Cable manufacturing under a microscope.

Cameras installed at the LEONI plant monitor operation and warehouse activities. Losses were reduced down to zero.



Organization:

LEONI Slovakia spol. s r. o.

Location:

Slovak Republic

Industry segment:

Industrial

Application:

Building security systems, production monitoring, warehouse security

Axis partner:

MMS Servis, spol. s.r.o.

Mission

The Slovakian company LEONI is a manufacturer of cable and cable sets used in various industries and in consumer electronics. LEONI manufactures almost any cable based on customer requirements, for example, special cables for auto production. Copper, the main material necessary for the production of cables, is a highly desirable material also outside of our company. Copper losses occurring in the past were rather significant, and therefore the need to increase security has become apparent. The plant, which produces cables and cable harnesses/sets in Ilava, had to be equipped with a camera system that completely covers the inner and outer warehouse areas, including vehicle inspection and operational areas. No single blind spot, which could be used by thieves to move copper material out of the factory, was allowed.

Solution

MMS Servis designed and assembled a complete system overseeing the perimeter and inside areas using approximately 130 Axis IP cameras of various types and models. MMS service also connected IP cameras with

the warehouse security system, including a movement detection system. All hall entry doors/gates are connected to the camera system as well. When the door opens, the camera automatically focuses on the door and no one can therefore enter without being recorded. The entire building is secured.

Result

The result was immediate. A large screen visible to all incoming persons was installed at the entry gate, and since the deployment of the system LEONI has not had any single material theft. The installation of the camera system was clearly a successful move, which lowered loss and gave LEONI a quick return on investment thanks to the elimination of its losses. In addition, the management is considering the use of cameras to read license plates of all entering vehicles and create an automatic database. Until now this has been done by the plant security officer, who uses an electronic database where individual vehicles and drivers may be searched for, but an automated IP camera system shall further streamline this task in the future.



"It is interesting that any time something is stolen the camera is looking the other way. Now this is impossible thanks to the connection of Axis cameras with the door security system. When any door emits a signal that indicates a door is open when it should not be, the camera immediately turns towards the door and monitors the action."

Michal Slezák, Supply Chain Manager, LEONI.

Task number one – demonstrate that cameras work well

LEONI has several branches in Slovakia and manufactures cable sets, power and data cables of all types. Material losses were so high that investment into network cameras was necessary. It all began after a fire, which burned down a large portion of the production hall and company management decided to invest in new technologies. A large number of old analogue cameras in the hall were replaced by AXIS M3007-PVNetwork Cameras. Results were very positive and, therefore, it became clear that this technology will also work well in the Ilava branch. Huge spaces for 700 employees represented a huge security challenge, so in the end approximately 130 cameras allowing movement detection, meta-data search and automatic rotation. Among others, the most frequently used models include AXIS M3007-PV, AXIS M1125, AXIS P1428-E, AXIS P1425, AXIS M3027-PVE and AXIS M3104 Network Cameras.

According to Mr Marek of MMS: "The biggest challenge was to demonstrate the true usability and efficiency of the camera system. A large plant such as LEONI employs many managers responsible for various sectors, and the installation had to suit everybody. Further, only few believed that the system could work with such a high level of automation. Only after the system was deployed, did it become clear that the use of IP technology together with Axis cameras was the right solution, even for an additional expansion in the future."

Valued material - copper

Production of custom made cables and just-in-time production is an excellent business opportunity, but it requires a high level of professionalism and punctuality. Basically, you have 16 hours for the actual manufacture following the order submission, and an additional 9 hours for delivery.

If at that moment you realise that you are missing a critical material, even for a very small portion of the order, you will most likely be paying a penalty. The system introduced a new feature in the fight against crime: motion detectors installed in Axis cameras and AXIS Camera Station allowing easy and intelligent searching. Each rack in the warehouse has 40 positions per pallet with material. The camera is loaded with preconfigured positions for each pallet in the given range.

At the same time, the camera oversees movement of materials. Should any material be missing you just enter the storage location into the software. The system simply searches who and when was present at the given location and displays all camera images/recordings. Therefore, you do not need to search through hours/days of recordings to determine when something happened.

When a truck approaches the ramp the camera system is activated and the truck loading area is monitored from both inside and outside. LEONI simultaneously utilizes two mutually interconnected systems for video recording management. AXIS Camera Station oversees all inner cameras (production and warehouse areas) and all cameras where recording is required. In addition to surveillance production spaces, it also monitors the perimeter. Therefore, certain cameras send data to both systems at the same time. Thus far, LEONI does not use the camera system for vehicle license plate detection, but management is considering this option as well. Such layout and distribution of all security components and their mutual interaction covers all previous blind spots and the Axis IP cameras continuously prove how efficient they are.











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