



Provides 16,000 m² of security at the Valley of Waves with just three cameras:

SUN CITY HOTELS & CASINO RESORT



Challenge

- Prevent and investigate pickpocketing and swimming accidents
- Cover large areas of the water park
- Discreet appearance of camera solution

Solution

- Only 3 Panomera® multifocal sensor cameras
- SeMSy® video and alarm management system
- Transparency for visitors thanks to information signs

Only 3

Panomera® camera systems

16.000 m²

Area covered

Maximum

improvement of the customer experience

Result

- Maximum overview thanks to combined camera image
- Enhanced customer experience with minimum visibility
- Seamless integration with the indoor video system



"There is simply no other camera technology on the market that 7/7/7meets our key requirements: Maximum enhancement of the customer experience with minimum visibility."

Hendrik Strauss, Resort Security Manager, Sun City







The legendary Wave Pool in the "Valley of Waves" is the undisputed main attraction in Sun City's famous water park. Here, visitors find their place in the sun, with two-metre-high waves shooting into the air every 90 seconds. But where there is a lot of light, there is also plenty of shadow which come in the form of pickpocketing and occasionally swimming accidents. With a video technology solution from Regensburg-based manufacturer Dallmeier, the Sun City Resort has been able to significantly improve their "customer experience".

Due to the size of the resort, it's a daunting task to monitor the movements of all residents and day visitors in the "Valley of Waves" and therefore, as in any amusement park, it's unfortunately unavoidable to be accountable for the actions of "Valley" users. By using Dallmeier's patented Panomera® multifocal sensor cameras and SeMSy® video management software, the operators have succeeded in effectively managing their liability for the safety of all visitors to the Valley. In the event of an accident, the company also has access to easy-to-use video documentation. This makes it possible to accurately reconstruct the causes of accidents and take appropriate action.

No sunbathing under cameras

The challenge was to reconcile the security interests of the visitors and the desire to improve customer service with the expectation of a carefree stay at the beach. Of course, there are signs pointing out the video security Johnathan Rieder,

CCTV Technician at Sun International

technology in place, but it is unlikely that guests want to be constantly confronted with the sight of cameras. "This was also the classic paradox of many security solutions: How can you secure an entire beach area in such a way that visitors are protected in the best possible way, but do not feel harassed?" says Hendrik Strauss, Resort Security Manager at Sun City. "It quickly became clear to us that the right choice of technology would play a central role in this initial situation."

Only three systems for more than 16,000 square metres

In these conditions, and after extensive testing, conventional camera technology was ruled out: The images were simply not accurate enough — or the operator would have had to "spike" the site with many cameras. In the end, the surveillance department opted for the patented Panomera® multifocal sensor technology from



With just three Panomera® cameras, Sun City Hotels & Casino Resort covers 16,000 square metres.





Regensburg, Germany. "These cameras solve the optical dilemma of decreasing resolution in depth or distance by combining multiple sensors with lenses of different focal lengths," says Johnathan Rieder, CCTV Technician at Sun International, explaining the patented technology. "In this way, the systems provide a consistently high-resolution image of the entire object space, including the rear image areas — and for the entire area of just over 16,000 square metres, the operator only needs three Panomera® S8 Ultraline camera systems. At the end of the day, the operators are looking at a single overall image — with normal 4K cameras, that would quickly be 20 - 24 individual images."

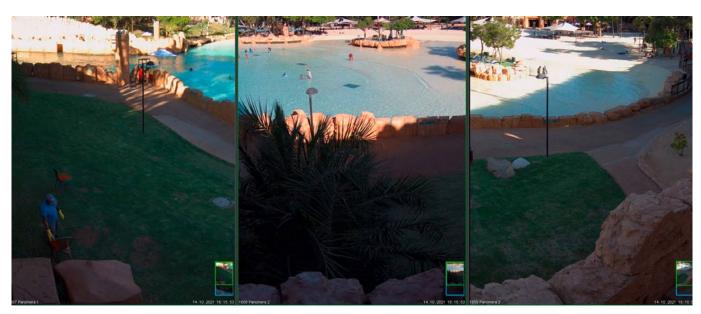
Maximum overview for the operators and recording of all details

The images from these "individual cameras" are then "stitched" together by software to form an overall image – eight individual images are combined to form one overall image. This means that the operator always has a complete overview during live observation, as the entire terrain is displayed on just three monitors. If required, any section of the overall image can be selected with



Perfect overview and any number of detail zooms – both live and in the recording. This is made possible by the Panomera® system's patented combination of up to eight sensors in one optical unit.

the mouse and opened in a separate window. Operators can zoom into these detailed views as required, enabling them to identify and track details with precision. The special feature is that any number of these detailed views can be opened at the same time and that this function is available in live operation, but also in the recording. This provides Sun City's security experts with an extremely powerful tool for investigating crimes or determining the exact cause of an accident.



Operators can zoom in on any number of freely selectable image areas. Unlike PTZ cameras, everything is always recorded in the highest quality, regardless of the zoom range. In this application, the three Panomera® systems replace between 20 and 24 single sensor cameras.



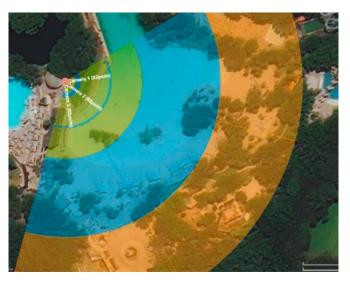


Bright beach, dark forest

Another advantage of the technology used is that, with eight individual sensors available for each image, the problem of large differences in brightness can be solved very well. After all, each of the sensors only must adjust to the differences in brightness in exactly the image area for which it is "responsible". And in the Valley of Waves, the contrasts could not be greater: The terrain includes both bright sandy beaches and the adjacent tropical rainforest – a huge challenge for any imaging system.

"Customer experience" improved to the maximum

"We have been using Dallmeier's 'standard' camera technology and the company's 'SeMSy®' video and alarm management system 'indoors' in the casino for years. We have a total of around 1,200 cameras and are still convinced of the quality of the systems," says Hendrik Strauss, Resort Security Manager at Sun City. "So, it made sense for us to also use Dallmeier in the outdoor area as well. Especially as there is simply no camera technology on the market that meets our key requirements. Maximum improvement of the customer experience with minimum visibility."



For accident prevention in swimming pools, it is important to have an overview of as large an area as possible with just a few screens.



- Case Study on YouTube
- **Dallmeier Solutions for Casino**
- Homepage "Valley of Waves"

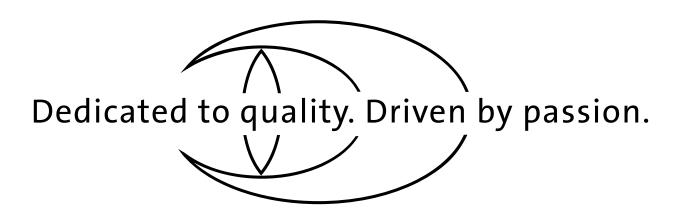






+49 941 8700-0





Dallmeier electronic GmbH & Co.KG Bahnhofstr. 16 93047 Regensburg Germany

Tel: +49 941 8700-0 Fax: +49 941 8700-180

info@dallmeier.com www.dallmeier.com

