



DAS STADTWERK.DONAU-ARENA

TRUST VIDEO TECHNOLOGY FROM REGENSBURG

As an ice skating stadium, ice hockey match venue, the setting for musicals or rock concerts, *das Stadtwerk.Donau-Arena* in Regensburg is widely appreciated as one of the premier event locations in the region, and as a multipurpose hall it can be adapted to meet an enormous range of requirements. Over 150,000 visitors every year demand a modern infrastructure – not at least in terms of security technology. It should be capable of ensuring the safety of visitors, fans and employees and at the same time satisfy their requirements with regard to maintaining their personal privacy. Therefore, in 2017 the management of *das Stadtwerk.Donau-Arena* decided to modernise the arena's video security equipment with a total solution from the Regensburg-based company Dallmeier. A home game for Dallmeier, with everything to play for, because for the first time an ice skating stadium would join the long list of stadium projects undertaken by the global player from Regensburg.

Rapid response time with modest expense

The facilities offered by *das Stadtwerk.Donau-Arena* and its capacity – it can hold over 4800 ice hockey fans – mean that the multipurpose hall and home venue for the third-tier league (Oberliga) ice hockey team EV Regensburg satisfies the requirements set forth in the 9000-point plan of the German Ice Hockey League (DEL). Accordingly, it is eligible to host in-



ternational ice hockey matches and has welcomed the German national ice hockey team among others. It is no surprise, then, that great importance is attached to a security strategy in which the fans can enjoy the party atmosphere without worrying about their safety, and players and employees are also protected from danger. These two primary aspects thus provide the capability not only to obtain an overall view in the event of acute danger situations – outbreak of fire, for example – but also to help with the rapid investigation of crimes in the stadium, on the concourses or in the car parks, for instance. The operators were also particularly keen to keep the installation and operation as simple as possible and the total costs low, while at the same time to be able to adapt the systems to various requirements.

Privacy and data protection are valuable commodities even in the stadium

Data protection and data security are very important to the operators of *das Stadtwerk.Donau-Arena*. The fact that Dallmeier is based in Germany as well as many specific functions therefore guarantee compliance with the legal requirements, in particular the new European General Data Protection Regulation for protecting personal data. Examples of this are the “Privacy and People-Masking“ functions, with which individuals can be “pixellated” or certain areas can be covered, or the “dual control principle”. With the last function certain images can only be accessed by two personnel members at the same time, with different passwords, for use in police investigations, for example. Many other security and protection functions, e.g. for limiting retention time or resisting hacker attacks targeting the video system, ensure that all legal requirements can be met with Dallmeier technology, even if the regulations are changed.

Analyse details and still keep the big picture in sight: The “Panomera® effect”

Most importantly, *das Stadtwerk.Donau-Arena* wanted a system that would enable a rapid response to isolated incidents while maintaining an uninterrupted overview of the total picture. The multifocal sensor system of the patented Dallmeier Panomera® technology is designed to provide them with exactly that: If necessary, the operator can focus on a certain area, but capture and recording of all areas of the scene under observation continues simultaneously, without





interruption and in the highest resolution. This means that an occurrence can be reconstructed subsequently wherever it occurred in a manner that is admissible as evidence, even if the operator was focussing on a different detail of the scene at the time. This is not possible with conventional PTZ (Pan Tilt Zoom) cameras. *Das Stadtwerk.Donau-Arena* has installed several S8 Ultraline series Panomera® cameras offering good low-light sensitivity even in lighting conditions of events such as concerts to ensure the safety of the guests.

Outstanding light sensitivity for car parks and concourse as well

Surveillance of the entrances and exits, car parks and concourse/ticket office areas is assured with infrared (IR) box cameras and dome network cameras. The Dallmeier IR cameras have been developed with particular attention to changing light conditions to ensure 24-hour video coverage, combining the very latest sensor and encoder technology. They are thus able to deliver outstanding contrast, brilliant clarity and the highest possible resolution and colour fidelity even under diffuse event lighting. In IR mode at night, the camera's high infrared sensitivity and semi-discrete 850 nm high-performance LEDs guarantee exceptional results. The IR network cameras are supplemented with two Topline series dome camera models with 3K, high resolution in real-time and good light sensitivity. In addition, a model from the Nightline series with 2K, full HD and excellent low-light performance also contributes to 24-hour video coverage.

Innovative 3D technology encourages planning confidence

The customer learned about the successful deployment of a Dallmeier solution for stadium security in the new Regensburg football stadium "Continental Arena" from the operator company *das Stadtwerk Regensburg.Bäder und Arenen GmbH*. In the request for tender and bidding phase, the operations manager of *das Stadtwerk.Donau-Arena*, Peter Lautenschlager was particularly impressed by the 3D model presentation, with which the planning experts from Dallmeier's 3D-Engineering team supported the project from start to finish. "From the very beginning, we were able to obtain a very precise picture of what we would get later. And in the end, everything from the camera viewing angles to image resolutions over the entire observation area matched what was shown in the 3D model simulation exactly. So we were very soon able to plan with great confidence, keep a clear idea of costs throughout the process, and were finally completely satisfied after implementation. What we did find surprising was how much planning and project work could be done even at a very early stage using the 3D technology, 'practically at the same time'", recounts Peter Lautenschlager.

Project development and implementation: The "Factory Acceptance Test" as the last hurdle

The planning proposal and the bid resulting therefrom convinced the customer, and the project was executed jointly with the installation company, Dallmeier group member IPPI GmbH from late 2017 to early 2018. Prior to installation, the system was preconfigured and tested in the Dallmeier Factory Acceptance Test Center (FAT) to ensure 100% functional capability and trouble-free implementation. The mounting of the Panomeras presented a further extraordinary challenge, since they had to be mounted on the special ceiling structure at a dizzying height of about 15 metres. Installing the systems while standing in cherry pickers or lifting platforms at such a height was no job for anyone suffering from vertigo. Peter Lautenschlager confirms: "IPPI worked very professionally. We were very satisfied!"

Surveillance, recording, analysis

The data recorded on the IPS 10000 appliance can be analysed quickly and conveniently even while the game is in progress at two video analysis stations with Dallmeier Workstations using the SMAVIA Viewing Client.

Conclusion: Much more than just video cameras

The operators are extremely satisfied with the new systems. Peter Lautenschlager: "In an age characterised by both digitalisation and an increasing unpredictability of events, it was clear to us that we need to upgrade our camera and recording technology from analogue to IP systems and deploy modern security equipment. The quality of the images delivered by the new cameras is exceptional. The perfect harmonisation of camera technology and intelligent (live) observation and analysis enables us to receive meaningful image material so that we can act rapidly if intervention is needed. We want happy visitors and fans. With solution from Dallmeier, we have obtained exactly the right degree of data protection while offering the highest level of security. We are very glad to have chosen the right partner in Dallmeier."

