



ENVIRONMENTALLY FRIENDLY REPLACEMENT PARTS

- Water Savings
- Energy Savings
- Chemical Reduction
- LEED Point Opportunities
- Noise Reduction
- Efficiency Improvements



Call your local Mr. GoodTower® for a Free Unit Inspection on all Brands and Models of Evaporative Cooling Equipment.

Call **EVAPCO** at **410-756-2600** for the Mr. GoodTower® Service Center near you.





Environmentally Friendly Replace

Pulse~Pure®

Pulse~Pure® with Integrated Controller—Eliminate Chemicals and Conserve Water

EVAPCO's non-chemical water treatment system provides an environmentally responsible alternative for treating cooling water. Pulse~Pure's pulsed-power technology provides scale, microbiological and corrosion control without the use of chemicals and biocides. *Water resources are conserved when the discharge water of Pulse~Pure® treated cooling towers is used for irrigation, groundwater recharge or sewage conveyance.**



The Pulse~Pure® Integrated Controller (PPIC) provides water meter inputs for make-up and blow down water use (**water meters by others**), a conductivity controller and blow down valve.



Retrofit existing evaporative cooling equipment with the Pulse~Pure® Integrated Controller to comply with LEED® Existing Building green guidelines and ASHRAE Standard 189.1. Protect our water resources by eliminating the discharge of chemicals to our water supply!

**Note: Check with local government agencies for regulations governing the use of this discharge water.*

Pulse~Pure® can contribute to the following LEED 2009 Existing Buildings Operation and Maintenance (EBOM) Credits:

LEED EBOM

- Water Efficiency Credit 1: Water Performance Measurement: Metering Make-up/Blow down water use.
- Water Efficiency Credit 3: Water Efficient Landscaping: Use blow down water for irrigation.
- Water Efficiency Credit 4, Option 1: Cooling Tower Water Management: Improve water efficiency by installing and/or maintaining a conductivity meter and automatic controls to adjust the bleed rate.
- Indoor Environmental Quality Credit 1.1: Indoor Air Quality Best Management Practices- Indoor Air Quality Management Program

The PPIC, when used in conjunction with water meters and overflow alarms contributes to the requirements of ASHRAE Standard 189.1 Section 6. Water Use Efficiency.

Super Low Sound Fan

Improve Indoor Acoustics



Reduce cooling tower fan noise by retrofitting induced draft cooling towers and closed circuit coolers with EVAPCO's Super Low Sound Fan. The EVAPCO Super Low Sound Fan is capable of reducing unit sound pressure levels 9 db (A) to 15 db(A),

based on specific unit selection and measurement location. A 10 db (A) reduction is **HALF THE NOISE!**

The Super Low Sound Fan contributes to the following LEED 2009 Existing Buildings Operation and Maintenance (EBOM) Credits

- Indoor Environmental Quality Credit 2.1: Occupant Comfort-Occupant Survey

The Super Low Sound Fan also contributes to meeting the requirements of ASHRAE Standard 189.1 Section 8.3.3. Acoustical Control.

Conductivity Controller Package-ECC

Manage and Conserve Cooling Water



Mounting Plate Shown is Optional

Conductivity is maintained with a temperature-compensated toroidal sensor and a motorized ball valve. In addition, The ECC includes a timer-operated 115/230 volt output relay.

All control outputs are interlocked with a flow switch. The controller features a NEMA 4X enclosure, the ability to import "configuration" files from or to another controller, and two inputs for water meters (meters not included). The ECC also features a storage and memory capability. 60 days of conductivity, temperature and water use data are stored in the controller and can be conveniently downloaded to a USB memory stick providing a continuous audit trail.

The Evapco Conductivity Controller will contribute to the following LEED 2009 Existing Buildings Operation and Maintenance (EBOM) Credits:

- Water Efficiency Credit 1: Water Performance Measurement, Option 2: Sub-metering of cooling tower water use. *NOTE: Per LEED EBOM-" water utilities may offer incentives and rebates for the installation of conductivity meters on existing cooling towers because of the substantial water savings."*
- Water Efficiency Credit 3: Water Efficient Landscaping: Use blow down water for irrigation.
- Water Efficiency Credit 4: Cooling Tower Water Management: To reduce potable water consumption for cooling tower equipment through effective management and measurement of water use.

The ECC, when used in conjunction with an automatic blow down valve, water meters and overflow alarms contributes to the requirements of ASHRAE Standard 189.1 Section 6. Water Use Efficiency.



Replacement Coils

Improve Energy Efficiency

Improve the efficiency of your closed circuit coolers and evaporative condensers by replacing their coils with EVAPCO's patented Thermal-Pak coil. A fouled tube with a scale thickness of just 1/16" could reduce performance up to 20%! In addition, replacing corroded or leaking coils will eliminate water, glycol, or refrigerant loss to the environment.

EVAPCO's energy efficient heat transfer coil incorporates a unique elliptical tube design providing 20% more surface area than competitors, maximizing heat transfer and cooling capacity.

EVAPCO will custom design and manufacture replacement coils and coil sections for any manufacturer's cooler or condenser and guarantee to match or exceed its thermal performance.



Replacement Coils can contribute to LEED 2009 for Existing Buildings Operation and Maintenance Credits (EBOM):

- Energy and Atmosphere Prerequisite 2: Minimum Energy Performance: Help to establish baseline energy performance
- Energy and Atmosphere Credit 1: Optimize Energy Efficiency Performance: Achieve increasing levels of operating energy performance

Replacement Fill

Improve Energy Efficiency

Improve cooling tower energy efficiency by replacing the fill media. Fill media that has an accumulation of scale and debris will result in higher energy costs and reduced thermal performance. EVAPCO offers both counter flow and cross flow fill replacements for all cooling towers, regardless of original manufacturer. EVAPCO has several solutions to offer for fill media including wide-gap, anti-fouling fill and HPVC fill for high temperature applications (up to 150°F/66°C).



Replacement of heat transfer media can contribute to LEED 2009 for Existing Buildings Operation and Maintenance Credits (EBOM):

- Energy and Atmosphere Prerequisite 2: Minimum Energy Performance: Help to establish baseline energy performance
- Energy and Atmosphere Credit 1: Optimize Energy Efficiency Performance: Achieve increasing levels of operating energy performance

NEMA Premium and Energy Efficient Motors

Improve Energy Efficiency

EVAPCO offers NEMA Premium and Energy Efficient Cooling Tower Duty fan and pump motors meeting the efficiency requirements of EISA, (the Energy Independence and Security



Act of 2007) and ASHRAE Standard 189.1. In addition, re-circulating pump assemblies are also available with NEMA Premium and Energy Efficient motors. Electric motors account for 50% of all U.S. energy use and 2/3 of all industrial energy use. Based on U.S. Department of Energy

data, it is estimated that if NEMA Premium Efficient motors were used industry wide, we would save 5,800 gigawatts of electricity and prevent the release of nearly 80 million metric tons of carbon into the atmosphere over the next ten years. This is equivalent to keeping 16 million cars off the road!

Replace inefficient fan and pump motors with EVAPCO's Cooling Tower Duty, NEMA Premium or Energy Efficient motor designs to comply with LEED 2009 for Existing Buildings Operation and Maintenance Credits (EBOM), ASHRAE Standard 189.1 and 2008 CA Title 24 requirements for electric motor efficiency:

- Energy and Atmosphere Prerequisite 2: Minimum Energy Performance—Help to establish baseline energy performance
- Energy and Atmosphere Credit 1: Optimize Energy Efficiency Performance—Achieve increasing levels of operating energy performance

EVAPCO's NEMA Premium Motors meet the efficiency requirements of ASHRAE Standard 189: Chapter 7. Energy Efficiency Section 7.4.7.1 Electric Motors, Table C-13. EVAPCO energy efficient motors comply with Table S Electric Motor efficiency levels of CA Title 24.

High Efficiency Drift Eliminators

Water Savings, Reduce Environmental Impact

EVAPCO's patented High Efficient drift eliminators limit maximum drift rate to 0.001% of the recirculated spray water. This low drift rate saves valuable water and prevents the dispersion of biological and water treatment chemicals if used. The drift eliminators are constructed of non-corrosive inert PVC.

Replacement of inefficient drift eliminators with EVAPCO's 0.001% guaranteed drift rate design will contribute to meeting LEED 2009 for Existing Buildings Operation and Maintenance Credits (EBOM):

- Water Efficiency Credit 4: Cooling Tower Water Management: To reduce potable water consumption for cooling tower equipment through effective water management.

EVAPCO's drift eliminators exceed the requirements of ASHRAE Standard 189: Water Use Efficiency Section 6.3.2.3 HVAC Systems and Equipment Item B drift loss of 0.002% for counter flow and 0.005% for cross flow towers.



EvapJet™ Spray Distribution

Improve Energy Efficiency and Thermal Performance



Retrofit existing cooling towers with EVAPCO's EvapJet water distribution system to increase their thermal performance. EvapJet nozzles can increase equipment thermal performance up to 3.5% without an increase in unit horsepower. Combined

with EVAPCO's pressurized water distribution system, an EvapJet retrofit provides the most energy efficient spray distribution system in the industry.

The EvapJet nozzle has a large orifice opening which makes it resistant to clogging. Its fluidics design results in an oscillating spray pattern, with no moving parts. Constructed of ABS, the nozzles are corrosion resistant.



Contact EVAPCO for information on retrofitting other manufacturer's cooling towers, including field erected towers, with the EvapJet nozzle.

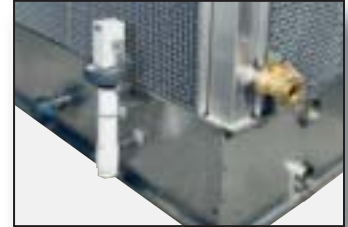
Replace inefficient water distribution systems with the EvapJet system which can contribute to LEED 2009 for Existing Buildings Operation and Maintenance Credits (EBOM) in:

- Energy and Atmosphere: Prerequisite 2 Minimum Energy Performance: Help to establish baseline energy performance
- Energy and Atmosphere Credit 1: Optimize Energy Efficiency Performance-Achieve increasing levels of operating energy performance

Electric Water Level Control Package

Manage and Conserve Water

Reduce water loss caused by faulty or worn mechanical make-up valves by retrofitting evaporative cooling equipment with EVAPCO's Electric Water Level Control package. The conductivity based electric water level control provides accurate control of the basin water level compared to mechanical make-up float assemblies. The package includes a slow-closing solenoid valve with positive closure to prevent water hammer. The optional 5-probe assembly allows for the use of high and low water alarms.



The Evapco electric water level controller will contribute to the following LEED 2009 Existing Buildings Operation and Maintenance (EBOM) Credits and ASHRAE Standard 189.1 requirements:

- Water Efficiency Credit 4: Cooling Tower Water Management: To reduce potable water consumption for cooling tower equipment through effective management and measurement of water use.

The electric water level control, with the high alarm option, when used in conjunction with an automatic blow down valve, will contribute to the requirements of ASHRAE Standard 189.1 Section 6. Water Use Efficiency.

Additional Water and Energy Conservation Measures

- Prevent water loss through leak prevention; use EvapLiner Protective Coating on cooling tower hot and cold water basins, closed circuit cooler and evaporative condenser cold water basins.
- Reduce heat loss by insulating discharge hoods and adding dampers to prevent heat loss.
- Consider capturing waste heat and directing it to our Hot water/Steam coil option as alternative to electric basin heaters.



Mr. GoodTower®



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