City of Dreams Macau – a paradise with perfect building technology

This spectacular entertainment resort benefits from state-of-the-art fire safety and building comfort – thanks to Total Building Solutions from Siemens.

City of Dreams: This exclusive mega resort on the Pearl River Delta in southern China encompasses hotels, casinos, clubs, bars, restaurants, and theaters, and caters to guests from all over the world. Building technology from Siemens provides reliable fire safety and efficient building management.

The building

City of Dreams, an entertainment resort of superlatives in the southern chinese city of Macau, was opened in June 2009. The complex encompasses a 39,000 m^2 casino with approximately 400 tables and 1,300 slot machines, as well as three hotels: Grand Hyatt Macau, Crown Towers, and Hard Rock Hotel. More than 20 restaurants, clubs, and bars take care of the culinary needs of guests, and two theaters offer spectacular entertainment. In addition, 16,000 m^2 of retail space provides an exclusive shopping experience with the most sought-after brands in the world.

The challenge

This mega project required large-scale technical systems that could be integrated. Building comfort, fire safety, security, efficiency, and uninterrupted operations had the highest priority.

In addition, the customer's tight construction schedule placed high demands on project management and coordination. A team of experienced experts was on site to supervise the implementation of the Siemens solutions selected for this project.

Answers for infrastructure.

The solution

For City of Dreams, Siemens delivered a turnkey fire safety and building management concept. This comprehensive solution includes a variety of systems for fire detection, evacuation, building automation, energy management, heating, ventilation, and air conditioning. In addition, Siemens was in charge of the installation and commissioning of all delivered products, including extensive services such as the energy optimization program.

The safety concept for persons and infrastructure includes a fire alarm system with 7,500 detectors, a voice alarm system with 14,000 loudspeakers, 75 aspirating smoke detectors for rooms with high air exchange rates, as well as associated services. Innovative technologies and processes minimize technical malfunctions and ensure rapid detection and recovery in emergencies. This contributes to highly efficient operations, uninterrupted business workflows, and a smooth and pleasant vacation experience for visitors. All systems are monitored by a comprehensive building management solution with 44,000 data points. It makes sure that the room climate in all buildings areas and hotel rooms is comfortable, that elevators and escalators run smoothly, and that the lighting makes City of Dreams look its best. Thanks to energy-efficient solutions and services as well as the building management system's monitoring and control functions, the energy consumption of the resort's chiller plant alone was reduced by about a third. This is an important factor, considering that buildings account for 40% of energy consumption worldwide. The solution from Siemens effectively lowers operating costs, conserves fossil resources, and reduces the CO_2 emissions of the City of Dreams mega resort.

Highlights

- On schedule project management by on-site experts
- Reliable overall protection thanks to comprehensive fire safety
- Lower operating costs thanks to energy-efficient solutions and services
- High operating efficiency due to intelligent resort-wide systems integration
- Comprehensive support with one point of contact for service and maintenance