

Water Recirculating System

Taylor Dynamometer, Inc. is pleased to offer a Water Recycling System for use with your waterbrake dynamometer(s). The system offers several significant benefits:

- Reduced dynamometer operating costs through water conservation
- Reduced dynamometer maintenance costs with controlled, high-quality water supply.
- Assured environmental-friendliness by discharging through evaporation rather than drainage.
- Assured dynamometer performance due to proper water pressure, volume, and cooling.

The Water Recycling System is intended for use with waterbrake dynamometers, though it can be used to conserve water with any heat-generating, water-cooled process equipment as well. One system can serve several dynamometers or other heat sources, if sufficient capacity is designed into the system.

Taylor Dynamometer can supply any or all of the following system components:

PLC Controlled Command Center

The Command Center includes state of the art motor starters, transformer, power supply and accessory connections. In an effort to design this system to be completely customizable, we have introduced a programmable logic controller to head the Command Center. The Command Center can be programmed for start up temperatures, failure notification, emergency shutdown and many other convenient options to best suit your application.



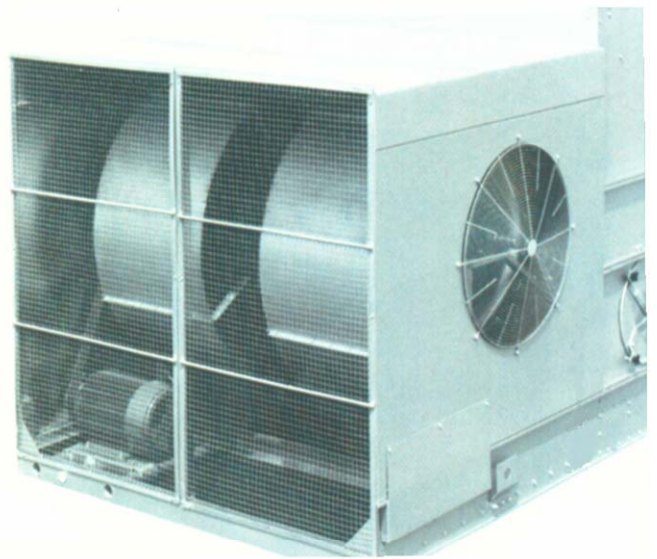
Pump & Motors

Taylor Dynamometer will supply you with the best possible pumps with “totally enclosed fan cooled” motors for your application. Some of the different styles are centrifugal, vertical turbine, and centrifugal self-priming. All pumps are sized specifically for your application and related cooling volume and pressure requirements.

Evaporative Cooling Tower

The Evaporative Cooling Tower is a high-temperature fill designed for optimum heat transfer and efficiency. The fill is self-extinguishing for fire resistance. The fan is a forwardly curved centrifugal type, with a hot dip galvanized construction. The fan is statically and dynamically balanced to minimize vibration. The drip-proof ball bearing fan motor is suitable for outdoor service and is mounted on an adjustable base. Bottom screens are provided for safety. The blower motor is totally enclosed, so as to protect the motor from dust and other foreign matter.

The Evaporative Cooling Tower is to be installed outdoors, on an unobstructed rooftop or on ground level away from walls and other barriers, to avoid air recirculation.

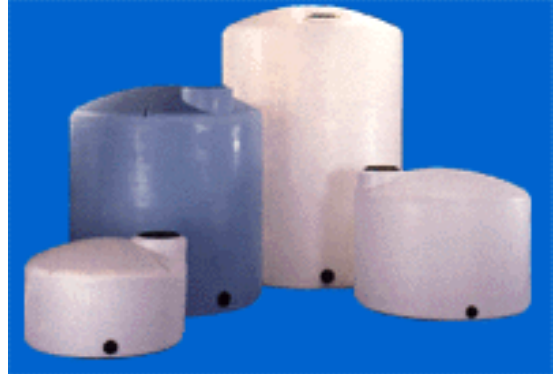


Temperature Sensor

Single Type K thermocouple that is linearized, calibrated and cold junction compensated.

Holding Tanks

High temperature holding tank populated with the appropriate fittings for your application. Holding tank has a maximum fluid specific gravity of 1.9.



Specifications & Installation Drawings

Taylor Dynamometer will provide specifications for each pump and motor, Evaporative Cooling Tower, and if applicable, holding tanks. Taylor Dynamometer will also provide the following informational Forms and Installation Drawings:

- Water Flow Rates
- Installation Drawing - Water Recirculating System - Sump Style
- Installation Drawing - Water Recirculating System - Tank Style
- Installation Drawing - Evaporative Cooling Tower Layout
- Electrical Schematic Drawing - Command Center
- Assembly Drawing - Recirculating Control System Command Center
- Command Center Operation Instructions
- Water Recirculating System Schematic

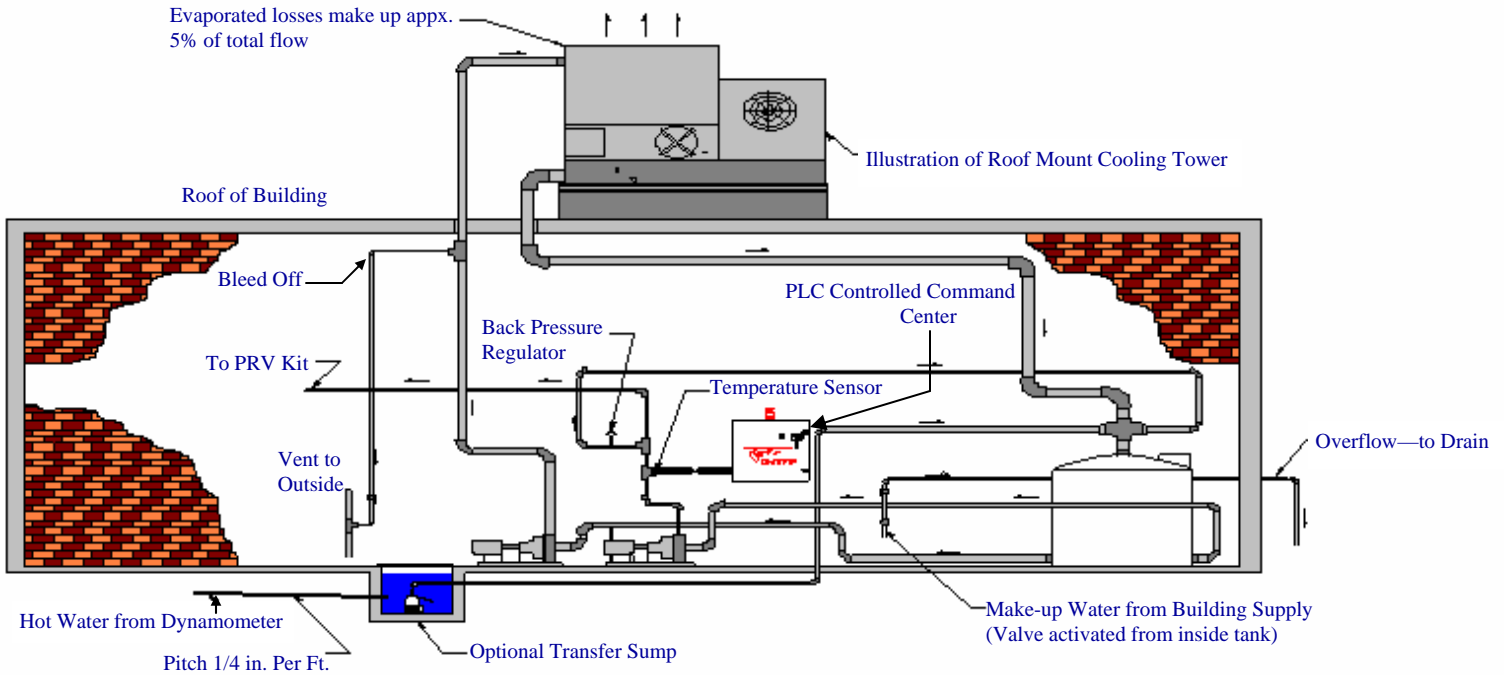
The customer to supply the following components:

- Remote sump or above ground tank, 2,000 gallon minimum (if not purchased from Taylor).
- Common plumbing items, such as pipe, tile and fittings, gate valves and back flow preventor.
- Common electrical items, such as wire.
- Evaporative Cooling Tower foundation, including steel beams.
- Deck plates/sump cover, when applicable.



EXPERIENCE THAT MEASURES UP

Water Recirculating System With Above Ground Storage Tank



Water Recirculating System With In-Ground Sump

