THE WHOLESALER®
JULY 2005

SUPPLIER NEWS

Renovated Olympic pool now world-class, energy efficient facility

Los Alamitos, Calif. — Once plagued by rusting pipes, algae and a vast community of tadpoles, the U.S. Waster Polo National Training Center in Los Alamitos, Calif. — home of the world-champion U.S. women's and men's water polo teams — is once again striving to regain its grandeur. And, with the installation of new high-efficiency boilers, the training center is one step closer to becoming the state-of-the-art facility its sponsors and operators envision.

"We're always interested in ways to be more energy efficient," said Mark Wagner, director of recreational and community services for the City of Los Alamitos, which oversees the facility's operations. "And we're looking at a minimum of $5,00 in energy savings each year [from the boiler retrofit]. Especially with the budget impacts we're all facing, these are the kinds of numbers that mean a lot."

Years of Neglect

Located on the grounds of the Joint Forces Training Base (formerly the Los Alamitos Naval Air Station), the pool was built in 1942 to train World War II pilots in ocean survival techniques. Because of the pool's size, it also became a part-time training and competition site for water polo — hosting the U.S. National Championship tournament in 1952 and serving as the training center for the 1972 U.S. Olympic team. After the Vietnam War, use of the base was transferred to the California National Guard. But because of military budget cuts, the pool became a victim of neglect — requiring a complete overhaul in order to be put back into use.

Initial repairs began prior to the 1996 Olympics in Atlanta, but efforts stalled when the men's national water polo team — which used the pool for training — failed to win a medal. Two years later, the City off Los Alamitos entered into a joint effort with USA Water Polo Inc. to open the facility for regional use, spearheading the funding that allowed new water-filtration and heating systems, as well as lighting and permanent bleachers, to be installed. The facility is now used by more than 300 people each day (400 in the summer months), including local swim club members, city residents and military personnel.

According to City of Los Alamitos recreation coordinator Heather Gutfeld, the pool is a rarity because of its size and construction. Its 649,000 gallons are contained within a 50-meter-by-25-yard dimension to meet both European and U.S. length requirements. It has an average depth of eight feet, and military-spec all-concrete construction.

New boilers installed

Because of the heavy use requirements of the facility — water temperature is maintained between 81ºF and 83ºF, 24 hours a day — energy consumption is a constant concern. Total operating costs at the facility previously ran at about $125,000 each year.

Dave Carlson (right) and a DCM Service technician inspect the Laars Pennant boiler during a pre-fire system check at Los Alamitos.

And, because the old heating system was limping along at less than 80% AFUE, the city chose to replace the existing water heaters. Their solution: installing two of the newest boiler/water heaters from Laars Heating Systems.

The first of these, assigned as the primary heat source for the pool, is a Rheos+ 2400 (2,400,000 Btu/hour) boiler/water heater, a high-efficiency, fully-

modulating condensing unit that offers up to 97% efficiency.

"The unit is perfectly suited for the job because its controls monitor the demand for hot water and automatically adjust to the boiler's capacity to meet the required heating load from 1.2 million to 2.4 million Btu," said Dave Carlson, owner of DCM Mechanical, the plumbing and mechanical firm that performed the installations. "The Rheos provides an infinite variability of modulation between 100% and 25% of the input rate."

Wagner added, "They're an 'environmental' win, too. These are among the 'greenest' heating systems on the marketplace with NOx levels of less than 10 ppm and low CO greenhouse gas emissions, and offer up to 96% efficiency — a definite win here in California."

The high efficiency boiler reduced the amount of natural gas required to heat the pool water, lowering energy consumption and operating cost.

Maintaining nearly 650,000 gallons of water at 81ºF to 83ºF 24 hours a day demands a lot of the boilers heating the pool at the U.S. Water Polo National Training Center. The facility's new Rheos+ 2400 and the Pennant 2000 boilers from Laars Heating Systems are up to the job, all the while delivering 96% efficiency.

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Piped in lead-lag fashion to the Rheos, and serving as the secondary heater, is a Pennant 2000 (2,000,000 Btu/hour) boiler which operates at 85% efficiency. The fan-assisted, sealed combustion boiler has a 2-million Btu capacity that offers four-stage control to meet demand as needed, adding considerably to the energy savings.

Its two ignition modules permit each burner stage to fire independently. This patented design offers balanced air flow to each stage, enabling operation as individual water heaters. This permits the unit to continue operation without having to shut down the entire heater.

"It's like having a built-in stand-by water heater," said Carlson. "If there would be failure of one of the ignition systems, the other takes over. That's unlike any other water heater, and was an important factor for us."

Both of the hydronic units from Laars meet ANSI boiler and pool-heater codes, as well as Southern California requirements for low-NOx emissions.

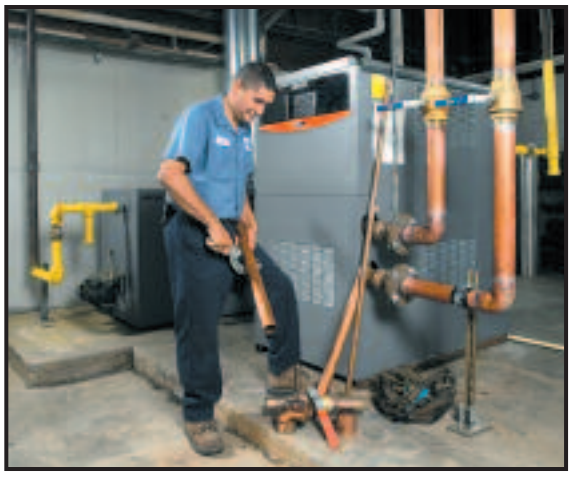
"The previous heaters really worked hard," said Mike Elmore, Laars' West and Southwest territory service manager. "But the efficiency of the two new units, when averaged together, is 10 or more percentage points higher than the existing pool heaters. Programming for temperature control also is more accurate than ever before, within 1/10 of 1º."

Carlson noted, "We now average an installation of at least one Laars system every week. When we install a Laars boiler, we don't get the callbacks we routinely find with other equipment."

For Mark Wagner of the City of Los Alamitos, the continuing improvements are a dream come true.

"This facility is a showcase of what we've been able to accomplish," he said. "Laars' service is excellent, and we've been very pleased with product performance and reliability."

For more information, call Laars at 800/900-9726 or visit www.Laars.com ■



Dave Carlson completes the piping of the Rheos+ boiler.

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