

High Temperature/High Pressure Liquid to Liquid Heat Exchangers



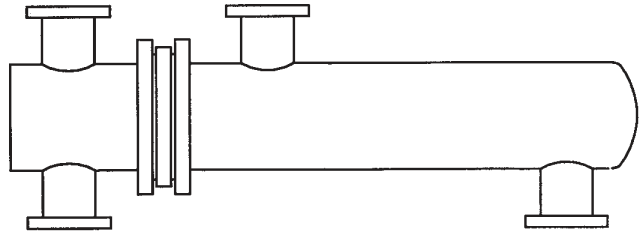
Features

Features

- Designed, constructed and tested to ASME Section VIII, Div. 1 requirements
- NSF/ANSI 372 Certified and Listed
- High degree of flexibility in materials to meet varying application requirements
- Available in 2 or 4 pass construction
- All fabrication done in-house
- Computerized selections to ensure fast and easy design
- National Board Registration
- CRN registration (optional)



Certified to
NSF/ANSI/CAN
372



4" - 30"

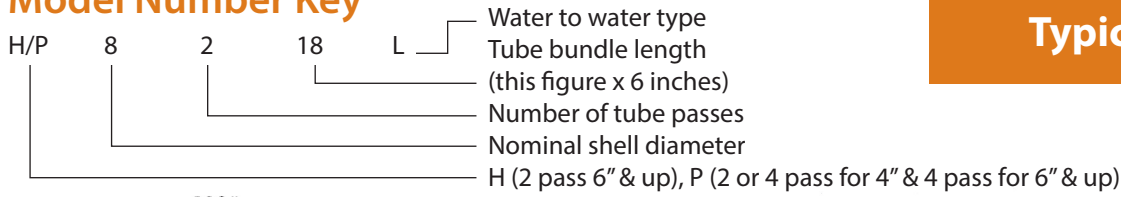
Performance Data

- Connection sizes: 1-14"
- Diameters: 4-30"
- Max. Length: 10ft. Standard
- Working Pressure: 400PSI Standard tube side, 150 PSI shell side, (Optional Higher Pressures)
- Max. Operating Temp.: 450°F (Optional Higher Temperatures)

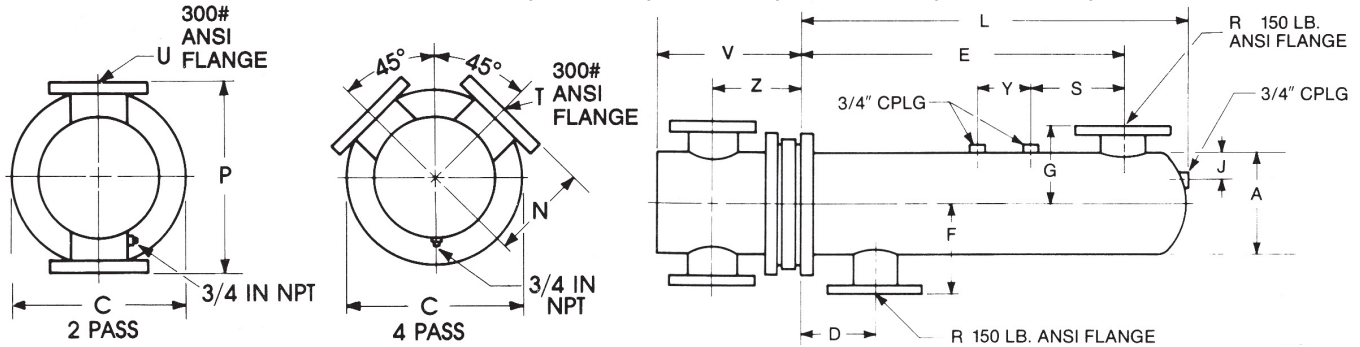
Materials of Construction

	STANDARD	OPTIONAL
Shell Head 4" - 30"	Steel Fabricated Steel	304ss/316ss Duplex 2205 Fabricated 304ss/316ss, Duplex 2205
Tubes	3/4 X 20 BWG 90/10 Cupro-Nickel	3/4 X 18 BWG 90/10 Cupro-Nickel, Steel, 304ss, 316ss, Duplex 2205
Tube Sheet	Steel	304ss, 316ss, 90/10 CuNi, Duplex 2205
Separators	Steel	Bronze, Brass, 304ss, 316ss, 90/10 CuNi
Tie Rods Nuts and Bolts	Copper Steel	304ss, 316ss -----

Model Number Key



Typical Dimensions



4 Inch Diameter

Model Number		Fabricated Steel Heads								Dimensions (inches)										Heating Surface (Sq. Ft.)	Approx. Shipping Weight (Lbs.)	
2 Pass	4 Pass	2 Pass				4 Pass				2 & 4 Pass												
		V	Z	P	U	V	Z	N	T	A	C	D	E	F	G	J	L	R	S			Y
4204HTF	4404HTF	10 ¼	7	13 ½	1 ½F	10 ¼	5 ½	6 ¾	1F	4 ½	10	6	31	5	5	1 ¼	36 ½	2 ½T	13	12	4.6	121
4206HTF	4406HTF	10 ¼	7	13 ½	1 ½F	10 ¼	5 ½	6 ¾	1F	4 ½	10	6	43	5	5	1 ¼	48 ½	2 ½T	13	12	7.0	132
4208HTF	4408HTF	10 ¼	7	13 ½	1 ½F	10 ¼	5 ½	6 ¾	1F	4 ½	10	6	55	5	5	1 ¼	60 ½	2 ½T	13	12	9.3	143
4210HTF	4410HTF	10 ¼	7	13 ½	1 ½F	10 ¼	5 ½	6 ¾	1F	4 ½	10	6	67	5	5	1 ¼	72 ½	2 ½T	13	12	11.7	154
4212HTF	4412HTF	10 ¼	7	13 ½	1 ½F	10 ¼	5 ½	6 ¾	1F	4 ½	10	6	79	5	5	1 ¼	84 ½	2 ½T	13	12	14.1	165
4214HTF	4414HTF	10 ¼	7	13 ½	1 ½F	10 ¼	5 ½	6 ¾	1F	4 ½	10	6	91	5	5	1 ¼	96 ½	2 ½T	13	12	16.4	176

6 Inch Diameter

Model Number		Fabricated Steel Heads								Dimensions (inches)										Heating Surface (Sq. Ft.)	Approx. Shipping Weight (Lbs.)		
2 Pass	4 Pass	2 Pass				4 Pass				2 & 4 Pass													
		V	Z	P	U	V	Z	N	T	A	C	D	E	F	G	J	L	R	S			Y	
6204HTF	6404HTF	11 ½	7 ½	16	2 ½F	11 ½	6	7 ¾	1 ½F	6 ¾	12 ½	6	17 ½	5 ½	5 ½	1 ¼	25	3T	5 ½	6	9.2	146	
6206HTF	6406HTF	11 ½	7 ½	16	2 ½F	11 ½	6	7 ¾	1 ½F	6 ¾	12 ½	6	29 ½	5 ½	5 ½	1 ¼	37	3T	11 ½	12	14.3	160	
6208HTF	6408HTF	11 ½	7 ½	16	2 ½F	11 ½	6	7 ¾	1 ½F	6 ¾	12 ½	6	41 ½	5 ½	5 ½	1 ¼	49	3T	11 ½	12	19.4	187	
6210HTF	6410HTF	11 ½	7 ½	16	2 ½F	11 ½	6	7 ¾	1 ½F	6 ¾	12 ½	6	53 ½	5 ½	5 ½	1 ¼	61	3T	11 ½	12	24.5	214	
6212HTF	6412HTF	11 ½	7 ½	16	2 ½F	11 ½	6	7 ¾	1 ½F	6 ¾	12 ½	6	65 ½	5 ½	5 ½	1 ¼	73	3T	11 ½	12	29.6	241	
6214HTF	6414HTF	11 ½	7 ½	16	2 ½F	11 ½	6	7 ¾	1 ½F	6 ¾	12 ½	6	77 ½	5 ½	5 ½	1 ¼	85	3T	11 ½	12	34.7	268	
6216HTF	6416HTF	11 ½	7 ½	16	2 ½F	11 ½	6	7 ¾	1 ½F	6 ¾	12 ½	6	89 ½	5 ½	5 ½	1 ¼	97	3T	11 ½	12	39.8	295	

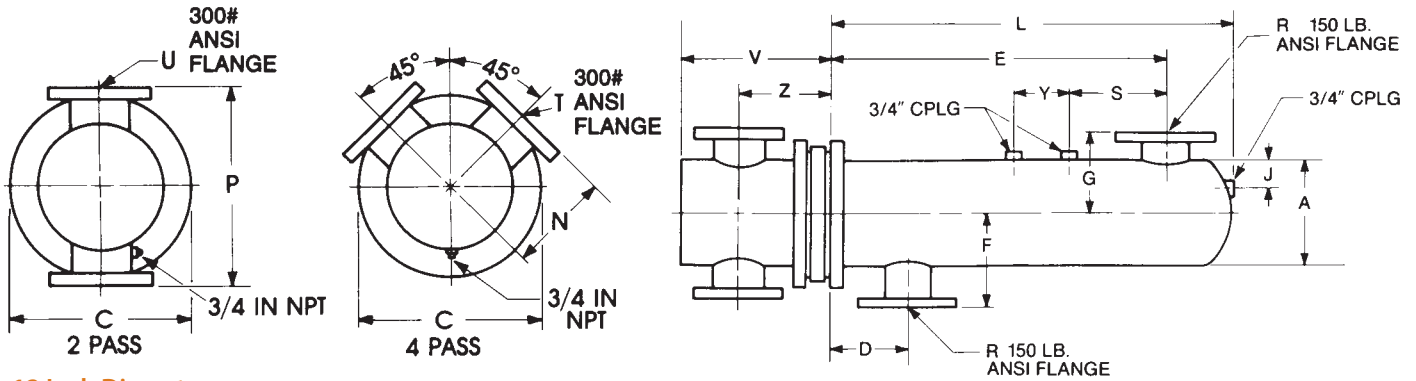
8 Inch Diameter

Model Number		Fabricated Steel Heads								Dimensions (inches)										Heating Surface (Sq. Ft.)	Approx. Shipping Weight (Lbs.)	
2 Pass	4 Pass	2 Pass				4 Pass				2 & 4 Pass												
		V	Z	P	U	V	Z	N	T	A	C	D	E	F	G	J	L	R	S			Y
8204HTF	8404HTF	11 ½	7 ¼	18 ½	2 ½F	11 ½	6 ¾	9 ¼	2F	8 ¾	15	8 ¼	16 ¾	9 ⅞	9 ⅞	1 ¼	24	4F	5 ¾	6	16.5	212
8206HTF	8406HTF	11 ½	7 ¼	18 ½	2 ½F	11 ½	6 ¾	9 ¼	2F	8 ¾	15	8 ¼	28 ¾	9 ⅞	9 ⅞	1 ¼	36	4F	10 ¾	12	25.1	240
8208HTF	8408HTF	11 ½	7 ¼	18 ½	2 ½F	11 ½	6 ¾	9 ¼	2F	8 ¾	15	8 ¼	40 ¾	9 ⅞	9 ⅞	1 ¼	48	4F	10 ¾	12	33.7	278
8210HTF	8410HTF	11 ½	7 ¼	18 ½	2 ½F	11 ½	6 ¾	9 ¼	2F	8 ¾	15	8 ¼	50 ¾	9 ⅞	9 ⅞	1 ¼	60	4F	10 ¾	12	42.4	317
8212HTF	8412HTF	11 ½	7 ¼	18 ½	2 ½F	11 ½	6 ¾	9 ¼	2F	8 ¾	15	8 ¼	64 ¾	9 ⅞	9 ⅞	1 ¼	72	4F	10 ¾	12	51.0	356
8214HTF	8414HTF	11 ½	7 ¼	18 ½	2 ½F	11 ½	6 ¾	9 ¼	2F	8 ¾	15	8 ¼	76 ¾	9 ⅞	9 ⅞	1 ¼	84	4F	10 ¾	12	59.7	395
8216HTF	8416HTF	11 ½	7 ¼	18 ½	2 ½F	11 ½	6 ¾	9 ¼	2F	8 ¾	15	8 ¼	88 ¾	9 ⅞	9 ⅞	1 ¼	96	4F	10 ¾	12	68.3	434
8218HTF	8418HTF	11 ½	7 ¼	18 ½	2 ½F	11 ½	6 ¾	9 ¼	2F	8 ¾	15	8 ¼	100 ¾	9 ⅞	9 ⅞	1 ¼	108	4F	10 ¾	12	76.9	473
8220HTF	8420HTF	11 ½	7 ¼	18 ½	2 ½F	11 ½	6 ¾	9 ¼	2F	8 ¾	15	8 ¼	112 ¾	9 ⅞	9 ⅞	1 ¼	120	4F	10 ¾	12	85.6	515

Dimensional Data

10 Inch Diameter

Model Number		Fabricated Steel Heads								Dimensions (inches)											Heating Surface (Sq. Ft.)	Approx. Shipping Weight (Lbs.)
2 Pass	4 Pass	2 Pass				4 Pass				2 & 4 Pass												
		V	Z	P	U	V	Z	N	T	A	C	D	E	F	G	J	L	R	S	Y		
10204HTF	10404HTF	16	10 3/8	21	4F	16	9 3/4	10 1/2	2 1/2F	10 3/4	17 1/2	9 1/2	14 1/2	10 3/8	10 3/8	1 3/8	24	6F	5	4	26.8	301
10206HTF	10406HTF	16	10 3/8	21	4F	16	9 3/4	10 1/2	2 1/2F	10 3/4	17 1/2	9 1/2	26 1/2	10 3/8	10 3/8	1 3/8	36	6F	9 1/2	12	40.9	354
10208HTF	10408HTF	16	10 3/8	21	4F	16	9 3/4	10 1/2	2 1/2F	10 3/4	17 1/2	9 1/2	38 1/2	10 3/8	10 3/8	1 3/8	48	6F	9 1/2	12	55.0	410
10210HTF	10410HTF	16	10 3/8	21	4F	16	9 3/4	10 1/2	2 1/2F	10 3/4	17 1/2	9 1/2	50 1/2	10 3/8	10 3/8	1 3/8	60	6F	9 1/2	12	69.2	467
10212HTF	10412HTF	16	10 3/8	21	4F	16	9 3/4	10 1/2	2 1/2F	10 3/4	17 1/2	9 1/2	62 1/2	10 3/8	10 3/8	1 3/8	72	6F	9 1/2	12	83.3	524
10214HTF	10414HTF	16	10 3/8	21	4F	16	9 3/4	10 1/2	2 1/2F	10 3/4	17 1/2	9 1/2	74 1/2	10 3/8	10 3/8	1 3/8	84	6F	9 1/2	12	97.5	581
10216HTF	10416HTF	16	10 3/8	21	4F	16	9 3/4	10 1/2	2 1/2F	10 3/4	17 1/2	9 1/2	86 1/2	10 3/8	10 3/8	1 3/8	96	6F	9 1/2	12	111.6	638
10218HTF	10418HTF	16	10 3/8	21	4F	16	9 3/4	10 1/2	2 1/2F	10 3/4	17 1/2	9 1/2	98 1/2	10 3/8	10 3/8	1 3/8	108	6F	9 1/2	12	125.7	695
10220HTF	10420HTF	16	10 3/8	21	4F	16	9 3/4	10 1/2	2 1/2F	10 3/4	17 1/2	9 1/2	110 1/2	10 3/8	10 3/8	1 3/8	120	6F	9 1/2	12	139.9	752



12 Inch Diameter

Model Number		Fabricated Steel Heads								Dimensions (inches)											Heating Surface (Sq. Ft.)	Approx. Shipping Weight (Lbs.)
2 Pass	4 Pass	2 Pass				4 Pass				2 & 4 Pass												
		V	Z	P	U	V	Z	N	T	A	C	D	E	F	G	J	L	R	S	Y		
12206HTF	12406HTF	16	10 3/8	4	4F	16	10 1/2	2	3F	12 3/4	20 1/2	10	26 3/4	11 1/8	11 1/8	1 3/8	36 1/4	6F	9 3/4	12	58.6	490
12208HTF	12408HTF	16	10 3/8	4	4F	16	10 1/2	2	3F	12 3/4	20 1/2	10	38 3/4	11 1/8	11 1/8	1 3/8	48 1/4	6F	9 3/4	12	79.0	563
12210HTF	12410HTF	16	10 3/8	4	4F	16	10 1/2	2	3F	12 3/4	20 1/2	10	50 3/4	11 1/8	11 1/8	1 3/8	60 1/4	6F	9 3/4	12	99.5	637
12212HTF	12412HTF	16	10 3/8	4	4F	16	10 1/2	2	3F	12 3/4	20 1/2	10	62 3/4	11 1/8	11 1/8	1 3/8	72 1/4	6F	9 3/4	12	119.9	711
12214HTF	12414HTF	16	10 3/8	4	4F	16	10 1/2	2	3F	12 3/4	20 1/2	10	74 3/4	11 1/8	11 1/8	1 3/8	84 1/4	6F	9 3/4	12	140.3	785
12216HTF	12416HTF	16	10 3/8	4	4F	16	10 1/2	2	3F	12 3/4	20 1/2	10	86 3/4	11 1/8	11 1/8	1 3/8	96 1/4	6F	9 3/4	12	160.8	859
12218HTF	12418HTF	16	10 3/8	4	4F	16	10 1/2	2	3F	12 3/4	20 1/2	10	98 3/4	11 1/8	11 1/8	1 3/8	108 1/4	6F	9 3/4	12	181.2	933
12220HTF	12420HTF	16	10 3/8	4	4F	16	10 1/2	2	3F	12 3/4	20 1/2	10	110 3/4	11 1/8	11 1/8	1 3/8	120 1/4	6F	9 3/4	12	201.6	1007

14 Inch Diameter

Model Number		Fabricated Steel Heads								Dimensions (inches)											Heating Surface (Sq. Ft.)	Approx. Shipping Weight (Lbs.)
2 Pass	4 Pass	2 Pass				4 Pass				2 & 4 Pass												
		V	Z	P	U	V	Z	N	T	A	C	D	E	F	G	J	L	R	S	Y		
14206HTF	14406HTF	20	12 ½	26	6F	20	11 ¾	13	4F	14	23	9 ¾	27 ¼	14	14	1 ⅜	37 ¼	6F	10 ¼	12	75.7	600
14208HTF	14408HTF	20	12 ½	26	6F	20	11 ¾	13	4F	14	23	9 ¾	39 ¼	14	14	1 ⅜	49 ¼	6F	12 ¼	12	102.4	689
14210HTF	14410HTF	20	12 ½	26	6F	20	11 ¾	13	4F	14	23	9 ¾	51 ¼	14	14	1 ⅜	61 ¼	6F	13 ¼	12	129.1	781
14212HTF	14412HTF	20	12 ½	26	6F	20	11 ¾	13	4F	14	23	9 ¾	63 ¼	14	14	1 ⅜	73 ¼	6F	13 ¼	12	155.8	872
14214HTF	14414HTF	20	12 ½	26	6F	20	11 ¾	13	4F	14	23	9 ¾	75 ¼	14	14	1 ⅜	85 ¼	6F	13 ¼	12	182.5	962
14216HTF	14416HTF	20	12 ½	26	6F	20	11 ¾	13	4F	14	23	9 ¾	87 ¼	14	14	1 ⅜	97 ¼	6F	13 ¼	12	209.2	1054
14218HTF	14418HTF	20	12 ½	26	6F	20	11 ¾	13	4F	14	23	9 ¾	99 ¼	14	14	1 ⅜	109 ¼	6F	13 ¼	12	236.0	1145
14220HTF	14420HTF	20	12 ½	26	6F	20	11 ¾	13	4F	14	23	9 ¾	111 ¼	14	14	1 ⅜	121 ¼	6F	13 ¼	12	262.7	1237

Dimensional Data

16 Inch Diameter

Model Number		Fabricated Steel Heads								Dimensions (inches)											Heating Surface (Sq. Ft.)	Approx. Shipping Weight (Lbs.)
2 Pass	4 Pass	2 Pass				4 Pass				2 & 4 Pass												
		V	Z	P	U	V	Z	N	T	A	C	D	E	F	G	J	L	R	S	Y		
16206HTF	16406HTF	21 ¼	13 ¾	28 ½	6F	21 ¼	12 ¾	14 ¼	4F	16	25 ½	11 ¼	25 ¼	15 ¼	15 ¼	1 ¾	37	8F	12 ¼	8	104.5	772
16208HTF	16408HTF	21 ¼	13 ¾	28 ½	6F	21 ¼	12 ¾	14 ¼	4F	16	25 ½	11 ¼	37 ¼	15 ¼	15 ¼	1 ¾	49	8F	13 ¼	12	141.4	888
16210HTF	16410HTF	21 ¼	13 ¾	28 ½	6F	21 ¼	12 ¾	14 ¼	4F	16	25 ½	11 ¼	49 ¼	15 ¼	15 ¼	1 ¾	61	8F	13 ¼	12	178.4	1006
16212HTF	16412HTF	21 ¼	13 ¾	28 ½	6F	21 ¼	12 ¾	14 ¼	4F	16	25 ½	11 ¼	61 ¼	15 ¼	15 ¼	1 ¾	73	8F	13 ¼	12	215.3	1130
16214HTF	16414HTF	21 ¼	13 ¾	28 ½	6F	21 ¼	12 ¾	14 ¼	4F	16	25 ½	11 ¼	73 ¼	15 ¼	15 ¼	1 ¾	85	8F	13 ¼	12	252.2	1212
16216HTF	16416HTF	21 ¼	13 ¾	28 ½	6F	21 ¼	12 ¾	14 ¼	4F	16	25 ½	11 ¼	85 ¼	15 ¼	15 ¼	1 ¾	97	8F	13 ¼	12	289.1	1329
16218HTF	16418HTF	21 ¼	13 ¾	28 ½	6F	21 ¼	12 ¾	14 ¼	4F	16	25 ½	11 ¼	97 ¼	15 ¼	15 ¼	1 ¾	109	8F	13 ¼	12	326.0	1149
16220HTF	16420HTF	21 ¼	13 ¾	28 ½	6F	21 ¼	12 ¾	14 ¼	4F	16	25 ½	11 ¼	109 ¼	15 ¼	15 ¼	1 ¾	121	8F	13 ¼	12	363.0	1568

18 Inch Diameter

Model Number		Fabricated Steel Heads								Dimensions (inches)											Heating Surface (Sq. Ft.)	Approx. Shipping Weight (Lbs.)
2 Pass	4 Pass	2 Pass				4 Pass				2 & 4 Pass												
		V	Z	P	U	V	Z	N	T	A	C	D	E	F	G	J	L	R	S	Y		
18206HTF	18406HTF	22	14 ¾	30	6F	22	13	15	4F	18	28	11 ½	24	16 ½	16 ½	1 ¾	36 ½	8F	11	8	130.7	935
18208HTF	18408HTF	22	14 ¾	30	6F	22	13	15	4F	18	28	11 ½	36	16 ½	16 ½	1 ¾	48 ½	8F	13	12	177.0	1069
18210HTF	18410HTF	22	14 ¾	30	6F	22	13	15	4F	18	28	11 ½	48	16 ½	16 ½	1 ¾	60 ½	8F	13	12	223.4	1208
18212HTF	18412HTF	22	14 ¾	30	6F	22	13	15	4F	18	28	11 ½	60	16 ½	16 ½	1 ¾	72 ½	8F	13	12	269.7	1351
18214HTF	18414HTF	22	14 ¾	30	6F	22	13	15	4F	18	28	11 ½	72	16 ½	16 ½	1 ¾	84 ½	8F	13	12	316.1	1470
18216HTF	18416HTF	22	14 ¾	30	6F	22	13	15	4F	18	28	11 ½	84	16 ½	16 ½	1 ¾	96 ½	8F	13	12	362.4	1611
18218HTF	18418HTF	22	14 ¾	30	6F	22	13	15	4F	18	28	11 ½	96	16 ½	16 ½	1 ¾	108 ½	8F	13	12	408.8	1752
18220HTF	18420HTF	22	14 ¾	30	6F	22	13	15	4F	18	28	11 ½	108	16 ½	16 ½	1 ¾	120 ½	8F	13	12	455.1	1893

20 Inch Diameter

Model Number		Fabricated Steel Heads								Dimensions (inches)											Heating Surface (Sq. Ft.)	Approx. Shipping Weight (Lbs.)
2 Pass	4 Pass	2 Pass				4 Pass				2 & 4 Pass												
		V	Z	P	U	V	Z	N	T	A	C	D	E	F	G	J	L	R	S	Y		
20208HTF	20408HTF	23 ½	15 %	32 ½	6F	23 ½	14 %	16 ¼	4F	20	30 ½	13	34 ¾	18	18	1 ¾	48 ¾	10F	12 ¾	12	223.6	1251
20210HTF	20410HTF	23 ½	15 %	32 ½	6F	23 ½	14 %	16 ¼	4F	20	30 ½	13	46 ¾	18	18	1 ¾	60 ¾	10F	12 ¾	12	283.3	1411
20212HTF	20412HTF	23 ½	15 %	32 ½	6F	23 ½	14 %	16 ¼	4F	20	30 ½	13	58 ¾	18	18	1 ¾	72 ¾	10F	12 ¾	12	343.0	1572
20214HTF	20414HTF	23 ½	15 %	32 ½	6F	23 ½	14 %	16 ¼	4F	20	30 ½	13	70 ¾	18	18	1 ¾	84 ¾	10F	12 ¾	12	402.7	1731
20216HTF	20416HTF	23 ½	15 %	32 ½	6F	23 ½	14 %	16 ¼	4F	20	30 ½	13	82 ¾	18	18	1 ¾	96 ¾	10F	12 ¾	12	462.4	1892
20218HTF	20418HTF	23 ½	15 %	32 ½	6F	23 ½	14 %	16 ¼	4F	20	30 ½	13	94 ¾	18	18	1 ¾	108 ¾	10F	12 ¾	12	522.2	2066
20220HTF	20420HTF	23 ½	15 %	32 ½	6F	23 ½	14 %	16 ¼	4F	20	30 ½	13	106 ¾	18	18	1 ¾	120 ¾	10F	12 ¾	12	581.9	2227

Dimensional Data

Sizing and Selection

Computerized selections are available on our web selection tool at <https://apps.tacocomfort.com/>

Following data is required:

1. Flow in tubes (GPM).
2. Entering liquid temperature in tubes (°F).
3. Leaving liquid temperature in tubes (°F).
4. Flow in shell (GPM).
5. Entering liquid temperature in shell (°F).
6. Leaving liquid temperature in shell (°F).
7. Fouling factors.

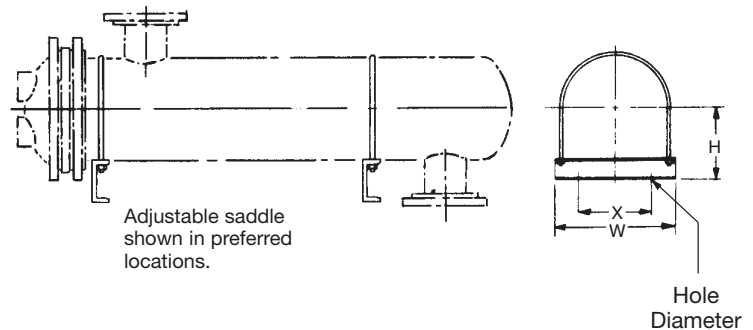
If using fluid not available in the selection tool please contact your local Taco Representative.

<https://www.tacocomfort.com/rep-locator/>

Taco's Product Selection Tools include Expansion Tank Sizing, Air/Dirt Separators, Buffer Tanks, Multi-Purpose Tanks, Shell and Tube Heat Exchangers, and Braze Plate Heat Exchangers which can be found at <https://apps.tacocomfort.com/>. For Plate and Frame Selections please contact your local Taco Representative.

Typical Saddle Dimensions (Optional)

Unit Size	Dimensions (inches)			
	H	W	X	Hole Dia.
4	5 ¼	6 15/16	5 ½	5/8
6	6 5/16	9 ¼	7 ½	5/8
8	7 5/16	11 ¼	9	5/8
10	8 3/8	13 5/8	10	5/8
12	9 3/8	15 3/8	11	5/8
14	10	17	12	¾
16	12	19	13	¾
18	13	21	14	¾
20	14	23	14	¾
22	17	25	18	¾
24	18	27	19	¾
26	19	30	20	¾
30	21	33	22	¾



Note: Two adjustable U-bolt type saddles furnished when specified only.

7.

Notes

[illegible]



Taco Inc., 1160 Cranston Street, Cranston, RI 02920 / (401) 942-8000
Taco (Canada) Ltd., 8450 Lawson Road, Unit #3, Milton, Ontario L9T 0J8 / (905) 564-9422