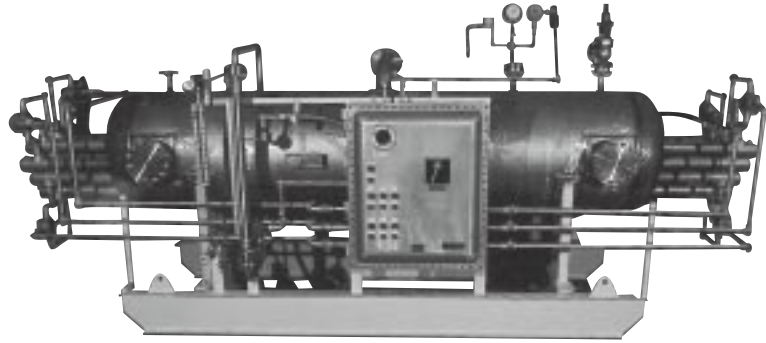


CHTV

Heat Transfer Fluid Vaporizer



- Heat Transfer Fluids (Vapor Phase) to 750°F
- 15 - 300 kW (51 - 1,024 Mbh)
- 240 and 480V, 3 Phase, 60 Hz
- Pressurized Operation — ASME Certified to Section VIII, Div. 1 150 psig @ 750°F
- 300 Lb Carbon Steel Construction
- OCE Open Coil Elements Removable w/o Draining Tank
- Hartford Loop Piping Prevents Siphoning of Fluid in Gravity Return Systems
- Pressure Control and Sequencer for Process Control
- Operating Pressure Gauge
- Over-Pressure Cutout Switch
- Fluid Level Switch Locks Out Heating Elements if Low-Fluid Level Occurs
- Reflex Type High Pressure Liquid Level Sight Glass
- 5" Dia. Dial Type Thermometer with Thermowell
- ASME Relief Valve
- NEMA 1 Electrical Enclosure Complete with Circuit Breaker, Contactors, Fusing, Switches, Transformers and Pilot Lights

WARNING — In hazardous areas, pipe surfaces could achieve temperatures high enough to cause auto-ignition of the hazardous materials present. Consult Article 500 of the National Electrical Code for further information on the maximum allowable temperatures for a specific application.

Applications

Chromalox CHTV Heat Transfer Fluid Vaporizers are designed for use in textile, chemical, petrochemical and other industries requiring high temperatures and low operating pressures in their manufacturing processes. They operate to 750°F using Dowtherm® A or J, Therminol® VP-1 and other organic vapor phase heat transfer fluids.

Advantages

Vapor systems transfer more heat energy per pound of heat transfer medium than comparable liquid phase systems. As the fluid vapor condenses to a liquid in the process piping, it releases the latent heat of vaporization. Unlike steam, heat transfer fluids operate at relatively low pressures at elevated temperatures. Dowtherm® A only has a pressure of 102 psia @ 695°F.

Features

No pumps are needed for gravity return systems. Low operating pressures. Hartford loop piping for gravity return systems. Wiring and fusing conform to NEC requirements.

Options

- Alternate Voltage and kW Ratings
- Electronic Solid State (SCR) Power Controllers. Digital Communication Interface available
- Condensate Return Pumps
- NEMA 4 (CHTVW) or Class I, Group D, Div. 1 Electrical Enclosures (CHTVX) available
- Available without Control Panel or without Hartford Loop Piping
- Other Applications for Fluid Vaporization including Kerosene, Propane or Gasoline and Cryogenic Applications for Liquefied Natural Gas and Nitrogen

Specifications and Ordering Information

kW	Btuh	Operating Vol. (Gal.)	Dimensions (In.)			Tank Dia.	No. Circ.	Model	Stock	PCN	Wt. (Lbs.)
			H	W	D						
15	51,180	15.7	50	36	80	16	1	CHTV-316-15	NS	—	750
20	68,240	19.4	50	36	94	16	1	CHTV-316-20	NS	—	850
25	78,500	23.6	50	36	110	16	1	CHTV-316-25	NS	—	975
30	102,360	27.2	50	36	124	16	1	CHTV-316-30	NS	—	1,075
40	136,480	35.6	50	36	156	16	2	CHTV-316-40	NS	—	1,375
50	157,000	43.5	50	36	186	16	2	CHTV-316-50	NS	—	1,600
40	136,480	75	60	48	95	24	2	CHTV-624-40	NS	—	1,400
50	157,000	106	60	48	111	24	2	CHTV-624-50	NS	—	1,650
60	204,720	137	60	48	125	24	2	CHTV-624-60	NS	—	1,800
75	235,500	168	60	48	149	24	3	CHTV-624-75	NS	—	2,150
100	341,200	218	60	48	187	24	3	CHTV-624-100	NS	—	2,600
100	341,200	218	66	54	111	30	3	CHTV-1230-100	NS	—	2,650
125	392,500	222	66	54	129	30	4	CHTV-1230-125	NS	—	3,000
150	511,800	263	66	54	149	30	4	CHTV-1230-150	NS	—	3,400
175	549,500	300	66	54	167	30	6	CHTV-1230-175	NS	—	3,850
200	682,400	340	66	54	187	30	6	CHTV-1230-200	NS	—	4,300
225	767,700	379	72	60	149	36	6	CHTV-1836-225	NS	—	5,000
250	853,000	417	72	60	162	36	6	CHTV-1836-250	NS	—	5,600
275	938,300	455	72	60	175	36	6	CHTV-1836-275	NS	—	6,000
300	1,023,600	490	72	60	187	36	6	CHTV-1836-300	NS	—	6,400

Stock Status: S = stock AS = assembly stock NS = non-stock
To Order—Specify model, volts, phase, kW, options and quantity.

Ordering Guidelines

Heat Transfer Systems

Ordering Information

To Order—
Specify model, volts, phase, kW, PCN (where available) and options desired. Complete model number using the matrix provided.

Model	Heat Transfer Systems												
CMX	Non-Pressurized Water System with Centrifugal Pump and Standard Enclosures												
CWG	Non-Pressurized Water/Glycol System with Centrifugal Pump and Standard Enclosures												
CWGW	Non-Pressurized Water/Glycol System with Centrifugal Pump and Weather Resistant Enclosures												
CWGX	Non-Pressurized Water/Glycol System with Centrifugal Pump and Explosion Resistant Enclosures												
OTCS	Non-Pressurized Compact Oil Temperature Control System with Positive Displacement Pump												
COS	Non-Pressurized Oil System with Positive Displacement Pump and Standard Enclosures												
COSW	Non-Pressurized Oil System with Positive Displacement Pump and Weather Resistant Enclosures												
COSX	Non-Pressurized Oil System with Positive Displacement Pump and Explosion Resistant Enclosures												
PFC	Non-Pressurized Oil System with Centrifugal Pump and Standard Enclosures												
PFCW	Non-Pressurized Oil System with Centrifugal Pump and Weather Resistant Enclosures												
PFCX	Non-Pressurized Oil System with Centrifugal Pump and Explosion Resistant Enclosures												
CLD	Pressurized Oil System with Centrifugal Pump and Standard Enclosures												
CLDW	Pressurized Oil System with Centrifugal Pump and Weather Resistant Enclosures												
CLDX	Pressurized Oil System with Centrifugal Pump and Explosion Resistant Enclosures												
CLS	Pressurized Oil System with Centrifugal Pump, Standard Enclosures and Piping for Hot Expansion Tank												
CLSW	Pressurized Oil System with Centrifugal Pump, Weather Resistant Enclosures and Piping for Hot Expansion Tank												
CLSX	Pressurized Oil System with Centrifugal Pump, Explosion Resistant Enclosures and Piping for Hot Expansion Tank												
	Code Temperature Rating (°F)												
	250	CWG-A, CMX			650	COS-B							
	550	OTCS			750	CLD-A and CLS-A							
	600	PFC-B											
		Code Version											
		A	B	C	D	Blank (OTCS)							
			Code Kilowatt Rating										
			4	6	9	12	15	18	20	24	30		
			40	60	80	100	125	150	200	250	300		
			350	400	450	500	600						
				Code Options									
				C	Closed Loop Cooling (CWG and OTCS)								
				XX	Other Options, Voltage, Phase, ASME, Pumps, Cooling, etc.								
COS	650	B	100	XX	Typical Model Number								

Vaporizers

Ordering Information

To Order—
Specify model, volts, phase, kW, PCN (where available) and options desired. Complete model number using the matrix provided.

Model	Vaporizers												
CHTV	Heat Transfer Fluid Vaporizer												
CHTVW	Heat Transfer Fluid Vaporizer with Weather Resistant Enclosures												
CHTVX	Heat Transfer Fluid Vaporizer with Explosion Resistant Enclosures												
	Code Number of Heating Tubes												
	3	6	12	18									
		Code Diameter of Tank (In.)											
		16	24	30	36								
			Code Kilowatt Rating										
			15	20	25	30	40	50	60	75	100		
			125	150	175	200	225	250	275	300			
				Code Options									
				XX	Voltage, Phase, Controls, Hartford Loop, etc.								
CHTV	3	16	50	XX	Typical Model Number								

Note — Refer to heat transfer systems and vaporizer product pages in this section for details, version letter and available options.