Comprehensive Controls Solution: Office Park 4

A full building management system for the state-of-the-art Office Park 4 at Vienna Airport via a single source — Johnson Controls keeps track of everything, from basic control functions like temperature and shading to the selection of the optimal energy source.

The newly built Office Park 4 at Vienna Airport comprises 20,000 m² of office space, an additional 2,700 m² of flexible co-working areas and event areas with capacity for up to 400 guests. General contractor Swietelsky AG relied on the expertise of Johnson Controls Austria GmbH & Co OG for the regulation and building management technology of the impressive area.

The operator has paid special attention to the building's energy efficiency. A geothermal system, in conjunction with a heat pump system, provides approximately 530 MWh of heat output for ceiling heating and cooling on the office and conference floors. "Using the latest controllers from the CGM family, Johnson

Controls ensures smooth operations while selecting the optimal energy source," said Walter Neuberg, Head of Project Management at Johnson Controls Vienna. "Be it the combination of geothermal energy and heat pumps, or if necessary, supporting via exchangers for the district cooling or heating supply of the airport."

To meet the demand for autonomous control of the individual rooms, Johnson Controls cooperated with LOYTEC electronics GmbH. The latest L-ROC room controllers and their associated room control units from the L-STAT generation were installed to enable a host of features: optimal temperature control, monitoring of all windows and checking of all cooling ceilings for condensation, shading using SMI technology, and DALI constant light control in conjunction with the latest generation of LDALI-MS2 multi-sensors.

Also integrated into the Johnson Controls world is the monitoring and control of all fire dampers as well as the complete control of

the complex pressurized ventilation and smoke exhaust systems. In combination with the fire controlsystem "Ringbus", compliance with the regulations according to ÖN F3001 is guaranteed.

"Together with the complex TGA control centers, a total of 16,000 data points are networked and processed by software," said Walter Neuberg.

This is achieved with Johnson Controls products from the NAE/CGM world of automation. The relevant data points are brought together using the BACnet/IP standard. On one hand, this enables smooth communication between the Johnson Controls components and, on the other, visualization of the room conditions at the airport's user interface.

As a special highlight, Johnson Controls is using its latest product Metasys UI 10.1 for this project. Its state-of-the-art web-based visualization, effective alarm management and informative Trend Viewer support the operator in daily building management.



Modern offices near the terminal at Vienna Airport.

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