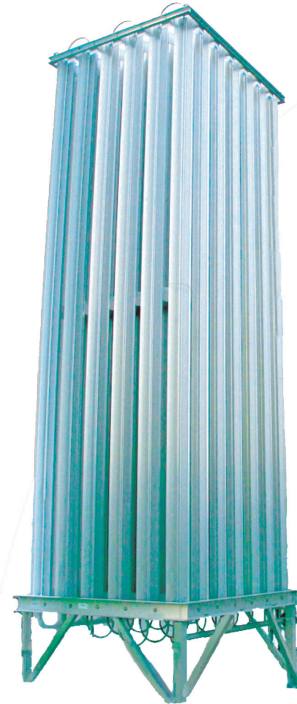


# AMBIENT AIR VAPORIZERS

## THERMAX SUPERGAP™ AMBIENT VAPORIZERS

---

Thermax Supergap™ Ambient Vaporizers have become the industry standard for ambient air vaporization. Supergap vaporizers use natural convection of air to vaporize liquefied gases. Finned aluminum tubes absorb heat from the air and transfer that heat to the product gas. The huge four inch gap between fin tips provides room for ice growth allowing for more than 500 hours of continuous operation without defrost, making Supergaps vaporizers ideal for severe climates and long-duration operation. Extended operation requires a vaporizer switching system. In addition to the standard aluminum construction, units are available with stainless steel and other alloy liners for high-pressure and corrosive applications.



### OPTIONS

---

- Stainless steel, monel and other alloy liners
- Design pressures exceeding 15,000 psig
- Horizontal and vertical pressure building units
- Low inlet pressure and low pressure drop designs
- Flanged, tongue and groove, butt weld end connections
- Tank mounting, wall mounting and truck mounting
- Continuous operation with switching system
- Electropolished 316L SS internals for ultra-pure applications

### BENEFITS AND FEATURES

---

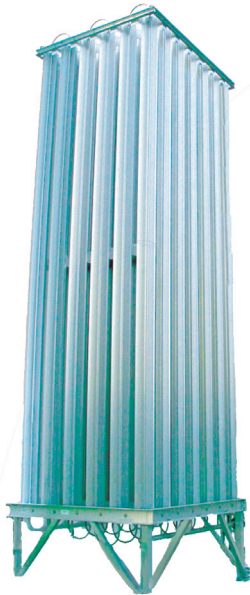
- 12-inch fin tube center-to-center spacing
- 4-inch gap between fins
- Standard models rated up to 200 MSCFH
- Aluminum corrosion-resistant construction
- High-strength welded base frame
- Withstands 100 mph winds and Zone 4 seismic forces
- 600 psig standard design pressure on all aluminum units
- Severe thermal cycling design
- Enhanced internal 16-fin heat transfer area, highest in industry
- No-crate shipping design for larger models
- Perimeter frame and legs for unrestricted airflow
- ASME B31.3, CRN (all provinces), and PED Category IV Module B & D compliant



Innovation. Experience. Performance.™

# AMBIENT AIR VAPORIZERS

## THERMAX SUPERGAP™ AMBIENT VAPORIZERS



Connection Type	Design Press
MNPT (Male pipe threads)	600 PSIG
150 lb ANSI F.F. Flange	275 PSIG
300 lb ANSI F.F. Flange	450 PSIG
Mueller Flange (solder O.D.)	450 PSIG

### TYPICAL SPECIFICATIONS

- MOC: Aluminum extrusions and frame
- Construction: welded base frame, internal and external finned extrusions, designed per ANSI B31.3 and meets UBC, chapter 23, 100 mph winds and Seismic Zone 4
- Extrusion spacing: 4 inches
- Design pressure drop: 20 psi at 150 psig inlet (standard)
- Design outlet temperature: 20°F approach to ambient (standard)

For lined units, substitute HF in model number with:  
 SS-4.0 (stainless, design pressure = 4,000 psig)  
 SS-6.0 (stainless, design pressure = 6,000 psig)  
 SS-EP (stainless, electro polish finish)  
 M-3.0 (monel, design pressure = 3,000 psig)

### Standard Supergap™ Models/Rating Table and Dimensions

Chart Part Number	Thermax Model Number	Flow Rate*		Inlet/Outlet Connection Size (inches)	Dimensions W x D x H (inches)	Weight (Lbs)	Design Pressure
		8hrs, SCFH, Nitrogen Aluminum	SS Lined				
12956561	SG20HF	1,700		3/4 MPT	22 x 22 x 128	135	600
12956579	SG25HF	2,600	2,100	3/4 MPT	22 x 22 x 152	155	600
12956608	SG35HF	3,900	3,100	3/4 MPT	32 x 22 x 152	215	600
12956616	SG50HF	5,200	4,200	3/4 MPT	44 x 22 x 152	275	600
12956587	SG70HF	7,800	6,200	3/4 MPT	48 x 36 x 152	405	600
12956632	SG110HF	11,500	9,400	1 Mueller**	48 x 36 x 213	580	450
12956641	SG140HF	15,600	12,500	1 Mueller**	48 x 48 x 213	760	450
12956659	SG180HF	19,400	15,500	1 Mueller**	48 x 60 x 213	935	450
12956667	SG270HF	29,200	23,400	1-1/2 Mueller**	60 x 72 x 224	1,425	450
12956675	SG360HF	39,000	31,100	1-1/2 Mueller**	75 x 62 x 284	1,890	450
12959631	SG770HF	83,200	66,300	2 Mueller**	98 x 98 x 284	3,875	450

For nominal flow rate: O<sub>2</sub> - multiply by 0.92, Ar - multiply by 1.14.

\* Nominal flow rate is based on eight hours continuous service between defrosts, an ambient temperature of 70°, relative humidity 70%, and a 70° approach temperature. Please consult your Chart sales person for ratings for other conditions.

\*\*Mueller Flanges supplied with mating brass flange, bolts, nuts and gaskets.

All tables and information are intended as guides only. Actual performance and dimensions may vary. Thermax does not make any representations or warranties, express or implied, of fitness for a particular purpose. Request a copy of Thermax's Limited Warranty and Remedy for further details. Speak to a Thermax representative for specific design considerations and application criteria.

Chart Industries, Inc.  
 U.S. : 1-800-400-4683  
 Worldwide: 1-952-758-4484



Innovation. Experience. Performance.™

Copyright © 2005 Chart Industries  
 PN 11640222  
 www.chart-ind.com