

Sustainable Evaporative Cooling Systems

SAVE ENERGY. CONSERVE WATER. REDUCE LIFECYCLE COSTS.

MARLEY® 



Cool is green. Green is cool.

Evaporative cooling is an energy-efficient and cost-effective process that delivers benefits central to sustainable building design.



Today's building designers and contractors are seeking environmentally responsible processes and materials and cooling systems are no exception. Evaporative cooling systems from SPX Cooling Technologies provide sustainable cooling tower systems and water management strategies to optimize building performance and contribute to building sustainability and various standards and certification programs such as the American Society for Heating, Refrigeration and Air-Conditioning Engineers (ASHRAE), Leadership in Energy and Environmental Design (LEED), the WELL Building Standard™, Building Research Establishment Environmental Assessment Method (BREE-AM®), and other sustainability assessment systems.



Energy savings HVAC evaporative cooling systems can reduce energy consumption by one-half to one-third, compared to air-cooled equipment. (Results are climate and water resource dependent.)

Water savings Cooling towers can conserve water use by optimizing operational factors, including make-up water and cycles of concentration. Hybrid parallel path designs, such as the Marley® NCWD cooling tower, can reduce water use by up to 20% compared to other cooling towers.

LEED credits Evaporative cooling systems from SPX Cooling Technologies can achieve **significantly better than ASHRAE 90.1 minimum efficiency thresholds**, providing building designers one more way to receive LEED energy reduction credits.*

Clean air Not only is evaporative cooling an environmentally responsible process that uses naturally replenished water – **it provides about 95% effectiveness at cleaning the air** that flows through the system.

Cost savings Evaporative cooling systems from SPX Cooling Technologies are designed and built for the long haul - with materials and components that require less maintenance and withstand the rigors of hot, humid conditions.

Recyclability Recycled steel comprises a significant portion of new SPX cooling towers: 70% in stainless steel towers and 29% in galvanized steel towers. When decommissioned, these tower materials may be recycled again.

Evaporative cooling water management strategies conserve water. Our Water Usage Calculator makes comparisons easy.

Calculate water usage and consider conservation strategies using the **Water Usage Calculator**. Enter your operating conditions to calculate a variety of key data, including blowdown and total usage (gpm).

Water Usage Calculator			
Operating Conditions			
Tower Water Flow	1000 gpm	227 m ³ /h	
Hot Water Temperature	95.00 °F	35.00 °C	
Cold Water Temperature	85.00 °F	29.44 °C	
Wet-Bulb Temperature	78.00 °F	25.56 °C	
Drift Rate	0.005 %		
Concentrations	3		
Water Usage			
Evaporation	10.35 gpm	2.35 m ³ /h	
Drift	0.05 gpm	0.01 m ³ /h	
Blow down	5.12 gpm	1.16 m ³ /h	
Total Usage	15.52 gpm	3.53 m ³ /h	
Generate Curves*		IP Units	SI Units

*The difference between the energy consumption of a cooling system more efficient than the ASHRAE 90.1 minimum, and the minimum value, contributes to the LEED energy savings credit for a building.

To learn more about SPX evaporative cooling solutions, email spxcooling@spx.com or visit spxcooling.com.

Evaporative Cooling

IS SUSTAINABLE COOLING



SPX Cooling Technologies, Inc. is a leading global manufacturer of cooling towers, evaporative fluid coolers, evaporative condensers, industrial evaporators and air-cooled heat exchangers. Its cooling systems and components, coupled with technical services, support applications in heating, ventilation and air conditioning (HVAC), refrigeration, and industrial process cooling. SPX Cooling Technologies and its product brands are part of SPX Corporation. For more information see www.spxcooling.com.

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