

# POSCO ARGENTINA OPTS FOR A COMMUNICATIONS SYSTEM WITH MOTOROLA SOLUTIONS



When practice calls for, modern digital voice and instant messaging systems enable clear and timely communications in difficult work environments such as extreme and adverse weather conditions and inside mines.

For the implementation of a digital communications system, SIC Comunicaciones was engaged by the Posco ICT company for Posco Argentina SAU, to install a technological project that would allow the workers of the Salar del Hombre Muerto Mine to work in extreme weather conditions in the form of high winds and freezing temperatures.

#### THE COMPANY

#### Posco ICT

This company is dedicated to the implementation of telecommunications systems for various industries around the world. With 2,000 employees around the world, and its headquarters in Pohang, Korea, throughout its existence they have dedicated themselves for the application of technologies for automation and systems improvement, under the premise of "building a better future for all".

#### **SIC Comunicaciones**

In 2001, SIC was created to become a highly specialized technology integrator in the communications area. Starting in 2008, they started the Automation and Control division to supply the needs of the mining industry in collaboration with a trained staff committed to its goals.

## THE CHALLENGE

The client faced the need for an efficient digital communication system with specific characteristics to operate in a complex work environment that also offered real-time contact. Extreme weather conditions

within the *Sal de Oro* mining project, inside the *Salar del Hombre Muerto* Mine, force workers to work in sub-zero temperatures throughout the year and winds of up to 160 km/h, at an altitude of 4,000 meters above sea level.

# THE SOLUTION

For the workers who enter the Salar del Hombre Muerto Mine every day to communicate, it was required to install a system consisting of two repeaters and 32 radiocommunication equipment to benefit 3 operating sectors of the company: security, operations, and plant. This was carried out within a total coverage radius of 12 km, in which the repeater station, located in the Lithium Carbonate pilot plant, was taken as the center. This area is completely devoid of population.

SIC Comunicaciones developed the Engineering process of the Project and focused on the installation, commissioning and total training within the plant carried out in June 2020 and which included 16 days of assembly and tests. To carry out the installation, the elaboration and approval of detailed engineering was carried out, which the client in Korea was in charge of. All this was carried out during the collection of materials that had to be built and imported for the project. These materials were transported to the job site to fully install the solution.







# SYNTHESIS OF IMPLEMENTATION

#### Company

Posco ICT para Posco Argentina http://www.poscoict.com/

#### Location:

Provincia de Salta, Argentina

#### Vertical Market: Mining

Integrating company of the solution SIC Comunicaciones. Provincia de Salta, Argentina.

#### www.sicsalta.com

A leading company that provides engineering, technology, and services to develop telecommunications and radiocommunications systems.

**Motorola Solutions Products:** 

#### **REPEATERS**

Motorola SLR5100 digital repeaters FIPLEX brand duplexer FIPLEX brand multi-coupler Combiner brand FIPLEX Commscope 7/8" system Battery for Back Up UPS Eaton 9px IPSC and NAI Data licenses for repeaters

#### COMMUNICATION DEVICES:

MOTOTRBO DGP8550e Digital Mobile Radios

HPE Proliant DL360 Server TRBOnet Dispatch Console with HP Brand Desktop PC Terminal

#### MOBILE EQUIPMENT:

DGP8550e laptop chargers, antennas and belt clips

APPLICATIONS: TRBOnet Enterprise TRBOnet



### THE BENEFITS

Thanks to the installation of the solutions, the Salar del Hombre Muerto Mine now has an optimal digital communication system that includes voice, text messaging from the dispatch console, safety and environmental management tools, such as GPS and audio recording. Additionally, these

tools can now manage the network centrally to avoid the misuse of system resources. Success lies in the installation, complete development of the project engineering and in compliance with the equipment delivery deadlines.

"The operating environment of the equipment is highly challenging (extreme climatic conditions, industrial process that includes highly CORROSIVE fluids). Success over time will be subject to the durability of the system as a whole."

Eric Han. IT Manager, Posco Ict.

