



## HIGH ACHIEVING SCHOOLS GO HIGH EFFICIENCY

### *Efficiencies Maximized – In a Very Nice Installation*

Schuylkill Haven School District is a competitive district in eastern Pennsylvania that maintains very high educational standards.



Old equipment in both the High School and Elementary School needed to be replaced. The original heating plant consisted of five GE Electric boilers that were about 30 years old. Due to the aging equipment, as well as the inefficient setup and high electricity costs, the school district thought that now was the opportunity to install an efficient, cost effective, rugged gas-fired system. The district had been working with Johnson Controls out of Allentown, Pennsylvania for some time, so JCI helped the School come up with the best solution for their heating needs. Johnson Controls has been selling Triad products in this area since 2010.

After considering several options, the district chose five of Triad's T-1000 Triumph High Efficiency Condensing Boilers. These 1,000,000 Btu boilers are 95% efficient based on ANSI Z21.13/CSA 4.9 and are capable of up to 99% efficiency depending on the specific operating conditions. Three of these were installed in the Schuylkill Haven High School, and two were installed in the Elementary School. The Triumph boilers are designed to fit through a 28" doorway allowing for easy installations.



The heart of the Triumph is a robust cast aluminum sectional heat exchanger. This proven technology has been utilized in European designs for over thirty years. The cast sections are impervious to corrosive condensate and protected against thermal shock. The key to the longevity of this boiler is the use of an advanced aluminum alloy. This approach allows for the construction of a boiler that can withstand the corrosive attack of condensed flue gases for years of reliable operation.

This modern design has also eliminated the need for the push-nipples and gaskets that were a frequent maintenance issue on older technology cast iron designs. The heat exchanger is supplied with a five-year warranty.



These boilers are controlled by an integrated Honeywell Microprocessor-Based Control System that provides PID Temperature Control and Flame Management.

**TRIAD Boiler Systems, Inc.**  
West Chicago, IL  
630-562-2700  
[www.triadboiler.com](http://www.triadboiler.com)



## HIGH ACHIEVING SCHOOLS GO HIGH EFFICIENCY (continued)



A digital touch-pad user interface is mounted on the boiler front for easy monitoring of the outdoor air temp reset, integrated domestic hot water priority control, and the ability to accept control signals from BMS systems. The integral mesh burner provides for high combustion efficiencies and a high turn-down ratio while providing Low-NOx operation.

Ray Wohlfarth of Fire and Ice Heating and Cooling, [www.fireiceheat.com](http://www.fireiceheat.com), provided training for the school personnel as well as several Johnson Controls technicians who are becoming proficient with Triad's boilers.

Please go to [www.triadboiler.com](http://www.triadboiler.com) for other successful applications as well as detailed information on TRIAD and its product line!