

## 1998 Vilter Shell and Tube 18 ft. Ammonia Heat Exchanger

Mfg: Vilter

Model:

Stock No. HDCD367.7

Serial No. H73946-1

1998 Vilter Shell and Tube 18 ft. Ammonia Heat Exchanger. S/N: H73946-1. Nat'l Bd: 41337. Number of passes: 4. Number of tubes: 121. Tube material: SA-124 carbon steel. Tube dimensions: 1-1/4 in. dia. x 18 ft. Heat transfer surface area: approx. 712 sq. ft. Shell side MAWP @ 400 °F: 300 psig. Shell side MDMT @ 300 psig: -20 °F. Tube side MAWP @ 200 °F: 75 psig. Tube side MDMT @ 75 psig: -20 °F. Heat exchanger is equipped with Hansen pressure relief valves. Inlets: (1) 3-1/2 in. dia. pipe (media), (1) 4 in. dia. pipe (product) with an 8-1/2 in. dia. flange and (8) 3/4 in. dia. attachment holes at a center-to-center distance of 6-1/2 in. Outlets: (1) 2 in. dia. Pipe (media), (1) 4 in. dia. pipe (product) with an 8-1/2 in. dia. flange and (8) 3/4 in. dia. attachment holes at a center-to-center distance of 6-1/2 in. Shell: 20 in. dia. x 18 ft. L. Overall dimensions: 19 ft. L x 28 in. W x 70 in. H.





TABLE 5 GPM AND CONDENSER RATING TABLE

Nominal Size	Total GPM based on 13 GPM/Tube/Pass -- (300 FPM)				Tons Capacity 175 psig Condensing, 20 psig Suction, 13 GPM 75° Water/Tube/Pass (300 FPM)							
	4-Pass	6-Pass	8-Pass	12-Pass	4-Pass	6-Pass	8-Pass	12-Pass				
12" x 6'	136.5	91	68	45.5	18.5	17.5	16.5	15.0				
12" x 8'					23.5	22.0	20.5	17.5				
12" x 10'					28.5	26.0	24.0	20.0				
12" x 12'					32.5	29.5	27.0	22.0				
12" x 14'					37.0	33.0	29.0	23.0				
12" x 16'					41.0	35.5	31.0	24.0				
12" x 18'					43.5	38.0	32.5	25.0				
12" x 20'					46.5	40.0	34.0	25.5				
16" x 8'	247	164	124	82	43.5	40.0	37.0	32.0				
16" x 10'					52.5	47.0	43.5	36.5				
16" x 12'					60.0	53.5	48.0	39.5				
16" x 14'					67.0	59.0	52.5	42.0				
16" x 16'					74.0	64.0	56.0	44.0				
16" x 18'					80.5	69.0	59.0	45.5				
16" x 20'					86.0	72.0	61.0	46.5				
20" x 10'					394	262	196	131	83.0	75.5	68.5	58.0
20" x 12'	96.0	85.5	78.0	62.5								
20" x 14'	108	95.0	83.0	67.0								
20" x 16'	118	102	88.5	69.5								
20" x 18'	130	109	94.0	72.5								
20" x 20'	138	115	98.0	74.0								
24" x 12'	588	392	294	196					144	128	115	94.0
24" x 14'									161	141	125	100
24" x 16'					177	155	134	105				
24" x 18'					190	163	140	108				
24" x 20'					207	172	148	110				
30" x 12'					946	630	473	315	230	207	185	151
30" x 14'	259	228	202	160								
30" x 16'	285	245	214	167								
30" x 18'	310	265	226	173								
30" x 20'	330	277	236	178								
36" x 12'	1492	994	746	497					364	326	293	239
36" x 14'					409	360	318	254				
36" x 16'					450	390	340	266				
36" x 18'					487	417	358	274				
36" x 20'					520	440	374	281				
42" x 12'					2070	1380	1035	690	505	451	405	332
42" x 14'	568	499	440	352								
42" x 16'	625	541	470	370								
42" x 18'	677	575	496	380								
42" x 20'	725	606	518	390								
48" x 12'	2700	1800	1350	900					660	590	527	431
48" x 14'					743	651	575	458				
48" x 16'					815	705	617	480				
48" x 18'					885	750	646	497				
48" x 20'					947	793	675	511				