

PRE-COOLING HVAC AND REFRIGERATION UNITS

Italfog fogging systems are the best solution for hvac condenser cooling.

Air conditioning systems perform at their worst in hot summer days, just when they are needed the most. The cooling capacity decreases by 14-15% and the power draw increases by 31%. The problem occurs in condensers which has to change vapors refrigerant into liquid forcing the air through the unit and absorbing heat from the refrigerant causing it to condense.

Applying water fogging system to air-cooled chillers can improve the efficiency under most of the working conditions, as the water mist could lower the air temperature entering the condenser.

On typical air-cooled chillers, a reduction in condenser air temperature of 6 °C will result 14% improvement in efficiency and 12°C about 25-30%.

Tests have shown that this power absorbing reduction is achievable, although it depends on external factors such as saturation level.

Better performances and energy savings.

BENEFITS

- Air temperature outside the unit lowered by up to 12°C
- Energy consumption decreased, as much as 30%
- Increase the efficiency of HVAC units up to 30%
- Live of the whole system extended
- Low start up and operating costs
- Quick installation

Evaporation efficiency

10 micron droplets have an area 3 times higher in relation to the volume of 30 micron droplets produced by low pressure systems.

This means more efficiency and faster evaporation.



30 μ

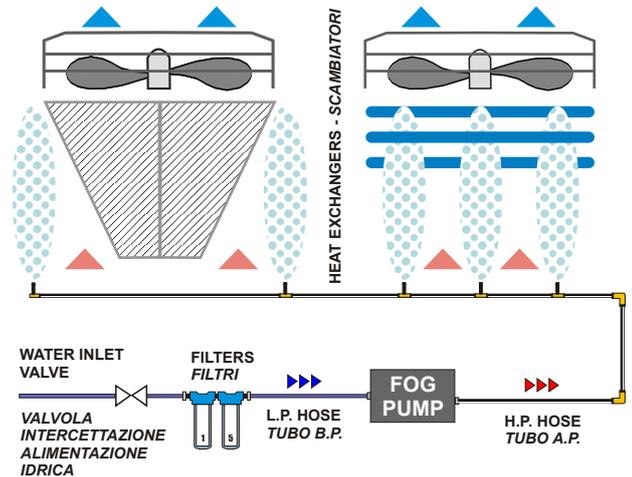


10 μ



EFFICIENCY
Lower energy consumption

+30%



Heat exchangers mounting layout example

