HERRMIDIFIER®

Humidification Systems

Making Every Drop Count

About Herrmidifier®

Since its founding in Lancaster, PA, Herrmidifier® has been designing and producing high quality solutions for indoor air humidification for over 50 years. In that time, their product offering has evolved to integrate the latest technologies to bring you the most efficient and effective humidification products in the market today.

Ranging from in-duct atomizing systems to steam humidifiers, you can rest assured that Herrmidifier® products will not only satisfy occupant conditions and application requirements, but they can also be retrofitted to correct and improve environments that may not be properly humidified.

Our History

In 2008, Air System Components, Inc. (ASC), a division of the Tomkins Building Products Division of Tomkins PLC (NYSE, TKS), acquired Herrmidifer, an industry leading manufacturer of humidification solutions. ASC is a market-leading supplier of heating, air conditioning, and ventilation system components for commercial and residential applications. Their corporate headquarters is located in Richardson, TX, which is also home to multiple brands that operate as independent companies including Titus®, Krueger®, Tuttle & Bailey®, and PennBarry®.

With over a half-century of excellence in customer service, product quality, and dependability, coupled with the resources of our parent company, Herrmidifier® continues to provide humidification solutions with exacting results.

A Commitment to Quality & Service

Manufactured in Sanford, NC, Herrmidifier® products and systems can be found in homes, hospitals, offices, and industrial locations throughout the world. Year after year, Herrmidifier® has continued to provide high-quality, state-of-the-art humidification systems through research in technology, analysis tools, as well as manufacturing innovative, new components and products.

Herrmidifier's employees are committed to understanding and meeting customers' evolving needs. Continuous improvement, operational excellence, and commitment to ISO 9001:2007 facilitate innovative products and quality solutions.

In addition to quality products, it is also our goal to provide you with world-class customer service. We have experienced, knowledgeable application and support specialists ready to assist you along with supplemental brochures, technical information, and performance data, all of which can be found on our website at any time - www.herrmidifier-hvac.com.

Research & Development

Our Humidified Air Research Environment (HARE) testing and analysis facility takes the guesswork out of system configuration and installation and provides the best mix of system components to balance energy requirements, environmental concerns, and economic realities.

Certifications

Herrmidifier® welders are U.S. Navy and State Certified MIG and TIG welders through the Titan Group, Raleigh, North Carolina. This biannual certification covers eight different welding applications.

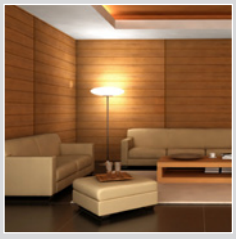
Herrmidifier's research and development center.

Herrmidifier® employs certified MIG and TIG welders.

Humidification Products to Improve Your Environment

Controlled humidification is critical to many processes throughout the commercial and industrial world. The paint on most vehicles needs to be applied and dried to the most exacting standards. In the baking of bread and cookies, the humidity must be maintained at precise levels to ensure consistent quality. Hospitals also use humidification control to restrict the growth of bacteria and fungus. Additionally, in many applications involving the manufacture and use of microelectronics, static and dimensional control can be crucial to the process. There are, in fact, many other applications that can benefit from a properly humidified space.

Herrmidifier®-brand products specialize in the introduction of water vapor or mist into the air to help raise the relative humidity to the desired level for human comfort and protection of processes and products. Learn more about how our products can help you in your next humidification application.



Common Applications

- Bakeries
- Circuit Board Manufacturing
- Cleanroom Manufacturing
- Cold Storage Rooms
- Food Processing and Storage
- Hospitals
- Laboratories
- Investment Casting
- Leather Storage
- Museums
- Offices
- Printing Plants
- Paper Storage
- Schools
- Semiconductor Manufacturing
- Telecommunications Facilities
- Textile Plants
- Woodworking Plants

Trouble-Free Performance

The family of Herrtronic® and Herrmersion™ self-generating steam humidifiers advances the purity of clean steam. Applications including computer rooms, cleanrooms, laboratories, telecommunication switch gear facilities, schools, offices, and printing facilities now have many humidification options.

Available with a wide variety of steam distribution packages, including room distribution units, standard duct dispersion, and the more advanced Herricane™-CS series; with available rapid absorption distance guarantee for critical applications, the Herrtronic® Electrode Steam Humidifiers and the Herrmersion™ Resistive Element Steam Humidifiers are extremely efficient. Herrtronic® units can operate with a wide range of water qualities, including softened water. If the application calls for de-ionized or reverse osmosis treated water, the Herrmersion™ is your solution to provide pure, sterile, clean steam.

Herrtronic®-MD

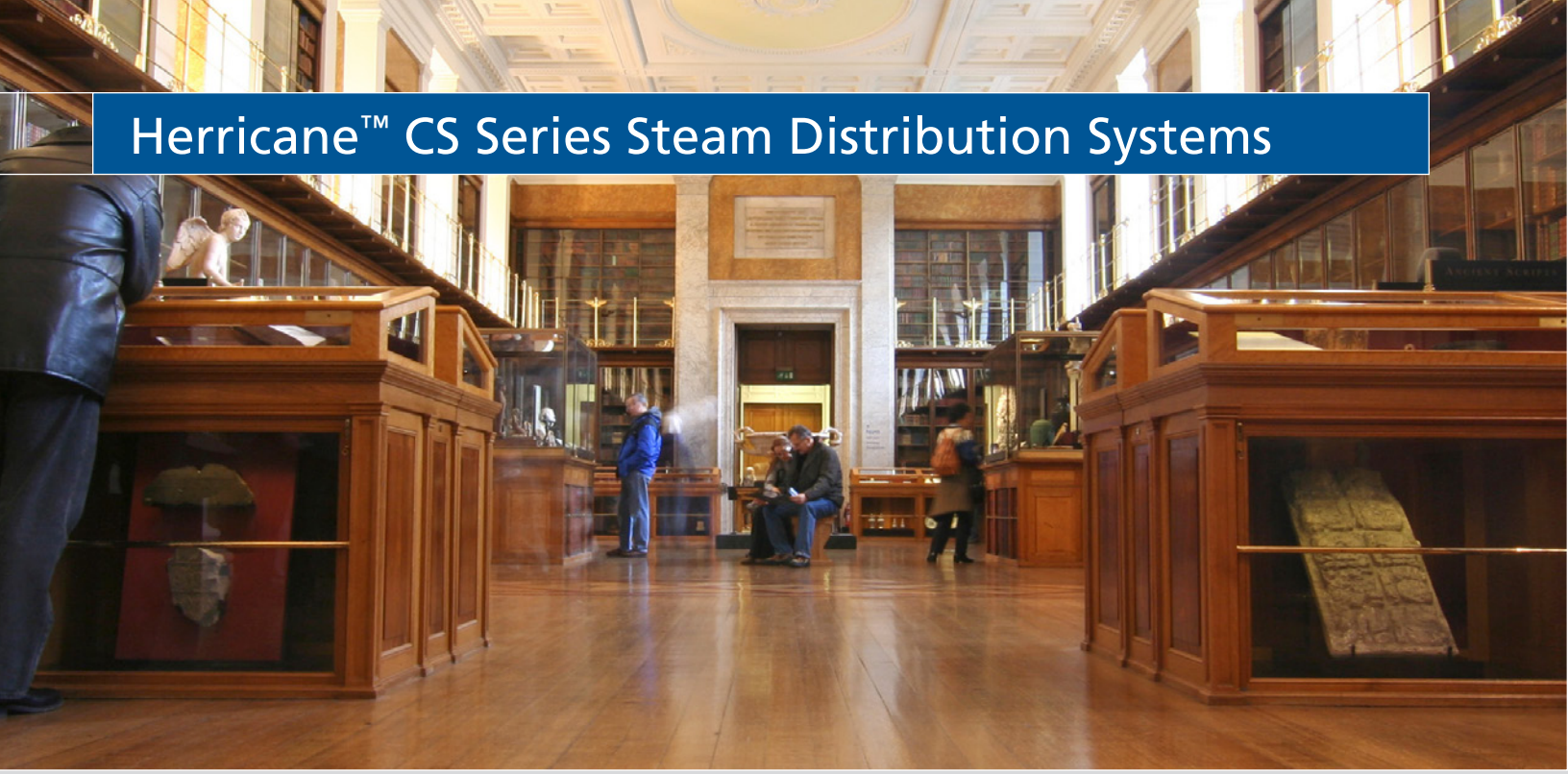
Herrmersion™RE, showing unit with open faced controls.

Herrtronic® Series Spotlight

The Herrtronic® Series is available at capacities up to 250 lbs/hr with full modulation and works with voltages up to 600 VAC.

Herrmersion™ Series Spotlight

The Herrmersion™ is equipped with native BACnet controls and is available at capacities up to 90 lbs/hr; working with voltages up to 600 VAC.



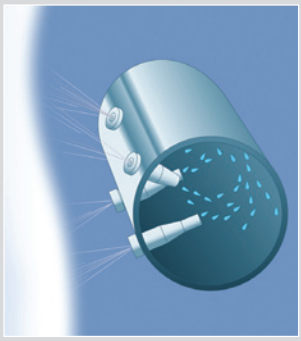
Herricane™ CS Series Steam Distribution Systems

Quiet, Solid Reliability

There is calm in the eye of the Herricane™. The 100% stainless steel Herricane™ CS is designed to precisely meter steam from either a central boiler or a self contained steam humidifier for years of maintenance-free operation.

At our leading-edge testing facility, extensive research allows us to offer Guaranteed Absorption Distances for virtually any system. Each Herricane™ is fitted with two rows of calibrated orifices that discharge only the driest steam into the airstream. This is essential to ensure a long, drip-free operating life.

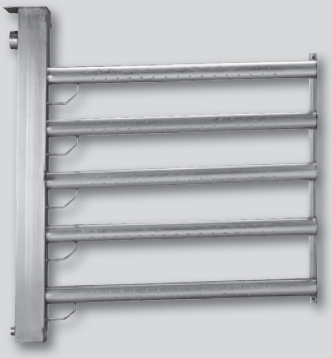
After construction, each system is pressure tested with live steam to confirm quality and reliability.



Our proven, metered nozzle design extends into the manifold to allow only the driest steam to discharge evenly across the entire length of the manifold.

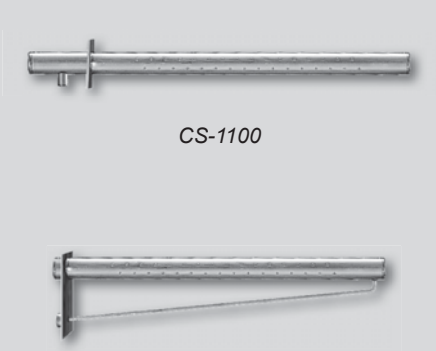
Herricane™ Series Spotlight

A Herrmidifier® First: Our proven, metered nozzle design that extends into the steam manifold. It allows the driest steam to discharge evenly across the entire length of the manifold - a feature critical to the success of any humidification installation. Uneven distribution can have as much as 50% differential in humidity from side-to-side and severe wetting in the air handler/ duct can result. Avoid such problems by specifying Herrmidifier's Herricane™.



CS-3115

CS-4111

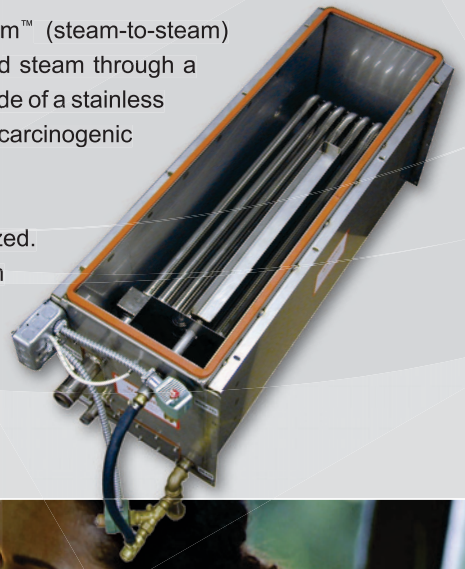


CS-1100

CS-2105

Chemical-Free Assurance

Get more humidification steam as pure as its water source with the Herrmidisteam™ (steam-to-steam) humidifier. The Herrmidisteam™ is used with an existing boiler by passing pressurized steam through a heat exchanger made from stainless steel or copper to generate atmospheric steam inside of a stainless steel vaporization chamber. This eliminates problems associated with potentially carcinogenic boiler-treatment chemicals being passed into the airstream.

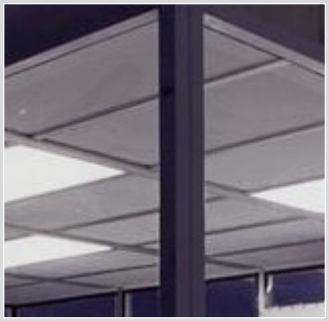


Models are available for all water types including tap, reverse-osmosis, and de-ionized. This makes Herrmidisteam™ an optimal choice for both hospital and cleanroom applications.

Herrmidisteam™ systems are easy to install and are engineered for a long, corrosion-free life. It is no wonder this is the clear and simple choice anywhere steam is available.

Herrmidisteam™ Spotlight

Output capacities are available up to and exceeding 700 lbs/hr of steam. Optional nickel-plated heat exchangers are available for use with raw water and are available in output capacities up to and exceeding 1000 lbs/hr of steam. Each unit comes complete with a dedicated control system and a control valve package that includes a wye strainer, control valve, actuator, and condensate traps. The Herrmidisteam™ control system will accept a proportional demand signal from a BMS or humidity controller. Optional installation configurations and control schemes are available to meet special application needs.



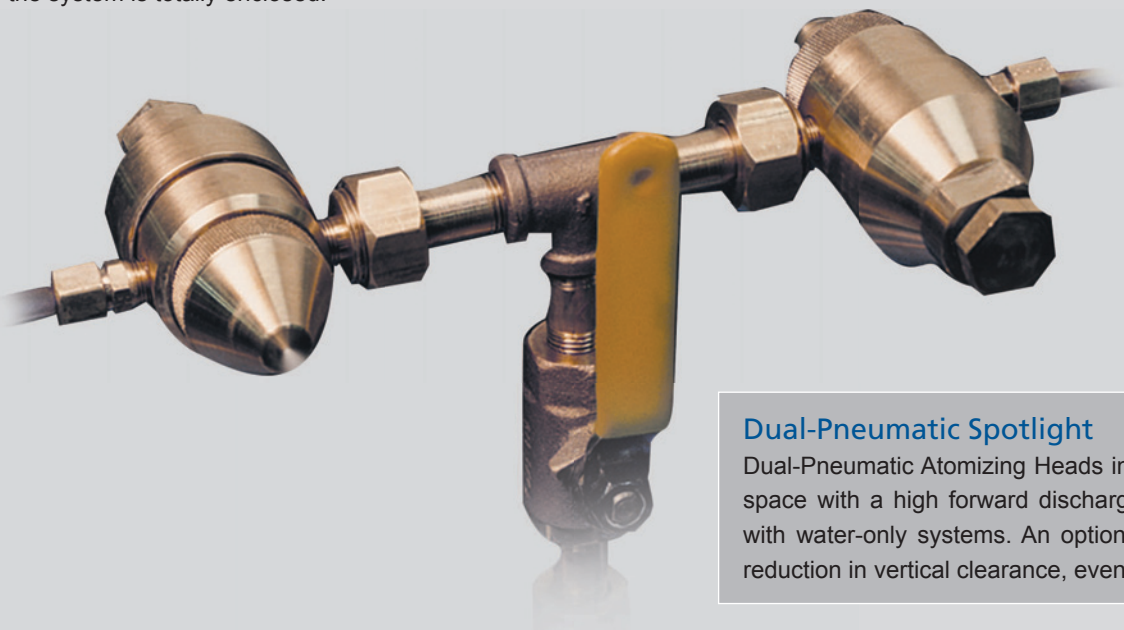
Dual-Pneumatic Open-Space Atomizing System

The Energy Saver

Four decades of constant refinement and proven performance make the Dual-Pneumatic Air/Water Atomization System the ideal, energy-saving solution for your humidification problems.

This system is designed for open-space applications, ranging from cold food storage to large printing and woodworking operations. It is also ideal for use in “dirty atmospheres” since the system is totally enclosed.

It works by using compressed air and water atomizing heads to automatically discharge microsheared water droplets into the air when the relative humidity drops below the humidistat setting. This produces an evaporative cooling effect on the surrounding air and raises the relative humidity without excess moisture. Two types of systems are available: brass and stainless steel.



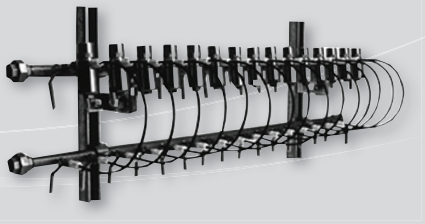
Dual-Pneumatic Spotlight

Dual-Pneumatic Atomizing Heads inject water droplets into space with a high forward discharge velocity not possible with water-only systems. An optional air jet allows further reduction in vertical clearance, even in high humidity.

Superior Precision Control

Herrmidicool® provides technologically superior atomizing humidification, which has been developed specifically for in-duct applications.

A control technique, which monitors not only room humidity, but also supply duct conditions, provides accurate modulation for even the most precise environments. Fine-mist atomizing head manifolds are at the heart of the Herrmidicool® system. They are comprised of multiple drip-free, self-cleaning nozzles that are mounted horizontally on the manifold to optimize coverage in the duct or air handler. The system can interface with existing environmental control systems or can standalone.



Herrmidicool® Nozzle Manifold

Small and large companies alike specify Herrmidicool® because it is energy efficient, easy to install, cost-effective, and can be adapted to available systems, including computer and cleanrooms, offices, schools, woodworking areas, paper storage and printing plants.

Herrmidicool® Spotlight

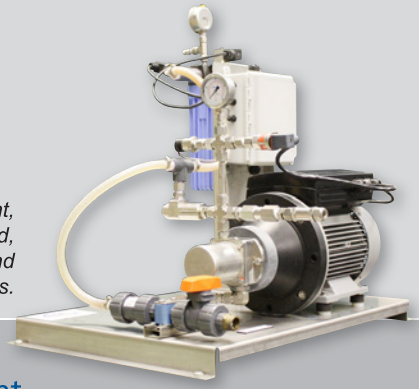
Shown (*right*) is an enclosure for our humidification control center, which minimizes field mounting and wiring. The control components contained within regulate the flow and pressure of water and air through the atomizing heads as well as monitor room humidity and supply duct conditions to provide accurate modulation. It interfaces with existing environmental control systems or can operate as a standalone unit.

Herrmidicool® Control Enclosure

High Pressure Atomizing Humidification System

Low Maintenance

The Herrdraulic™ High-Pressure Humidification System provides adiabatic humidification solutions for both air handler and duct applications. The highlight of the Herrdraulic™ system is its energy efficiency. By utilizing a positive displacement pump to generate fine droplets in combination with its 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.



From left to right, Herrdraulic™ Pump Skid, Valve Plate and Fogging Nozzles.

Herrdraulic™ Spotlight

Pump Skid: The pump skid is the heart of every Herrdraulic™ system. Featuring a water-lubricated axial piston pump, the Herrdraulic™ is smooth, quiet, and dependable.

Valve Plate: The Herrdraulic™ valve plate consists of a plurality of three-way solenoid actuated valves. These robust valves insure 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.

Control Interface: The Herrdraulic™ system control panel incorporates a programmable logic controller to manage the system inputs, operate the pump skid, and sequences the valves on the valve plate. The system control can accept BMS or standalone proportional or ON/OFF control signals.

Distribution System: A typical AHU 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 ball check valves which, when combined with the release of pressure at system shutdown, insure drip-free operation.

The Right Humidity Level

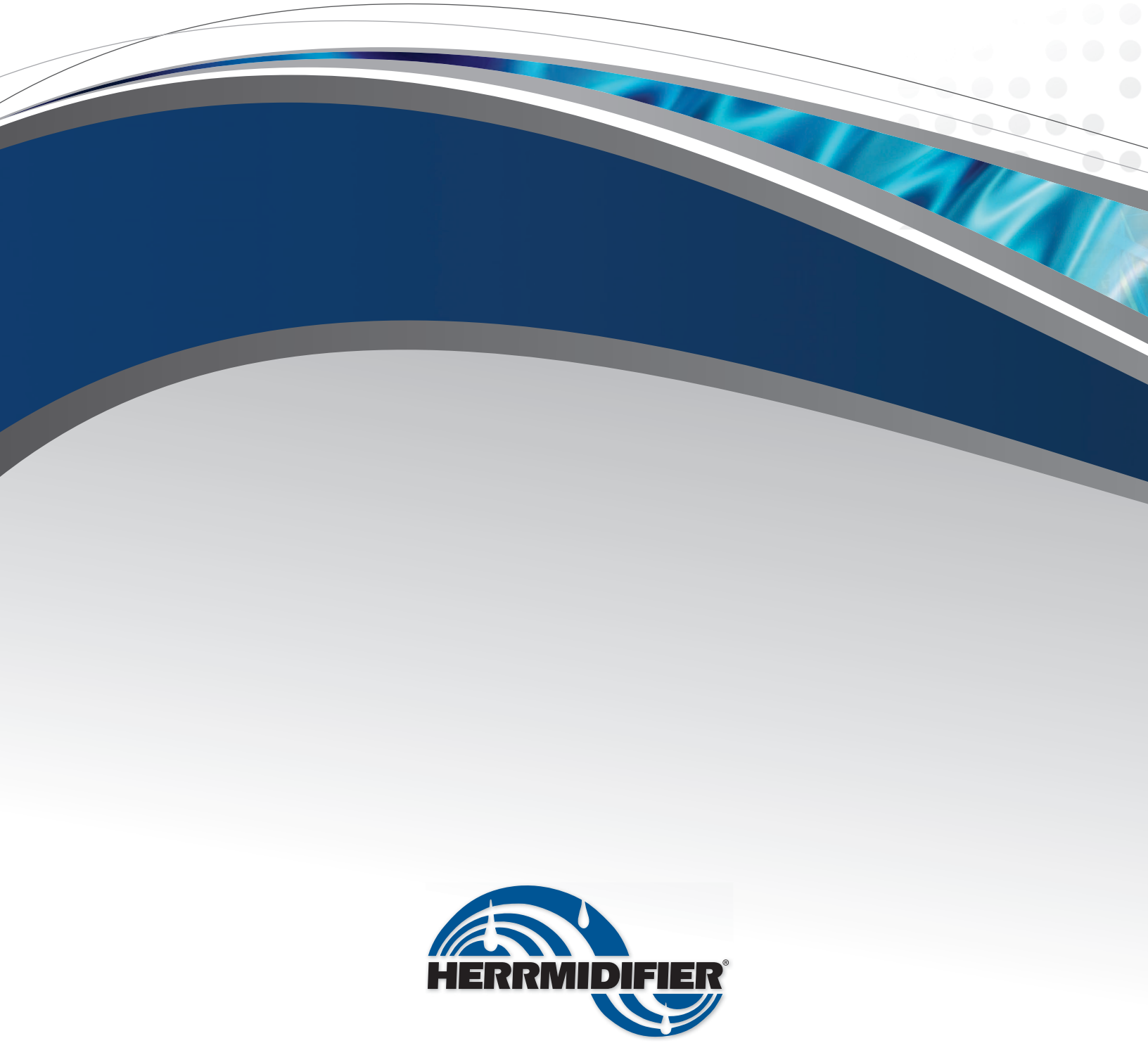
Achieving the right humidity level for your application is paramount to the workability of your product or process and to your health and comfort. Review the table below to find the recommended conditions for your industry.

Contact Herrmidifier®, the leader in humidification solutions, at 1-800-884-0002, cs@herrmidifier-hvac.com, or simply visit our website at www.herrmidifier-hvac.com for more information.

Industry	°F	°C	%RH
Abrasives Manufacturing	78	25	50
Bowling Alleys	74	23	50
Billiard Rooms	74	23	45
Bread Baking	75	24	60
Flour & Powdered Product Storage			
Fermentation (Dough)	80	27	75
Retarding of Doughs	36	2	85
Final Proof	108	42	88
Counterflow Cooling	75	24	83
Brewing Hop Storage	31	-1	55
Yeast Culture Room	C	C	80
Candy			
Chocolate Pan Supply Air	59	15	50
Enrober Room	83	28	28
Chocolate Cooling Tunnel Supply Air	43	6	78
Hand Dippers	62	17	45
Molded Goods Cooling	43	6	78
Chocolate Packing Room & Finished Stock Storage	65	18	50
Centers Tempering Room	78	26	33
Marshmallow Setting Room	77	25	43
Gum (deposited in starch) Drying	137	59	20
Sanded Gum Drying	100	38	33
Gum Finished Stock Storage	57	14	65
Sugar Pan Supply Air	95	35	25
Polishing Pan Supply Air	75	24	45
Pan Rooms	78	25	33
Nonpareil Pan Supply Air	110	43	20
Hard Candy Cooling Tunnel Supply Air	65	19	47
Hard Candy Packing	73	23	37
Hard Candy Storage	60	16	40
Caramel Rooms	75	24	40
Raw Material Storage			
Nuts (insect)	45	7	70
Nuts (rancidity)	36	7	70
Eggs	30	-1	87
Chocolate (flats)	65	18	50
Butter	20	-7	C
Dates & Figs	43	6	70
Corn Syrup	95	35	C
Liquid Sugar	78	25	35
Comfort Air Conditions	**78**	**26**	**55**
Ceramics			
Refractory	130	55	70
Molding Room	80	27	65
Clay Storage	70	21	50
Decalcomania Production and Decoration Room	78	26	48
Cereal Packaging	**78**	**25**	**47**
Cheese Curing			
Cheddar	50	10	88
Swiss	60	16	83
Blue	49	9	95
Brick	63	17	90
Limburger	63	17	95
Camembert	56	13	90
Cleanrooms & Computer Rooms			
Computer Room	75	24	50
Cleanroom-General	72	22	45
Cleanroom-Critical	72	22	45

Industry	°F	°C	%RH
Distilling			
Grain Storage	60	16	38
General Manufacturing	63	20	52
Aging	69	20	55
Electrical Products			
Coil and Transformer Winding	72	22	15
X-ray Tube Assembly	68	20	40
Meter Assembly and Test	76	24	62
Fuse and Cutout Assembly, Capacitor Winding and Paper Storage	73	23	50
Conductor Wrapping with Yarn	75	24	67
Lightning Arrestor Assembly	68	20	30
Thermal Circuit Breaker Assembly and Test Water Wheel Generators Thrust	76	24	45
Runner Hopping	70	21	40
Processing Selenium and Copper Oxide Plates	65	19	47
Fruit Storage			
Apples	35	2	90
Apricots	32	0	93
Grapefruits (California)	59	15	88
Grapefruits (Florida)	50	10	88
Grapes (Eastern)	21	0	85
Grapes (Western)	31	-1	93
Lemons	59	15	87
Oranges (California)	42	6	88
Oranges (Florida)	33	1	88
Peaches and Nectarines	31	-1	90
Plums	31	0	93
Specialty Citrus Fruit	39	4	93
Fur Storage	**45**	**7**	**60**
Gum			
Manufacture	77	25	33
Rolling	68	20	63
Stripping	72	22	53
Breaking	74	23	47
Wrapping	74	23	58
Hospitals			
Operating, Cystoscopic and Fracture Rooms	72	22	50
Patient Rooms	75	24	45
Intensive Care Units	75	24	40
Administrative and Service Areas	75	24	40
Leather			
Drying	95	35	75
Storage, Winter Room Temperature	55	13	50
Lenses (Optical)			
Fusing	75	27	45
Grinding	80	27	80
Libraries and Museums			
Normal Reading and Viewing Rooms	72	22	45
Rare Manuscript Storage Vaults	71	22	45
Art Storage Areas	68	20	50
Manufacture	73	22	50
Drying	72	23	60
Storage	61	16	50
Meat and Fish			
Beef (Fresh)	33	1	90
Beef, Fish, Lamb and Pork (Frozen)	-5	-20	93
Fish (Fresh)	34	2	93
Lamb and Pork (Fresh)	33	1	88

Industry	°F	°C	%RH
Mushrooms			
Sweating-out Period	130	54	C
Spawn Added	67	20	Sat.
Growing Period	54	12	80
Storage	33	1	83
Oil Paints, Paint Spraying	**75**	**24**	**80**
Pharmaceuticals			
Manufactured Powder Storage and Packing Area	75	24	35
Milling Room, Table Compressing and Coating	75	24	35
Effervescent Tablets and Powders	75	24	20
Hypodermic Tablets	75	24	30
Colloids	70	21	40
Cough Drops	80	27	40
Glandular Products	76	24	8
Ampoule Manufacturing	75	24	42
Gelatin Capsules and Storage	76	24	35
Microanalysis	76	24	50
Biological Manufacturing and Liver Extracts	76	24	35
Serums	76	24	50
Animal Rooms	78	25	50
Plastics			
Manufacturing Areas Thermosetting Molding Compounds	80	27	28
Cellophane Wrapping	78	25	55
Plywood			
Hot Pressing (Resin)	90	32	60
Cold Pressing	90	32	20
Printing			
Platemaking	78	25	45
Lithographic Press Room	78	25	45
Letterpress and Web Offset Press Rooms and Paper Storage	78	25	50
Paper Storage (Multicolor Sheet Feed Lithography)	78	25	6
Rubber Dipped Goods			
Cementing	80	27	28
Storage Prior to Manufacture	67	20	45
Laboratory (ASTM Standard)	73.4	23	50
Tea Packing	65	18	65
Textiles			
Cotton	78	25	53
Wool	78	25	65
Man-Made	73	23	55
Tobacco			
Cigar and Cigarette Making	73	23	60
Softening	90	32	87
Stemming and Stripping	80	27	73
Filler Tobacco Casing Conditioning	75	24	75
Filler Tobacco Storage and Preparation	78	26	70
Wrapper Tobacco Storage and Conditioning	75	24	75
Woodworking			
Finished Products	66	19	38
Gluing	70	21	40
Manufacture	75	24	40
Painting-lacquer (Static Control)	70	21	60



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