Indonesian tire manufacturer Multistrada

Tire Manufacturer Multistrada uses MOBOTIX Cameras to secure its production site

Today's special: scented tires for motorsport and drifting enthusiasts. These tires give off a lavender, rose or lemon aroma when they burn rubber. Or how about tires that produce purple, red, yellow and gray smoke? Indonesian tire manufacturer Multistrada is well known for innovation. The company launched the first slicks produced in Indonesia in 2010 to complement its line of 'fun' tires described above. Multistrada produce and sell radial tires for motorcycles and cars worldwide under their own brand names (Achilles, Corsa, Strada) and for external customers. The tire manufacturer can look back on a storied past. The company was founded in 1988 under the name Oroban Perkasa. In the early days, the company received technical and distribution assistance from well-known tire makers Pirelli and Continental. In 1999, however, Multistrada were unable to meet their liabilities during the Asian financial crisis, and these were transferred to the National Bank Restructuring Agency. The company's fortunes began to improve in 2004 when it was acquired by PVP XVII Pte and Indokemika Jayatama. The new owners restructured the company, converted debt into

equity and floated the tire manufacturer on the stock exchange. With fresh capital, Multistrada were able to expand their production capacity, improve quality and expand their distribution network. The company has been growing ever since. From 2004 to 2010, net revenue rose annually by 35 percent.

Until 2009, Multistrada were still using analog CCTV camera systems that recorded the video feed onto cassettes to secure the area inside and outside their production facilities. "These cameras were incredibly unreliable and required constant maintenance in places where they were exposed to heavy dust as well as high temperatures and humidity," says Mr. Juwanda, Asset Manager at Multistrada. Especially the ones installed outside were prone to failure during high temperatures. Multistrada were also unhappy with the poor image quality of the cameras and with the service provider that installed and maintained them: "Its employees were inexperienced and lacked proper training. The situation was often very chaotic," recalls Juwanda.

Switching To A Decentralized System

Multistrada therefore made the decision to replace their current service provider and install new cameras. These would allow the company to more reliably monitor its production facilities and raw material warehouse, areas housing finished tires and highly inflammable materials, as well as outdoor areas, than was previously possible with the old cameras. "We wanted to monitor all our activities round-the-clock, as we saw potential to increase productivity particularly during the night shift," says Juwanda to underscore his point.

The company considered camera systems from Axis, Sony and Pelco, as well as the complete system offered by Germany's MOBOTIX. The Indonesian service provider Sirca Global Niaga presented the MOBOTIX concept to Multistrada. "We were truly astonished by the high image quality of the cameras, the panorama images and the unlimited expandability of the decentralized MOBOTIX system," says Juwanda.

With the decentralized MOBOTIX concept, a

MOBOTIX

All Eyes On Tire Production

high-speed computer and, if requested, a digital long-term flash memory (MicroSD card) are built into every camera. Unlike more traditional approaches where the cameras only supply images, while processing and recording take place later on a central PC using video management software, the computer is merely used in the MOBOTIX system to view and control the cameras. The benefits: The system requires less network bandwidth since the cameras themselves process the data and do not send a constant feed of information to the computer for analysis. Plus, fewer cameras and recording devices are required.

Won Over By The Quality Of The Rugged Cameras

Despite their initial positive impression, Multistrada were not yet fully convinced. After their bad experience with the previous service provider, the tire manufacturer asked for a reference project from Sirca Global Niaga to demonstrate the

MOBOTIX systems in successful use. Representatives from both companies drove together to the facilities of well-known Indonesian drinks maker Ultrajaya in West Java province, which uses MOBOTIX systems to secures its entire grounds.

"We were really impressed during the tour. The MOBOTIX cameras installed at Ultrajaya are able to function under extreme conditions at high temperatures and humidity," says Juwanda. He and his team were particularly impressed by the MOBOTIX DualDome model that works with motion sensors and provides a 180° view of spaces and rooms. After seeing how good the MOBOTIX cameras were, Multistrada went ahead and replaced their entire video system, something they had not originally planned to do. Juwanda goes on to add, "At the beginning, we intended to keep our PTZ cameras that provide an allround view and can thus take the place of several fixed cameras. However, we were so

impressed by the concept presented by the German manufacturer that we decided to replace the entire system with the one offered by the MOBOTIX."

Easy To Manage

Multistrada installed a total of 134 MOBOTIX cameras at their company grounds between February and August 2010. These included the DualDome, the hemispheric Q24 with 360° allround view, the DualNight M12 and weatherproof Allround cameras. Because the camera housings are compliant with protection classes IP65, they can withstand dust, dirt, water and heat. "Thanks to their robust design, the cameras are incredibly reliable even under extreme conditions and supply crystal-clear images. We have not had any problems whatsoever, even in intense heat or in high humidity," states Juwanda.

All the cameras installed at the factory are interconnected to transfer data over fiber

optic cable. MOBOTIX MxControlCenter is used to operate the system. The professional video management software connects any number of cameras for centralized or local use and evaluation. The easy-to-use application is provided by MOBOTIX free of charge with the cameras. "MxControlCenter makes it so much easier to manage the system. Plus, we save money because we don't have to pay for licenses or software upgrades," says Juwanda. And since the cameras can be supplied with power via the network cable (Power-over-Ethernet, or PoE), the company was able to lower its costs for wiring its buildings. Multistrada also combined most of their cameras with external speakers and amplifiers. These are used to make important announcements or play security warnings via the data cable using Voice over IP. Through the cameras, employees are also alerted acoustically when their breaks begin and end.

Security And Higher Productivity

The MOBOTIX camera system allows Multistrada to provide a high level of security everywhere on their premises. The high-resolution cameras also enable the company to easily identify the license numbers of vehicles or the faces of people moving on its grounds. This makes it possible to solve acts of theft. "Since we installed the cameras, we can keep an eye on our processes at all times. In addition, we have been able to boost our productivity during the night shift by at least 20 percent," Juwanda summarizes. Multistrada plan to install around 100 additional MOBOTIX cameras by mid-2013. This will allow the company to further increase production and better document the accompanying processes.

MOBOTIX

MOBOTIX has developed and manufactured IP video systems, video management and analysis software in Germany since 2000.
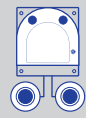
MOBOTIX stands out for its **high level of reliability**. All outdoor cameras are subjected to a stress test for temperatures between -30°C and +60°C (-22°F and +140°F). Without additional components, without heating or cooling and with no moving parts (for example auto iris), they are virtually maintenance 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.
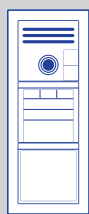
An intelligent IP video system from MOBOTIX allows you to **reduce total costs**. The investment pays for itself after a short time and the free-of-charge software and updates ensure it is a future-proof investment.

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:

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