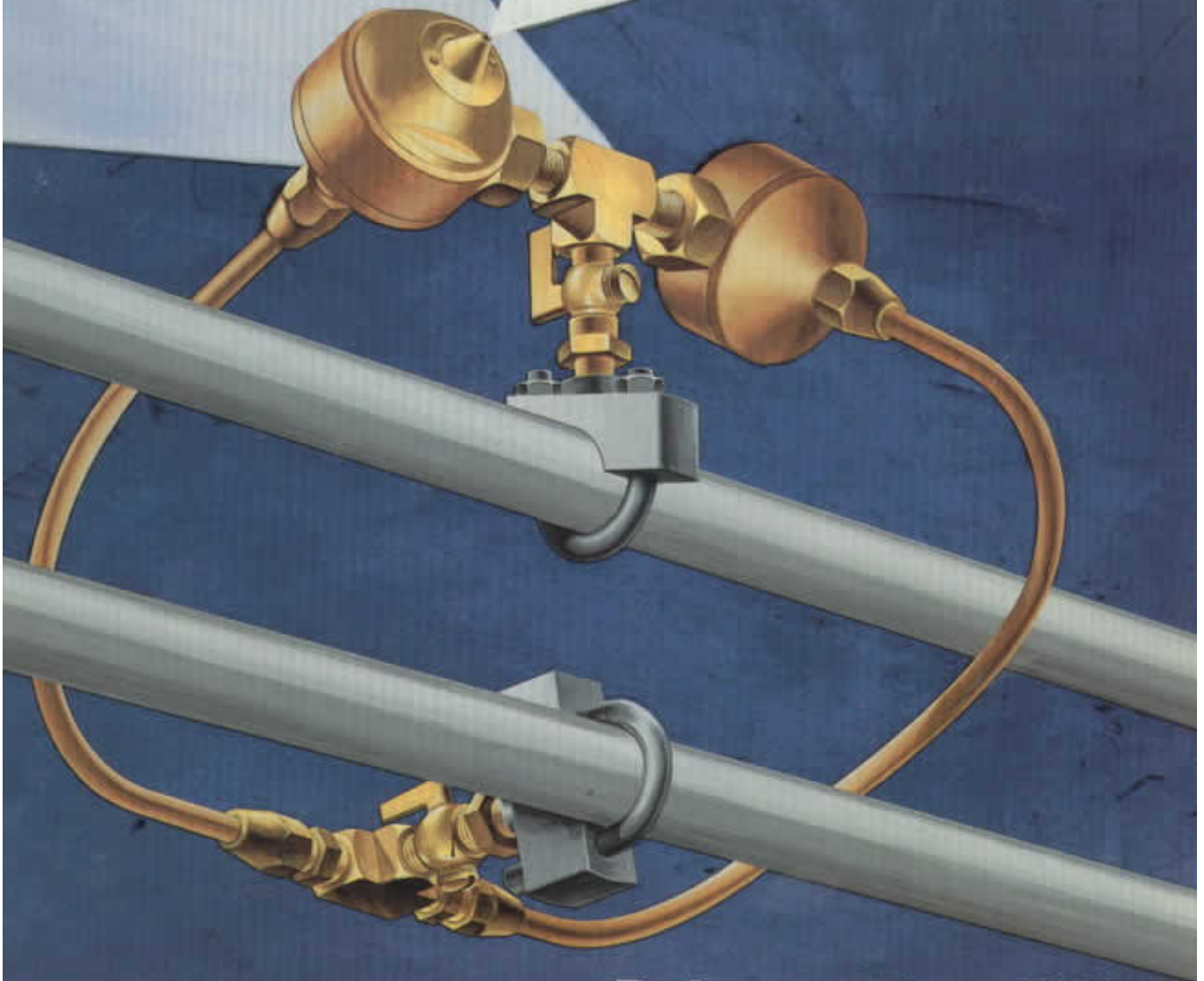


DnB



**Bahnson Type ESC-2
Pneumatic Atomizers**
An economical and flexible capacity
system for humidity control.

Catalog No. 3A-1

WHY HUMIDIFY?

Proper humidification of the air is important and necessary for many commercial and industrial areas.

Dry air will absorb moisture from the surroundings, damaging

ing materials and hampering manufacturing processes.

Static electricity caused by the dry air can interfere with production machinery.

Using both air and water under pressure, the ESC-2 Atomizers produce an extremely fine spray or atomized mist. Uniform conditions are obtained without the use of fans, since the compressed air provides uniform distribution of the moisture.

Moisture-retaining or hygroscopic materials such as paper, textile fibers, wood, tobacco, fruit, certain other foods and chemicals are kept in

optimum condition by properly controlling the humidity of the air. Static electricity is minimized. The result is less waste and increased productivity. It can even result in energy savings.

The Benefits of Type

ESC-2 Atomizers

Economical

□ Does not waste compressed air like aspirating type atomizers which use this air to draw up water from supply lines.

■ Water is supplied directly to the Type ESC-2 Atomizer under pressure.

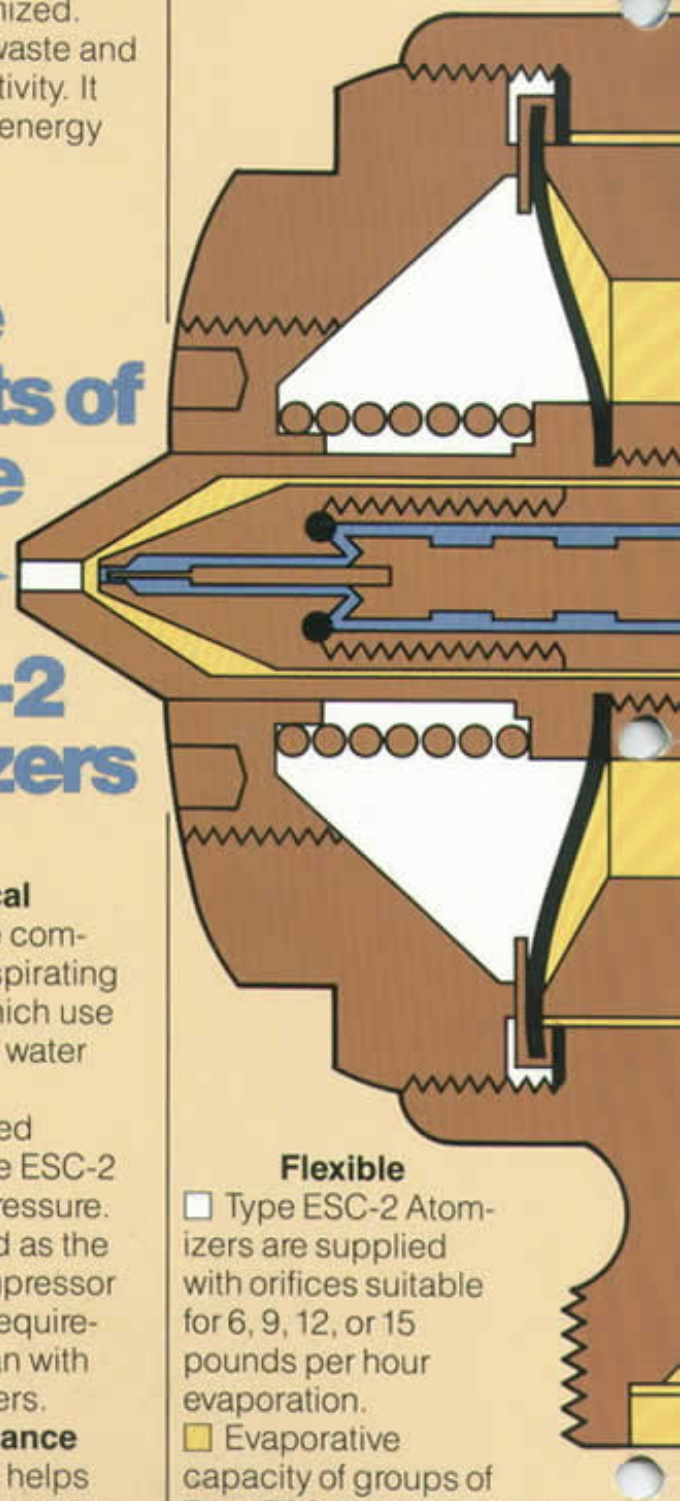
■ Energy is saved as the size of the air compressor and horsepower requirements are less than with aspirating atomizers.

Low Maintenance

■ Water pressure helps prevent dirt accumulation in the water orifice.

□ A strainer and stainless

steel cleaning pin automatically keep the water orifice clear.

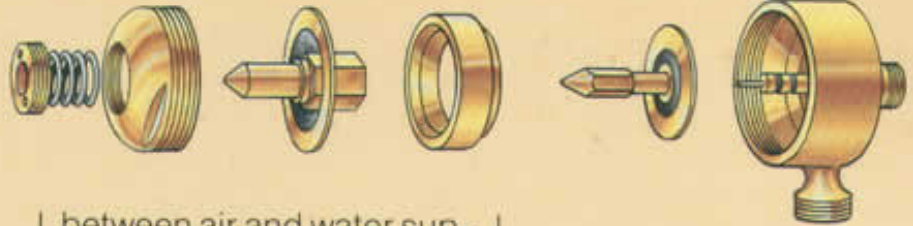


Flexible

□ Type ESC-2 Atomizers are supplied with orifices suitable for 6, 9, 12, or 15 pounds per hour evaporation.

■ Evaporative capacity of groups of Type ESC-2 Atomizers can be changed by raising or lowering the differential

Simplicity of design allows quick and easy disassembly.



between air and water supply pressures.

■ Evaporative capacity of an individual atomizer can be changed by adjusting the valve stem or by adjusting the front cap of the ESC-2 without removing it from the line.

□ Type

sumption of the Type ESC-2 Atomizers.

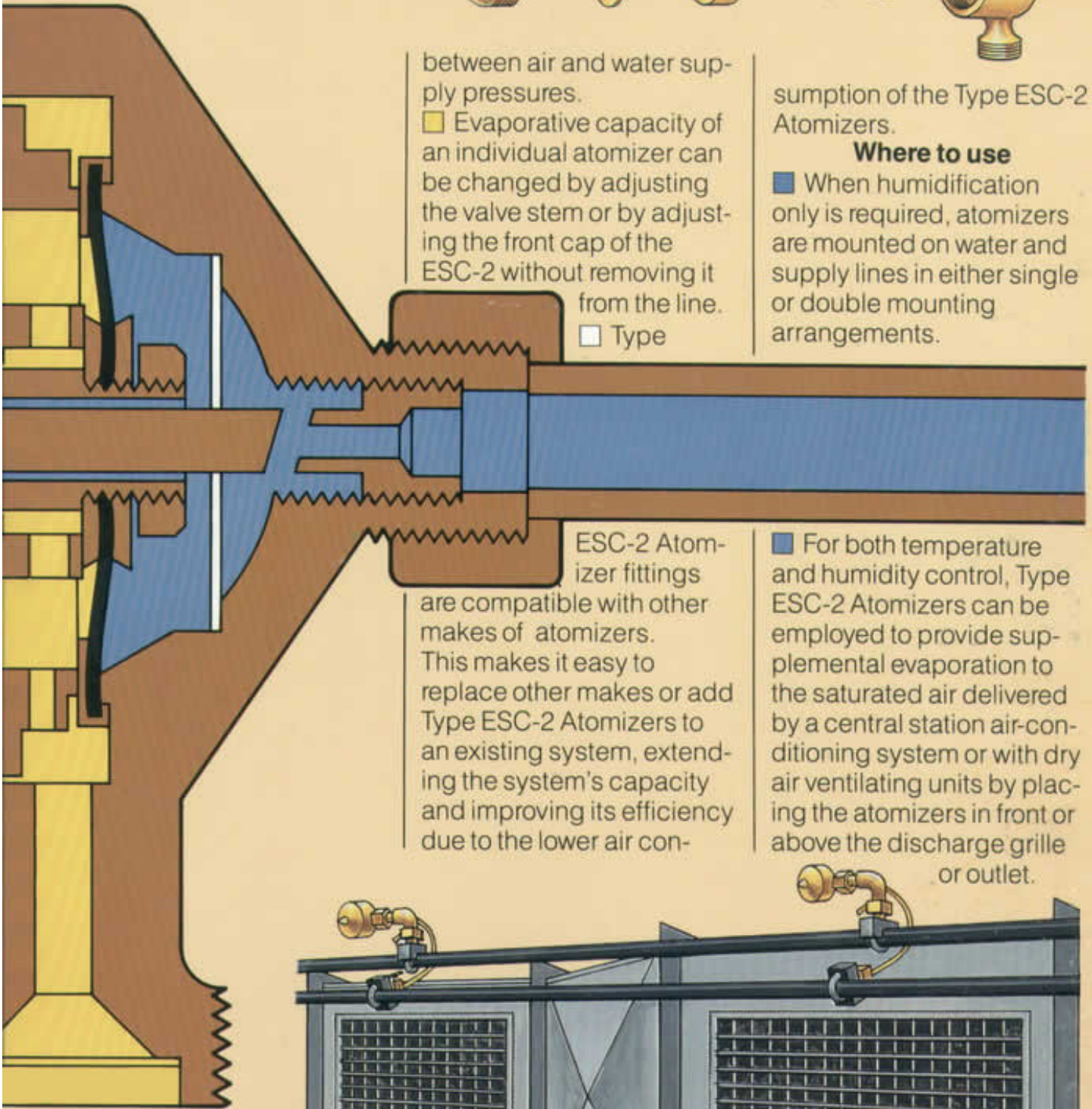
Where to use

■ When humidification only is required, atomizers are mounted on water and supply lines in either single or double mounting arrangements.

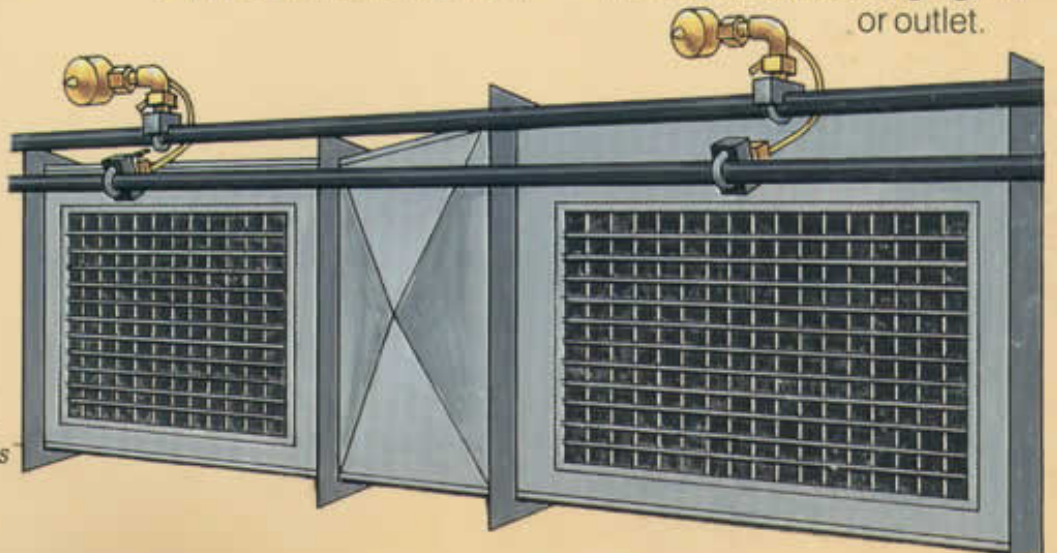
ESC-2 Atomizer fittings

are compatible with other makes of atomizers. This makes it easy to replace other makes or add Type ESC-2 Atomizers to an existing system, extending the system's capacity and improving its efficiency due to the lower air con-

■ For both temperature and humidity control, Type ESC-2 Atomizers can be employed to provide supplemental evaporation to the saturated air delivered by a central station air-conditioning system or with dry air ventilating units by placing the atomizers in front or above the discharge grille or outlet.



Type ESC-2 Atomizers shown mounted over discharge grilles of an air handling system.



Construction and Operation

■ The construction of the Type ESC-2 Atomizer is simple by design, allowing quick and easy disassembly. Internal parts are made of stainless steel, brass, copper, and neoprene for long wear and resistance to corrosion and the harmful effects of oil in the air line.

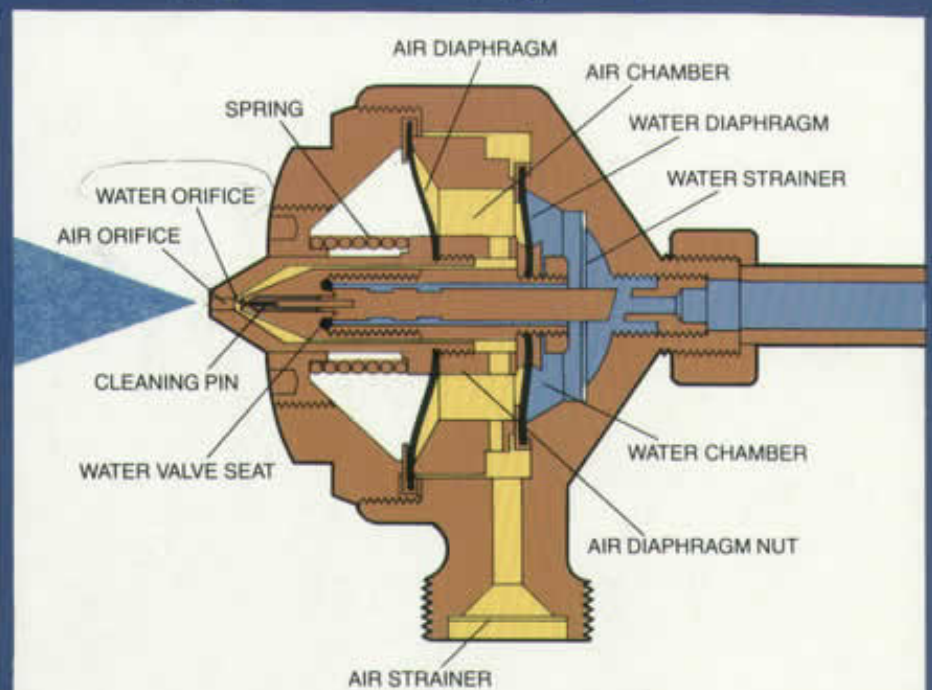
■ The operation of the Type ESC-2 Atomizer is equally as simple. Water and clean, dry pressurized air start off in different chambers and proceed through separate channels until the air is discharged at high velocity just behind the orifice from which the water is discharged. The velocity of the air stream breaks the water into a very fine mist which quickly evaporates when mixed with room air. And when the humidistat closes the main air supply valve, the amount of water automatically decreases, thus preventing wetting down.



Humidity Control (Electric)

■ The Bahnson Type ESC-2 Atomizer can be operated with any type of humidity control that interrupts the air pressure to the Atomizers when the humidity in the space being conditioned has reached the desired level. Humidity controls are offered in either electric or pneumatic design. The control consists of a highly sensitive

hygroscopic element which actuates an electric or pneumatic relay in response to humidity changes in the conditioned area. The relay, through a Free-Blow valve, opens or closes the air supply line to the Atomizers. The humidistat is mounted in an aspirated cabinet which continuously draws a sample of room air over a hygroscopic element.



TYPE ESC-2 ATOMIZER SPECIFICATIONS

Evaporation in Pounds of Water Per Hour	Air Pressure p.s.i.	Water Pressure p.s.i.	CFM (Standard)	Orifice Size	
				Air	Water
6	25	26	1.1	55	76
9	25	26	1.3	53	76
12	25	28	1.5	52	76
15	26	29	2.0	50	74
Optional Controls	Electric or Pneumatic Control Systems with Humidistat				

Specifications are subject to change. No statement contained herein shall constitute or be construed to constitute a warranty, expressed or implied, with respect to the products described.

DnB

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