

NATURAL RESOURCES

Cortex Intelligence Systems

Cortex Intelligence Systems embeds Getac F110s in remote control consoles for drilling operations

/ Challenge /

Cortex Intelligence Systems works with mining operators to digitize their rigs, providing software and hardware that helps remove manual handling tasks, reduce the room for error, drive consistency, and eliminate the potential risks to human workers.

The organization needed robust hardware that could be used in harsh mining conditions to support its innovative software and empower mining operators to leverage automation across their sites to improve working conditions and increase efficiencies for operators.

Specifically, it needed rugged devices that could withstand extreme temperatures, high concentrations of dust, and strong vibrations from machinery used in mining operations.

/ Solution /

Getac's F110 tablets are embedded in Cortex Intelligence Systems remote control consoles across drilling site operations. Getac devices provide the main interface for mining operators to control their entire rig.

/ Benefits /

The fully wireless rugged devices let drilling organizations improve efficiencies and streamline operations in harsh conditions, helping to improve safety for workers onsite. Additionally, they empower organizations to use software that improves site safety, helping them to attract and retain skilled talent.

/ Cortex Intelligence Systems /

"The evolving journey we have taken with Getac has been critical to the success of these devices in the field. The Getac device is the primary interface for drillers, so it needs to be rugged to ensure continuous, reliable use in the field. The Getac F110 has quickly become part of our standard product offering. "

Mark Lott, Managing Director, Cortex Intelligence Systems



Cortex Intelligence Systems
Remote Control Console

/ Challenge /

Mining operations can expose workers to significant risk and dangerous working conditions, including extreme temperatures and the potential for damage from heavy machinery. To improve the efficiency and safety of operations, many mining organizations are investing in automation and other smart technology to help reduce the risk to their skilled workers.

Cortex Intelligence Systems works with mining operators to digitize their rigs, providing software and hardware that helps to remove manual handling tasks, reduce the room for error, drive consistency, and eliminate the potential risks to human workers. Through its research and development process, Cortex Intelligence Systems designs and builds its machinery and supporting control systems in house.

To support the use of its software in the field and empower mining operators to leverage automation across their sites to improve working conditions and increase efficiencies for operators, Cortex Intelligence Systems needed robust hardware that could be used in harsh mining conditions. Specifically, Cortex Intelligence Systems needed rugged devices that could withstand extreme temperatures, high concentrations of dust, and strong vibrations from machinery used in mining operations.

Mark Lott, managing director, Cortex Intelligence Systems said, "When it comes to monitoring rigs on mining sites, there was a natural progression to automation to drive efficiency, improve safety, and get people out of harm's way. To effectively house our software and ensure that we could deliver that efficiency, we needed hardware that was as robust as possible to withstand the challenging conditions of mining sites."

/ Solution /

After assessing the solutions available on the market, Cortex Intelligence Systems identified the Getac F110 fully rugged tablet as the ideal solution to support its software in situ.

Mark Lott said, "We quickly identified the Getac tablet as the most suitable solution to test our software in the field. After an initial proof of concept, we purchased two devices and have rapidly progressed from there. We now have four devices embedded in our remote control consoles in the field and working on drilling operations, with another seven on order, in build, or due to be commissioned."

Cortex Intelligence Systems and Getac worked collaboratively to improve the solution, making tweaks and modifications to meet Cortex Intelligence Systems and its customers' specific needs. The Getac devices provide the main interface for mining operators to control their entire rig, and lets users offload functions, diagnostics, and operations settings through the Cortex Intelligence Systems proprietary application.

Mark Lott said, "The evolving journey we have taken with Getac has been critical to the success of these devices in the field. The Getac device is the primary interface for drillers, so it needs to be rugged to ensure continuous, reliable use in the field. The Getac F110 has quickly become part of our standard product offering."

/ Benefits /

The Cortex Intelligence Systems and Getac devices are essential to the success of modern mining operations, with the fully wireless system empowering mining organizations to improve safety onsite for their people. In particular, the devices support remote operations ensuring rig operators, geologists,

and others can be released from the intense heat of site operations, helping to improve conditions for workers in the field.

The use of Getac devices and Cortex Intelligence Systems has helped Ranger Exploration Drilling to reduce manning on the machine, streamline sampling duties, and reduce the wear of components.

Stuart Baird, general manager, Ranger Exploration Drilling, said, "We have two devices in the field drilling, which have helped significantly improve the onsite experience. Automation is the natural progression for drilling operations in mining, and solutions like this make a real difference. Our staff no longer need to stand next to the drill hole and risk exposure to dust, noise, and potential projectiles. As a result, our people are more alert and less fatigued."

Mark Lott said, "These devices are a vital tool for rig operators. Innovative software is the future of mining operations; however, having the right hardware to enable its use in the field is critical to its success."

The use of rugged Getac devices and innovative Cortex Intelligence Systems software also helps mining organizations curb the effect of skills shortages on their operations by delivering software that improves site safety, helping them attract and retain skilled talent.

/ About Cortex Intelligence Systems/

Cortex Intelligence Systems is a mining and drilling technology organization that was formed in 2018 in response to demand for remote monitoring and analysis of operating data across customer drill rig fleets. It provides a range of automation, control, and data analysis solutions to the drilling segment of the mining sector.

