

# STEAM SPARGED WATER BATH

## CRYOGENIC VAPORIZERS



Product Datasheet **6.0**



### Standard features

- ASME Sect VIII Div. 1 code stamp on bundle
- Pneumatic steam control system
- Stainless steel removable tube bundle
- Spring compensated sparger heads
- Steam line drip trap & strainer
- Thermax proven Vortex Flow action
- Temperature gauge & Sight glass
- Vent / Manway with flapper
- Carbon Steel tank with 3 minute ballast

### Options

- Steam Block and Bypass valves
- Tank insulation
- ASME code stamp on tank
- Ballast tanks to 30 Minutes
- Approval for CSA Components, CRN Registration, PED & SQL
- Coil bundle made from Hasteloy, Monel or Titanium
- High/Low water temp sensor
- Liquid by-pass for process temperature control
- Pressure-build circuit
- Multiple coil bundles in same tank

### Thermax Steam Sparged Water Bath Cryogenic Vaporizers

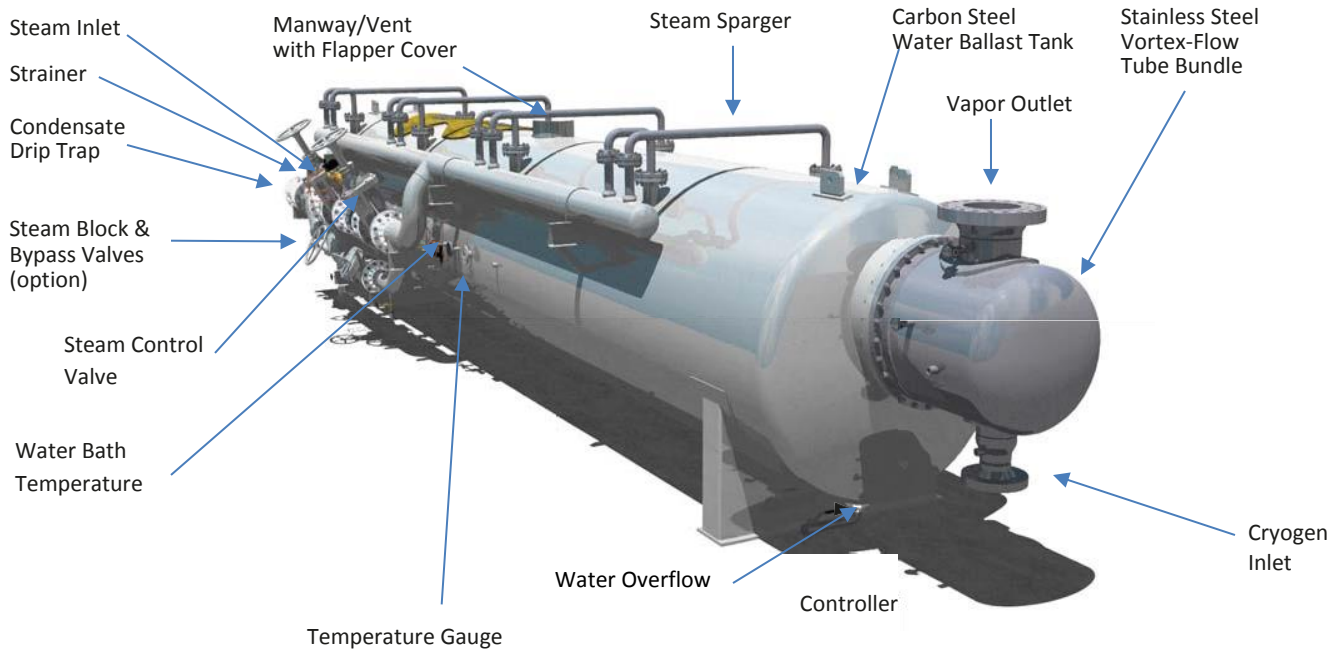
provide smooth and reliable vaporization over a wide range of flows. Cryogenics and liquefied gases are vaporized and superheated in Thermax Vortex-Flow™ tube bundle located in the hot water bath. The water bath temperature is maintained by feeding steam through custom variable flow spargers. An entire steam control train is part of the package that includes a pneumatic control valve, strainer, and steam drip trap. Condensate is recovered or sent to drain through a provided overflow connection.

The water bath provides a large thermal mass that reduces peak steam demand and also reduces thermal stress, extending the life of the tube bundle. Standard units come with a 3 minute ballast time with optional ballast times up to 30 minutes for operation even during steam interruptions.



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Standard Models and Ratings									
Model	Rating MSCFH Nitrogen*	Steam Consumption		Tank Capacity		Length		Width	
		lb/Hr	kg/Hr	Gal	Liters	in	mm	in	mm
SP 100H	100	1,300	585	500	1,893	156	3,962	50	1,270
SP 200H	200	2,600	1,170	500	1,893	156	3,962	50	1,270
SP 500H	500	6,500	2,925	1,000	3,785	291	7,391	46	1,168
SP 1000H	1000	13,000	5,850	2,000	7,570	312	7,925	85	2,159
SP 2000H	2000	26,000	11,700	3,500	13,248	240	6,096	101	2,565
SP 3000H	3000	39,000	17,550	5,000	18,925	315	8,001	101	2,565

Super-heating Nitrogen to 70°F  
Adjust ratings for other fluids as shown:

Oxygen	92%
Argon	110%
Hydrogen	150%
Carbon Dioxide	85%
LNG	80%

For Ammonia, Propane, Ethylene, Chlorine and other Cryogenics call Chart Inc. for ratings  
Data shown are approximations, units are built to order.