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# ThyssenKrupp – sustainable thanks to Total Building Solutions

Future-oriented showpiece: integrated security and building control center, green monitoring, and new control concepts

The ThyssenKrupp Quarter houses the corporate headquarters of this industrial company. This city in a city is a true standout, not only due to its striking architectural design but also because of its customized overall solution for electrical and security technology as well as its energy-efficient building automation system.

## The building

ThyssenKrupp constructed its new corporate headquarters right in the heart of Essen. The ThyssenKrupp Quarter is an architectural showpiece which houses around 2,000 employees of this international company.

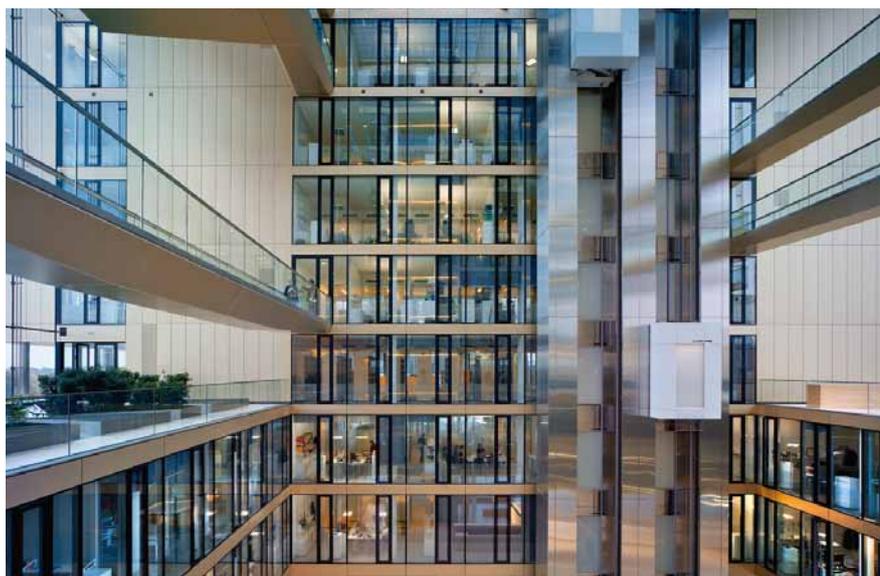
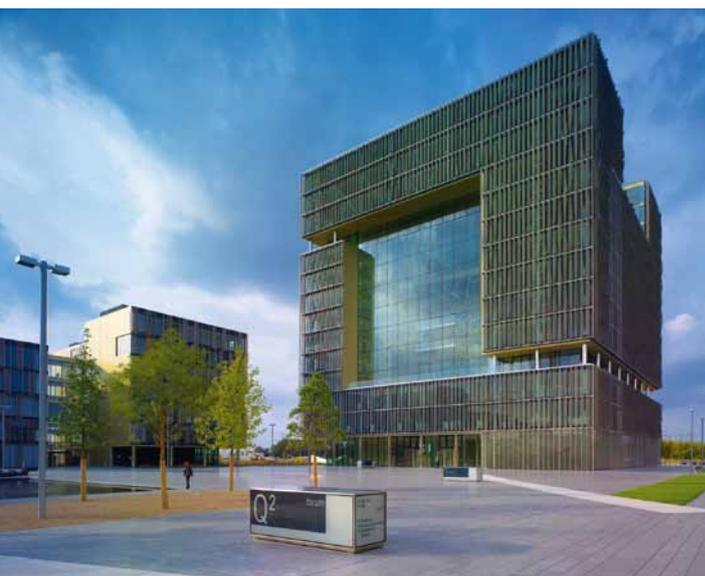
A campus comprising 230 hectares is home to several striking buildings, with the cube-shaped corporate headquarters, Q1, forming the centerpiece. Q2, the Forum, provides a venue for meetings and project work and incorporates the subterranean logistics for the entire Quarter. The seven-story administrative buildings Q5 and Q7 are integrated harmoniously into the grounds.

## The challenge

The ThyssenKrupp Quarter is a “city” in its own right. Sustainable resource management was a major focus during planning and implementation.

For the proposed solution, this meant using energy cost-effectively by taking into consideration the weather conditions, comfortable workspaces, personnel security, as well as the protection of data and business processes against unauthorized access, theft, and fire.

**Answers for infrastructure.**



### The solution

With its overall concept, Siemens helped to implement an integrated solution for electrical and security technology as well as for an energy-efficient building automation system tailored to the specific needs of the customer.

At the heart of the installation is the security and building control center that monitors the entire campus. This highly automated management system supplies, monitors, and administers the technical systems.

To ensure security on the campus, a danger management system coordinates 350 video surveillance cameras, 490 card readers, and an intrusion detection system equipped with 2,750 intrusion detectors. In addition, Siemens introduced a new solution that provides for touchless, video-based identification and counting of people. The security concept consists of a fire alarm system including aspirating smoke detectors and voice alarm.

Building automation includes the Green Building Monitor™ information system. This system is part of a customizable solution for energy management which monitors the consumption data of buildings. The Green Building Monitor also makes it possible to provide employees and visitors with information that will motivate them to use resources more responsibly.

In addition, the building automation system includes a specially developed operating concept for 1,133 rooms which provides for the energy-efficient control of room functions. Sensors record daylight and detect the presence of people, which allows the system to provide optimal workspace conditions based on those readings. This concept does not include traditional switches because telephones are used to customize all functions for each workspace.

The solutions implemented by Siemens delivered the high level of quality expected by the ThyssenKrupp technology group.

### Highlights

- Convenient management system tailored to the customer's needs
- Touchless, video-based access control system
- Newly developed operating concept for rooms with telephone-based control
- Maximum energy efficiency thanks to the Green Building Monitor information system