

Direct Steam Vaporizers

FinnCo Direct Steam Vaporizers use steam as a heat source to vaporize and superheat cryogenic fluids providing a compact footprint and cost efficient design.

Outlet temperature controlled with PID controller and steam valve.

Manufactured to TEMA standards with ASME VIII stamped tube bundle and shell.



Direct Steam Vaporizers are fully customizable and are provided as a complete system including :

- Steam train with strainer, condensate drip trap, control valve w/positioner, vacuum breaker, and pressure relief valve
- Outlet process temperature control with thermocouple and PID controller
- Condensate management with drain valve, strainer, F&T or inverted bucket steam trap

DIRECT STEAM VAPORIZERS

STANDARD DIRECT TO PROCESS VAPORIZER 150 psig N₂, 300 psig CO₂; 70°F outlet; 75 psig sat'd steam

Model	Flowrate		Steam, lbs/hr	Weight, lbs	Approx Dimensions	Connection Sizes, inches			
	N ₂ , SCFH	CO ₂ , lbs/hr				Steam	Condensate	Process In	Process Out
FS-60K-6	61,000	5,000	810	500	11' x 1' 5'	1-1/2	1	1	2
FS-120K-8	123,000	10,000	1,620	700	11' x 1'-2" x 5'	2	1	1-1/2	3
FS-180K-10	184,000	15,000	2,440	900	11' x 1'-4" x 5'	2	1	1-1/2	4
FS-250K-10	245,000	20,000	3,250	1,000	11' x 1'-4" x 5'	3	1	2	4
FS-300K-12	306,000	25,000	4,060	1,300	11' x 1'-7" x 5'	1	1	2	6
FS-600K-14	613,000	50,000	8,120	1,900	15' x 1'-9" x 6'	4	1-1/2	3	6
FS-900K-16	919,000	75,000	12,190	2,500	15' x 2' x 6'	4	1-1/2	4	8
FS-1200K-18	1,225,000	100,000	16,250	2,900	15' x 2'-1" x 6'	6	2	4	8

STANDARD TRIM HEATER 150 psig N₂, 300 psig CO₂; 100°F temp increase; 75 psig sat'd steam

Model	Flowrate		Steam, lbs/hr	Weight, lbs	Approx Dimensions	Connection Sizes, inches			
	N ₂ , SCFH	CO ₂ , lbs/hr				Steam	Condensate	Process In	Process Out
FST-80K-6	80,000	5,600	160	500	9' x 1' x 5'	1	1	3	3
FST-200K-8	200,000	14,000	410	600	9' x 1'-1" x 5'	1	1	4	4
FST-300K-10	300,000	21,100	620	800	9' x 1'-4" x 5'	1-1/2	1	6	6
FST-500K-12	500,000	35,100	1,030	1100	9' x 17" x 5'	2	1	6	6

SPECIFICATIONS

- Cryogenic SS tube bundle rated at 250 psig @-320/+350°F; TEMA compliant
- Carbon steel shell rated at 100 psig @-20/+350°F
- Shell and tube bundle to be ASME Sec VIII stamped
- Insulated shell with aluminium jacket

OPTIONS

- Customized for various steam pressures and process conditions
- Low outlet temperature shut off
- Spare tube bundles
- Control tie-ins to plant DCS
- Block and bypass around control valve
- Pressure building circuit