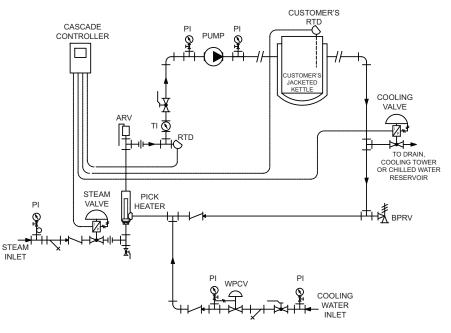


Process Heating Solutions Worldwide

Heat/Cool System for Jacketed Reactor Vessel

Features and Benefits:

- Improved Product Quality
- Easy Heat/Cool Transition
- Uniform Jacket Temperatures
- Accurate Temperature Control
- Total System Design Capability and Responsibility



Chemical & Pharmaceutical Industry Case History

Application:

A company producing photographic chemicals for the printing industry wanted better temperature control for heating and cooling a gelatin-based emulsion in 480 gallon jacketed vessels. A hot water system was considered to replace their steam jacket method. The steam jacket method exposed sensitive chemicals to hot spots and made transition to cooling difficult. Batches were very expensive, making product quality of utmost importance.

Operating Conditions:

3-23°F temperature rise per pass 180°F jacket temperature 120°F product temperature in 1.1 hour 18 PSIG steam supply pressure

Solution:

The Pick 6X7-3HCS Pre-Packaged
Heat/Cool System included the basic
Constant Flow Heater along with a cooling
valve for "metered out" control during
cooling mode. Steam and cooling valves are
controlled with separate I/P transducers
taking signal from customer supplied
cascade temperature controller. Complete
scope of supply including water circulation
pump, check valves, shut off valves, relief
valve, piping and fittings assembled on
heavy duty angle iron frame.

