Rose-Hulman Institute of Technology

CASE STUDY





Challenge

With its Memorial Union serving as a hub of activity, housing the school's dining services and a multitude of activities, RoseHulman administrators were excited about the opportunity to expand the facility to provide additional options for social gatherings to foster stronger relationships and greater camaraderie. Design plans for the new facility included impressive architecture, a new cafe featuring fresh cooked foods, additional student lounge areas, an outdoor patio, unique gathering spaces, and refurbished conference rooms with state-of-the-art audio/visual technology.

In line with their desire to provide a top-notch setting for student activities, facility managers sought an equipment solution to replace the aging 20-year old chillers serving the needs of the student center and nearby campus buildings. The desired upgrades would improve efficiency and increase capacity, while adhering to budget constraints.

Solution

Pleased with the reliability of Trane equipment, the company's expertise in HVAC systems, and its past working relationship, Rose-Hulman contacted Trane to discuss their needs. Bringing in its team of knowledgeable professionals, Trane listened carefully to the school's requirements before presenting a solution that would serve the school's best interests.

Selecting the right equipment

Utilizing their TOPSS™ Chiller Selection Program, Trane optimized the chiller design to provide an efficient and reliable solution within the school's budget. Additionally, the Trane team delivered a solution offering efficiency levels that enabled the school to take advantage of enhanced utility rebates to help offset project costs.

Using the Trane solution as a basis of design, Rose-Hulman did their due diligence, evaluating chiller options from a variety of suppliers, before selecting Trane as their upgrade partner based on the high-efficiency chiller they could provide within the school's set budget, as well as the strong support team Trane offered.

Rose-Hulman Institute of Technology

Terre Haute, Indiana

PROJECT HIGHLIGHTS

Chiller solution answers efficiency and capacity needs, while adhering to budget requirements; results in energy savings and a \$16,000 utility company rebate.

With a mission to provide students with the world's best science, engineering, and mathematics education in an environment of individual attention and support, Rose-Hulman has been ranked as the number one undergraduate engineering college by the US News & World Report® for eighteen straight years. The school has an enrollment of 2,100 undergraduate and 100 graduate students on its 200acre campus.



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CASE STUDY

Increasing efficiency, improving comfort

Based on lifecycle costs and efficiency, two 320-ton Trane® CenTraVac® centrifugal water-cooled chillers were installed to serve the Rose-Hulman Memorial Union and three smaller nearby buildings. The CenTraVac chillers offer a robust design and the industry's highest full- and part-load efficiencies, helping Rose-Hulman to provide reliable comfort for students and reduce energy costs. With a low-speed, direct-drive design, the CenTraVac chillers provide quiet, vibration-free operation to create an optimal environment for learning and socializing.

"The noise level is so much quieter with the CenTraVac chillers. You don't even know they're running."

 Chad Weber, PE. Rose-Hulman Institute of Technology, Director of Maintenance and Service Operations and Alum



About Rose-Hulman Institute of Technology

Two high-efficiency Trane
CenTraVac centrifugal chillers
keep students comfortable and
energy costs down at RoseHulman's Memorial Union.

Ensuring optimal performance

Trane factory-authorized service professionals keep the chillers running at peak performance, providing preventive maintenance to help reduce system inefficiencies, prevent downtime, and extend the life of the equipment. By taking a proactive approach to address their maintenance requirements, the school is reducing the need for urgent service calls, helping to lower operational costs.

Results

Working together, Rose-Hulman and Trane selected chillers for the school's upgraded Memorial Union that would meet the school's requirements to increase efficiency and capacity, while staying within the school's established budget. The energy-efficient Trane CenTraVac chillers installed in the upgraded student center earned Rose-Hulman a \$16,000 utility rebate.

"We are pleased with our decision to select the Trane chillers for our remodeled Memorial Union," said Weber. "I'm happy to continue our relationship with Trane."



Trane – by Trane Technologies (NYSE: TT), a global climate innovator – creates comfortable, energy efficient indoor environments through a broad portfolio of heating, ventilating and air conditioning systems and controls, services, parts and supply. For more information, please visit *trane.com* or *tranetechnologies.com*.