

# TrilliumSeries Cooler

## A Triple Advantage into one Product



## TrilliumSeries

Cooler



### HIGH THERMAL PERFORMANCE

- Air pre-cooling to temperatures approaching wet bulb temperature
- Thermal dry cooling capacity increase up to 40%
- Reduced energy consumption
- Low process temperatures



### OPERATIONAL SAFETY

- No water recirculation
- No stagnant water conditions
- No aerosol generation
- No water carry-over



### WATER SAVING

- More than 80% annual water saving
- Intelligent adiabatic controls
- Short and limited periods of adiabatic operation
- Staged adiabatic operation



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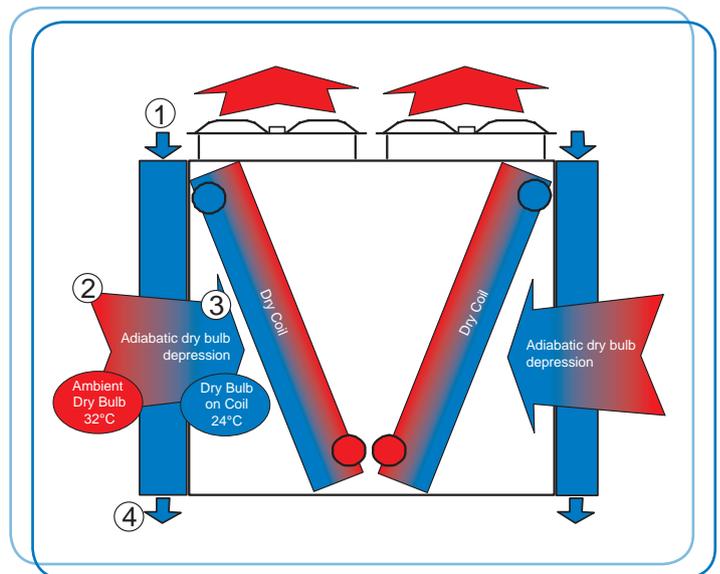
Product Report

## TrilliumSeries Cooler

In conditions where the required fluid temperature at the outlet of the heat exchanger approaches the design ambient dry bulb temperature, cooling with dry air becomes ineffective. The TrilliumSeries Cooler combines evaporative cooling advantages in a V-shape air cooled heat exchanger. The TrilliumSeries Cooler is equipped with unique adiabatic air pre-cooler sections, which greatly enhance the cooler's capacity with minimum water usage and maximum operational hygiene.

### Working Principle

High efficient evaporative cooling pads are wetted with water, which is evenly distributed over the top of the evaporative pads at city water pressure ①. As the air passes through the pads ②, water is evaporated in the air, and the air is humidified and cooled down to temperatures at two to three °C above wet bulb temperature ③. Such substantial depression of the dry bulb temperature of the air results in a major increase in dry cooling capacity.



The pre-cooler is constructed in stainless steel, with water distribution piping and a gutter system to drain the water once-through to the sewer ④. Part of the distributed water is evaporated, while the excess water assists in rinsing the pad to keep it free from debris and minerals that would stay behind on the pad after evaporation.

Designed to be used as once-through system, the TrilliumSeries Cooler does not require any water treatment, nor pumps while minimising the risk of micro-biological contamination.

To view an animated working principle of the TrilliumSeries Cooler, visit [www.BaltimoreAircoil.com](http://www.BaltimoreAircoil.com)



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