



Leaflet

HatchTech Pre-Humidification Unit

In hatcheries, it is essential to have a ventilation system that controls environmental parameters such as temperature, air flow, and relative humidity in order to produce high-quality chicks. Within such systems, Air Handling Units filter and condition the air to the preferred temperature level.

HatchTech developed a high-quality system that pre-humidifies the air before it enters the HatchTech MicroClimer Setters and Hatchers. The HatchTech Pre-Humidification Unit ensures an optimally conditioned air supply for your HatchTech MicroClimer Setters and Hatchers – and optimal functioning – year-round.

Pre-humidification technology

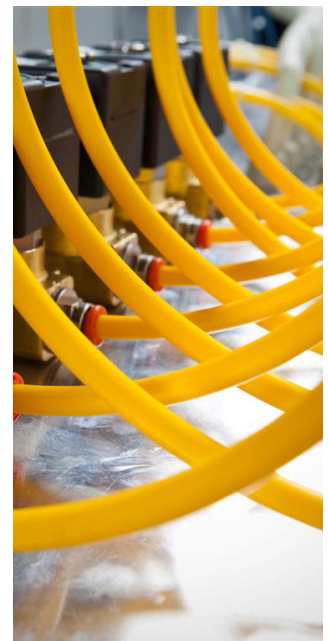
The HatchTech Pre-Humidification Unit is part of the ventilation system, and is positioned just after the Air Handling Unit. The HatchTech Pre-Humidification Unit, in turn, contains six U-Vaporators™.

How does it work?

- The HatchTech Pre-Humidification Unit measures the relative humidity of the air.
- If the relative humidity is too low, the controller calculates how much additional humidification is necessary, and activates the appropriate number of the U-Vaporators™ to create it.
- The U-Vaporators™ emit small, rapid vibrations, which create extremely small water droplets.

The result is a 24/7 air supply with an optimum level of humidity for the HatchTech MicroClimer Setters and Hatchers in your hatchery.

- U-Vaporator™ technology for perfect humidity
- Stable and optimal incubation environment in all seasons



HatchTech Pre-Humidification Unit



Smaller droplets for better results

The smaller the moisture droplet, the more efficiently it will evaporate into the air and the more uniformly humidified the environment will be. When droplets are large, > 50 micron, they can evaporate poorly, and create cold areas in HatchTech MicroClimer Setters and Hatchers – which can have a very negative impact on chick-quality and uniformity. The HatchTech Pre-Humidification Unit produces droplets that are remarkably small – just 1 micron in size!

Pre-humidification for a stable and optimum incubation environment

When more of the air conditioning takes place before it enters the HatchTech MicroClimer Setter and Hatcher, far fewer adjustments have to be

made to the air when it is inside the machine itself – which means that there is little to no fluctuation in the environmental conditions in the HatchTech MicroClimer Setters and Hatchers. Such stable and uniform environment is one of the key factors in achieving optimal and uniform chick quality.

Stable environment in all seasons

Day and night, winter and summer, wet and dry weather – all these factors impact humidity levels. Even in areas that are consistently very humid, a substantial difference in air temperature and humidity between day and night can be observed. In all climates, the relative humidity of the air sometimes can get so low that none of today's humidification systems on the market have sufficient capacity to bring humidity up to the necessary level. But with the HatchTech Pre-Humidification Unit, sufficient humidification can be created under all climatic conditions, ensuring that optimal environmental conditions can be maintained throughout the incubation process in order to achieve superior chick quality.



Technical specifications

Evaporation: 42 liter/hour

Ventilation: 5000m³ air/hour

Dimensions (w x d x h): 2400 x 1110 x 1750 mm