

Case study

Milwaukee City Hall

Milwaukee, Wisconsin



Modernization project maintains historic integrity

The citizens of Milwaukee have identified with this local landmark for more than 120 years. Built in 1885, the historic Milwaukee City Hall is the anchor of the city's three-building downtown complex. Nearly 3,500 employees occupy these buildings. To improve facility operations and occupant comfort in the buildings without negatively impacting the historic integrity of the City Hall, the city called on Johnson Controls to install its Metasys® building management system.

The Milwaukee Department of Public Works' vision has always been to preserve the City Hall as a cultural and architectural icon. In fact, in 2005 the city embarked on a three-year restoration project for the buildings' exterior that gained national attention. But even before the restoration project began on the exterior, the city was challenged with operational and comfort concerns associated with outdated building controls and aging equipment in all three of the facilities on the downtown campus.

"The building controls were in need of an upgrade, but we had to be careful of how we modernized the controls system," says Venu Gupta, facilities manager for the City of Milwaukee. "Because the City Hall is listed on the National Historic Register, its building controls must be hidden, so they do not interfere with the historical structure. Johnson Controls not only understood these special needs, they also helped us meet them within our budget constraints."



A rich history

When the city's facilities staff decided to upgrade the three-building complex, it was only natural that they turned to Johnson Controls for assistance. Ever since Johnson Controls founder, Warren Johnson, designed the City Hall's pneumatically driven clock in 1896, the company has been working with City of Milwaukee officials to better control the indoor environments of municipally owned properties. The success of this relationship led to the city's decision to contract with Johnson Controls for the conversion from pneumatic controls to direct digital controls in all three facilities.

Johnson Controls and the City of Milwaukee staff teamed in a five-year plan to implement the facility enhancements. The plan involved replacement of the 30-year old controls in all three buildings with the Metasys® building management system, which was the largest Metasys installation in Milwaukee at the time.

The Metasys system provides more precise control of HVAC and mechanical equipment, improving occupant comfort and budget planning. And by working together with Johnson Controls, the city is able to expose its staff to the latest technologies, increasing the skill sets of its own employees. As a result, the technicians are able to better use the new equipment and continue to improve building operations over the long-term.

Improving operational efficiency

With the installation of Metasys, including four computer workstations,

the three-building complex realized a 79 percent decrease in HVAC-related work orders on a remodeled floor. This occurred within a six-month period. The Metasys system allows staff to detect and react to problems and variations in building environments before the occupants even feel the change in their immediate surroundings.

In addition to product upgrades, Johnson Controls provided training and education for the staff through biweekly status meetings. The sales engineer, project engineer, in-house HVAC mechanics and resident Johnson Controls technician discussed technological progress and the current state of projects, including repair and remodeling jobs. Because the remodeling occurred on a floor-by-floor basis, these meetings encouraged the staff to identify areas that need improvement, as well as initiate new projects. Seven mechanics and three electricians from the city worked with Johnson Controls technicians to keep newly installed systems and products operating in top condition.

Remote monitoring is another example of how the Metasys system has added to the staff's efficiency. "There is no downtime at Milwaukee City Hall, because even when the staff is off site they are able to monitor and control temperatures in the buildings remotely via a computer and the Internet," explains Joseph J. Jacobsen, management facilities engineer for the city. The improved control helps keep the building occupants more comfortable and it frees the facility staff to focus on preventive maintenance and other more pressing needs.

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FACILITIES MANAGER
CITY OF MILWAUKEE

