INTELLICENE
SECURITY EVOLVED

SYMPHiA VMS SUCCESS STORY

Intellicene Symphia VMS Management Solution in

Mining Operations

Introduction

The mining industry faces unique challenges in maintaining safe, efficient, and reliable operations. To address these challenges, prominent mining companies, including Codelco (Chile Government Own Copper Mining Consortium) and BHP, have implemented advanced technologies like the Intellicene Symphia Video Management System (VMS).

This case study explores how Codelco and BHP, with different mine types — underground and open pit — leveraged the Intellicene Symphia VMS management technology to implement an integrated operations centers to function as an iSOC (Intelligent Security Operations Center), leading to improved security, remote control capabilities, greater operational efficiency for monitoring equipment and safety.

Customer
• Codelco
• BHP

Industry
Mining

Solutions
Symphia VMS

Region
South America

Results
Symphia integtrated with over 23,000 devices across multiple mining facilities

Challenges Faced by Codelco and BHP

Codelco, a Chilean government-owned copper mining consortium, faced the complex task of managing diverse mining operations. They operated four mines underground and two large open-pit mines. On the other hand, BHP operated seven underground mines, each with its own set of challenges. Both companies needed a comprehensive solution that could provide seamless security, control and insight across their variable mines. To magnitude of their operations is significant, Codelco needed to integrate over 12,000 Cameras and over BHP 11,000. They both required a solution that could scale and provide visibility with data capture in harsh conditions.

The Role of MoviSight Smart Camera Solutions

To ensure secure remote viewing and control of machinery across their varied mines, both Codelco and BHP integrated MoviSight's smart camera solutions into their operations centers. MoviSight PTZ cameras offered the robustness required to withstand the harsh conditions of underground and open-pit mining environments. Additionally, the nanotechnology-based pollution prevention feature ensured uninterrupted vision, even in challenging conditions.

Addressing the need for low latency in remote operations, MoviSight IP cameras equipped both mining companies with ultra-low latency technology. The high-resolution and real-time imaging capabilities of these cameras allowed for responsive and efficient remote-control operations

Introducing Intellicene Symphia VMS Management Solution

The critical aspect of achieving comprehensive video management and recording capabilities across diverse mines was the implementation of the Intellicene Symphia Video Management System (VMS) solution. This advanced video platform serves as the backbone of their integrated operations centers. Connecting the deployment of technology throughout the mine posed a challenge as networking from within a mine is prone to much disruption and interference and while networking such devices can often be a complicated task Symphia was found to provide the most optimal solution to connect the local networks within the mine.

Adapting to Diverse Mining Environments

The Symphia VMS seamlessly adapted to the distinctive characteristics of Codelco and BHP's mines. For Codelco's combination of underground and open-pit mines, the VMS effectively managed different camera feeds, offering a unified view of their entire mining operations. Similarly, for BHP's underground mines, Symphia VMS provided the necessary remote control capabilities, streamlining their complex operations and providing them with alarm and incident management.

Key Features of Intellicene Symphia VMS

- **Comprehensive Integration:** Symphia VMS effortlessly integrated with various smart camera solutions, providing a single interface for monitoring and managing and expansive and diverse mining environment.

- **Enhanced Security:** The VMS solution's robust security features ensured the protection of equipment and personnel, maintaining the integrity of mining operations.

- **Scalability:** Symphia VMS's scalability met the harsh demands of Codelco and BHP's expanding mining operations, accommodating future operations growth seamlessly.

- **Real-time Monitoring and Control:** The VMS offered real-time monitoring and control capabilities, empowering operators to make swift decisions and responses to potential risks.

- **Intelligent Analytics:** Leveraging Symphia's advanced analytics capabilities, Symphia VMS provided valuable data insights, optimizing operations, and supporting incident management.

Camera Count

Codelco, with its extensive mining facilities, had approximately 12,000 cameras strategically placed across their mines. BHP, operating in various underground locations, maintained a network of approximately 11,000 cameras for comprehensive monitoring.

Results and Benefits

The successful deployment of Intellicene Symphia VMS brought substantial benefits to Codelco and BHP. The cost saving involved in leveraging a scalable solution is significant. This includes both expansion and mitigation of risks and damages.

Enhanced Safety

With comprehensive video monitoring and control, both companies significantly enhanced safety protocols, reducing the risk to personnel and equipment.

Optimized Operations

Real-time insights and intelligent analytics empowered mining operators to optimize resource allocation, operational efficiency and ease the strain on their IT systems when planning expansions.

Increased Productivity

By streamlining remote control capabilities, the VMS solution minimized downtime and increased productivity for operations involving robotic mining.

Cost Savings

The integration of advanced technologies led to cost efficiencies through optimized resource utilization and preventive maintenance practices.

Conclusion

The successful implementation of Intellicene Symphia VMS management technology has revolutionized the mining operations of Codelco and BHP. By leveraging smart camera solutions and an advanced video management platform, tailored to the unique demands of underground and open-pit mines, both companies have strengthened their integrated operations centers. The Intellicene Symphia VMS has proven to be a versatile and indispensable tool for enhancing security, remote control capabilities, and operational efficiency, solidifying its position as an invaluable asset in the mining industry. As other mining companies look to modernize their operations, the case of Codelco and BHP stands as a benchmark example of the power and scalability of Symphia and it's video management solutions.

Schedule an Online Demo Today

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