

A construction project in video.

A Chilean developer innovates with Axis technology to attract investors and clients to its high-end real estate projects in Santiago.



Organization:

Desco

Location:

Santiago, Chile

Industry segment:

Commercial

Application:

Live streaming, remote monitoring, safety and security

Axis partner:

Cibernia

Mission

With a company history spanning over 80 years, Desco is a Chilean developer nationally recognized for its work on critical infrastructure projects and prominent commercial and residential buildings. The company's "Pyramid Lagoon" high-rise building project is situated in Huechuraba. One of the most desirable areas of Santiago, it offers convenient access to the capital's most influential business district, Business City. Unique aspects of this project were the inclusion of an expansive recreational lagoon adjacent to the building – the first of its type in the capital city – along with the company's goal of providing real-time viewing of the construction work in progress to clients, investors and others related to the project.

Solution

Around the clock, 365 days a year, HD cameras stream a live broadcast over YouTube allowing for remote viewing of work progress on any device, anywhere in the world with internet access.

The project was initially planned for implementation with a single Axis HD camera. However, with the addition of the artificial lagoon area around the building, a total of three cameras was required.

Result

Live streaming of work on Pyramid Lagoon has allowed Desco to show the actual progress of the real estate project to investors and clients. Thus it has become a helpful tool for sales teams by bringing added value to the property, while at the same time improving security. In fact, the results have led to expansion of the project with more cameras, and the planning of another similar initiative at a building to be constructed in the Coquimbo region of Northern Chile, approximately 300 miles from the company's Santiago headquarters.

“The high-quality live video stream is a real sales tool and also great for security; we can see what’s happening during the entire project on a smartphone.”

Mauricio Zamora, Desco General Manager.

How you build a building matters

As one of the world’s most earthquake-prone regions, construction projects in Chile can be challenging. Demanding conditions often require an innovative approach, and the country has demonstrated its expertise in this sector at the international level through outstanding project quality, and especially through demonstrating a great sensitivity toward the natural environment.

“Innovation at Desco is a part of our history. We were the first company in Chile to have cranes and to construct buildings using concrete. We have been pioneers in green roofing – the ‘Fifth Wall’ – and it’s been more than 10 years since we completed our Costa Brava project in Concón. Along the lines of this same concept we developed the Living Fifth Wall, such as in Magnolia Park in Valparaíso, where we constructed a major development that included terraces with views,” says the company’s general manager, Mauricio Zamora.

In its mission, Desco is dedicated to using technology to the full extent. Since 2016, the company has relied on Cibernia as its technology partner in implementing solutions that enable high-quality 24/7 online viewing of building projects through their various stages of development. “We were very interested in the idea of seeing our work in a high-definition live broadcast so that investors, clients and executives would be able to see the work in progress, in this case on Pyramid Lagoon, a high-end joint housing project in Huechuraba, right next to Business City,” says Zamora.

From his perspective as technical director at Cibernia, Leopoldo Herrera recognizes the valuable role that Axis technology has played in delivering the solution Desco was seeking. “Our projects have always been oriented toward delivering quality, long-lasting solutions which is why from the start we proposed transmitting images using Axis cameras that, in addition to high image quality also provide on-board image processing capability. This technology allows for running ‘embedded applications’ within the camera itself, simplifying installation as well as minimizing potential points of failure, while avoiding the hidden costs inherent in other alternative technologies,” says Herrera.

Ultra HD

The project faced several obstacles at the start, such as a lack of reliable communications and electricity connections, formidable challenges to say the least, when you’re attempting to provide a high-quality video stream viewable on any device, at any time or place. In order to overcome this, they were able to install a point-to-point link to a building some 100 yards from the site by mounting an Axis camera to a crane. From there, images can be captured and transmitted online via YouTube. “Together with Cibernia we persisted in finding a reliable solution that provides high-quality imagery in real time – at a resolution that’s even higher than that allowed to be uploaded online to YouTube – which has resulted in the actual expansion of this project,” says Zamora.

The solution required a total of three network camera models. The main camera installed was AXIS P1435-E, a 1080p HD camera delivering 60fps and capable of providing an overview of an entire construction site, like in the case of Pyramid Lagoon, where features such as their outstanding high-contrast and low light capabilities are critical. The second camera required was AXIS P1428-E 4K Ultra HD capturing 8.3 megapixel images that can render fine detail. The third camera installed, the AXIS M1124-E HD, is a 720p model also suitable for outdoor environments.

“Our clients and investors are pleased because now they can see the work in progress without having to be there. This has created a domino effect, and now every day more and more people affiliated with the company get to view the worksite in real time,” explains Zamora. Desco is preparing to apply its unique building design concept to another project that will be breaking ground in Coquimbo, approximately 290 miles from Santiago. There, Desco, in cooperation with Cibernia, will install three cameras that will provide a view of the project’s progress as well as supply video to various departments. As a result, clients can enjoy seeing a preview of the panoramic views they will have from what may soon become the location of their new home.

