

MINING

Exploraciones Mineras Andinas S.A.

Chile-based mining company EMSA uses Getac Fully Rugged Tablet F110 to help complete challenging exploration and mining operations in harsh desert environments

/ Challenge /

Exploraciones Mineras Andinas SA (EMSA), a wholly-owned subsidiary of Chilean state-operated copper mining company Codelco, is in charge of mineral exploration and mine management throughout different regions. It has to address the issue of poor readability on computers operating in desert environments with extreme temperature fluctuations, windblown sand and glaring sunlight, resulting in diminishing work efficiency and mining productivity.

/ Solution /

Getac Fully Rugged Tablet F110 featuring a wide operating temperature range between -21°C and 60°C copes with extreme conditions and provides optimal display clarity, enabling EMSA professionals to carry out challenging tasks.

/ Benefits /

Getac Fully Rugged Tablet F110 provides optimal display clarity, allowing field work to be completed more efficiently while keeping costs at bay.

/ Quote /

"Getac equipment is 100% reliable for work in extreme conditions which include high levels of dust and high temperatures"

Carlos Delmonte Lizana – TICA Supervisor



Getac F110
Fully Rugged Tablet

/ Challenge /

Codelco is not only Chile's largest and most influential state-owned company but also the world's top copper supplier. With abundant copper deposits, the Atacama Desert in Chile is a plateau covering a 1,000km strip of land on the Pacific coast. It is among the driest places in the world. Because of its unique environment, the Atacama Desert has been used for simulations of Mars missions. Exploraciones Mineras Andinas S.A.(EMSA), established in 2004 as a wholly-owned subsidiary of Codelco, is in charge of surveying the distribution of copper deposits in the region as well as managing operations at mines in Ecuador.

With mining operations around the world becoming increasingly costly, EMSA has to thoroughly evaluate a potential mine site for its volume of mineral deposits before EMSA mining managers can assess the profitability of a new mining project. EMSA generally will not undertake a mining project without being absolutely sure of the chance for success. Mineral explorers used to be able to discover mineral deposits simply by surveying the Earth's surface. Mineral exploration today, however, goes deep under the Earth's surface and requires more efficient methods for sampling, analysis and map verification. Intricate planning utilizing precise modeling and assessment software tools provides accurate results, allowing mining projects to go according to plan. As such, advanced computer systems that support smooth execution of assessment tools to help enhance exploration productivity and mine capacity become essential to mineral exploration today.

First-line geological engineers need to verify the surroundings to contrast map data and/or analyze the collected samples on site. Due to their challenging work environment, their computers face a high risk of becoming inoperable under the extreme temperatures in the desert and their screens may even become completely shut down, making the engineers unable to carry on with their missions. In that case, they must wait for the computer systems to cool down and resume operation. Furthermore, computers being used at mining sites are prone to accidental drops or drop of mineral samples on the device case itself, which can result in damage or failure. These disruptions to work can be frustrating. If engineers encounter

computer failure when they are collecting mineral samples, they will have to spend time getting the device repaired or replaced and recollecting samples. This brings the costs up and therefore is unacceptable.

/ Solution /

EMSA has been using Getac rugged computers for years, mainly Getac Fully Rugged Tablets F110, which are deployed throughout different drilling sites. As there is often bright sunlight in the operating environments at mines, computers enabling display clarity is vital to first-line geological engineers. Getac rugged tablets featuring its patented LumiBond® technology are exactly what the engineers need.

Enabling high brightness display, Getac's patented LumiBond® technology reduces reflective loss and increases contrast. It also eliminates the possibility of condensation between the LCD panel and touch screen. With enhanced readability under direct sunlight, it allows engineers to clearly see the data and charts that are critical to decision making.

Getac Fully Rugged Tablet F110, which combines mobility, performance and safety to meet the needs by high-end industrial applications, features 11.6" display, 1.39kg lightweight and under 2.5cm slimness as well as compliance with MIL-STD810G, IP65 water and dust resistance and ATEX & IECEx Zone 2/22 intrinsic safety standards. With a wide operating temperature range between -21°C and 60°C, Getac F110 is built to withstand rapid climate changes and drastic temperature fluctuations between day and night in desert environments.

Powered by Intel® Core™ i7 and i5 vPro™ processors and Windows 10 operating system, Getac F110 provides the compatibility and performance required to run intricate software programs. Its dual hot-swappable battery ensures continuous operation for complete work shifts, boosting work efficiency.

/ Benefits /

In correspondence to the mining industry's growing demand on advanced exploration

technologies and mapping accuracy, the requirements on Getac rugged solutions are also increasingly challenging. Getac Fully Rugged Tablet F110 is designed with exceptional durability, robust computation power and long-lasting battery life, enabling EMSA's first-line geological engineers to complete on-spot exploration and topographical mapping tasks, which is critical to mine site managers' decision making and progress monitoring and allows mining operations to run smoothly and meet the company's financial objectives.

Geological engineers heavily rely on their computers to help them collect data, test minerals and verify mining maps. They need to improve upon old fashion paper-based operations and boost efficiency by incorporating computers to help them gather data with higher accuracy and in real time. Conventional consumer-grade laptops will not be able to withstand the harsh conditions EMSA professionals work in. In addition to strong protection against drop and impact, Getac provides comprehensive after-sales support and bumper-to-bumper warranty for its rugged solutions. These are the Getac advantages that EMSA engineers speak highly of. They count on Getac rugged solutions to help them carry out challenging tasks without having to worry about the cost of replacing damaged computers or the risk of losing data. EMSA can rest assured that its team will achieve the goal while keeping costs at bay.

/ About Exploraciones Mineras Andinas S.A. /

Exploraciones Mineras Andinas SA, is a limited company whose shareholders are Corporación Nacional del Cobre de Chile, CODELCO, and Sociedad de Inversiones Copperfield Ltda. The company was incorporated in July 2004 and began operations in November of that same year, giving continuity to the activities carried out by CODELCO's Exploration Corporate Management. The mission of Exploraciones Mineras Andinas S.A. is to execute the exploration activities of CODELCO in Chile, to discover new mineral deposits that allow increasing the resource base and mining reserves, increasing the value of the Corporation.

