



Herrdraulic™
High Pressure Atomizing Humidification System

The Herrdraulic™ System

The Herrdraulic High Pressure Humidification and Evaporative Cooling System provides adiabatic humidification/cooling solutions for both air handler/duct and open-space applications.

The highlight of the Herrdraulic system is its energy efficiency. By utilizing a positive displacement pump to generate fine droplets, in combination with an adiabatic evaporative process, the Herrdraulic uses roughly 1/10 the energy of an air/water atomization system, 1/80 the energy of a fossil fuel fired boiler, and 1/350 the energy of electric steam humidifier! Because it is an adiabatic process, approximately 1,070 BTU's of heat energy is removed from the air to evaporate each pound of water, making it ideal for processes that have high internal heat loads.

Applications

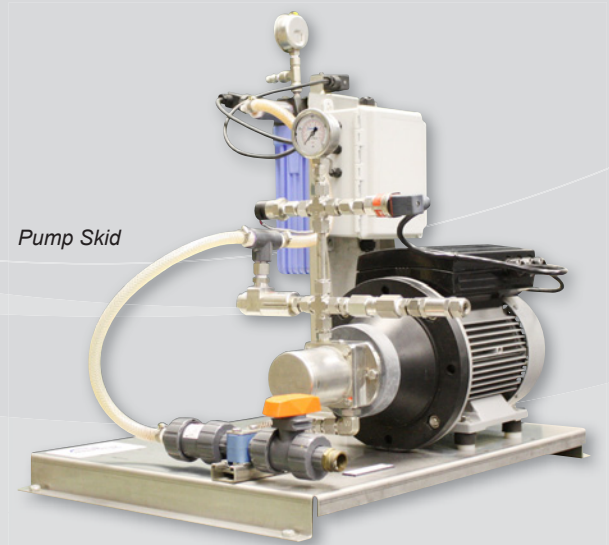
- Office Buildings
- Hospitals
- Universities and Colleges
- Research Facilities and Laboratories
- Pharmaceutical
- Museums
- Manufacturing Plants
- Clean-rooms
- Semiconductor Manufacturing
- Printing Operations
- Woodworking Shops
- Indoor/Outdoor Evaporative Cooling
- Ornamental Fogging in Theme Parks/Exhibitions

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Herrdraulic™ System Highlights

Pump Skid:

The high-pressure pump is the heart of every Herrdraulic system. Unlike other micro-misting systems, the Herrdraulic does not use compressed air or ultra-sonic vibrators; thus maintenance is minimized. The Herrdraulic systems employ a technically superior axial piston pump. The pump is positive displacement and water lubricated; so maintenance is further minimized since there is no oil to change in the pump. Output pressure is so smooth that pulsation dampeners are not required. Compatible with all types of water (tap, de-ionized, or reverse-osmosis), the pump skid comes completely piped and includes a fixed or variable speed motor, a water by-pass valve, a 10 micron water filter, and built-in-safeties. Capacities exceeding 3000 lbs. (1364 Kg) per hour are available.



Pump Skid

Valve Plate:

The Herrdraulic valve plate consists of a plurality of three-way solenoid actuated valves. These robust valves are constructed of stainless steel to ensure long-life, eliminate water hammer typically associated with two way valves, and allow for drip-free nozzle operation by relieving pressure each time the valve is actuated. An integral junction box contains a prewired terminal strip to simplify installation and facilitate maintenance. The valve plates are available with varying quantities of valves to match the system turndown requirements. Turndown ratios exceeding 30:1 are available.



Valve Plate

System Control Panel:

The Herrdraulic system control panel incorporates an advanced microprocessor controller to manage the system inputs, operate the pump skid, and sequences the valves on the valve plate. The system control can accept BMS, standalone proportional, or ON/OFF control signals.

Nozzle Array:

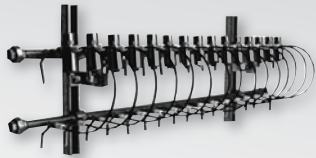
A typical air handler or duct installation includes a series of stainless steel fogging nozzles that are constructed to form a complete nozzle array. The nozzles feature anti-drip check-valves which, when combined with the release of pressure at system shutdown, ensure drip-free operation. A synthetic orifice resists mineral build-up when used with regular tap water. Each nozzle can be easily removed from the system, disassembled and cleaned.



Fogging Nozzles



Our Herrdraulic™ Systems come with a two-year limited warranty.



Herrmidicool®
In-duct Air/Water Atomizing System

To learn more about
Herrmidifier products,
contact your local
sales representative or
visit us on the web at
herrmidifier-hvac.com



Dual Pneumatic
Open Space Atomizing System



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