

EVAPORATIVE COOLING AND HUMIDIFICATION

The DriSteem® High-Pressure System provides evaporative cooling and humidification in multiple zones and in a wide variety of applications. Humidify to enhance indoor air quality, manufacturing processes, material longevity, and comfort while taking advantage of the free cooling and energy savings inherent with this technology.

The DriSteem High-Pressure System handles every aspect of the application from the potable supply water source to the cooled/humidified conditions in the air handler, duct, or space.

ENERGY EFFICIENT

Heat already present in air is used to evaporate tiny, evenly-distributed water droplets dispersed by the system, saving on energy costs compared to steam humidification.

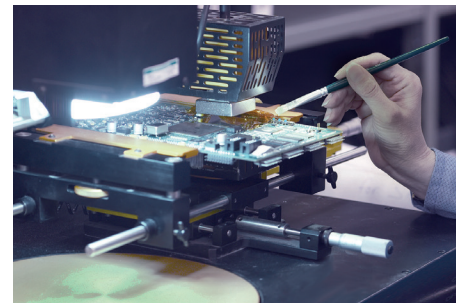
REDUCES COOLING LOAD

As atomized water droplets are absorbed in air, the evaporative cooling effect reduces the building's cooling load. This provides significant energy savings in applications requiring both cooling and humidification.

LOW MAINTENANCE

The stainless-steel high-pressure pump is designed to run for 8000 hours before its first maintenance check, and the stainless-steel dispersion nozzles and manifolds are maintenance free.

Water treatment options available from DriSteem provide ultra-pure water that leaves no white dust. The reverse osmosis (RO) system automatically backflushes for extended membrane life.



Application versatility

- Data centers
- Industrial manufacturing
- Printing and distribution



- *Energy efficient*
- *Provides both direct and indirect evaporative cooling*
- *Multiple zone capabilities in air handlers, ducts, and open spaces*
- *Complete water treatment options available from DriSteem*

THE MOST ADVANCED TECHNOLOGY

- Micro-turbines in precision-machined atomizing nozzles fragment water droplets into ultra-fine particles (90% are ten microns or less)
- Water delivered to nozzles at up to 1200 psi (8.27 MPa) requires no pressurized air
- Integral check valve in nozzle ensures no dripping when system shuts off

COOLING EFFECT SAVES ENERGY

- Every pound of atomized water absorbed in air removes approximately 1000 Btu of heat from the air (every kg absorbed removes approximately 2300 kJ of heat)
- Significant energy savings when cooling and humidifying simultaneously
- Utility rebates can offset costs

LOW MAINTENANCE

- Stainless-steel pump is cooled by purified supply water; 8000 hours before maintenance check
- Stainless-steel nozzles and manifolds require no maintenance
- Thorough water filtration protects stainless-steel components from corrosion and undue wear
- Final evaporation media as close as three feet (0.9 m) downstream from heating coil prevents downstream wetting

COMPREHENSIVE SYSTEM CONTROL AND MULTIPLE ZONE CAPABILITY WITH VAPOR-LOGIC® CONTROL

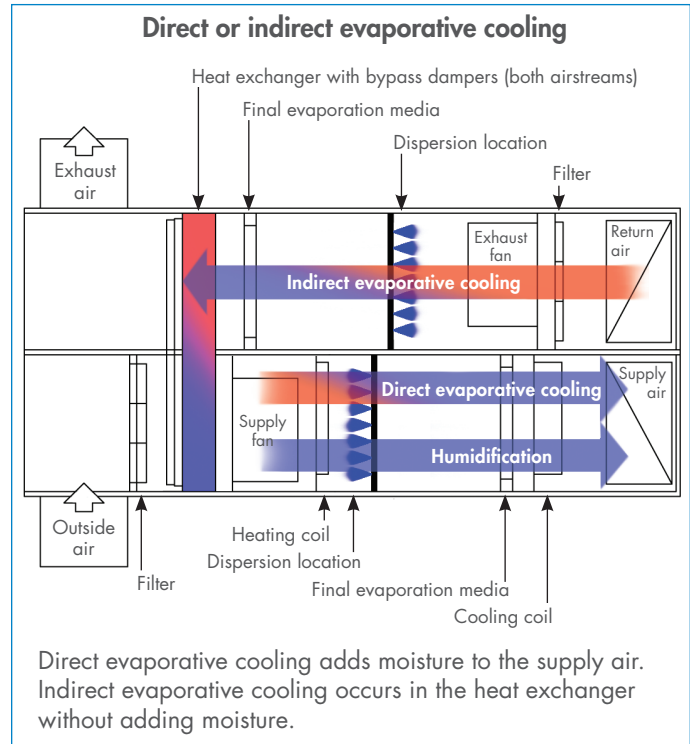
- Accurate, responsive RH control; PID control tunes system for maximum performance
- Set up, view, and adjust system functions with intuitive keypad/display or Web interface
- Integrates into any building automation system via Modbus® and optional BACnet® or LonTalk® communication protocols
- Individual zone monitoring and modulated staging valves provide tight control in all zones with optimized absorption and minimal water waste
- One system cools and humidifies multiple zones with separate demands

VERSATILE

- Cools and humidifies in air handlers, ducts, and open spaces
- Nozzle staging and pulsed modulation allow high turndown of system output
- Capacities up to 5500 lbs/hr (2495 kg/h), multiple systems can be combined for larger capacities
- Flexibility accommodates the most challenging applications; extensive network of DriSteem Representatives available to assist with system layout and design

COMPLETE WATER TREATMENT SOLUTION

- Water treatment options available from DriSteem include RO hyperfiltration, particulate filtering, dechlorination, and duplex water softening
- Automatic back-flush technology ensures long RO membrane life
- Ultra-pure water eliminates white dust fallout and bacteria/virus proliferation that can occur when using potable water



DRI-STEEM Corporation

A subsidiary of Research Products Corporation
DriSteem U.S. operations are ISO 9001:2015 certified

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Continuous product improvement is a policy of DriSteem Corporation; therefore, product features and specifications are subject to change without notice.

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Form No. HPS-Flyer-0114