

# CLOSED LOOP EVAPORATIVE COOLERS



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FIRST EDITION

Air Solutions Group  
Davidson, NC 28036

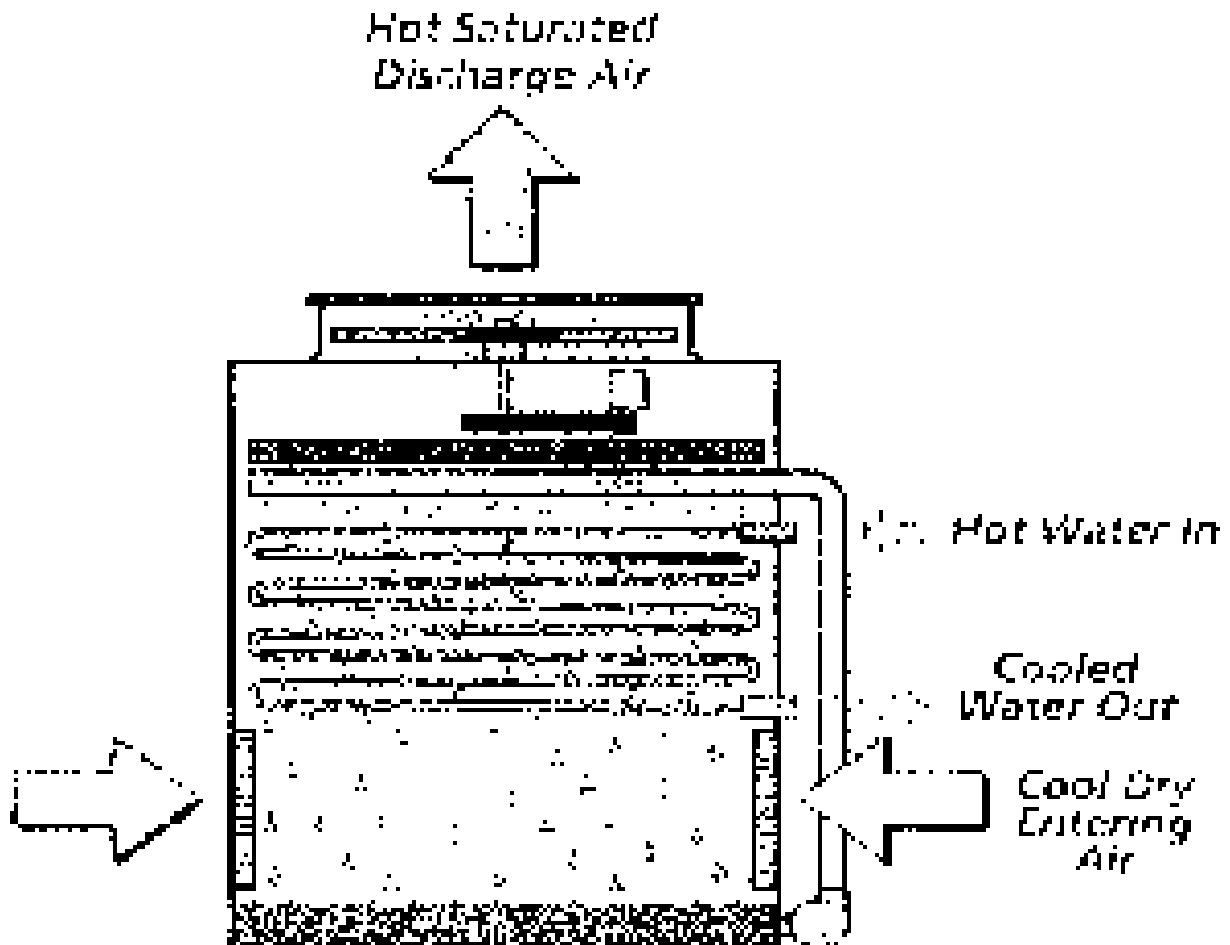
## INDUCED DRAFT DESIGN FLOW DIAGRAM

### Principle of Operation

The process fluid is circulated through the coil of the closed circuit cooler. Heat from the process fluid is dissipated through the coil tubes to the water cascading downward over the

tubes. Simultaneously, air is drawn in through the air inlet louvers at the base of the cooler and travels upward over the coil opposite the water flow. A small portion of the water is evaporated which removes the heat. The warm moist air is drawn to the top

of the closed circuit cooler by the fan and is discharged to the atmosphere. The remaining water falls to the sump at the bottom of the cooler where it is recirculated by the pump up through the water distribution system and back down over the coils.



**Principle of Operation**