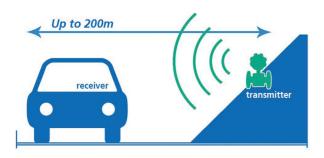






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With the new solution Maricunga workers are obtaining data from the MAGX2 flowmeters without leaving their vehicles, improving safety conditions for operators and avoiding extreme conditions as -30°C temperature, which makes the work easier and safer.





Arkon communication modules

MAGX2 offers a wide range of modules to allow each customer to "design" their own solution for the application. The modules are "plug and play", can be easily installed or removed from the motherboard and their small size make them very manageable.

Arkon offers 7 different options for communication: Bluetooth, RS232, RS485, USB, TCP/IP, GPRS and GSM-SMS. Only one of them can be installed/used at the same time.

This wide range of communication options cover all industrial requirements. All options are based on Modbus RTU protocol, excepting GSM-SMS module.

All modules are CE marked and fully PED compliant.



All the modules on www.arkon.co.uk

Contact our engineers to obtain a customized solution for your specific application on office@arkon.co.uk

MAGX2 Modules User Guide and other technical information available for downloading on Arkon website.



















Technical support: support@arkon.co.uk www.arkon.co.uk



