ENERQUIP®
THERMAL SOLUTIONS

WATER & STEAM HEAT EXCHANGER PROJECTS

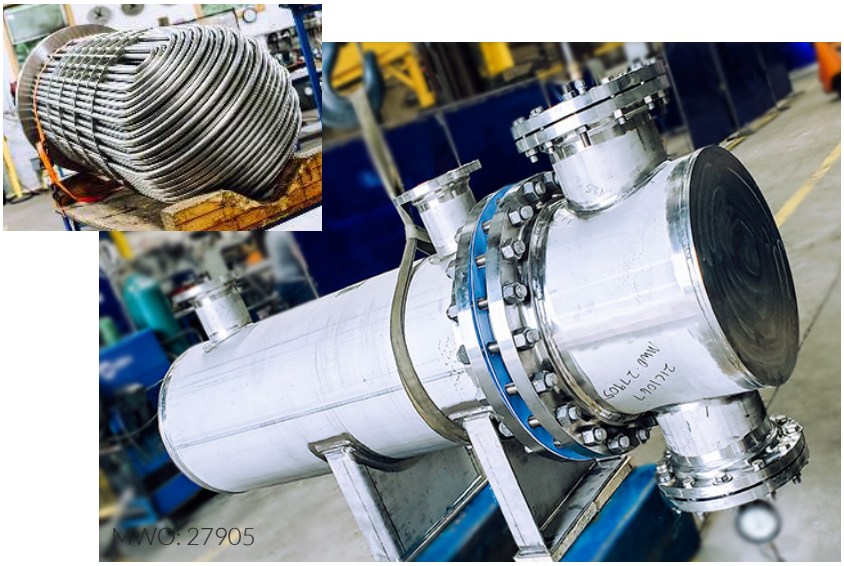

MWO: 28031

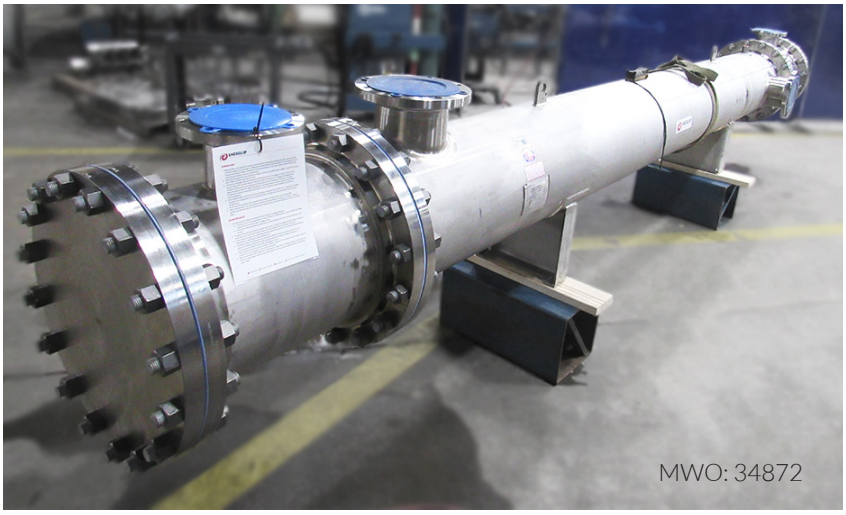
BIOREACTOR WATER HEATER

Built to ASME code, this pair of 10 x 72" BEU bioreactor loop water heaters were built to maximize plant efficiency by recycling wastewater. Their industrial design includes a customer-specified all-mill finish. Engineered with welded U-tubes, these two-pass units have removable tube bundles for easy cleanability.

WATER HEATER

This custom U-tube heat exchanger was built for a global tire company. It was designed for high-efficiency water service. This unit has an internal and external milled finish with flange tube side connections. Its fabricated channel and tube bundle are removable for easy cleaning.


MWO: 27905


MWO: 34872

WATER COOLER

This 18" x 168" straight tube water cooler was built for a chemical process in Texas. It's made of all 304L stainless steel and has removable bonnets on both ends with removable covers for easy tube cleaning. It was built to TEMA B guidelines and is ASME Code stamped.

VAPOR CONDENSER

This large 24 x 144” AEM heat exchanger meets the TEMA Standard for industrial use. It’s a one-pass design with double-grooved and roller-expanded tube-to-tube sheet joints. This heat exchanger has custom supports to provide a 10-degree slope for its operation as a tube-side condenser. All connections are true vertical to simplify connected piping.

VACUUM STEAM CONDENSER

This project spotlight is an 18” x 72” vacuum steam condenser. Built for vertical installation, it will condense 6,000 pounds of steam per hour into usable water for recirculation into the customer’s operation. All product contact surfaces were finished to 32 Ra, except for the tubes which were bright annealed to reduce surface oxidation.

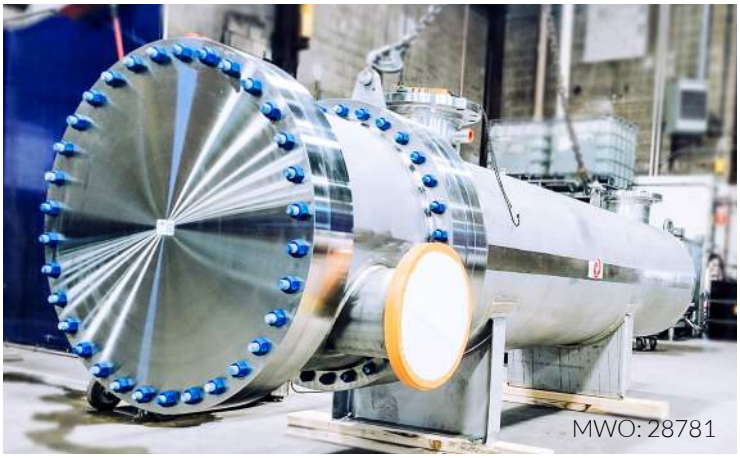
The tube side of this condenser was designed for full vacuum conditions, which is when the pressure inside the tubes is reduced to a level approaching a complete vacuum. Operating under full vacuum conditions lowers the boiling point of the fluid inside the tubes, enhances heat transfer by promoting better contact between the hot and cold liquids, helps prevent the ingress of contaminants from the atmosphere into the heat exchanger, and facilitates evaporative cooling.

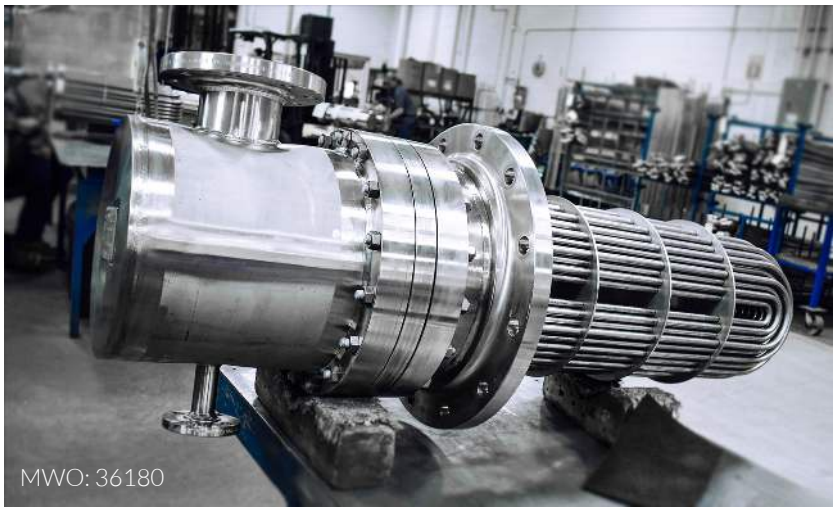
PROCESS COOLER

Using tower water, these 3” x 78” units were designed to cool process fluid on the tube side of the exchangers. Both straight-tube, they have removable, machined bonnets on both ends. They were designed to meet ASME Code and the TEMA Class B for chemical use.

WATER COOLER

This 28” x 108” U-tube water cooler was engineered with a four-pass bonnet and tubing design. The tubes and tube sheets were made with 2205 Duplex – an austenitic-ferritic stainless steel that stands up to chloride stress corrosion. It was built with a removable fabricated bonnet and tube bundle and code stamped to ASME Section VIII Div 1.


MWO: 28781


MWO: 36180

BAYONET HEATER

This project spotlight is a 12” x 30” bayonet heater. Unlike our shell and tube exchangers and suction heaters, which are designed to heat liquids as they are pumped through the exchanger, bayonet immersion heaters are designed to efficiently heat entire tanks of fluid. With our bayonet immersion heaters, the tube bundle is completely immersed in the tank, and the heating coil is directly exposed to the fluid for maximum heating efficiency.

VAPOR CONDENSER

This project spotlight is a 12” x 78” straight tube inclined condenser built with 316L stainless steel construction. The bonnets are removable on both ends, and its seamless tubes were roller expanded and seal welded into the double-grooved tube sheets. The exterior is coated with Thermalox 70 and insulated with an Inswool insulation jacket.


MWO: 35724

Let us design a custom solution for your production process. Call us, today!

Enerquip Thermal Solutions
611 North Road, Medford WI 54451
(715) 748-5888 | sales@enerquip.com
www.enerquip.com

ENERQUIP®
THERMAL SOLUTIONS

Rev. 2/26/24