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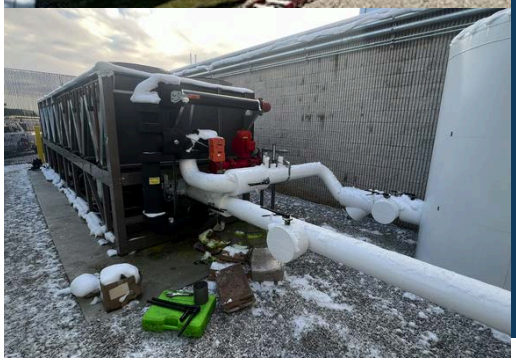
RL ADAMS

PROCESS COOLING SYSTEM UPGRADES

Faced with unreliable process cooling and the inability to cool their heated extrusion process, RL Adams turned to PET. The solution: **a closed chilled water loop with a 270 ton chiller with integral free cooling, and new heat exchanger skid.**



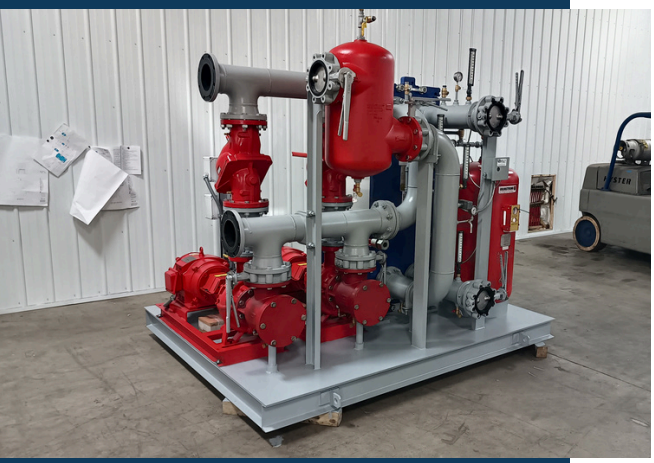
EXISTING COOLING TOWER



NEW 270 TON CHILLER WITH INTEGRAL FREE COOLING

PET PROVIDED:

- On-Site Evaluation
- Consultation
- Engineering Design
- Fabrication



NEW HEAT EXCHANGER AND PUMP SKID

The **PET by Hedrick Industrial Division** was created via a merger between Hedrick Associates and Process Environment Technologies (PET). PET's background includes plumbing, mechanical, and industrial engineering. **Our team experience includes over 100 years** in the mechanical and industrial engineering, contracting and fabrication fields.

BACKGROUND

RL Adams Plastics is a manufacturer of extruded foam products based in Wyoming, Michigan, producing items like plastic plates for food packaging and different foam art products. Their process relies on electrically heated extrusion that forms micro-thin sheets of foam into 10-foot-wide rolls. This requires reliable chilled water cooling through internal roller jackets to maintain operating temperatures.

Their existing system used an open cooling tower and tanks but struggled heavily during the summer. Because cooling towers rely on evaporative cooling, their capacity is controlled by outdoor weather. When summer temperatures and humidity spiked, the tower could not meet the required cooling capacity. This shortfall caused operational instability and shutdowns.

PET was chosen because they provided a complete, upfront engineering package that includes site visits, contractor coordination, fabrication, and engineering, giving the client total operational comfort. PET recommended and implemented a closed-loop solution centered around a 270-ton air-cooled chiller featuring an integral free-cooler, a custom pump and heat exchanger skid, and a 1,500-gallon chilled water buffer tank. This integral system utilizes a set of free cooling coils alongside the standard refrigeration coils. During Michigan's colder months , the chiller uses these separate coils to cool the process water using just ambient outdoor air. PET's full package completely resolved the unreliable process cooling interruptions and caused only one week of operational shutdown with installation.

With the new closed-loop infrastructure in place, RL Adams has access to year round reliable process cooling, regardless of outdoor air conditions.

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