



## Case Study

### NovaCare Complex – Philadelphia, PA

#### NFL Training Facility Reduces Maintenance with Navigator® Thermostatic Mixing Valve

##### Challenge

The Philadelphia Eagle's new state-of-the-art training facility, NovaCare Complex, opened to fanfare in spring of 2001. The complex is used year-round, because it houses administrative offices, physical therapy and rehabilitation departments in addition to the team's practice facility.

The locker rooms, coaches rooms, offices, hydrotherapy pools and restrooms all have a need for tempered water. A key challenge with a facility of this type is the variation in water use between peak and off season periods, as well as the range in demand for hot water throughout the recirculated hot water system.

Excessive maintenance became an immediate problem for the thermostatic mixing valve (TMV) that was installed to service the whole building. "We had monthly work orders to repair the valve," said Ray Murphy, plumbing foreman for the Philadelphia Eagles. "It was undersized, resulting in diminished hot water in some areas of the building. The return system was also not functioning properly and in no-flow situations, the valve would seize up."

## Solution

Murphy called on Kenneth Rinear, a Bradley Corp. representative with Rinear Associates, Inc., to troubleshoot the problem and find a solution before the team arrived back in Philadelphia for the 2006 football season. NovaCare needed a valve that could deliver from five to 200 gallons of water per minute, and accurately maintain a preset temperature during periods when no water was being drawn from the system.

Rinear recommended that the existing two-valve system be replaced with a Bradley high-low Navigator® TMV (model HL-200), which could accommodate a higher capacity. The Navigator is a compact valve capable of providing tempered water for fluctuating high and low demand without the need for a second low-capacity valve.

“Sizing and specifying the Navigator valve couldn’t have been easier,” noted Murphy. “Installing the single unit was fast and the valve hasn’t required any maintenance since being installed – we’re extremely impressed.”

## Safe Water Supplied to All

The Navigator line of thermostatic mixing valves uses single-valve technology to blend hot and cold water to preset temperatures with pinpoint accuracy, providing better user protection. The benefit of the single-valve design is that it’s less complex than a multi-valve system, making it easier to set up, start up and maintain – especially in a recirculated system. Fewer connections and a universal mounting capability mean reduced installation time.

Navigator TMVs can be installed at the main water source, or in remote locations such as a locker room. All Navigator valves feature a reliable liquid-filled thermostat with a 10-year warranty, accurate temperature control to within 3°F and a positive shut off of hot water should the cold water fail. For easier servicing, the valve systems have inlet and outlet shut-off valves.

“The Navigator valve is saving us time and money on repair costs,” Murphy said. “The support of Bradley and Rinear Associates made the valve retrofit an easy decision and we’d do it again in a minute.”



Ongoing maintenance is a thing of the past with the new high-low TMV.

*“Sizing and specifying the Navigator valve couldn’t have been easier. Installing the single unit was fast and the valve hasn’t required any maintenance since being installed – we’re extremely impressed.”*

– Ray Murphy  
Plumbing foreman  
NovaCare Complex



Navigator TMVs are designed to fit virtually an application, and can be easily retrofitted for an existing system like the one at NovaCare Complex.