CLOSED LOOP TOWER SYSTEMS

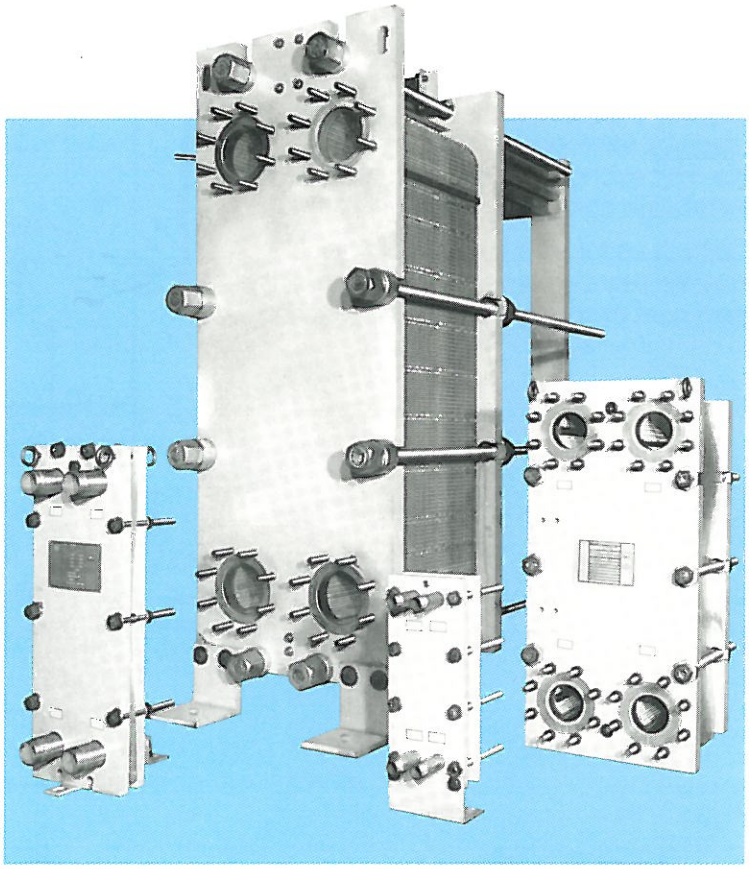
No water contamination, therefore no more heat exchanger maintenance.

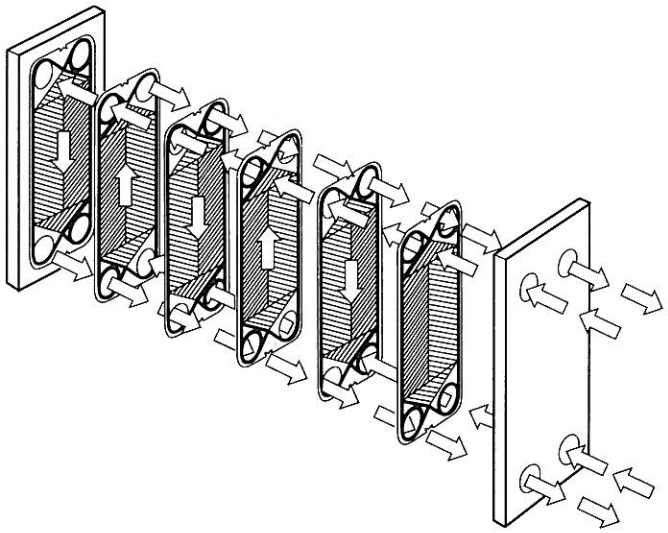
Why Use a Heat Exchanger

A cooling tower system provides the least expensive cooling per ton that is available for applications where 85°F water is acceptable. While it provides efficient cooling, a cooling tower is an airwash. No matter how good the treatment is, there can be scale build up in heat exchangers which means inefficient heat transfer.

There is a way to benefit from the low operating cost of a cooling tower and still have clean water to your process: isolate the tower water from the process with a heat exchanger. This approach will provide the entire plant with clean closed loop water thereby reducing the maintenance from multiple heat exchangers to one single point.

Many companies promote a single closed loop tower with a heat exchanger as an integral part of the tower. This is a disadvantage because the tower will be much heavier, requiring more expensive support, and when the heat exchanger needs to be cleaned, it is extremely difficult. With a separate plate and frame heat exchanger, these problems are eliminated, plus you have the following benefits.





Why a Plate and Frame Heat Exchanger

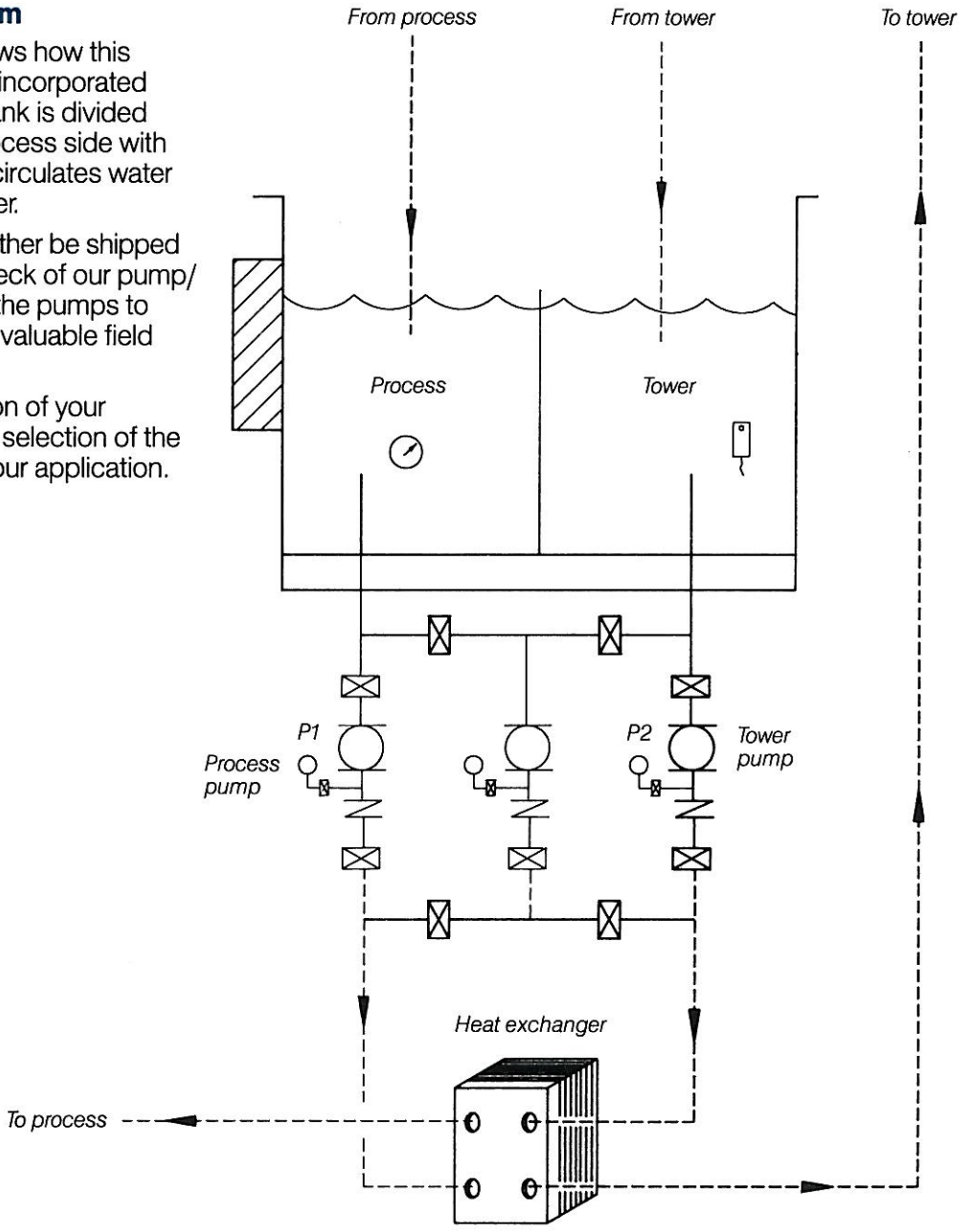
- ***High efficiency***—*Specially designed corrugated plates produce heat transfer coefficients that are several times greater than those obtained with other types of exchangers.*
- ***Low initial cost***—*Often times less than half the cost of shell and tube exchangers.*
- ***Minimum fouling***—*High velocities and turbulent flow mean greatly reduced fouling and therefore more effective heat transfer and less downtime.*
- ***Close temperature approach***—*A large heat transfer area allows process water to be cooled to within two or three degrees of incoming cooling tower water.*
- ***Easily cleanable***—*These units can easily be disassembled for service.*

How It Works In a System

The schematic below shows how this heat exchanger would be incorporated into a system. A holding tank is divided into a tower side and a process side with each having a pump that circulates water through the heat exchanger.

The heat exchanger can either be shipped loose or mounted to the deck of our pump/reservoir. Interconnecting the pumps to the heat exchanger saves valuable field installation cost.

Contact us for an evaluation of your specific requirements and selection of the best heat exchanger for your application.



The difference is in the details

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