Goodyear, great image: Axis IP cameras show exactly who is at the gate.

Network cameras with live monitoring deliver positive identification and improved access control at an Ontario tire plant.



Organization: Goodyear Canada

Location: Napanee, Ontario, Canada

Industry segment: Industrial

Application:
Plant security, access control

Axis partners: Meglan Technologies, Forcefield Systems, Milestone Systems

Mission

The Goodyear Canada manufacturing plant in Napanee, Ontario, is a big operation. Covering almost 800,000 square feet, the plant produces approximately 1,900 tires daily, is open 365 days a year and has about 750 employees and contractors. With cartage companies, deliveries, visitors and staff coming and going, the main gate accommodates a great deal of traffic. Goodyear must approve every person who wishes to enter the property and monitor sensitive areas within the plant.

Solution

Goodyear opted to outsource its access control to security company Meglan Technologies. Integrator and Axis partner Forcefield Systems worked with Meglan to install AXIS 214 PTZ Network Cameras at the gate and in the plant. The gate video feed is sent wirelessly to be recorded at the plant, 0.5 km away, and to Meglan's office, where it is monitored in real time and stored redundantly in the cloud.

The installation also employs four-channel Axis video encoders to digitize existing analog cameras, custom outdoor servers, and a VMS system combining custom software and technology from Cogito, Milestone and Netshield, all integrated by an Averics system.

Result

Prior to the upgrade, the quality of the security video did not allow Goodyear personnel to accurately identify people seeking entrance. The clear images delivered by the AXIS 214 PTZs enable Meglan staff to make positive identifications and view licence plates and identifying critical information on vehicles, such as company names. The system also supports forensic investigations, and video evidence has been successfully used by local police to thwart a province-wide theft ring.



"What we had before was much less efficient, and the cameras were limited in terms of functionality. It was a no-win situation. [This implementation] has changed our security overnight. Now, we can really control who is in the plant and we know when they entered, what they did and when they left. And if someone did manage to sneak in, we can also prevent that truck from leaving, simply by keeping the gate closed."

Larry Kimmerly, Security Manager, Goodyear Napanee.

Gate control

The gate at Goodyear's Napanee plant is a busy one. To support the daily production of approximately 1,900 tires, raw materials, personnel, visitors and crates full of finished tires pass through the gate 24 hours a day. Every person seeking to enter or leave must be checked and approved by security staff. The powered gate is 0.5 km from the plant. An analog camera was used to view visitors but "our video looked like there was always bad fog," says Larry Kimmerly, the plant's security manager. "Our people would hear the buzzer and simply let visitors in because we couldn't see them well."

Crisp, clear and lightning-free

Goodyear turned to Meglan Technologies for assistance. "We considered many options, and we chose Meglan's video surveillance service because it was the best and most economical solution." While terrible image quality from the analog cameras was a problem, it wasn't the biggest one. That was Mother Nature. "There was a buried analog coax cable that ran alongside a pond [from the gate to the plant]," explained Jim Paterson, founder of Meglan Technologies. "Lightning strikes fried the old camera on a few occasions."

To overcome this environmental hurdle, Axis partner Forcefield Systems installed AXIS 214 PTZ Network Cameras and linked them wirelessly to the plant and Meglan's off-site monitoring centre – thereby eliminating the inground wire need. "While the old cameras were certainly limited in scope and functionality, not having cameras fried is the number one benefit," added Paterson.

With higher quality video, Meglan personnel check visitors remotely against a list of authorized people. "Having the new cameras and Meglan's entry control means we can actually decide who gets in the gate," said Kimmerly. "If there's a security event, we now have licence plate information and good images of the driver. This project changed our security overnight."

An ounce of prevention

The new system has been very effective. "A truck pulled up one day and the driver said he was picking up a load

of tires," explained Kimmerly. "Meglan saw [remotely] over the cameras that the licence plate was flipped over and the truck was from a cartage firm we don't use anymore. We asked questions and the driver got nervous, u-turned and drove away. Before the Axis cameras were installed, this individual would likely have gotten in and driven off with a trailer of tires. The new system avoided a major theft."

It also led to an arrest. "We submitted the footage to the police and they tracked down the individual. He was part of a province-wide theft ring."

Piggybacking – i.e. driving in after an authorized truck – has also been reduced. "Now when someone piggybacks we can follow that person through the video system. I make contact and find out what's going on," Kimmerly said. "Before, we would get a report of a piggyback but would have no idea where that person was [once through the gate]."

The new system is also a deterrent for external and internal theft – including time theft. "We have fewer incidents now. After you effectively follow up on a few incidents, word spreads and people know they can't get away with it."

Flexibility and redundancy: on-site and in the cloud

Axis' support of multiple streams and resolutions sets it apart, said Jim Paterson, founder of Meglan. "Multistreaming and multi-resolution are critical. We store two resolutions: high quality at the gate and a lower resolution version in the plant as back-up. Operators can switch resolutions, based on their needs. Axis is the best camera to support from one stream to multiple resolutions."

The video is stored on-site for two weeks and video of any event requiring Meglan interaction is backed up to a data centre in Toronto and stored for at least three months. Surge protectors and batteries ensure "the entire system can run even in a blackout," Paterson said. "Our goal is to provide a totally managed security package and let Goodyear do what it does best: make tires."





"No other camera in the world can deliver multi-resolutions and multi-streams like Axis, and that makes them the best in the world for surveillance. Axis cameras are computers first and cameras second," says Jim Paterson, founder of Meglan.









