

## Mivor Fruit Cooperative, South Tyrol, Italy



# MOBOTIX IP Cameras secure one of the largest Fruit Cooperatives

40 cameras, seven days to plan, five days to install: The Mivor Fruit Cooperation example demonstrates just how fast a functioning system with state-of-the-art IP video technology can be implemented. Food is a sensitive area that requires a high level of security. This is especially true for the northern Italian cooperative. It is one of the largest of its kind in Europe. The member companies deliver, temporarily store and trade up to 90,000 metric tons of apples every year. Mivor is one of seven members of the Vi.P federation of cooperatives. The Vi.P also acts as a central platform to market other natural products from the autonomous region such as vegetables and berries.

Mivor is a merger of two previous cooperatives, Mivo and Ortler. 411 farmers currently farm a total of 1,100 hectares and deliver their goods to the central storage area in Latsch, near Bolzano. "The main reasons behind our decision to use video technology were to have a better overview of who is driving through and stopping on our premises, and for documentation purposes," explains Kurt Wellenzohn, technical director at

Mivor. "Our customers also requested it so as to ensure that unauthorized parties couldn't access the products in our ten hectare-sized halls or the storage spaces on the roofs. Most importantly, the quality of the video technology fulfilled all of our expectations and it was also implemented very fast." Mivor previously had some problems with vandalism, and even a fire was started on one occasion. "We're really impressed at how IP video technology would end up being the only solution that meets all of our requirements."

### Professional IP Video Team Implements System Concept In Record Time

VALEO IT Neteye GmbH only needed 12 days to set up a comprehensive system concept to secure the perimeter, open spaces and halls with MOBOTIX cameras. 40 state-of-the-art IP cameras from the high-tech manufacturer are now in place to secure Mivor. The recording units are installed on poles, on the outer surface of the building and on the roof. "It no longer takes months to get a system up and running,"

says Norbert von Breidbach-Bürresheim, Managing Director at VALEO IT Neteye. The IP video specialist has long been convinced of the quality of MOBOTIX cameras and is an Advanced Partner of the company that is a spin-off of the University of Kaiserslautern. "Network cables, switches and servers are standard IT products. If a professional team plans for it, they can be used in combination with IP cameras to deliver the desired results within a very short amount of time," says von Breidbach-Bürresheim.

### More Detail Thanks To Digital Technology

The system specialists from Schwandorf in Bavaria used several MOBOTIX models in South Tyrol while planning the system. They all offer the advantages of megapixel cameras. Analog video systems can only deliver PAL resolution, whereas state-of-the-art digital models have far more pixels. Even affordable standard models have over three million pixels; analog video has just 400,000 (4CIF). You can see a lot more detail, such as on a license plate, if you enlarge a section in digital material. "This also reduces the



## Higher Resolution Requires Fewer Camera Points

number of camera points required and makes it easier to quickly implement projects," says IP video specialist von Breidbach-Bürresheim.

### Four MOBOTIX Models Up And Running In Vinschgau: T24, M24, D14 And M12.

The MOBOTIX M24 model is one of the company's allrounders. The housing meets IP66 protection class and offers excellent protection against substances like dust and water. The devices are fitted with L11 and L22 lenses: The numbers 11 and 22 represent the converted focal lengths of 35 mm cameras. The wide-angle lenses reliably cover large spaces with an image section of 90 or 180 degrees.

The day/night version, of the dual cameras D14 and M12, like the one at Mivor, delivers brilliant, high-resolution color images during normal daytime light conditions. At night, an infrared light source that is barely noticeable to

the human eye is enough for high-grade black and white images.

### Environmental Protection: Infrared Prevents Light Pollution

"The advantages are obvious," explains von Breidbach-Bürresheim. "No additional artificial light is necessary at night. That was an express customer wish to prevent unnecessary and ugly light pollution in the unspoiled holiday region." Another advantage of the IR beam is that the amount of energy the system requires is reduced considerably. The video motion sensors built into the MOBOTIX cameras help secure the perimeter of the Mivor premises. Objects that move in specific areas trigger an alarm and a recording. "Even a remote signal, like an e-mail, is not a problem," explains von Breidbach-Bürresheim.

### IP Video Via The Existing Network/ Advantage: UPS Is Available

Recording takes place at six frames per second at Mivor. "This frame rate gives the network a break and still delivers sufficiently useful content," explains Wellenzohn. Mivor uses the existing Cisco IP network to transfer data and a virtual LAN was set up for video technology. "There are absolutely no problems. The images are perfect thanks to the excellent MxPEG compression standard from MOBOTIX and the throughput is still surprisingly low."

Mivor decided to use IP video with MOBOTIX cameras after testing and lengthy deliberations. Quality was not the only decisive factor for Wellenzohn, as cost also played an important role: IP networks are protected by an uninterruptible power supply. This means additional emergency power devices are not necessary if the IP cameras are connected to the switches with Power-over-Ethernet (PoE) cables. The power



supply from the switches as nodes to the IP cameras takes place via the same cable that was used to transport the data. "That's just not possible with analog video," says Wellenzohn.

"The T24 allowed us to implement a thorough, coherent concept for more security at Mivor in a very short amount of time."

### High-Tech T24 Door Station With 3.1 Megapixel Camera

Here is another high-tech product from MOBOTIX that impressed those responsible at Mivor: The T24 Door Station is integrated into the IP network. It features an integrated intercom and a camera that covers a 180-degree area. This means that it is not possible for people to secretly transport items into the building, for example. The T24 has a 3.1 megapixel camera that delivers brilliant color images. You can see a video stream on an IP videophone if someone rings the doorbell. You can press a button to allow someone to enter. The Door Stations also enable access via PIN or RFID card. The Door Station is the ideal add-on product for IP video technology for Norbert von Breidbach-Bürresheim.

MOBOTIX has developed and manufactured IP video systems, video management and analysis software in Germany since 2000.

MOBOTIX stands out for its **high level of reliability**. All outdoor cameras are subjected to a stress test for temperatures between -30°C and +60°C (-22°F and +140°F). Without additional components, without heating or cooling and with no moving parts (for example auto iris), they are virtually maintenance free.

MOBOTIX delivers a **perfectly matched package**, starting with the microSD card for storage management and HD audio (microphone and speaker) with VoIP telephony through video analysis, a professional video management system and motion detection software reducing false alarms.

The **decentralized architecture** means that a central computer is not required and the network load is minimal. The intelligent cameras from MOBOTIX process and store image data themselves, trigger events and, in the event of remote access, manage the frame rate and resolution depending on the available bandwidth.

The **6MP Moonlight sensors** and complementary **thermal imaging technology** ensure reliable detection of moving objects, even under the most challenging light conditions and over long distances. As a result, it is possible to cover large areas with just a few cameras. Less power cabling, less IT infrastructure and fewer additional light sources are needed. MOBOTIX cameras are powered using standard PoE and do not require more than 4-5 watts.

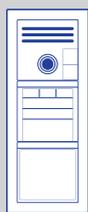
An intelligent IP video system from MOBOTIX allows you to **reduce total costs**. The investment pays for itself after a short time and the free-of-charge software and updates ensure it is a future-proof investment.

Outdoor Dual Lens			Thermal	
M15/16 AllroundDual	S15/16 FlexMount	D15/16 DualDome	M15/16 Thermal	S15/16 DualThermal
				
Robust for extreme conditions	Flexible dual camera	Modular dual camera	Thermal dual	Thermal dual

Outdoor Single Lens			
M25/26 Allround	S15M/26 FlexMount	Q25/26 Hemispheric	D25/26 Dome
			
Robust for extreme conditions	Discreet, video analysis	Discreet, video analysis	Modular Fix dome

Indoor			
i25/26 Panorama	c25/26 Hemispheric	p25/26 Allround	v25/26 MiniDome
			
180° hemispheric	Discreet, video analysis	Modular ceiling camera	Vandalism camera

Door Modules			MxDisplay+
Camera	BellRFID	Keypad	Remote Station
			

Door Sets			
Double Frame		Triple Frame	
			

Retailer information: