



Case Study

UMC MEDICAL CENTER

General Contractor: Ameresco

Mechanical Contractor: LMS Boiler Services

Boilers: Camus Hydronic - DynaForce Condensing Boilers



UMC Medical Center

The Challenge

University Medical Center had a need to replace most of their heating and domestic water boilers. As part of an Energy Conservation Project developed by AMERESCO, the total energy savings from all plant upgrades, which included lighting, controls, high-efficiency motors, VFDs, new boilers and pumps, made the boiler upgrades possible. Four of the old boilers had already failed and five others had burners needing replacement. CO emissions from five of the existing boilers tested were over 1500 ppm.

The Solution

Ameresco offered a site energy upgrade program that would pay for the retrofit of new high-efficiency boilers. LMS BOILER oversaw the installation of eleven (11) - 2.0 MMBTUH and two (2) 1.6 MMBTUH DynaForce Condensing boilers.

The boilers are manufactured by Camus Hydronics, a leader in high-efficiency hydronic heating boilers and controls. The Camus Hydronics – DynaForce Gas fired stainless steel condensing boilers can achieve up to 99% thermal efficiency. The boiler incorporates a 20 to 100% modulation range, SS outer jacketing, and advanced integrated Honeywell Sola control. This boiler is the perfect choice for building heat, domestic water, and pool applications.

There are two systems located outdoors on the roof of the UMC Trauma Center and two systems located in the Central Plant. In all, two four-boiler domestic water systems and one two-boiler and one three-heating boiler systems operated in lead/lag through DynaForce's onboard Honeywell Sola Control. The heating boilers are also operating via the Sola with an outdoor reset to adapt the building loop supply temperature to the ambient temperature for additional system efficiency. Each boiler achieves single digit CO and NOx in low fire <40 CO and <9 NOx in High Fire. Efficiency 90% and above.

