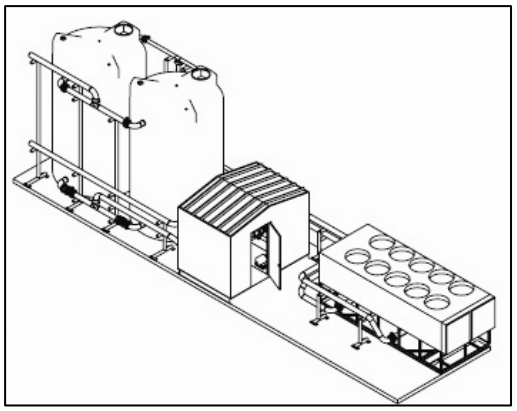
Hunton Trane Services

CUSTOM ENGINEERED PRODUCTS & SERVICES

PROCESS COOLING

PROJECT BRIEF

A water treatment chemical manufacturer with plants in Virginia, Texas and Iowa wanted to increase production efficiency without adding process equipment in their Nederland, TX plant.



The plant uses a batch production process, with a resulting cooling load as high as 700 tons. Their existing process cooling was city water, used once and disposed of through the sanitary sewer. They used huge amounts of water, and the cooling process, especially in summer months, could take hours.

Since there was no available interior space, Hunton Trane Services designed and built an 8' x12' pump house/chiller to sit outside the process area in previously unused space. The pump house provided conditioned space for primary/secondary pumping, variable frequency drives and DDC controls, and supported the operation of a 125 ton Trane air cooled chiller. The pump house was completed prefabricated and included piping, control valves, power distribution, power wiring, control wiring, lighting and air conditioning unit.

The plant is now able to cool and store 17,000 gallons of chilled water. Piping from the chiller plant to the process area was also provided, and the existing plate frame heat exchangers were removed from the domestic water system and connected to the new chilled water system. Batch cooling that took hours can now be accomplished in minutes. Plant productivity more than doubled, and the manufacturer achieved their original goal of increasing production without adding new process equipment.

At a different plant location, this same manufacturer had achieved their process cooling goal using a less expensive method, but with all equipment exposed to the elements. The corporate engineering manager said, "We need to standardize on the Nederland plant solution at all our facilities."

Hunton Trane Services can help you with challenges that fall outside of the "normal" HVAC equipment boundaries.

For more information, please call us at 713-643-8336.
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