The Greener Closed-Loop System

Cooling tower heat exchanger systems beat closed-circuit cooling towers for economy and efficiency!

Certain processes require a closed-loop, whereby the process water for cooling does not come in contact with the atmospheric air. This prevents the cooling water from picking up particles that may not get filtered or even dissolved gases.

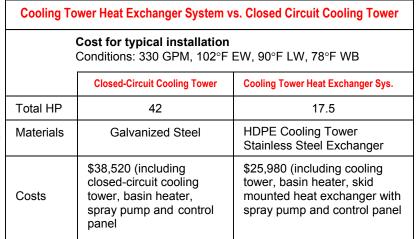
Closed-loop cooling requires more energy and has higher initial and life-cycle costs than an open cooling tower, but provides an added protection to expensive processes or chillers being cooled.

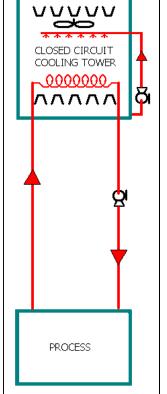
For closed-circuit cooling, Delta recommends a
cooling tower plus a plate heat exchanger system

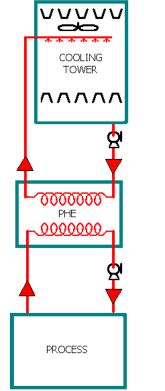
The skid-mounted plate heat exchanger provides a closedcircuit on the hot side of the heat exchanger. The noncorroding Delta cooling tower feeds the cold side of the plate heat exchanger.

The advantages of this system over a closed-circuit cooling tower (usually galvanized sheet steel and galvanized steel coil inside a cooling tower box) are:

- Cost Typically Costs Less to purchase & operate
- HP Less Total HP required, Green solution
- ASHRAE 90.1 Performance requirements for heat rejection equipment show closed-circuit cooling towers use 2.5 x more HP
- Warranty Delta cooling tower has 20-Year casing warranty versus 1-Year on galvanized steel
- Expandability Heat Exchanger can handle future load increase by adding plates
- Maintenance Heat Exchanger has Stainless Steel plates and is much more accessible than coil for easy cleaning
- Weight Delta tower is 3-7 times less weight saving rigging and structure costs
- Install Flexibility Heat Exchanger skid can be placed indoors without need to maintain Glycol solutions necessary with outdoor coil
- Water treatment Easier and much less risk with Engineered Plastic Cooling Tower
- Replacement Cost Galvanized steel coil replacement cost (labor and material) often exceeds initial unit cost of Closed Circuit Cooling Tower
- Downtime Delta system prevents costly downtime. Corrosion is only delayed with galvanizing and wet/dry operation, chemicals, PH fluctuations, salts and other atmospheric conditions can lead to premature failure













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