Protecting the coal industry.
Axis helps Shanxi Coal build network-wide video surveillance system.

Organization:
Shanxi Coal Shennan
Production Services

Location:
Yulin, Shanxi Province,
China

Industry segment:
Critical infrastructure

Application:
Production management
and monitoring

Axis partner:
Digital China Co., Ltd.

Mission

Shennan Production Services Co., Ltd. is located in Shenmu County of Shanxi Province, China. It is a large-scale production and service enterprise established by the Shanxi Coal and Chemistry Industry Group to achieve specialization and intensification of mining for its raw coal production. The target of this service is the seven shareholders of the company, while also taking local mines into account.

In order to strengthen security and ensure production safety, it was necessary to establish a reliable, advanced, open, manageable and easily expandable large-scale monitoring system. A video surveillance system was needed to manage the production areas, warehouses, roads, factories, office buildings, living quarters, canteen, garage, activity center, main entrances and park perimeters, while integrating the electronic fence at the park perimeter to establish an intelligent video monitoring and management platform.

Solution

The front-end uses Axis IP cameras, with quality assurance of MTBF greater than 100,000 hours and fully supporting the ONVIF standard. The backend uses a Sobey platform with powerful management features. It supports interface and management for access control, alarm, intercom, patrol and matrix, providing comprehensive monitoring of the operations of each subsystem. It uses completely open standards, with support for many domestic and international equipment brands and provides SDK development, while also supporting standard protocols such as ONVIF, OPC, MOBUS and SIP.

AXIS
COMMUNICATIONS

"We are very satisfied with the on-site installation of Axis network cameras, which have powerful functionalities, high stability, and outstanding cost-effectiveness. A pure IP solution not only saved construction time and costs, it also simplified the maintenance process and reduced maintenance cost. In addition, the excellent low stream performance of Axis equipment has greatly reduced our cost for storage. It is proven that the Axis network video monitoring system can fully meet our needs for high quality, real-time, stable and intelligent applications, and truly helped us to improve our management efficiency."

Shennan Production Services.

This solution has the following advantages:

> **Greater stability**
  Core equipment supports hot standby, multi-machine cluster, automatic fault tolerance, load balancing. It also supports equipment inspection functionality.
> **Open standard**
  Fully supports the ONVIF standard.
> **Comprehensive permission management**
  Multiple user management permission levels, to a maximum of 99 levels of permission management that can effectively handle conflicts.
> **Powerful search functions**
  PB-level storage implementation achieve seconds-level playback. Supports real-time playback and can play back videos without retrieval for up to 10 minutes (time adjustable).
> **Multi-level system integration**
  Platform provides standard system interface for fire protection, alarm, access control, and perimeters for easy third-party system access.
> **Cost-effective**
  The solution employs 720p network cameras for a wide view, with one network camera equivalent to three analog cameras. Cameras support PoE power supply, with a single network cable providing signal controls for audio, video, and control.

Not only does the system use fewer cables and have a lower construction cost, it also has a low maintenance cost and strong scalability. Axis cameras provide low bandwidth to save storage space.

Result

A network-wide solution achieved management upgrade and technological progress for the enterprise. 720p imaging has greatly improved image quality. When integrated with electronic fences, it has strengthened the security level. The system was already trouble-free after operating for one full year, garnering praises from the user.

神州数码
Digital China

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