



## **Steam complete package vs buying single parts**

One of the biggest challenges for Maxi-Therm is mechanical contractors asserting that our complete skid package is too expensive compared to buying a system in parts, assembling and wiring everything together, and then programming everything. Some mechanical contractors, like Kirlin in Baltimore and Anchor Mechanical in Chicago, are doing more steam projects with Maxi-Therm, even without going out for bids. They offer steam solutions from Maxi-Therm directly to their customers, like NIST and Loyola University.

But lately, a well-known general contractor decided to challenge a complete spec design toward conventional design and the pricing of the mechanical contractor that bid according to the consultant engineer design.

According to Forbes, Whiting-Turner Contracting, based in Baltimore, Maryland, has been in business since 1909. It is one of the nation's largest construction management and general contracting companies. The company provides the full spectrum of construction services on projects small and large in markets such as retail, office, education, health care, life sciences, technology, transportation, and utilities.

Maxi-Therm, with their local representative, Jobe and Company, was asked by Whiting-Turner to submit an alternate proposal to the original design of the consultant engineer involved in the project for the University of Maryland for the CHEM Wing 1 building. The specs were calling for a conventional steam to hot water set-up, including a pressure-reducing valves station, a steam safety relief valve, condensate pump, horizontal heat exchanger, and 1/3-2/3 steam control valves.

The proposed new system was a complete duplex skid package, including two vertical flooding heat exchangers directly using 125 psig steam instead of 10 psig to heat 350 US gpm of hydronic water from 120 to 150°F, two circulation pumps of 15 hp each, a complete control set-up with touchscreen panel, and four secondary water-to-water heat exchangers to preform 35 US gpm of domestic hot water at 140°F; all pre-piped, pre-wired and pre-tested before shipping. Maxi-Therm calls this a Duplex Ultimate 5 Side-Arm Package.



## **Saving over \$240,000 in install costs**



Whiting-Turner reviewed the original mechanical contractor proposal with the original scope, and compared it with the Maxi-Therm proposal, including the work of the local mechanical contractor. After review, Whiting-Turner showed a saving in total installation costs of over \$240,000.

Robert Heims, mechanical/electrical manager at WT, sent an email once he finished the comparison:

*“Attached is our internal detailed MEP estimate of the savings using Maxi-Therm to replace the Steam PRV, HHW exchangers, HHW pumps, both domestic and lab hot water exchangers and controls.*

*As you can see, we determined it to be a savings of over \$240,000 on this project. Not to mention, we have approximately reduced the total SQFT space for these items by 50%, allowing the University to add back in program space.”*

Please note that this does not include a potential annual energy savings of \$35,000. On top of everything, the University of Maryland will end up with a system that will require much lower maintenance costs, without the need of pressure reducing valves, big steam control valves, condensate pumps, and steam safety valves.

If you would like to see Robert’s Excel spreadsheet breakdown of the costs or even talk to him, please send an email to [patrick@maxi-therm.net](mailto:patrick@maxi-therm.net)