

### / Case Study /

## CMH, Peru's Second Largest Miner, Extracts Minerals with Getac F110



### / Challenge /

CMH (Consortio Minero Horizonte), Peru's second largest underground miner of gold and other minerals, needed to extend its subterranean exploration and development more precisely. It used the Getac F110 Fully Rugged Tablet to enhance work efficiency. In the past, the progress of production was recorded on paper. However, the environment inside the tunnels is dusty, hot and humid, while dripping water made traditional paper records susceptible to damage, affecting the progress of projects and resulting in lost productivity and efficiency for CMH. CMH wanted to use new technology to improve efficiency and move towards a paperless process.

### / Solution /

The Getac F110 Fully Rugged Tablet paired with high-end mining software allows front-line workers to improve the accuracy of excavation routes and control the status of daily excavation progress. The Getac F110 Fully Rugged Tablet is dustproof, shock proof and water resistant and can assist front-line miners in completing their daily work schedule efficiently.

### / Benefit /

After introducing the Getac F110 Fully Rugged Tablet, CMH's mining operations saved a lot of time and front-line miners got used to keeping data records. Miners now provide more precise and accurate topographic data to supervisors to assist in making faster strategic decisions. At the same time, front-line miners can also achieve their work objectives before critical deadlines, creating a win-win situation. Since CMH started using the Getac F110, it has improved the overall efficiency of its mining operations by more than 100%.

### / CMH /

*"We evaluated and tested the software and hardware features of several well-known rugged computer brands. No other computer passed the test smoothly except the Getac F110."*

*Juan Carlos Pereyra C./Director of IT Department*



**/ Getac F110 /**  
Fully Rugged Tablet

---

## / Challenge /

CMH is located in northern Peru, and has a magnesium mine at an altitude of 2,000 meters and a depth of a total of 1.5 km. The front-line miners must work in 30°C - 40°C heat at 95% humidity with a lot of dust and sand. The front-line miners need to rely on paper instructions for the direction and depth of excavations, while also recording on paper the data obtained from their work. However, this type of mining under high temperatures and high humidity often causes problems that not only make it difficult to retain traditional paper, but can also easily affect miners' progress, sometimes even resulting in wrong decisions. Every mistake made in excavation will result in unnecessary costs, causing a loss of productivity and efficiency.



In addition, traditional paper is not good for protecting confidentiality, and important confidential information such as mining data is easily leaked. In order to effectively manage its workflow and implement paperless operations, CMH began to implement the Fully Rugged Tablet solution.

---

## / Solution /

At an industry conference, CMH found out about the Getac Fully Rugged Tablet and began to study and assess the possibility of integrating the Fully Rugged Tablet into the mining field. CMH selected 4 top global brands in fully rugged computers, excluding those that were too big and too heavy. It tested the effectiveness of the software and hardware of their products; only Getac passed their rigorous testing.

The Getac F110 Fully Rugged Tablet has a number of features suitable for the highly

challenging environment encountered every day by CMH's miners. It comes with an 11.6" screen that can zoom in or out and it weighs only 1.39kg. Not only is it lightweight and portable, it also allows the front-line miners to precisely determine the direction of excavations, reducing the potential for errors and consequent mining costs.



The Getac F110 is IP65 and MIL-STD-810G certified and is drop resistant, shock-proof, dustproof, and waterproof. Equipped with Getac's proprietary LumiBond 2.0 display technology, it can function normally in direct sunlight. The tablet offers a clear view of the screen in both a dimly lit mine shaft or in bright sunlight, avoiding any work disruptions. The Getac F110 comes with a new generation of Intel processors that offer high-speed computing power to ensure complete entry of information and data into the computer after the collection of the minerals. Data is sent back to the central database via Wi-Fi.



---

## / Benefit /

In order to improve performance and reduce costs, today's mining industry has an increasing demand for technology. This is reflected in the ever-increasing popularity of Getac's fully rugged products and solutions. The Getac F110 Fully Rugged Tablet paired

with high-end mining software delivers major benefits for topographic surveys.



In the past, miners had to complete information collection using complicated traditional documents and paperwork. Information was easily lost and errors were commonplace. After the Getac F110 replaced traditional paperwork, there has been a marked improvement in efficiency. Previously, any search for information entailed leafing through huge piles of paper documents, which was both time-consuming and labor-intensive. A search can now be done on the computer, thereby saving time and improving work efficiency.



---

## / About CMH /

CMH (Consortio Minero Horizonte) is a private company that performs Peruvian capital for exploration, exploitation, extraction and development of gold mineral resources and energy. Consortio Minero Horizonte is also the second largest underground gold mining in the country and fifth in all of Peru, producing 190 000 ounces of fine gold.