Marlenka under surveillance.
Axis IP cameras guard the quality of the popular honey delicacy.

Organization:
MARLENKA International s.r.o.

Location:
Czech Republic

Industry segment:
Industrial

Application:
Loss prevention, production and logistics monitoring

Axis partners:
TINT, Synology

Mission
The primary objective of the camera system in the MARLENKA facility producing honey cakes was to secure the site in terms of the property and assets protection. At that time, no production monitoring was considered at all. However, the new production facility development project considered implementation of a camera system due to industrial standards in this field.

Solution
Originally, about ten AXIS 210 and AXIS 211 Network Cameras were used for the protection of assets. Once the production capacity was enlarged, the number of cameras increased to sixty. Synology technology handles the video management system. The original cameras for protecting the assets were replaced by AXIS P1344, AXIS P1346 and AXIS P1347 Network Cameras due to different requirements for resolution. AXIS P3367-V Network Cameras with HD recording were installed in production facility and the dispatch department. AXIS M3007-PV Network Camera was selected for surveillance and AXIS 232D+ Network Cameras were placed above the production line.

Result
Originally, the cameras inside the facility were placed above the production line only to monitor the belt conveyor movement and the dough baking process. Later, cameras in the product packing department as well as in the dispatch department, for process and traffic monitoring, were also added. The camera system meets the demanding requirements for an extremely long-time (90 days) recording from cameras in the dispatch department with the possibility of finding a specific moment in the recording as fast as possible. The surveillance system can be viewed via software in utility computers directly from the facility area, or via mobile applications. Security officers, production specialists and the enterprise owners use the mobile applications.
“We have responded to the successive requirement of adding cameras into various facility departments. We had to upgrade the original sections as we did not know how large a number of cameras would be needed in the system. Now, we can find the number of packs on pallets or their batches.”

Mr. Pavel Mohyla, TINT Commercial Head.

Production enlargement required more effective monitoring

The MARLENKA company, operating in the North Moravian town of Lískovec, entered the Czech market in 2003 with honey cakes of the same name produced according to an ancient Armenian family recipe. Since then, the production facility has expanded in several development stages into the present eight thousand square meters of total floor area. Products are exported to 35 countries. The original eight to ten surveillance cameras were initially used just for the needs of security. The current sixty Axis network cameras perform, in addition to the security function, all the monitoring of production processes inside the facility, as well as the final dispatch process.

For future development of the MARLENKA production facility, the company management will decide on installation of additional cameras for packing inspection or into cold shops with the temperature below the freezing point. Any request for such an installation has not been raised yet; however, the system is ready for additional enlargement.

Intelligent functions in use

Based on the recommendation of the installation company, Axis IP cameras were selected instead of another enlargement of the analog camera park. Such an up-to-date approach is a good starting point for additional development of the camera system. Although all the intelligent functions of cameras are not in operation in the current installation, such as face recognition, the Synology system already allows detecting, based on the specific marking, the searched-for pallet with the dispatched goods. The operator just specifies the number of the pallet and the time period within which the detection is to occur. The software then finds all the records where the pallet with this number appears. For the future, the function of detecting arrivals and departures of specific vehicles at the facility entrance gate with connection to the database will be considered for the system enlargement.

Axis cameras minimum fault rate

All the cameras operating currently at MARLENKA are Axis products. In the beginning, the company management used this trademark on the basis of the supplier company recommendation. Prior to realization of the second stage consisting primarily in enlarging the camera surveillance in the facility’s inner areas, the company management has evaluated the success rate of the original project, and raised the question: Why should we continue to use the Axis cameras? The answer was quite simple: “For the whole operation time, only one camera has been faulty in the facility; however, it was quite possible that the fault was not caused by the impact of the environment but by not fulfilling the ideal conditions, e.g. in power, or the line for transferring the signal was not done with the required quality,” says Mr. Pavel Mohyla.