

Donbass Arena - ready for the UEFA EURO 2012 Football Championship Games



Modern video system provides security at a UEFA-Certified Stadium in Donetsk (Ukraine)

The Donbass Arena was opened on August 29, 2009, with a sensational ceremony that was attended by Ukrainian president Victor Yushchenko. Many national and international pop stars performed at the opening celebration. The arena is the first Eastern European football stadium that meets the criteria by UEFA as an Elite Stadium and it will host an important venue - the UEFA EURO 2012 Football Championship Games, including the semi-final game. The new home stadium of the 2009 UEFA Cup Winner, FC Shakhtar Donetsk, offers seating for more than 51,000 spectators.

Architectural Highlight

Even before entering the arena, visitors stop to admire the world's largest "floating" football made of granite. Carved from a single piece of stone, the football floats on a thin surface of water. Outside the stadium, the 24,000 square meter shiny façade especially catches the visitor's eye. Inside the stadium, the spectator seats are arranged in an unbroken oval shape ensuring that the football field is perfectly visible from every

seat so that nobody misses a crucial moment in an exciting football game. This phenomenal building is even more fascinating at night when the sophisticated lighting illuminates the Donbass Arena in blue. In addition, after sunset, some 272 floodlights illuminate everything that is happening on the field.

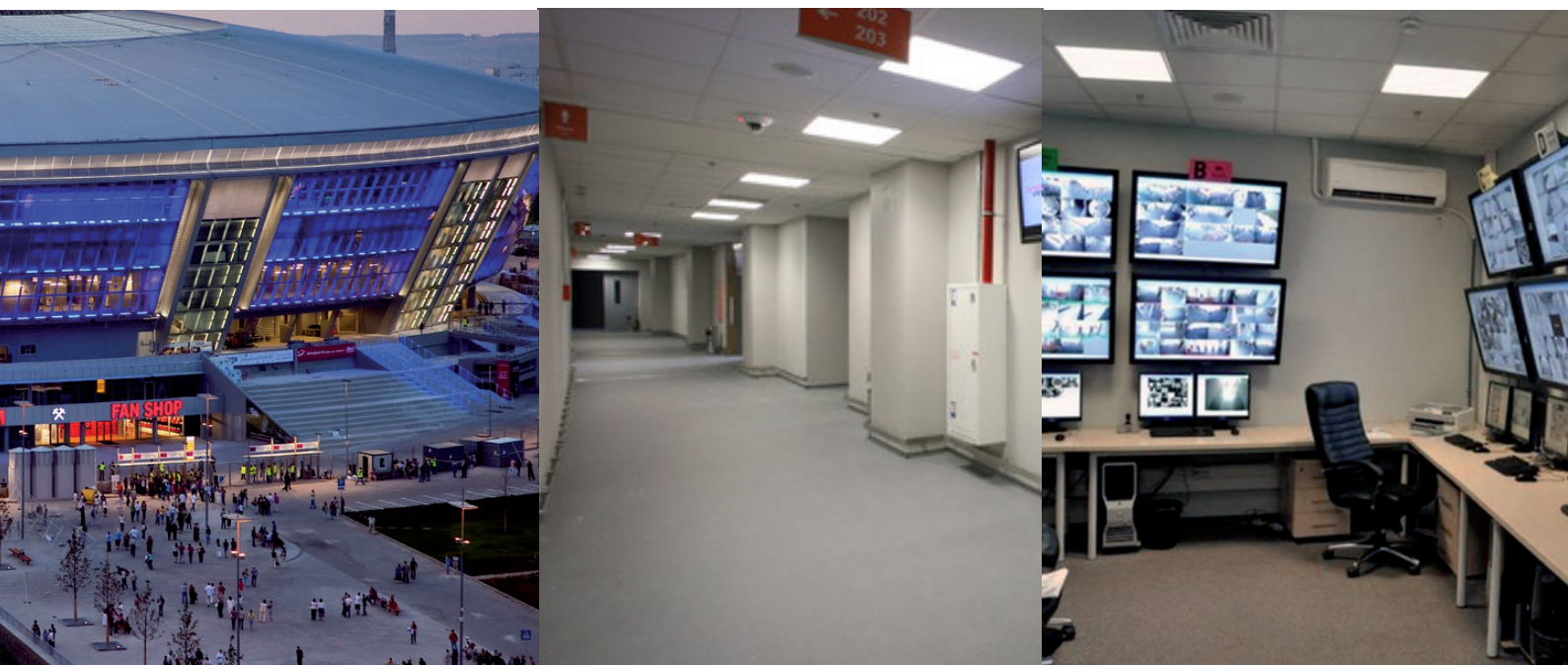
Fully Equipped And Securely Designed

The Donbass Arena also accommodates three restaurants, four bars, a lounge area, fitness studio, fan café, the FC Shakhtar museum and a merchandising shop along with 53 food stalls. Visitors will find everything they need, whether attending a football game or another major event such as a concert or a show. Of course, security is critical here. It can take up to one hour for all 51,504 spectators to find their seats, but it only takes eight minutes to evacuate the entire stadium in an emergency. "We want our visitors to feel safe here and enjoy their stay. This is why we only use cutting-edge security technology," said the Director of the Stadium,

Oleksandr Atamanenko. The number of video surveillance cameras installed is very impressive, but hardly surprising considering how large the area is: 528 MOBOTIX cameras, supported by 58 Bosch PTZ cameras, are keeping an eye on everything in and around the Donbass Arena.

High Resolution is Crucial...

The tasks the video system must perform in order to ensure security in the Donbass Arena are very clear. First, it should allow the identification of every person as they enter or leave the stadium as well as during their stay. Second, it is used to monitor and control the flow of visitors at key points such as the entrances and exits of the stadium, the entrances to the seating area or in the park. Other key areas in where cameras have been installed include the restaurants, parking lots and fan shop. "We chose MOBOTIX cameras based on their impressive array of features," explained Sergey Burgela, Chief of Security at the Donbass Arena. "I would particularly like to mention the image quality. I can zoom in



Consistent Video Security in all Key Areas

on a potential troublemaker and immediately have a detailed image of his or her face that I can then send to the police for identification.”

The cameras act preventively and enable the security personnel to arrange for troublemakers to leave the stadium even before a game begins. If an incident occurs, the video security system can also help to identify the offenders after the event. The system is therefore invaluable for shedding light on what happened.

... as are the low Costs

The cameras, which feature 3.1 megapixel sensors, not only deliver extremely sharp images, they are also able to provide a complete overview of much larger areas compared to conventional cameras with a lower resolution. “The MOBOTIX bid required fewer cameras than offers from other manufacturers,” says Burgela. In addition, the existing IT infrastructure could continue to be used. All 528 cameras are supplied with

power via PoE switches and are connected to the largest network ever installed in Ukraine. It has more than 6,000 ports.

Weatherproof and vigilant at Night

Operating outdoors and at night place high demands on a system. The weatherproof design and absence of mechanical components made another compelling case for the products from Langmeil, Germany. They require no heating or cooling and need very little maintenance. The cameras deliver the highest-quality images around the clock thanks to the two separate, high-resolution sensors, one for color images during the day and one highly sensitive black and white sensor for night images. The unique DualNight technology works reliably without any mechanical moving parts and guarantees extreme light sensitivity. The powerful stadium lighting, in particular, which makes the Donbass Arena shine like a diamond at night, requires

backlight-proof sensors like those used in MOBOTIX cameras.

Decentralized Storage Solution, simple Installation

“The decentralized concept was what really convinced me,” said Evgeniy Konovalenko, head technician of the Security Department. Image processing and event control take place in the cameras themselves. This not only dramatically reduces the load on the network, but it also allows users to do everything simultaneously, such as live image transmission, recording and event search. “At four workstations, we transmit live images to 42-inch monitors. We also use two 19-inch monitors for searching the archive,” explains Konovalenko.

Software included

“We work with MxControlCenter on each of the screens. The software is very user-friendly,

MOBOTIX Ukrainian Partner wins recognition

This major project was completed by Unitop, a MOBOTIX distributor in Ukraine. The former IT company, founded in 1991, has worked with MOBOTIX on over 50 installations since they started working with MOBOTIX in 2008. The team made its case against the competition and won the contract with a comprehensive total concept.

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


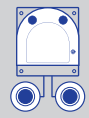



MOBOTIX stands out for its **high level of reliability**. All outdoor cameras are subjected to a stress test for temperatures between -30°C and +60°C (-22°F and +140°F). Without additional components, without heating or cooling and with no moving parts (for example auto iris), they are virtually maintenance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



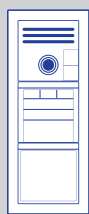

An intelligent IP video system from MOBOTIX allows you to **reduce total costs**. The investment pays for itself after a short time and the free-of-charge software and updates ensure it is a future-proof investment.

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: