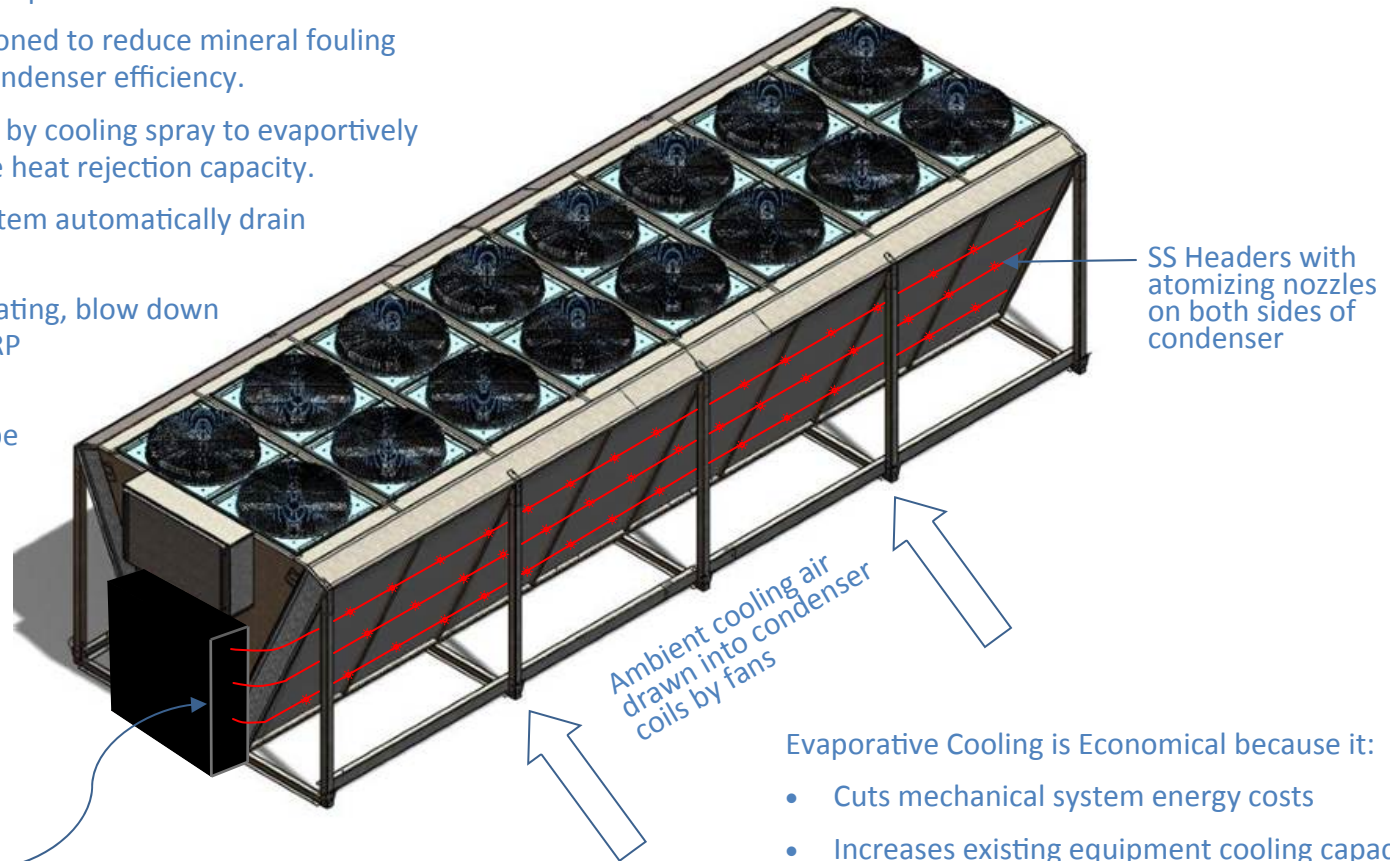


# How it works.



**ARP**  
American Research Products

- As ambient air temperature or condenser head pressure approaches design conditions, pumping unit pressurizes nozzle headers to provide evaporative cooling to condenser coils.
- Capacity of evaporative cooling is controlled via staging valves located in pump station control panel.
- Cooling spray water is conditioned to reduce mineral fouling of coil surfaces to maintain condenser efficiency.
- Coil fins and tubes are wetted by cooling spray to evaporatively cool the surfaces and increase heat rejection capacity.
- Nozzle headers and pump system automatically drain to prevent freezing.
- No sump basin cleaning or heating, blow down or legionella concerns with ARP "Smart Kool" systems.
- Uses less water than flood type cooling systems
- Pump controls interface with condenser fan control



Water conditioning and evaporative cooling pump station with

- Water treatment unit for descaling the water
- High pressure pumping unit
- High pressure staging valves
- Interface to Fan control

Evaporative Cooling is Economical because it:

- Cuts mechanical system energy costs
- Increases existing equipment cooling capacities
- Increases compressor life
- Reduces condenser foot print on new projects
- Reduces first cost when designing and buying condensers for lower ambient conditions
- Evaporative Cooling becomes more effective as the temperature increases