

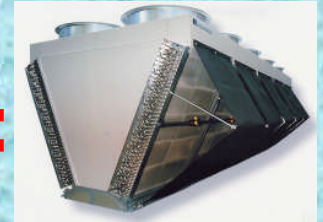
ADIABATIC AIR INLET COOLING SYSTEMS

10 GOOD REASON TO CHOOSE

EcoMESH

1- SHADING EFFECT;

EcoMESH in front of the heat rejection coil provides a shading which in return overcomes the solar radiation impact. By blocking direct sun light over the coil the shading provided by EcoMESH results in 3-8 C cooling for the incoming air.



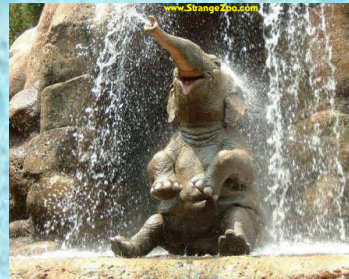
2- SELF-CLEANING FILTER



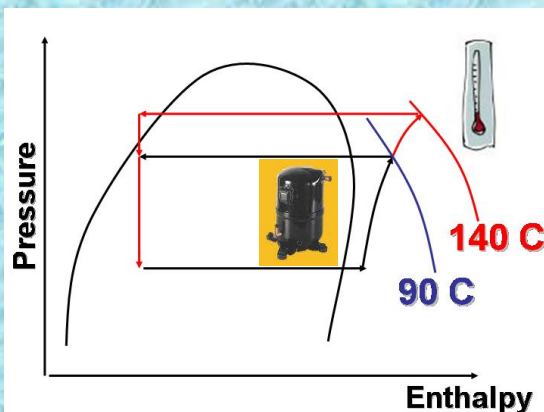
EcoMESH in front of the heat rejection coil provides a self-cleaning filter which in return keeps the coil clean. This is achieved by the mechanical design of the double mesh concept as well as jet water spray over the mesh against the air stream. By keeping the coil clean the overall system efficiency could be improved as much as 3-5%.

3- ADIABATIC COOLING

By intermittently wetting the EcoMESH using simply the mains water results in cooling the incoming air as much as 28C. As water is only sprayed over the mesh the condenser coil remains dry and the additional air cooling provided by EcoMESH provides 20-30% peak power reduction for the refrigeration machinery.



4- INCREASED COMPRESSOR LIFE



Additional air cooling provided by EcoMESH reduces the refrigeration cycle head pressure and effectively discharge temperatures.

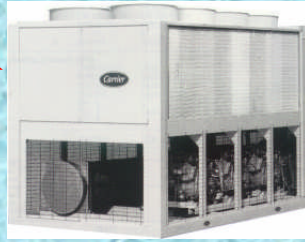
Reduced discharge pressures and lower temperatures significantly increases the compressor life .

As EcoMESH significantly reduces the excessive high discharge pressure and temperatures for the refrigeration cycle and therefore the mechanical stress over the system can be reduced significantly which provides reliable operation and reduced maintenance.

5- REDUCED MAINTENANCE & INCREASED RELIABILITY;

EcoMESH by keeping the condenser coil clean, providing lower discharge temperature and pressure the overall system maintenance frequency and emergency call outs can be reduced significantly which would have a direct impact of the reduction of the annual maintenance cost not to mention to reliability.

6- INCREASED CAPACITY;

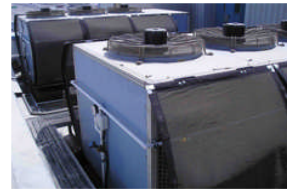


The combination of **a) Shading** **b) Clean coil** and **c) Cooling** the incoming air results in as much as 20~30% output increase for a given refrigeration system. As long as the refrigeration machinery such as **chillers, rooftops, dry coolers or refrigeration condensers** matches the designed peak ambient duty EcoMESH offers the possibility of increasing system overall capacity without adding any additional refrigeration machinery.

7- EASY RETROFIT;

EcoMESH is supplied as D.I.Y kit and it can be applied for both **new** and **existing** machinery for any make or model air conditioning and refrigeration applications.

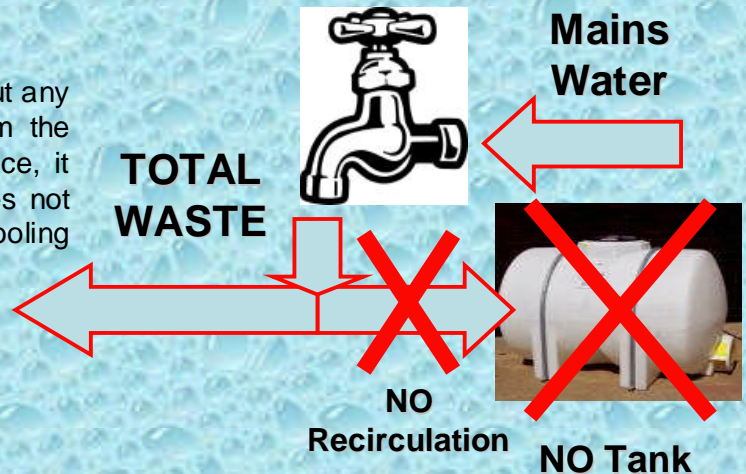
As it can be simply applied externally without having any impact / modifications on the internal circuits it does not affect the manufacturers warranty for any new or retrofit applications.



8- NO WATER TREATMENT;

EcoMESH utilises city mains water directly without any tank, reservoir or pump and what comes from the mains goes out as a total waste principal. Hence, it does not require any water treatment and it does not require reporting to local Authorities like Cooling Towers or Evaporative Condensers.

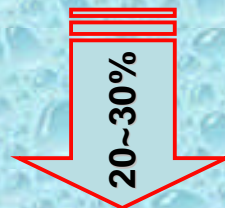
As the water spray is very coarse like the garden sprinkler rather than atomised, the droplets are almost 20~50 times larger than critical inhaling scales which is considered to be the main risk for legionella.



9- REDUCED ENVIROMENTAL IMPACT;



WATER



ELECTRICITY



By reducing the peak power consumption EcoMESH reduces the electricity consumption and effectively associated CO2 emission from the power plants. EcoMESH system also uses only 10 ~ 25% of the water consumption in comparison with any other adiabatic cooling system on the market such as atomised air inlet cooling, pad cooling, cooling towers and evaporative condensers. Hence, it conserves the valuable water resources.

10- REDUCED RUNNING COST;

By reducing the incoming air and keeping the coil clean EcoMESH turns summer to spring and it is obvious to building owners and energy manager that their spring electricity bills are lower than summer periods and the peak savings could be as much as 30~40% with annual savings levels of 15 ~ 25% depending on the location, application and operational patterns of the refrigeration and air conditioning system as well as saving from reduced maintenance.



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