



## ULTRA-SORB®

### Steam Dispersion Panels

- *Guaranteed short non-wetting distances*
- *Reduce wasted energy and condensate up to 85%*
- *Lowest installation cost*

# Features and benefits

## **GUARANTEED, SHORT NON-WETTING DISTANCES**

Install within inches of downstream devices

Rapid, drip-free steam absorption means steam does not condense on downstream devices.

## **EFFICIENT BY DESIGN**

Reduce wasted energy and condensate up to 85%

High-Efficiency Insulated Tubes significantly reduce airstream heat gain and condensate production. (Standard on Model XV; optional on Models LV and LH.)

Higher capacities per tube increase efficiency, reduce cost  
Insulated dispersion tubes produce less condensate and, therefore, have more steam available for humidification, increasing the capacity of each tube. As a result, fewer tubes may be required to meet application requirements, further lowering condensate production and heat gain while reducing resource consumption and cost.

No steam jackets; no unnecessary heat gain.

When there is no call for humidity, Ultra-sorb panels are at duct temperature while conventional jacketed steam injection systems stay hot and continue to add heat to the airstream.

## **MODEL XV: HIGHEST PERFORMANCE**

Integral condensate management

An industry first for pressurized steam, Ultra-sorb Model XV vaporizes dispersion-generated condensate and returns pressurized condensate to the boiler without additional pumps, valves, vents, or controls.

Most efficient dispersion

Zero water waste - All condensate returns to the boiler while still hot, saving energy, water, and boiler chemicals.

Lowest heat gain - High-Efficiency Insulated Tubes and an insulated steam delivery header reduce airstream heat gain by up to 85%.

## **MODELS LV AND LH: MOST VERSATILE**

Disperse pressurized or nonpressurized steam

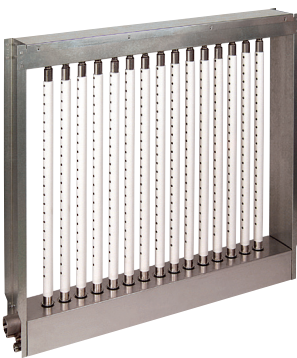
Models LV and LH disperse steam generated by pressurized steam boilers or by nonpressurized steam generators such as driSteam's GTS®, Humidi-tech®, STS®, Vaporstream®, and XT Series humidifiers.

Wide capacity range and options

- Steam capacity up to 1815 kg/h
- High-Efficiency Insulated Tubes option
- 316 stainless steel construction option

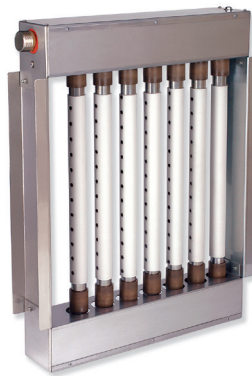
## **LOWEST INSTALLATION COST**

Panels ship preassembled and install quickly with easy mounting, steam, and condensate connections.



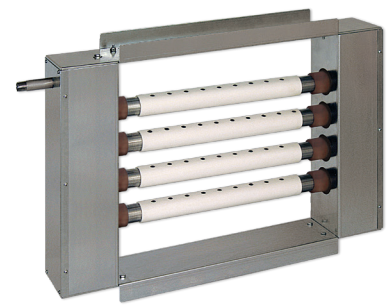
**ULTRA-SORB MODEL XV**

*Integral condensate management*



**ULTRA-SORB MODEL LV**

*Vertical tubes*



**ULTRA-SORB MODEL LH**

*Horizontal tubes*

**Table 3-1:**  
**Ultra-sorb models comparison**

	Model XV Integral condensate management	Ultra-sorb Model LV Vertical tubes	Ultra-sorb Model LH Horizontal tubes
Steam source	<u>Humidification steam inlet:</u> Steam from boiler or STS humidifier <u>Heat exchanger:</u> Pressurized boiler steam	Pressurized boiler steam or nonpressurized steam	
Steam capacity	<u>Per panel:</u> Pressurized boiler steam: Up to 898 kg/h One Ultra-sorb Model XV with STS: Up to 204 kg/h <u>Per tube:</u> 19.5 kg/h*	<u>Per panel:</u> Up to 1815 kg/h <u>Per tube:</u> Insulated: 39 kg/h** Uninsulated: 36 kg/h**	<u>Per panel:</u> Up to 1482 kg/h <u>Per tube:</u> Insulated: 39 kg/h*** Uninsulated: 36 kg/h***
Steam pressure	<u>Heat exchanger:</u> 35 to 345 kPa <u>Humidification steam inlet:</u> 35 to 345 kPa, pressurized boiler; or atmospheric, STS humidifier	Up to 345 kPa	
Airflow	Horizontal	Horizontal	Horizontal (pressurized steam) Vertical (nonpressurized steam)
High-Efficiency Insulated Dispersion Tubes	Standard	Available option	
Header insulation	Header inside of enclosure is insulated	Header enclosure provides air gap insulation	
Condensate drain	Pressurized	Atmospheric	
Condensate lifting	Vaporizes dispersion tube-generated condensate in header; returns pressurized condensate to condensate return main	Available pump	
Airstream heat gain	Lowest	Low with High-Efficiency Insulated Tubes option	
Non-wetting distance	Shortest; performs to published Ultra-sorb non-wetting distance		
Face dimensions	305 x 305 to 3660 x 3660 mm	305 x 305 to 3660 x 3660 mm	305 x 305 to 3050 x 3050 mm
Assembly	Pre-assembled (shipped unassembled by request or as larger dimensions require)		
Dispersion tube mounting	Spring-loaded tubes and frame	Slip couplings and frame	
Steam / drain connections	Inlet: Steam for humidification Inlet: Pressurized steam for heat exchanger Outlet: Pressurized condensate to return main Outlet: For optional header overflow (if no float switch)	Inlet: Steam for humidification Outlet: Condensate drain	
Piping connections	Same-side connections	Top or side steam inlet, opposite-side drain connection	Top or side steam inlet, 2 drain connections (one per header)
Optional 316 stainless steel construction, and stainless steel trap, valve, and strainer	No	Yes	
Notes: * Consult driSteem when face height is less than 432 mm. ** Consult driSteem when face height is less than 660 mm. *** Consult driSteem when face width is less than 635 mm.			

**DriSteem Corporation**

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DriSteem U.S. operations are ISO 9001:2015  
certified

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**EXPECT QUALITY FROM THE INDUSTRY LEADER**

For more than 45 years, DriSteem has been leading the industry with  
creative and reliable humidification solutions. Our focus on quality is  
evident in the construction of the Ultra-sorb. DriSteem leads the industry  
with a Two-year Limited Warranty and optional extended warranty.

**For more information**

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