

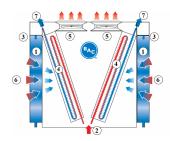
# **Principle of Operation**

## Adiabatic cooling

### **Principle of Operation**

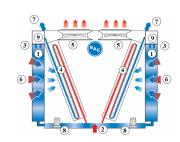
#### Once through

The TRF is a V-shaped TrilliumSeries adiabatic cooler equipped with adiabatic pre-coolers (1) that cool the warm process fluid (2) by sensible heat transfer. Water flows (3) evenly over evaporative cooling pads located in front of the dry finned coil (4). At the same time axial (5) fans draw air (6) through the pads where a portion of the water evaporates and cools down the saturated air. This increases the cooling capacity of the incoming air for cooling the process fluid (7) inside the coil.



#### Recirculating

The TRF is a TrilliumSeries Adiabatic Cooler equipped with adiabatic pre-coolers (1) that cool the warm process fluid (2) by sensible heat transfer. Water flows (3) evenly over evaporative cooling pads located in front of the dry finned coil (4). With the make up (9) situated on top of the pads, adiabatic precooling of the air can also be guaranteed when the pump is not in operation. Axial (5) fans draw air (6) through the pads where a portion of the water evaporates and cools down the saturated air. This increases the cooling capacity of the incoming air for cooling the process fluid (7) inside the coil. The recirculation system (8) can further reduce the total water consumption.



Want to use the TrilliumSeries Adiabatic Cooler - Model TRF to cool your process fluid? Contact your local <u>BAC representative</u> for more information.

