

Byron Center Schools

Case Study



Summary

Customer	Byron Center Schools
Location	Byron Center, MI
Industry	Education
Laars Products	UHE Condensing water heater, NeoTherm boilers

Challenge

Built in the mid-60s, buildings in the Byron Center (Michigan) school district, with roughly 4,500 students, were about as inefficient as they come. “The majority of the district’s high utility costs were for heating the schools,” said Gallup, Facilities Operations Director. “We even switched from white to black roofs because they absorb and hold more solar energy – limiting use of heating systems.” The heating and cooling bill for one year for the high school alone was \$398,000.





Solution

Gallup's research led him to the best manufacturer for a high efficiency solution for the locker room project. Today, a single, 199-gallon, high efficiency Laars UHE condensing water heater manages the task of heating domestic water for the entire school.

Next, Gallup turned his sights to two, four million BTU boilers in one school's mechanical room, chugging away at 72% efficiency.

"We decided that a three-million BTU Laars NeoTherm condensing boiler would be our best option to heat the facility," said Gallup. "We chose to keep the old ones there for backup – necessary on single digit days."

"The gas and electric savings in that building are nothing short of incredible," Gallup added.

And, other buildings were retrofitted. Some larger pumps were fitted with variable frequency drives, and older heating systems were expelled from school, too. More high efficiency NeoTherm boilers were installed, and Bradford White water heaters replaced some of the old domestic water heaters.

Today, all buildings in the Byron Center School District have won energy star ratings, with several of them coming in at 100%.

The school district went from spending \$1.4 million a year for heating and cooling to \$1 million.

