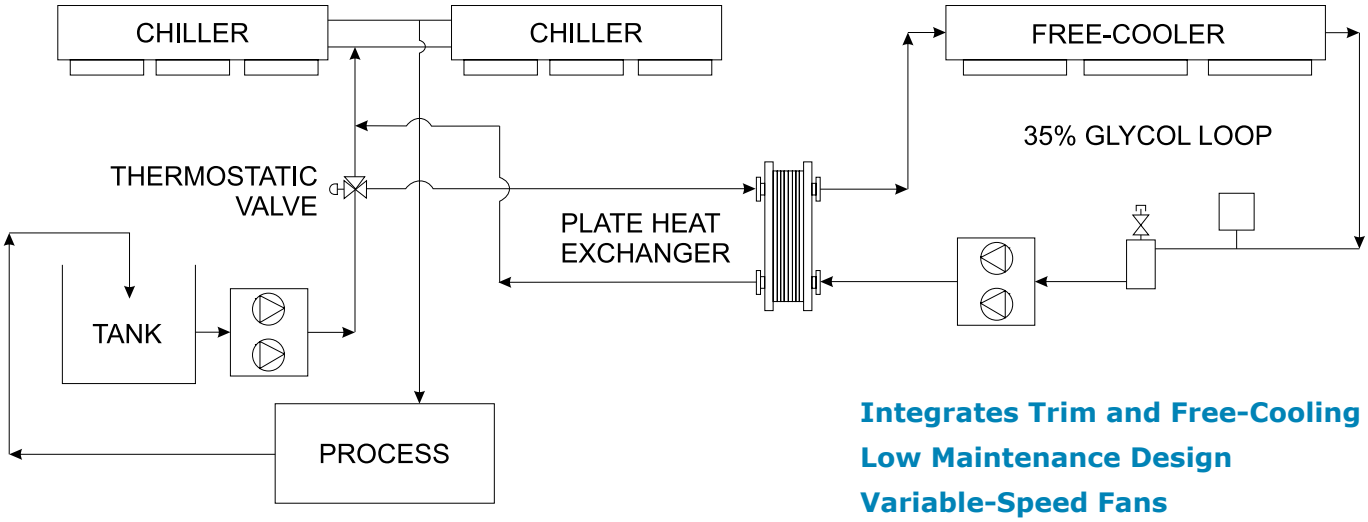
FLUID COOLING SYSTEMS, LLC.

SOLUTIONS

ENERGY EFFICIENCY UPGRADES for INDUSTRIAL CUSTOMER



Integrates Trim and Free-Cooling
Low Maintenance Design
Variable-Speed Fans
Automatic Temperature Control
Glycol-Loop for Free-Cooler
Chillers Can be Staged
Plate & Frame Heat Exchanger

A COMMON PROBLEM. A SIMPLE SOLUTION

An industrial customer approached Fluid Cooling Systems to design and implement an energy efficient upgrade for their aging inefficient cooling requirement.

THE REQUIREMENT

This factory produces plastic and metal products which have the requirement of 46°F chilled water. The cooling water must have steady temperatures and flow rates to the machinery for the most consistent product quality. There was no free-cooling capability and no PLC for system control and automated valve operation. Chiller condensers and hydraulic oil coolers that require 85° water are cooled in another system.

Free-Coolers are available in many configurations and with optional adiabatic assist.

THE ENGINEERED SOLUTION

Two variable-speed air cooled chillers coupled with a close-approach air-cooled fluid-cooler in a glycol loop using a plate heat exchanger provides the efficiency of air cooled centrifugal compression and the ability to conserve energy by staging chillers. The system leverages a Free-Cooler that can trim the chiller load as ambient temperatures fall, and ultimately provide enough cooling to satisfy the entire process heat load. If the process water loop contains glycol, or heat-tracing is possible, a separate glycol free-cooler loop may not be necessary.

Fluid Cooling Systems, LLC | 2441 E. Bristol Road. | Burton, MI 48529 | Phone: 888-315-5631
www.fluidcoolingsystems.com