

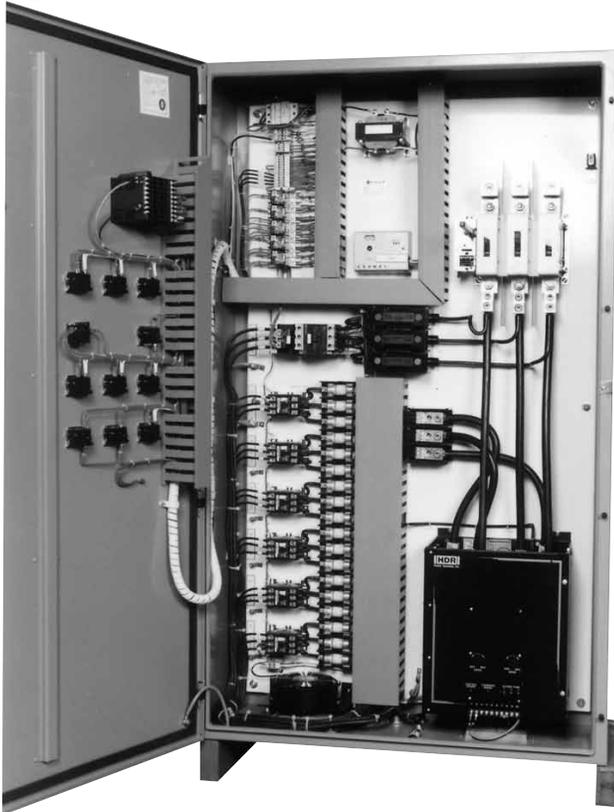
Liquid Heat Transfer Systems - FX

Applications

Caloritech™ hot oil heat transfer systems are custom designed to provide high temperature process heat without the necessity for high pressure design common to saturated steam transfer systems.

Accurate process temperatures up to 375°C (707°F) can be maintained in molds, platens, presses and jacketed vessels or pipes under practically negligible pressure conditions.

Ratings available to 3000 kW at 600V.



From the table below note the high steam operating pressure required whenever high process temperatures are needed. Even at 375°C (707°F) the Caloritech™ oil heat transfer system functions at a pressure less than 30 PSIG depending on the transfer fluid used.

Saturated Steam Pressure vs. Temperature

Pressure (PSIA)	°C	°F
250	205	400
500	242	467
750	265	510
1000	285	545
1500	313	596
2000	335	635
2500	353	668
3250	375	707

Construction

Type FX transfer systems are supplied as fully prewired and piped packaged assemblies customized to your specific application. You merely connect the process pipes to the system inlet and outlet, mount the separately supplied expansion tank, and connect to your electrical supply.



Each system comes equipped with low density EX type circulation heaters mounted on a structural steel frame. Centrifugal, direct drive pumps are standard. Positive displacement pumps are available on request.

Special inlet and outlet valves with high temperature packing and flanged connections are standard. Bypass, drain, fill and bleed valves are installed in the piping loop with all welded connections for 1/2" NPT pipes and larger.

A strainer is installed on the system inlet with an attached fill valve.

Other mechanical devices provided include an expansion tank with sight glass and vent, pressure gauge(s), low and high pressure switches or optional differential pressure switches.

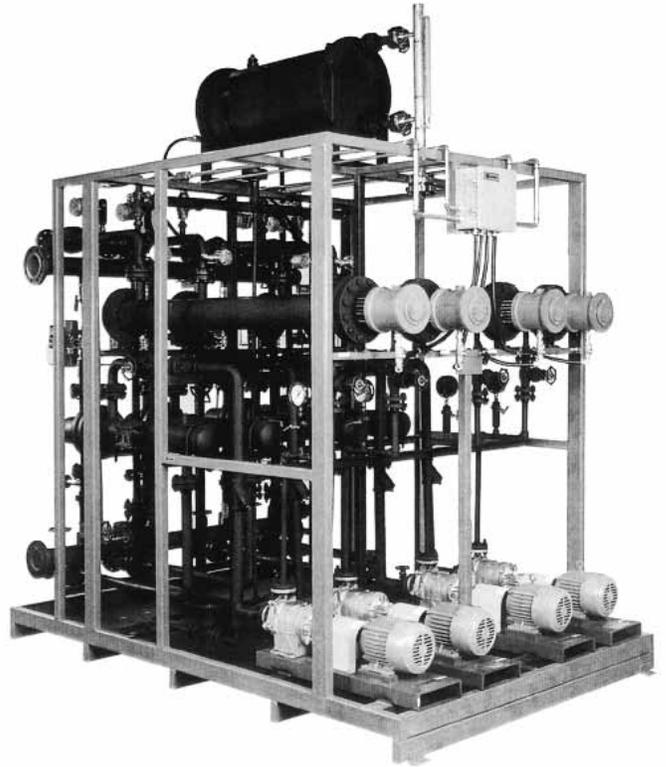
Systems are available with motorized valves for heating and cooling applications.

Standard electrical controls include a fully prewired control panel with disconnect, HRC fusing, derated magnetic contractors, electronic indicating and fully adjustable temperature control, electronic high temperature limit control, optional step controller, switches and pilot lights.

Selection

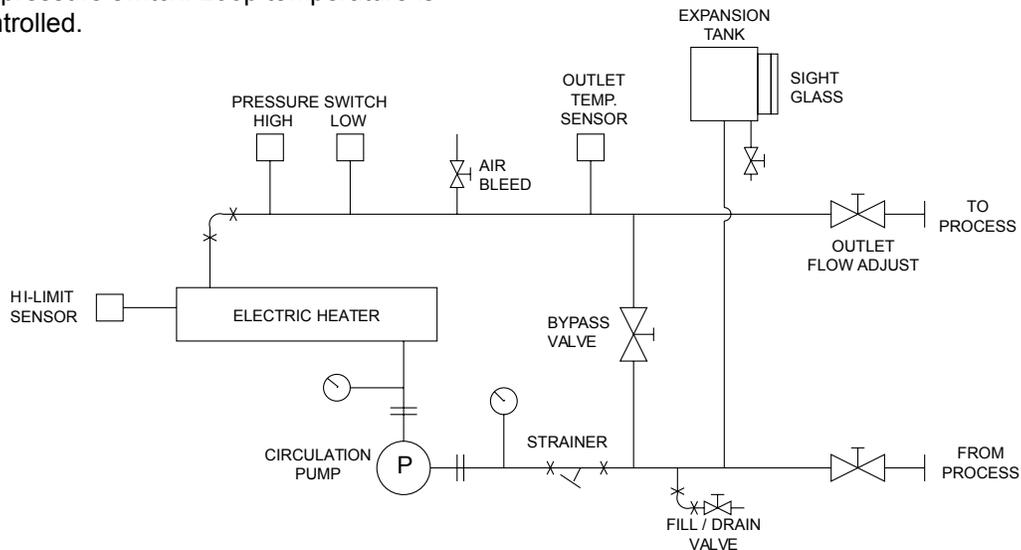
Contact the factory or your nearest Caloritech™ agent or distributor to obtain complete specifications and prices for an FX electric heat transfer system custom designed to your specific needs.

FX



Flow Diagram

The heat transfer fluid is circulated through the electric heaters and the process in a closed loop. All components are connected with factory tested, leak proof joints. An expansion tank, vented to atmosphere and elevated above the system maintains a constant positive suction head on the pump. A bypass valve is used on cold start-up. The pump and heater are protected against external shut-off by an outlet high pressure switch. Loop temperature is automatically controlled.



FX

