VIVOTEK Secures Miners' Safety in the Manganese Mine in Kuruman, South Africa

Background: A Comprehensive Surveillance System Protects Workers Under Perilous Working Environment

Mines are challenging environments. The terrain where mines operate is cruel and the working conditions are perilous. Every element in a mine can impact the operation. The safety and security are of paramount importance. Hence, the regulations and requirements are extremely stringent. To construct a safe working environment for mine workers, the utilization of effective technology is important. A new manganese mine in Kuruman, which wasn't yet operational, recently installed a site-wide network of IP-based security cameras for monitoring the safety of construction workers and to secure the site. The security system had to be able to cover the mine's needs once mining got started.

The installation, done by specialist company I3S Security Solutions, was simple, but with few challenges. In addition to the nature of the harsh operating environment, the extensive regulations and approval processes for each element installed are quite strict. Besides, there was no communications infrastructure in place at all. The communication infrastructure with a wireless connectivity solution was constructed from scratch. I3S Security chose RADWIN point-to-point and point-to-multipoint solutions to work with the VIVOTEK IP cameras for meeting the mine's needs. John Gerber, Shareholder of I3S Security, indicated: "This manganese mine is situated in relatively flat terrain, so there was bound to be some radio noise. With implementing a wireless network that covers 12 square kilometers, allowing us to effectively utilize the camera network as well as provide infrastructure for the Access control system."

Solutions: Various Type of Cameras Were Installed to Secure the Mine

Partnering with VIVOTEK's local distributor Miro, the installation of communication infrastructure and security system was successfully completed. Miro has provided professional advisory services and technical expertise along with VIVOTEK's network camera products, making the installation process exceptionally smooth. In this project, over 150 varying types of VIVOTEK high end network cameras were installed, including bullet network camera IP8362, IP8331 and IP8332, fisheye fixed network camera FE8171V, speed dome network cameras SD8321E and SD8322E, and P/T/Z network camera PZ8121. These cover all areas of the mine, from the construction village, to the shaft, to the entry turnstiles, and everything in between. VIVOTEK's cameras were selected due to the high-resolution 2 to 5 megapixel video recording and the ease of integration with other equipment such as smart phones, access control systems, safety systems and surveillance software. Moreover, VIVOTEK's cameras were perfectly suited for outdoor environments with auto-iris lenses and IR cut filters to ensure superior video quality under challenging lighting conditions, which is essential to securing the mine.

Customer Feedback: VIVOTEK's High Quality Cameras Are Invaluable for Safety Monitoring

"We chose the VIVOTEK range because these cameras provide clear imagery and are IP-based, so the data can be sent back to the central control room in real time. This not only provides security, but will be invaluable for safety monitoring when the mining starts," John Gerber, Shareholder of I3S Security added.