

---

## How Evaporative Condenser Works

Evaporative Condenser is also named Evaporative Cooler. It's a type of cooling equipment utilizing the evaporation of partial spray water, to absorb the heat from the flowing gaseous refrigerant of high temperature inside the condensing coils, and cool the refrigerant from gaseous state to liquid form.

In an evaporative cooling system, compressor discharges high pressure evaporated refrigerant in gas form, which passes through the heat exchange coils of evaporative condenser, and exchanges heat with spray water outside the heat exchange coils. After entering heat exchange coils from upper inlet, gaseous refrigerant is gradually cooled to be liquid form from top down. The strong wind of fans makes spray water fully cover the heat exchange coil evenly, and this tremendously increases the heat exchange efficiency.

Partial calefactive spray water gets vaporized and takes away massive heat with the air flow. Small water drops in hot air are intercepted by high efficient drift eliminator, collected and fall back to PVC fill together with hot spray water, then gets cooled by flowing air, eventually return to the spray water basin after temperature decreased. This whole process is recycling by the circulating pump when the evaporative condensers are working. The evaporated spray water is made up automatically by water level regulator.

[www.sjcooling.com](http://www.sjcooling.com)

