

Missouri University of Science and Technology

Upgrading to connected chillers to deliver data-driven performance



When one HVAC asset can affect them all, increasing uptime is mission critical. The campus of Missouri University of Science and Technology (Missouri S&T) is comprised of over 100 buildings, half of which are connected via a chilled water loop system and geothermal plant.

The interconnected nature of this system means one building's chiller asset can have a profound effect on all 49 other facilities in the loop. As a result, when it came time to replace a chiller within the electrical engineering building, the university's facilities team wanted to invest in a solution that would improve uptime and efficiency.

They needed asset performance data that could deliver real-time insights and remote monitoring capabilities that would optimize the team's manpower to ensure both the singular chiller and the entire loop system remained operational. By prioritizing uptime, the team was investing in a comfortable, healthy and efficient environment for its 7,200 students.

Campus-wide integration meets forward-thinking service

As a trusted partner to the university for over 20 years, Johnson Controls was selected to implement a YORK® connected chiller within the building and connect it to the larger loop system and geothermal plant. Johnson Controls was chosen for its cloud-based dashboard

Case study



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supervisor of facilities
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which provides near real-time updates on the asset’s health and performance. Johnson Controls experts also integrated the chiller into the campus wide Metasys® system for greater optimization. To extend the chiller’s lifecycle and improve uptime, Johnson Controls will provide basic monthly check-ups and annual maintenance through a five-year service agreement.

Data insights deliver critical campus outcomes

By upgrading to a connected chiller within the electrical engineering building, the team plans to use the connected chiller services to create time, cost and energy savings. The near real-time data insights and reporting provided by the connected chiller’s remote dashboard will allow the university’s team to monitor their asset’s health anywhere, anytime to maximize staff capabilities, optimize operations and minimize long-term utility costs.

Johnson Controls chiller experts, in partnership with the local service branch, can be dispatched to triage and resolve problems. With the electrical engineering building’s HVAC system connected to dozens of additional facilities and the campuses’ geothermal system, this ability to improve uptime is critical to maintaining overall campus operations.

“Working with Johnson Controls allowed us to extend our own team with their connected service and technology,” said Gary Hawkins, supervisor of facilities and electronic systems at Missouri S&T. “We’ve gained the data analytics and labor flexibility to optimize our systems’ uptime and overall performance. We’re proud to provide our students, staff and visitors with a comfortable campus environment that meets our standards for excellence.”

Working with Johnson Controls, the Missouri S&T facilities team will foster a comfortable and connected environment for learning while minimizing costs and maximizing performance. To learn more about how Johnson Controls services higher education leaders, visit

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