Thermax Inc.

PRODUCT DATASHEET **6.0**

Steam Sparged/Water Bath Cryogenic Vaporizers

Combines steam for high vaporization rates and a water bath for dependable operation.

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

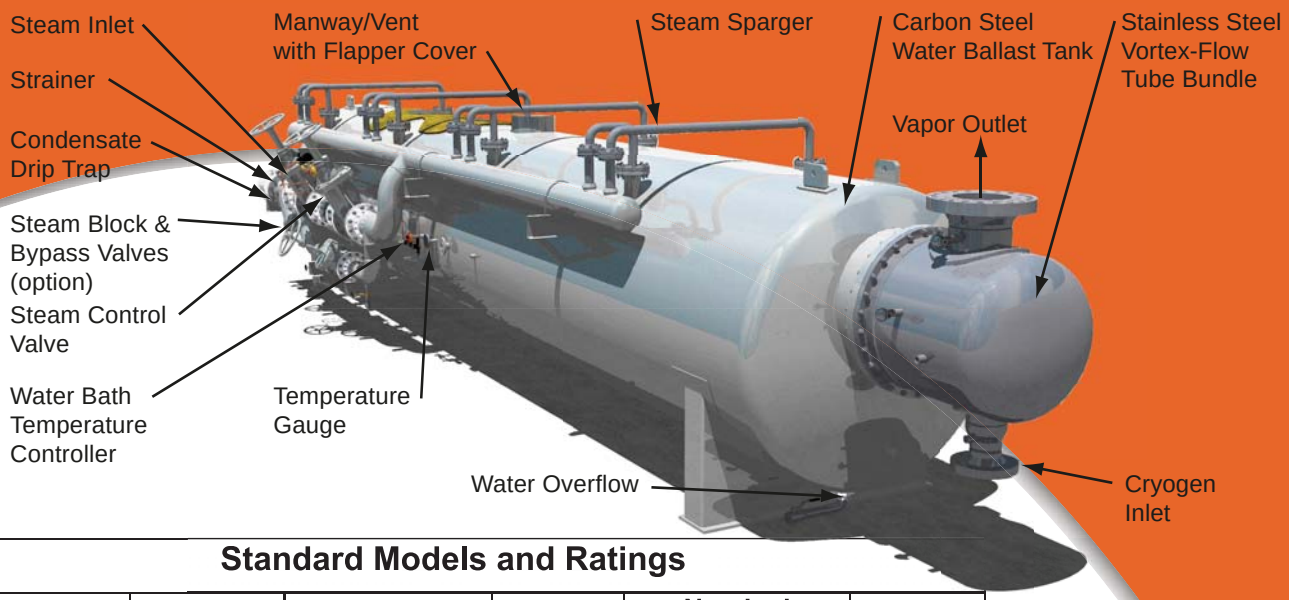
Thermax Steam Sparged Water Bath Vaporizers provide smooth and reliable vaporization over a wide range of flows. Cryogens and liquefied gases are vaporized and superheated in Thermax Vortex-Flow™ tube bundle located in the hot water bath. The water bath temperature is maintained by feeding steam through 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.

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

Steam Sparge/Water Bath Cryogenic Vaporizers



Standard Models and Ratings

Model V= Vertical H= Horizontal	Rating MSCFH Nitrogen	Steam Consumption Lb/Hr	Tank Gallons	Nominal Dimensions L x W x H inches	Weight/ Lbs.
SP 10V	10	130	65	30 x 60 x 144	1,850
SP 15V	15	195	65	30 x 60 x 144	1,850
SP 25V	25	325	65	30 x 60 x 144	1,850
SP 50V	50	650	135	30 x 60 x 180	2,350
SP 100 V	100	1300	300	37 x 52 x 155	5,000
SP 100H	100	1300	500	156 x 50 x 52	6,500
SP 150V	150	1950	400	48 x 44 x 180	5,800
SP 150H	150	1950	500	156 x 50 x 52	6,500
SP 200V	200	2600	400	48 x 44 x 180	5,800
SP 200H	200	2600	500	156 x 50 x 52	6,500
SP 300V	300	3900	500	77 x 60 x 172	6,500
SP 300H	300	3900	500	146 x 46 x 60	6,500
SP 400V	400	5200	600	77 x 60 x 158	7,500
SP 400H	400	5200	1,000	291 x 46 x 60	12,000
SP 500V	500	6,500	1,000	55 x 72 x 162	11,500
SP 500H	500	6,500	1,000	291 x 46 x 60	12,000
SP 600V	600	7,800	1,000	55 x 72 x 162	11,500
SP 600H	600	7,800	1,000	291 x 46 x 60	12,000
SP 750V	750	9,750	1,250	55 x 72 x 192	13,500
SP 750H	750	9,750	1,250	217 x 76 x 74	20,000
SP 900H	900	11,700	1,500	217 x 76 x 74	20,000
SP 1000H	1,000	13,000	2,000	312 x 85 x 100	25,500
SP 1200H	1,200	15,600	2,000	312 x 85 x 100	25,500
SP 1500H	1,500	19,500	3,500	240 x 101 x 96	36,000
SP 2000H	2,000	26,000	3,500	240 x 101 x 96	36,000
SP 2500H	2,500	32,500	4,200	271 X 101 x 96	45,000
SP 3000H	3,000	39,000	5,000	315 X 101 x 96	50,000
SP 5000H	5,000	65,000	8,000	326 x 110 x 120	90,000

Data shown are approximations, units are built to order.

Ratings shown are for Vaporizing and Super-heating Nitrogen to 70ºF

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 Cryogens call Thermax Inc. for ratings

All tables shown on this Datasheet are intended as a guide that reflect our experience on these models. Please call Thermax Inc. for guidance on specific applications. Actual performance may vary. This product and/or data was designed and/or developed by Thermax Inc. and shall not be used in any way injurious to the interests of Thermax Inc. Vortex-Flow™ is a Thermax Inc. trademark.

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