Product Range

Counterflow Evaporative Condensers

Induced Draft with Axial Fans
Forced Draft with Centrifugal Fans
Forced Draft with Axial Fans

Better Choices • Easy Solutions • Advanced Technology • Certified EN ISO 9001

Specialists in Heat Transfer Products and Services

Delivering Quality... Focused on Perfection

Counterflow Evaporative Condenser Designs

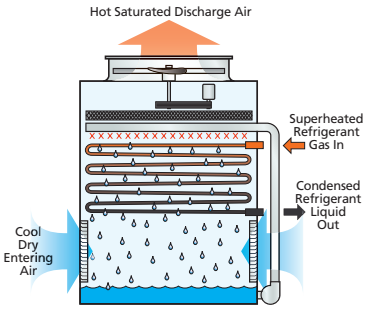
Induced Draft with Axial Fans

ATC-E/c-ATC

ATC-50E to
ATC-3714E
215 to 16000 kW
294 Models
Thermal-Pak®

c-ATC-181 to
c-ATC-504
780 to 2172 kW
24 Models
Thermal-Pak®

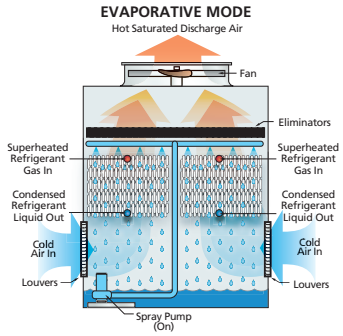
- Low energy
- Low risk for recirculation
- Best choice to avoid Legionella
- Dry operation possible
- Easy maintenance
- IBC Compliant
- c-ATC: containerized units



eco-ATC

eco-ATC-176 to
eco-ATC-4086
756 to 17569 kW
476 Models
Ellipti-*fin*™

- Extended surface coil
- Reduced horsepower
- Reduced footprint
- WET or DRY operation
- IBC Compliant

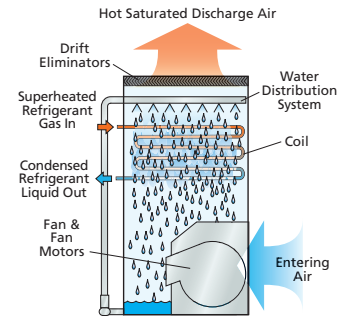


Forced Draft with Centrifugal Fans

LSCE

LSCE-36 to
LSCE-1610
155 to 6931 Kw
88 Models
Thermal-Pak®

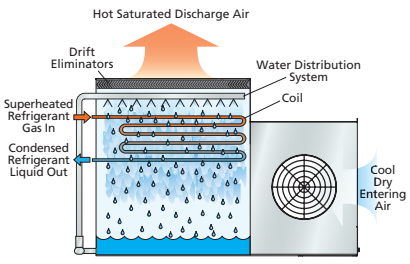
- Small footprint
- Low sound
- Indoor installation possible
- Plume abatement as an option
- Dry operation possible
- IBC Compliant



LRC

LRC-25 to
LRC-379
108 to 1632 kW
43 Models
Thermal-Pak®

- Low height
- Low sound
- Indoor installation possible
- TOP-TOP execution possible: Vertical air inlet and outlet
- Plume abatement as an option
- Dry operation possible
- IBC Compliant

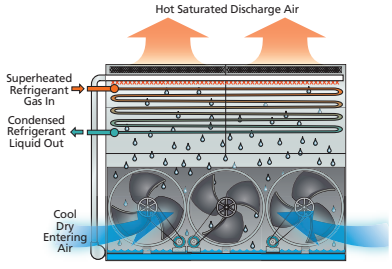


Forced Draft with Axial Fans

PMCQ

PMCQ-316 to
PMCQ-1786
1358 to 7679 kW
84 Models
Thermal-Pak®

- Low energy
- Super Low Sound Fans are standard
- Easy maintenance
- Individual fan drive systems
- Man sized access doors
- Dry operation possible
- IBC Compliant

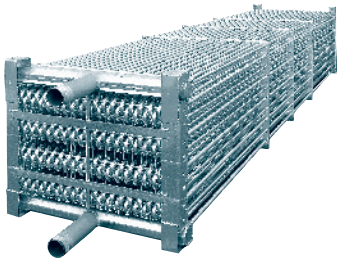


Design Features

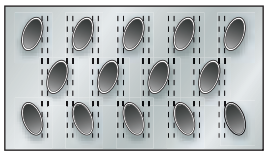
Coil Technologies

Evapco's coils are manufactured within the most stringent of quality control procedures. Each circuit consists of high quality steel tubing formed into a continuous serpentine circuit. Each circuit is then inspected and tested prior to being welded into a framed coil assembly. The coil assembly is then pneumatically tested at 35,5 bar under water to ensure its integrity in accordance with the European Pressure Equipment Directive (PED) 97/23/EC.

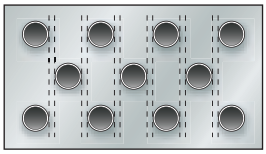
The entire coil assembly is then hot-dip galvanized for industrial strength corrosion protection.



Thermal-Pak®: Evapco's patented Thermal-Pak® Cooling Coil design assures greater operating efficiency. The elliptical tube allows for closer tube spacing, resulting in greater surface area per plan area than round-tube coil designs. In addition, it's staggered design has lower resistance to airflow and also permits greater water loading, making the Thermal-Pak® coil the most effective design available.

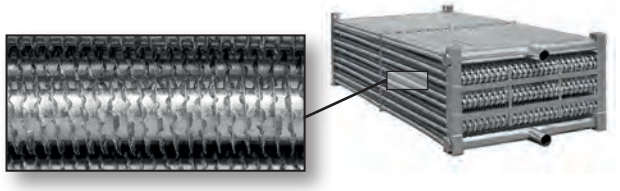


Thermal-Pak® Coil by EVAPCO



Round Tube Coil by Others

Ellipti-*fin*™: Evapco has developed the most efficient evaporative condenser coil in the HVAC industry! All coil rows feature patent pending finned Thermal-Pak® elliptical tubes. The Ellipti-*fin*™ lowers airflow resistance more than typical finned round tubes. This design increases evaporative and dry cooling capacity thereby saving both energy and water.



Pressurized Water Distribution System

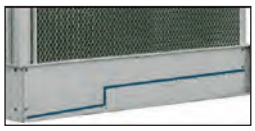
The water distribution system is made of PVC piping which is easily removable for cleaning. The spray branches have threaded end caps for debris removal. Evaporative condensers are equipped with **ZM®II** nozzles: these ABS plastic water diffusers are threaded into the PVC header pipe at proper orientation and have a large orifice to prevent clogging.

ZM®II Nozzle

Maintenance Friendly Basin Design

Easy Access: The cold water basin section on induced draft units is easily accessible from ground level from all four sides of the unit. This open basin design enables the unit to be easily cleaned.

Clean Pan: EVAPCO units feature a completely sloped design from the upper to the lower pan section. This "Clean Pan" design allows the water to be completely drained from the basin.

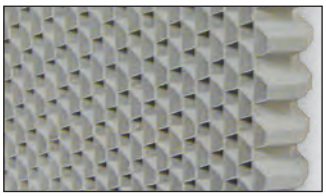


Reliable Drive System

All Evapco evaporative condensers come standard with IE2 motors that can be used with variable frequency drive (VFD) systems for precise capacity control. The mechanical drive systems are easy to access and easy to maintain. Bearing lubrication and belt adjustment can be performed from outside the unit. All units with fan motors located outside of the unit are protected with a removable motor cover or fan screen. Motors located inside the fan casing are mounted on a swing-out motor mount on an adjustable base for easy removal.

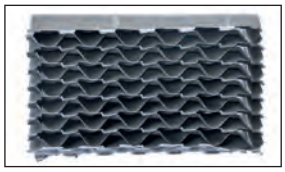
WST Air Inlet Louver

Evapco's water and sight tight (WST) louvers keep water in and sunlight out of induced draft products. The unique non-planar design is made from light-weight framed PVC sections which have no loose hardware, enabling easy unit access. The louver's air channels are optimized to block all line-of-sight paths into the basin eliminating splash-out. Additionally, algae growth is minimized by blocking all sunlight. (Patent pending)



Patented Efficient Drift Eliminators

An extremely efficient PVC drift eliminator system is standard on all Evapco units. The system removes water droplets from the air stream to limit the drift rate to less than 0.001% of the recirculating water rate. Evapco's drift eliminators are EUROVENT Certified.

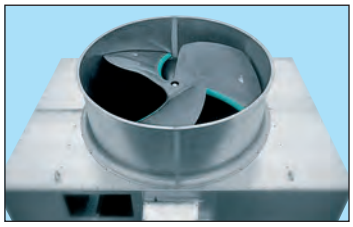


Low Sound Solutions

Induced Draft with Axial Fans

Super Low Sound Fan

Capable of reducing the unit sound pressure levels 9 to 15 dB(A).

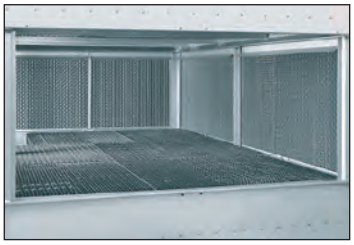


Low Sound Fan

Capable of reducing the unit sound pressure levels 4 to 7 dB(A).

Water Silencer

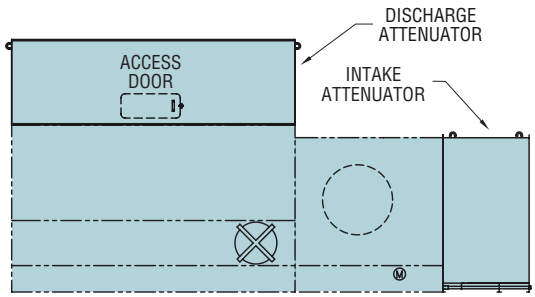
Reduces the high frequency noise associated with the falling water and is capable of reducing overall sound levels 4 to 7 dB(A) measured at 1.5 m from the side or end of the unit.



Forced Draft Centrifugal Fan Options

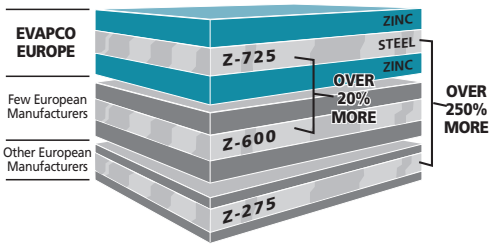
The centrifugal fan design of Evapco's forced draft evaporative condensers operates at lower sound levels which make these units preferable for installations where noise is a concern.

For extremely noise sensitive applications, these centrifugal fan models may be supplied with various optional stages of intake and/or discharge attenuation packages, which greatly reduce sound levels even further.



Corrosion Protection

EVAPCOAT: The Z-725 Mill Hot-Dip Galvanized Steel Construction is the heaviest level of galvanizing available for manufacturing evaporative condensers and has more zinc protection than competitive designs using Z-275 and Z-600 steel. EVAPCO was the first to standardize on Z-725 galvanized steel which means a minimum of 725 g zinc/m².
Today Evapco remains the only European evaporative condensers manufacturer using this heavy grade galvanized steel.

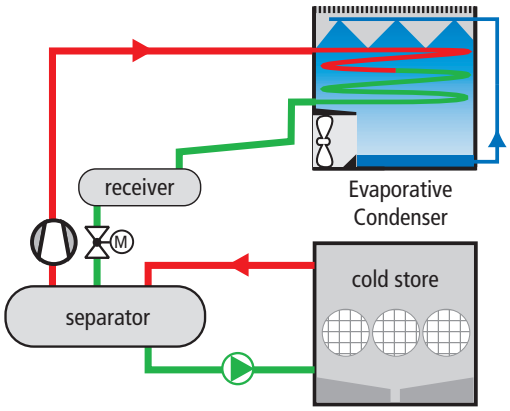


Stainless Steel Options: A variety of stainless steel construction upgrade options are available in both 304L and 316L stainless steel, including stainless steel cold water basins and complete stainless steel units.

Applications - Circulation Scheme

The example shows a typical scheme with the new PMCQ evaporative condenser. It also works with High-Side Float Regulators instead of motor driven expansions valve.

Piping: Evaporative condensers are used in refrigeration systems as an efficient means of heat rejection. Their installation and specifically the installation of the piping to and from the evaporative condenser has a direct effect on their operation and the overall energy efficiency of the refrigeration system. In a special manual, we will explore the principles of piping evaporative condensers, beginning with single condensers and exploring multiple condenser installations as well as thermosiphon and sub-cooling piping systems.



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