

# **Product Range**

## **Counterflow Cooling Towers**

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 Cooling Tower Designs**

## **Induced Draft with Axial Fans**

#### AT / UAT



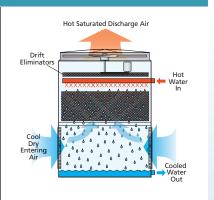
AT / UAT 14-64 to AT / UAT 456-926 139 to 22128 kW 455 Models

EVAPAK® EvapJet™

- Low energy
- Low risk for recirculation
- Easy maintenance
- UAT: Stainless Steel Unit
- IBC Compliant
- Eurovent-CTI Certified







## **Forced Draft with Centrifugal Fans**

#### **LSTE**



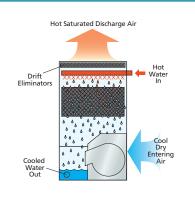
LSTE 416 to LSTE 10636 145 to 5930 kW 77 Models

**EVAPAK®** 

- Low sound
- Small footprint
- Indoor installation possible
- IBC Compliant (B)
- Eurovent-CTI Certified







#### **LPT**



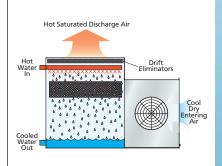
LPT 316 to LPT 8812 120 to 1460 kW 43 Models

**EVAPAK®** 

- Low sound
- Low height
- Indoor installation possible
- TOP-TOP execution possible: vertical air inlet and outlet
- IBC Compliant (B)
- Eurovent-CTI Certified







## **Forced Draft with Axial Fans**

#### **PMTQ**



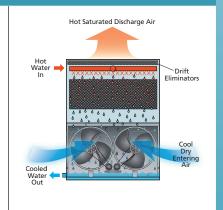
PMTQ 10112 to PMTQ 12940 460 to 5732 kW 90 Models EVAPAK®

EvapJet™

- Low energy
- Easy maintenance
- Super Low Sound Fans are standard
- Individual fan drive systems
- Man-sized access doors
- IBC Compliant (as)
- Eurovent-CTI Certified







## **Design Features**

## **Corrosion Protection**

**EVAPCOAT**: The Z-725 Mill Hot-Dip Galvanized Steel Construction is the heaviest level of galvanizing available for manufacturing cooling towers 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 cooling tower manufacturer using this heavy grade galvanized steel as per standard.



**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. All factory seams in the cold water basin are **welded** to ensure watertight assembly.

#### **EVAPAK® Fill**

The **EVAPAK®** fill is specially designed to induce highly turbulent mixing of the air and water for superior heat transfer. Special drainage tips allow high water loadings without excessive pressure drop. The fill is constructed of inert PVC, will not rot or decay, and will withstand water

temperatures of 55°C. A higher temperature fill is available for water up to 65°C. The structural integrity makes the fill usable as a working platform.



**EVAPAK®** has excellent fire resistance, having a flame spread rating of 5 per ASTM-E84-81a.

## **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. ABS plastic water diffusers have a large orifice and are practically impossible to clog. They are threaded for easy removal and positioning.

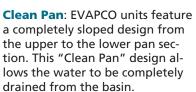
Axial fan units are equipped with **EvapJet<sup>TM</sup>** nozzles. This high efficient design requires 66% fewer nozzles.





## **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.







## **Reliable Drive System**

All Evapco cooling towers come standard with IE3 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. Mo-





tors located inside the fan casing are mounted on a swingout 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 (Patented).

## **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**

#### **Low Sound Fan**

The Low Sound Fan utilizes a wide chord blade design for sound sensitive applications where low sound levels are desired. This fan is capable of reducing the unit sound pressure levels 4 to 7 dB(A).



#### **Super Low Sound Fan**

The Super Low Sound Fan utilizes an extremely wide chord blade design applied for sound sensitive applications where the lowest sound levels are required. This fan is capable of reducing the unit sound pressure levels 9 to 15 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.



## Offset Sound Attenuation Walls

Offset Sound Attenuation Walls are EVAPCO's newest attenuation option for even greater levels of sound reduction when used in combination with the Super Low Sound Fan and Water Silencer options. These devices will reduce the 15 m free field sound level by an additional 3 db(A). The walls are

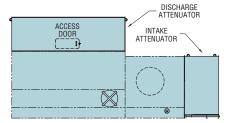


constructed of Z-725 galvanized steel (stainless steel construction also available) lined with acoustical padding on the inside of the walls. This option requires external support by others.

## **Forced Draft Centrifugal Fan Options**

The centrifugal fan design of Evapco's forced draft cooling towers 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.

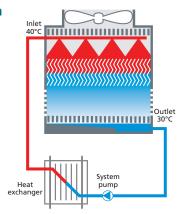


## **Applications**

## **Circulation Scheme**

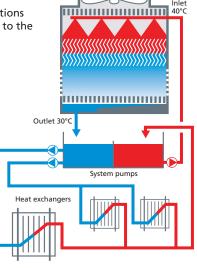
#### **Single Circuit System**

Mainly for applications with constant water flow.



### **Dual Circuit System**

For cooling tower applications with variable water flows to the consumers



## **Eurovent-CTI Certified - Standard 201**

**CTI Certified-Standard 201:** Every Evapco cooing tower is independently certified by the Cooling Technology Institute (CTI). This certification guarantees that the unit will meet the rated capacities, eliminating the need for costly field performance tests.

**Eurovent Certification Company (ECC).** The rating standard for Cooling Towers adopts CTI standard 201. ECC thermal performance rating can be granted in accordance with the ECC Operating Manual for the Certification of Cooling Towers.





www.eurovent-certification.com

## www.evapco.eu / www.mrgoodtower.eu

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