

Georgia World Congress Center

ATLANTA, GEORGIA



Swapping two 650-gallon boilers for a Rinnai Tankless Rack System resulted in the Georgia World Congress Center achieving significant energy savings and ensuring its high-capacity kitchen has the hot water needed to serve 20,000+ people per day.

Hot water is essential to the functionality of any kitchen, but it is especially necessary in commercial settings, where cleaning and the sterilization of dishes are imperative to stay open for business. Now, imagine a kitchen must have the capacity to serve 20,000+ people per day, depending on the events at the facility. Running out of hot water in this scenario could be an extreme challenge. Welcome to the world of the Georgia World Congress Center's management team, which is responsible for overseeing one of the top-five convention centers in the United States of America.

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Wayne Rosser, Physical Plant Manager, Georgia World Congress Center

HIGH-CAPACITY NEEDS, HIGH-CAPACITY OUTPUT

If a property is as large as the GWCC, which features three buildings containing 1.4 million square feet of exhibit space, changes to one of the facility's systems – or even changes to just part of one system – can yield significant results. So when the GWCC engineering staff discovered that the two 650-gallon boilers that provided hot water to the convention center's main food prep area were nearing the end of their useful lives, the team set about researching replacement options.

The Rinnai Advantage for Tankless Rack Systems:

- Endless supply of hot water delivered up to 9.8 GPM per unit
- Digital temperature displays provide error codes and other diagnostics for easy maintenance
- 96% Thermal Efficiency
- Commercial ENERGY STAR® certified
- Indoor/outdoor/wall/floor mount installations
- Multiple venting options (PVC, concentric)
- Available factory-direct preventive maintenance

Rinnai®

Given that the area served by the two boilers sometimes provided meals for 20,000+ people per day, the GWCC team knew the solution they chose needed to be a consistent source of hot water that the kitchen staff could rely on 100 percent of the time. Unfortunately, they knew this firsthand because the facility's existing boilers could not keep up with the kitchen's needs and periodically would run out of hot water.

AN ENERGY-EFFICIENCY TEST

With the current boiler system being approximately 13 years old, the GWCC team also realized the facility had been paying higher energy bills than necessary and that there were more advanced, energy-efficient technologies in the marketplace to consider. Aware of the energy-saving benefits that accompany tankless water heaters, GWCC Physical Plant Manager Wayne Rosser decided to replace the two failing boilers with the Rinnai Tankless Rack System and use the project as a test to see if the technology truly was more efficient.

Rinnai Applications Engineers reviewed the GWCC's hot water needs and made appropriate equipment recommendations to ensure the convention center's food prep area would not run out of hot water in the future. The system featured two wall-mounted rack units, each containing three Rinnai C199 tankless water heaters.

TEST RESULTS TO DATE

Although it has been less than a year since the Rinnai units' installation, the GWCC has seen its energy expenditures drop substantially. "We're extremely pleased by the performance of the Rinnai tankless units so far," said Rosser. "Not only are the units achieving the energy savings we anticipated, the kitchen staff's complaints about cold water have virtually disappeared. Our decision to go with Rinnai was the right one."

On top of the energy-efficiency and capacity benefits, the GWCC found the space savings offered by the Rinnai system beneficial as well. According to Rosser, "The Rinnai wall-mounted design makes for a nice look and provides my team with easy access to the equipment. All in all, this has been a great change for our facility."



The Rinnai Advantage

- Endless supply of hot water
- Built-in redundancy – never experience downtime during peak business hours
- Ability to service without system shutdowns
- Save money – installation, maintenance and operational cost savings
- Save space – no tanks needed
- Green – lower CO₂ emissions

For more information on commercial water heating solutions, maintenance services and a free sizing consultation by Rinnai Applications Engineers, call 866-383-0707 or visit rinnai.us/commercial.

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