



Wooster City Schools Boiler Upgrades

Last summer the Wooster City School District completed a series of boiler upgrades that spanned over several years. Boiler Room #3 serving the locker rooms and gymnasiums, was the last boiler system to be upgraded. HEI Engineering Group had designed boiler replacements for Boiler Room #1 in 2003 and Boiler Room #2 in 2004.

Boiler Room #3 work included two new Aarco 2,000 MBH high efficiency sealed combustion boilers that replaced existing Bryan Firetube boilers original to the 1961 building.

The existing system circulating pumps were replaced with (2) new inline pumps that operate in a run/standby configuration. The new pumps provide greater flow and pressure than the existing pumps they replaced and corrected problems the school district had heating remote areas of the building. The existing system did not have an air removal device so a new air separator was provided to aid in venting air from the system. New variable frequency drives were provided for the pumps to aid in water balance.

The existing combustion air louver was reused, and a new intake plenum was constructed allowing the boilers and water heater combustion air to be direct ducted to the air source. This eliminated cold air infiltration into the boiler room. The new flues for the boilers and water heaters were installed within the existing masonry chimney, to avoid new roof penetrations.

In addition to the boilers, two (2) new LAARS high efficiency tank type water heaters replaced a single copper-finned tube Domestic Water Heater. The vertical tank type heaters offer 200 gallon of storage and allowed the district to remove the existing horizontal water storage tank that was no longer functional. Not only does the district have a more efficient heating system, they also gained floor space.

