



The Built-In Advantage™

Lochinvar Water Heating Solutions

Case In Point



Lochinvar Scores Big Points at TCU

A Perfect Fit for University's Brand New \$32 Million Recreation Center

A sound mind in a sound body. This ancient philosophy rings true at modern-day Texas Christian University. As one of the nation's leading education and research institutions, TCU enrolls about 8,600 men and women at its campus in Fort Worth. In addition to a broad, comprehensive curriculum—including the humanities, natural sciences, social sciences, fine arts, and religion—physical education is also an important part of campus life.

The University recently invested \$32 million to demolish most of its outdated recreation center and construct a new complex nearly twice as large. The mission statement of the new facility is direct and simple: "To encourage the lifelong pursuit of active, healthy lifestyles and to enhance personal development."

The 230,000-square-foot complex includes five basketball courts, a climbing wall, six racquetball courts, an elevated running track, game tables, an outdoor swimming pool, two indoor pools, a volleyball court, a weight room, three multipurpose aerobics rooms, a massage room, a training room for the TCU Horned Frogs athletics teams, and an entire floor full of the latest cardio-fitness equipment. The facility also includes a three-story academic wing filled with classrooms.

"This is a state-of-the-art facility, inside and out," says Doug Jones of Lochinvar. "The boiler room is no exception. It says a lot that Lochinvar was the equipment of choice for this facility."

Despite the size of the fitness center, it was a very tight fit in the mechanical room. Finding equipment that was powerful enough for the job, but compact enough for the floor space, was one of the primary challenges for the HVAC design team. Lochinvar equipment, with its minimal footprint and stackable machinery, is specifically engineered to overcome these obstacles.

Lochinvar equipment has long been in use at TCU in dormitories and other buildings. With a track record of reliable products and customer service, Lochinvar's Copper-Fin II® was named a "spec boiler" for all engineering teams bidding on the project. Brandt Engineering won the bid to handle the plumbing and HVAC work for the TCU construction project.

In Brief:

Project:

Texas Christian University

Location:

Fort Worth, Texas

Products Used and Number of Units Installed:

6 – Lochinvar Copper-Fin II Boilers (CHN2070)

2 – Lochinvar Copper-Fin II Water Heaters (CFN1260PM)

2 – Lochinvar Copper-Fin II Pool Heaters (CPN1260)

2 – Lochinvar Lock-Temp Storage Tanks (RGA752)

1 – Lochinvar Custom Hi-Power Water Heater (HVX270-300)

For More Information:

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Texas Christian University

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Ashcraft Company

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About Lochinvar

Lochinvar® Corporation is a leading manufacturer of high-efficiency water heaters, boilers and pool heaters, ranging in capacity from small residential units to two-million Btu/hr models. Lochinvar's world headquarters is located in Lebanon, Tenn. Other facilities include Detroit, Mich.; Tampa, Fla.; Orlando, Fla.; Philadelphia, Pa.; and Dallas, Texas. Lochinvar stocks equipment at all locations.



For more information regarding Lochinvar's line of high-efficiency water heaters, boilers and pool heaters, contact:

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Brandt worked with the Ashcraft Company, which serves as manufacturer's representative for Lochinvar, to determine the proper equipment for the project. Bill Delbridge, Ashcraft vice president, says Lochinvar's compact design was vital to achieving success.

"Space was extremely important. The Copper-Fin II met our design needs perfectly," explains Delbridge. "And Ashcraft got a lot of support from the Lochinvar guys here in town."

Brandt Engineering and TCU

chose Lochinvar equipment to provide all hydronic heat and hot water to the entire recreation center. This requires six Copper-Fin II boilers (CHN-2070), two Copper-Fin II pool heaters (CPN-1260), two Copper-Fin II water heaters (CFN-1260PM), and two Lock-Temp® 750-gallon storage tanks (RGA752).

At the same time, Brandt Engineering and TCU were also involved in the construction of a new 2,200-seat baseball stadium less than a half mile from the recreation center. A Custom Hi-Power electric water heater (HVX2700-300) was chosen for that project. It supplies hot water to the entire stadium—including bathrooms and concession stands, locker rooms, washing machines, showers, and janitorial needs.

These two projects represented a major increase in heating demand for TCU. Before its demolition in 2003, the old recreation center relied on two 2,700 MBH, 64 hp Bryan natural draft steam boilers and a single 1255 MBH, 37.5 hp Hearst steam boiler (FD150-15-5) to heat the two indoor pools and provide heat and hot water to the entire 139,000-square-foot facility. This equipment required close human supervision to achieve the necessary heating requirements. University staff had to monitor the boilers and make manual adjustments to compensate for pressure swings, because the boilers had difficulty restoring the desired temperature levels inside the building.

The new Lochinvar equipment has rectified this shortcoming. The automated system keeps a consistent, comfortable temperature throughout the complex all year. The staff at TCU is pleased to report that the boilers require minimal supervision. Furthermore, all six boilers are rarely, if ever, employed at the same time in order to achieve the desired temperature. In fact, only two of the Copper-Fin II boilers are required at any given time to maintain a stable temperature throughout the new recreation center. Since the automated system rotates the boiler firing sequence and firing time, this maximizes the lifespan of each individual boiler within the system.

The new recreation center has been open to students for more than a year. At this point, the Lochinvar boilers, water heaters, and pool heaters are meeting all of the University's expectations in terms of performance, reliability, and cost-effectiveness. The staff at TCU is particularly pleased with the ability of Lochinvar to meet all of its heating needs despite the limited space available for mechanical equipment. The University expects to continue its relationship with Lochinvar and anticipates using Lochinvar equipment in future construction projects.

As for Lochinvar, Jones calls this project a "feather in our cap" because of the wide range of applications involved. "We're supplying the heat. We're supplying the hot water. And we're heating the pool," says Jones. "That's three separate jobs that the University needed to get done, and they trusted Lochinvar with every one of them."

