



# Thermal Leverage

COMMERCIAL & INDUSTRIAL  
**HEAT EXCHANGERS**



*When you have  
**Leverage**  
use it!*

[www.thermalleverage.com](http://www.thermalleverage.com)  
[info@thermalleverage.com](mailto:info@thermalleverage.com)

# SHELL & TUBE HEAT EXCHANGERS



- SW & WW Type Shell and Tube heat exchangers are engineered, designed and built in accordance with TEMA, ASME & ANSI Standards.
- Standard sizes are 4" -24" in Diameter
- Available in all TEMA Designs: A, B, E, F, K, L, M, N, S, T, U, W
- Available in tube sizes of 1/2", 5/8", 3/4", 1", 1-1/4"
- Heat Exchangers are designed up to 600 PSIG. Max, 500F Max.
- Available in 2 or 4 Pass Construction.

## STANDARD CONFIGURATIONS

TYPE	HEAD CONFIGURATION	TYPE	TUBE BUNDLE CONFIGURATION
A MARINE TYPE		U-TUBE	
B BONNET TYPE		STRAIGHT TUBE	
FLAT		DOUBLE WALL	

# SHELL & TUBE HEAT EXCHANGER MAJOR COMPONENT DESCRIPTION

## ① TUBE BUNDLE

Seamless Copper Tubes  
Yields High Thermal  
Conductivity Between  
Process Flow Media.

## ② SHELL

Standard Schedule ERW Pipe  
Shell With Zinc Rich Primer  
For Extended Service Life.

## ③ BAFFLES

Laser Cut TEMA Fit To  
Guarantee Proper Flow and  
Maximize Thermal  
Performance

## ④ SUPPORT

Saddles Welded Or Loose  
With Stock Units For Fast  
Installation.

## ⑤ FLAT / BONNET HEAD

Standard Cast Iron Or  
Steel Head For Welded  
Compact Installation

## ⑥ GASKETS

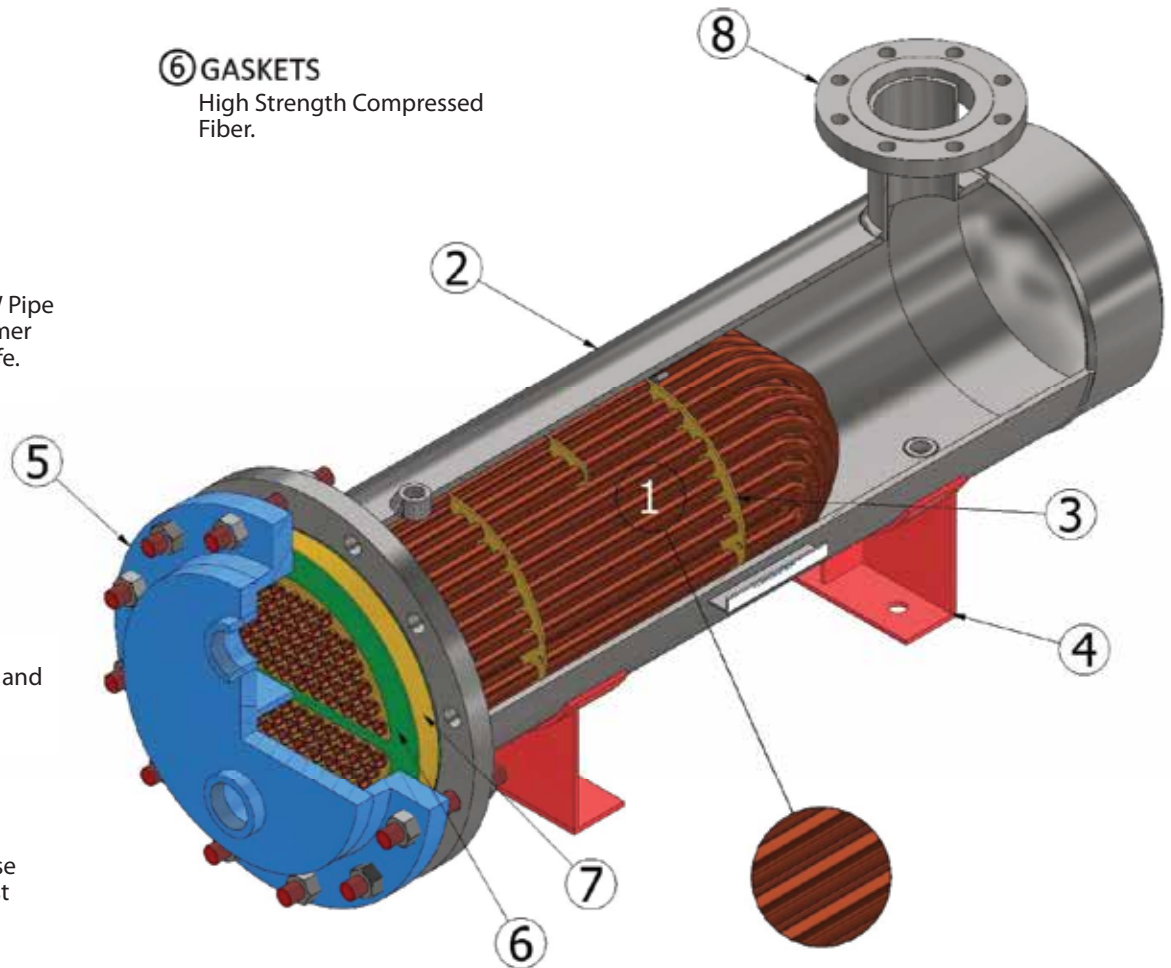
High Strength Compressed  
Fiber.

## ⑦ TUBESHEET

CNC Precision Drilled &  
Reamed To TEMA  
Specifications.

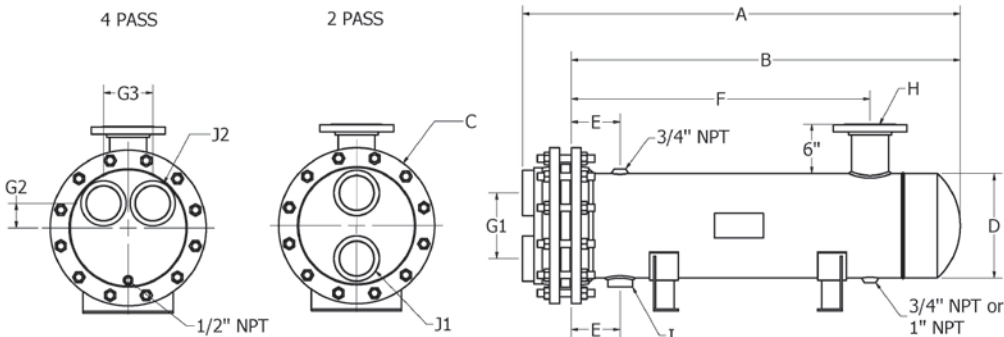
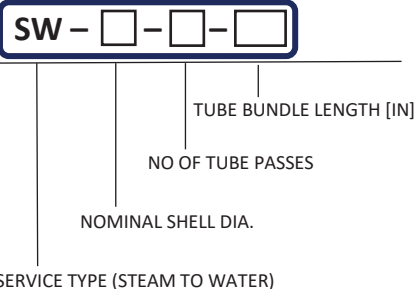
## ⑧ CONNECTIONS

ANSI Sizes For Quick  
Assembly.



# 4"-12" STEAM TO WATER TYPE HEAT EXCHANGER

## MODEL NUMBER KEY



Model Number		Dimensions [in.]									Connection Details				Htg. Surf	Weight Approx
2 Pass	4 Pass	A	B	C	D	E	F	G1	G2	G3	H	I	J1	J2	[Sq.ft]	Lbs
<b>4 inch</b>																
SW-4-2-24	SW-4-4-24	27 3/8	24 1/2	9	4 1/2	6	18	2 1/2	7/8	2 3/8	1 1/4" NPT	1" NPT	1" NPT	3/4" NPT	5	56
SW-4-2-36	SW-4-4-36	39 3/8	36 1/2	9	4 1/2	6	30	2 1/2	7/8	2 3/8	1 1/4" NPT	1" NPT	1" NPT	3/4" NPT	7	70
SW-4-2-48	SW-4-4-48	51 3/8	48 1/2	9	4 1/2	6	42	2 1/2	7/8	2 3/8	1 1/4" NPT	1" NPT	1" NPT	3/4" NPT	9	84
SW-4-2-60	SW-4-4-60	63 3/8	60 1/2	9	4 1/2	6	54	2 1/2	7/8	2 3/8	1 1/4" NPT	1" NPT	1" NPT	3/4" NPT	12	98
SW-4-2-72	SW-4-4-72	75 3/8	72 1/2	9	4 1/2	6	66	2 1/2	7/8	2 3/8	1 1/4" NPT	1" NPT	1" NPT	3/4" NPT	14	112
SW-4-2-84	SW-4-4-84	87 3/8	84 1/2	9	4 1/2	6	78	2 1/2	7/8	2 3/8	2" NPT	1" NPT	1" NPT	3/4" NPT	16	126
<b>6 inch</b>																
SW-6-2-24	SW-6-4-24	28 7/16	25	11	6 5/8	6	18	3	1 1/4	3 3/4	1 1/2" NPT	1" NPT	2" NPT	1 1/2 NPT	8	70
SW-6-2-36	SW-6-4-36	40 7/16	37	11	6 5/8	6	30	3	1 1/4	3 3/4	2" NPT	1" NPT	2" NPT	1 1/2 NPT	12	95
SW-6-2-48	SW-6-4-48	51 7/16	49	11	6 5/8	6	42	3	1 1/4	3 3/4	2 1/2" NPT	1" NPT	2" NPT	1 1/2 NPT	17	120
SW-6-2-60	SW-6-4-60	64 7/16	61	11	6 5/8	6	54	3	1 1/4	3 3/4	2 1/2" NPT	1" NPT	2" NPT	1 1/2 NPT	22	145
SW-6-2-72	SW-6-4-72	76 7/16	73	11	6 5/8	6	66	3	1 1/4	3 3/4	2 1/2" NPT	1" NPT	2" NPT	1 1/2 NPT	27	170
SW-6-2-84	SW-6-4-84	88 7/16	85	11	6 5/8	6	78	3	1 1/4	3 3/4	3" NPT	1" NPT	2" NPT	1 1/2 NPT	32	195
SW-6-2-96	SW-6-4-96	100 7/16	97	11	6 5/8	6	90	3	1 1/4	3 3/4	3" NPT	1" NPT	2" NPT	1 1/2 NPT	36	220
<b>8 inch</b>																
SW-8-2-24	SW-8-4-24	28 1/4	24	13 1/2	8 5/8	6	18	5	2	4	2" NPT	1" NPT	3" NPT	2" NPT	15	115
SW-8-2-36	SW-8-4-36	40 1/4	36	13 1/2	8 5/8	6	30	5	2	4	2 1/2" NPT	1" NPT	3" NPT	2" NPT	24	150
SW-8-2-48	SW-8-4-48	52 1/4	48	13 1/2	8 5/8	6	42	5	2	4	3" NPT	1" NPT	3" NPT	2" NPT	33	186
SW-8-2-60	SW-8-4-60	64 1/4	60	13 1/2	8 5/8	6	54	5	2	4	3" NPT	1" NPT	3" NPT	2" NPT	41	218
SW-8-2-72	SW-8-4-72	76 1/4	72	13 1/2	8 5/8	6	66	5	2	4	4" NPT	1" NPT	3" NPT	2" NPT	50	260
SW-8-2-84	SW-8-4-84	88 1/4	84	13 1/2	8 5/8	6	78	5	2	4	4" NPT	1 1/4" NPT	3" NPT	2" NPT	58	294
SW-8-2-96	SW-8-4-96	100 1/4	96	13 1/2	8 5/8	6	90	5	2	4	4" NPT	1 1/4" NPT	3" NPT	2" NPT	67	330
<b>10 inch</b>																
SW-10-2-24	SW-10-4-24	28 7/8	24	16	10 3/4	6	17	6 1/4	2 1/4	5 1/2	4" Flange	1" NPT	3" NPT	3" NPT	27	190
SW-10-2-36	SW-10-4-36	40 7/8	36	16	10 3/4	6	29	6 1/4	2 1/4	5 1/2	4" Flange	1" NPT	4" NPT	3" NPT	43	232
SW-10-2-48	SW-10-4-48	52 7/8	48	16	10 3/4	6	41	6 1/4	2 1/4	5 1/2	4" Flange	1 1/4" NPT	4" NPT	3" NPT	57	280
SW-10-2-60	SW-10-4-60	64 7/8	60	16	10 3/4	6	53	6 1/4	2 1/4	5 1/2	6" Flange	1 1/4" NPT	4" NPT	3" NPT	72	325
SW-10-2-72	SW-10-4-72	76 7/8	72	16	10 3/4	6	65	6 1/4	2 1/4	5 1/2	6" Flange	1 1/2" NPT	4" NPT	3" NPT	86	368
SW-10-2-84	SW-10-4-84	88 7/8	84	16	10 3/4	6	77	6 1/4	2 1/4	5 1/2	6" Flange	1 1/2" NPT	4" NPT	3" NPT	102	416
SW-10-2-96	SW-10-4-96	100 7/8	96	16	10 3/4	6	89	6 1/4	2 1/4	5 1/2	6" Flange	2" NPT	4" NPT	3" NPT	116	465
<b>12 inch</b>																
SW-12-2-36	SW-12-4-36	65 3/4	60 1/4	19	12 3/4	8	53	8	3	6	6" Flange	1 1/2" NPT	4" NPT	4" NPT	106	435
SW-12-2-48	SW-12-4-48	77 3/4	72 1/4	19	12 3/4	8	65	8	3	6	6" Flange	2" NPT	4" NPT	4" NPT	126	505
SW-12-2-60	SW-12-4-60	89 3/4	84 1/4	19	12 3/4	8	77	8	3	6	8" Flange	2" NPT	4" NPT	4" NPT	147	575
SW-12-2-72	SW-12-4-72	101 3/4	96 1/4	19	12 3/4	8	89	8	3	6	8" Flange	2 1/2" NPT	4" NPT	4" NPT	170	640
SW-12-2-84	SW-12-4-84	113 3/4	108 1/4	19	12 3/4	8	101	8	3	6	8" Flange	2 1/2" NPT	4" NPT	4" NPT	192	708
SW-12-2-96	SW-12-4-96	125 3/4	120 1/4	19	12 3/4	8	113	8	3	6	8" Flange	2 1/2" NPT	4" NPT	4" NPT	214	773
SW-12-2-108	SW-12-4-108	137 3/4	132 1/4	19	12 3/4	8	125	8	3	6	8" Flange	2 1/2" NPT	4" NPT	4" NPT	237	839
SW-12-2-120	SW-12-4-120	149 3/4	144 1/4	19	12 3/4	8	138	8	3	6	8" Flange	2 1/2" NPT	4" NPT	4" NPT	260	906

# 14"-24" STEAM TO WATER TYPE HEAT EXCHANGER

## MODEL NUMBER KEY

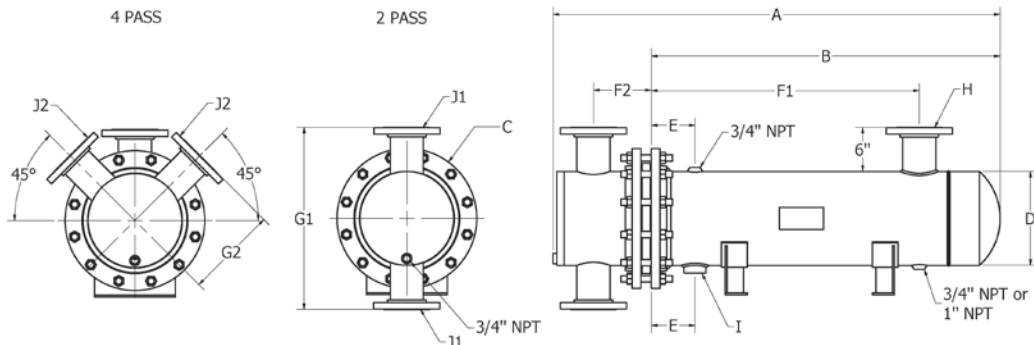
SW - [ ] - [ ] - [ ]

TUBE BUNDLE LENGTH [IN]

NO OF TUBE PASSES

NOMINAL SHELL DIA.

SERVICE TYPE (STEAM TO WATER)



Model Number		Dimensions [in.]									Connection Details				Htg. Surf	Weight Approx
2 Pass	4 Pass	A	B	C	D	E	F1	F2	G1	G2	H	I	J1	J2	[Sq.ft]	Lbs
<b>14 inch</b>																
SW-14-2-36	SW-14-4-36	65 7/8	49 1/4	21	14	10	40 1/2	11 5/8	26	13	6" Flange	2" NPT	6" Flange	4" Flange	116	534
SW-14-2-48	SW-14-4-48	77 7/8	61 1/4	21	14	10	52 1/2	11 5/8	26	13	6" Flange	2" NPT	6" Flange	4" Flange	146	619
SW-14-2-60	SW-14-4-60	89 7/8	73 1/4	21	14	10	64 1/2	11 5/8	26	13	8" Flange	2" NPT	6" Flange	4" Flange	175	701
SW-14-2-72	SW-14-4-72	101 7/8	85 1/4	21	14	10	76	11 5/8	26	13	8" Flange	2 1/2" NPT	6" Flange	4" Flange	204	789
SW-14-2-84	SW-14-4-84	113 7/8	97 1/4	21	14	10	88	11 5/8	26	13	8" Flange	2 1/2" NPT	6" Flange	4" Flange	234	874
SW-14-2-96	SW-14-4-96	125 7/8	109 1/4	21	14	10	100	11 5/8	26	13	10" Flange	2 1/2" NPT	6" Flange	4" Flange	263	959
SW-14-2-108	SW-14-4-108	137 7/8	121 1/4	21	14	10	112	11 5/8	26	13	10" Flange	2 1/2" NPT	6" Flange	4" Flange	294	1044
<b>16 inch</b>																
SW-16-2-36	SW-16-4-36	66 3/8	49	23 1/2	16	11	40	12 1/8	28 1/2	14 1/4	6" Flange	2" NPT	6" Flange	4" Flange	150	675
SW-16-2-48	SW-16-4-48	78 3/8	61	23 1/2	16	11	52	12 1/8	28 1/2	14 1/4	8" Flange	2 1/2" NPT	6" Flange	4" Flange	188	780
SW-16-2-60	SW-16-4-60	90 3/8	73	23 1/2	16	11	64	12 1/8	28 1/2	14 1/4	8" Flange	2 1/2" NPT	6" Flange	4" Flange	227	885
SW-16-2-72	SW-16-4-72	102 3/8	85	23 1/2	16	11	76	12 1/8	28 1/2	14 1/4	10" Flange	2 1/2" NPT	6" Flange	4" Flange	265	990
SW-16-2-84	SW-16-4-84	114 3/8	97	23 1/2	16	11	87 1/2	12 1/8	28 1/2	14 1/4	10" Flange	3" NPT	6" Flange	4" Flange	304	1095
SW-16-2-96	SW-16-4-96	126 3/8	109	23 1/2	16	11	99 1/2	12 1/8	28 1/2	14 1/4	10" Flange	3" NPT	6" Flange	4" Flange	342	1200
SW-16-2-108	SW-16-4-108	138 3/8	121	23 1/2	16	11	111 1/2	12 1/8	28 1/2	14 1/4	10" Flange	3" NPT	6" Flange	4" Flange	381	1305
<b>18 inch</b>																
SW-18-2-36	SW-18-4-36	66 1/2	48 1/2	25	18	13	39 1/2	12 5/8	30	15	8" Flange	2" NPT	6" Flange	4" Flange	195	836
SW-18-2-48	SW-18-4-48	78 1/2	60 1/2	25	18	13	51	12 5/8	30	15	8" Flange	2 1/2" NPT	6" Flange	4" Flange	242	960
SW-18-2-60	SW-18-4-60	90 1/2	72 1/2	25	18	13	62 1/2	12 5/8	30	15	10" Flange	3" NPT	6" Flange	4" Flange	290	1084
SW-18-2-72	SW-18-4-72	102 1/2	84 1/2	25	18	13	74 1/2	12 5/8	30	15	10" Flange	3" NPT	6" Flange	4" Flange	339	1208
SW-18-2-84	SW-18-4-84	114 1/2	96 1/2	25	18	13	86 1/2	12 5/8	30	15	10" Flange	3" NPT	6" Flange	4" Flange	387	1332
SW-18-2-96	SW-18-4-96	126 1/2	108 1/2	25	18	13	98 1/2	12 5/8	30	15	12" Flange	3" NPT	6" Flange	4" Flange	435	1456
SW-18-2-108	SW-18-4-108	138 1/2	120 1/2	25	18	13	96 1/2	12 5/8	30	15	12" Flange	3" NPT	6" Flange	4" Flange	485	1585
<b>20 inch</b>																
SW-20-2-36	SW-20-4-36	68 3/8	48 3/4	27 1/2	20	13	39 1/2	14 1/8	36 1/2	16 1/4	8" Flange	2 1/2" NPT	8" Flange	6" Flange	259	1158
SW-20-2-48	SW-20-4-48	80 3/8	60 3/4	27 1/2	20	13	50 1/2	14 1/8	36 1/2	16 1/4	10" Flange	3" NPT	8" Flange	6" Flange	324	1315
SW-20-2-60	SW-20-4-60	92 3/8	72 3/4	27 1/2	20	13	62 1/2	14 1/8	36 1/2	16 1/4	10" Flange	3" NPT	8" Flange	6" Flange	388	1472
SW-20-2-72	SW-20-4-72	104 3/8	84 3/4	27 1/2	20	13	74 1/2	14 1/8	36 1/2	16 1/4	12" Flange	3" NPT	8" Flange	6" Flange	453	1629
SW-20-2-84	SW-20-4-84	116 3/8	96 3/4	27 1/2	20	13	86 1/2	14 1/8	36 1/2	16 1/4	12" Flange	4" Flange	8" Flange	6" Flange	517	1785
SW-20-2-96	SW-20-4-96	128 3/8	108 3/4	27 1/2	20	13	98 1/2	14 1/8	36 1/2	16 1/4	12" Flange	4" Flange	8" Flange	6" Flange	582	1943
SW-20-2-108	SW-20-4-108	140 3/8	120 3/4	27 1/2	20	13	110 1/2	14 1/8	36 1/2	16 1/4	12" Flange	4" Flange	8" Flange	6" Flange	648	2100
<b>24 inch</b>																
SW-24-2-48	SW-24-4-48	87 5/8	62	32	24	14	49	17 7/8	37 1/2	18 1/2	12" Flange	4" Flange	10" Flange	8" Flange	394	1580
SW-24-2-60	SW-24-4-60	99 5/8	74	32	24	14	61	17 7/8	37 1/2	18 1/2	12" Flange	4" Flange	10" Flange	8" Flange	490	1764
SW-24-2-72	SW-24-4-72	111 5/8	86	32	24	14	73	17 7/8	37 1/2	18 1/2	12" Flange	4" Flange	10" Flange	8" Flange	586	1948
SW-24-2-84	SW-24-4-84	123 5/8	98	32	24	14	85	17 7/8	37 1/2	18 1/2	16" Flange	4" Flange	10" Flange	8" Flange	681	2132
SW-24-2-96	SW-24-4-96	135 5/8	110	32	24	14	97	17 7/8	37 1/2	18 1/2	16" Flange	5" Flange	10" Flange	8" Flange	777	2316
SW-24-2-108	SW-24-4-108	147 5/8	122	32	24	14	109	17 7/8	37 1/2	18 1/2	16" Flange	5" Flange	10" Flange	8" Flange	873	2500
SW-24-2-120	SW-24-4-120	159 5/8	134	32	24	14	121	17 7/8	37 1/2	18 1/2	16" Flange	5" Flange	10" Flange	8" Flange	969	2685

# 4"-12" WATER TO WATER TYPE HEAT EXCHANGER

## MODEL NUMBER KEY

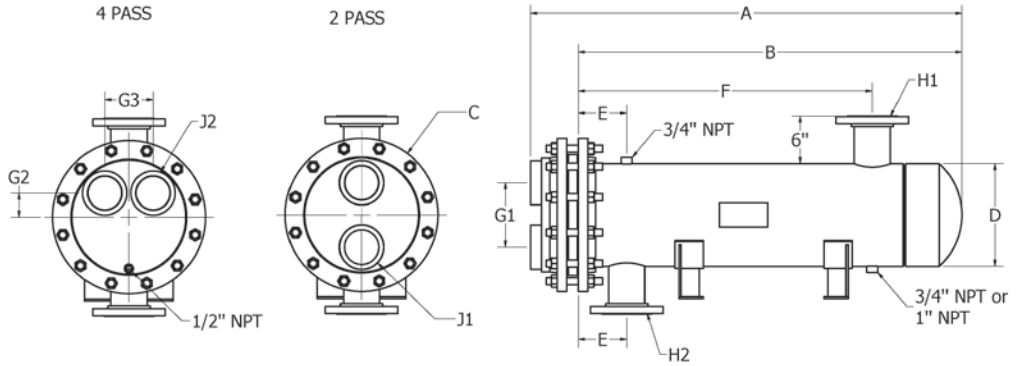
WW - [ ] - [ ] - [ ]

TUBE BUNDLE LENGTH [IN]

NO OF TUBE PASSES

NOMINAL SHELL DIA.

SERVICE TYPE (WATER TO WATER)



Model Number		Dimensions [in.]									Connection Details				Htg. Surf	Weight Approx
2 Pass	4 Pass	A	B	C	D	E	F	G1	G2	G3	H1	H2	J1	J2	[Sq.ft]	Lbs
<b>4 inch</b>																
WW-4-2-24	WW-4-4-24	27 3/8	24 1/2	9	4 1/2	6	18	2 1/2	7/8	2 3/8	2 1/2" NPT	2 1/2" NPT	1 1/4" NPT	1" NPT	5	56
WW-4-2-36	WW-4-4-36	39 3/8	36 1/2	9	4 1/2	6	30	2 1/2	7/8	2 3/8	2 1/2" NPT	2 1/2" NPT	1 1/4" NPT	1" NPT	7	70
WW-4-2-48	WW-4-4-48	51 3/8	48 1/2	9	4 1/2	6	42	2 1/2	7/8	2 3/8	2 1/2" NPT	2 1/2" NPT	1 1/4" NPT	1" NPT	9	84
WW-4-2-60	WW-4-4-60	63 3/8	60 1/2	9	4 1/2	6	54	2 1/2	7/8	2 3/8	2 1/2" NPT	2 1/2" NPT	1 1/4" NPT	1" NPT	12	98
WW-4-2-72	WW-4-4-72	75 3/8	72 1/2	9	4 1/2	6	66	2 1/2	7/8	2 3/8	2 1/2" NPT	2 1/2" NPT	1 1/4" NPT	1" NPT	14	112
WW-4-2-84	WW-4-4-84	87 3/8	84 1/2	9	4 1/2	6	78	2 1/2	7/8	2 3/8	2 1/2" NPT	2 1/2" NPT	1 1/4" NPT	1" NPT	16	126
<b>6 inch</b>																
WW-6-2-24	WW-6-4-24	28 7/16	25	11	6 5/8	6	18	4	1 1/4	3 3/4	2 1/2" NPT	2 1/2" NPT	2" NPT	1 1/2 NPT	8	70
WW-6-2-36	WW-6-4-36	40 7/16	37	11	6 5/8	6	30	4	1 1/4	3 3/4	2 1/2" NPT	2 1/2" NPT	2" NPT	1 1/2 NPT	12	95
WW-6-2-48	WW-6-4-48	51 7/16	49	11	6 5/8	6	42	4	1 1/4	3 3/4	2 1/2" NPT	2 1/2" NPT	2" NPT	1 1/2 NPT	17	120
WW-6-2-60	WW-6-4-60	64 7/16	61	11	6 5/8	6	54	4	1 1/4	3 3/4	2 1/2" NPT	2 1/2" NPT	2" NPT	1 1/2 NPT	22	145
WW-6-2-72	WW-6-4-72	76 7/16	73	11	6 5/8	6	66	4	1 1/4	3 3/4	2 1/2" NPT	2 1/2" NPT	2" NPT	1 1/2 NPT	27	170
WW-6-2-84	WW-6-4-84	88 7/16	85	11	6 5/8	6	78	4	1 1/4	3 3/4	2 1/2" NPT	2 1/2" NPT	2" NPT	1 1/2 NPT	32	195
WW-6-2-96	WW-6-4-96	100 7/16	97	11	6 5/8	6	90	4	1 1/4	3 3/4	2 1/2" NPT	2 1/2" NPT	2" NPT	1 1/2 NPT	36	220
<b>8 inch</b>																
WW-8-2-24	WW-8-4-24	28 1/4	24	13 1/2	8 5/8	6	18	5	2	4	4" Flange	4" Flange	3" NPT	2" NPT	15	115
WW-8-2-36	WW-8-4-36	40 1/4	36	13 1/2	8 5/8	6	30	5	2	4	4" Flange	4" Flange	3" NPT	2" NPT	24	150
WW-8-2-48	WW-8-4-48	52 1/4	48	13 1/2	8 5/8	6	42	5	2	4	4" Flange	4" Flange	3" NPT	2" NPT	33	186
WW-8-2-60	WW-8-4-60	64 1/4	60	13 1/2	8 5/8	6	54	5	2	4	4" Flange	4" Flange	3" NPT	2" NPT	41	218
WW-8-2-72	WW-8-4-72	76 1/4	72	13 1/2	8 5/8	6	66	5	2	4	4" Flange	4" Flange	3" NPT	2" NPT	50	260
WW-8-2-84	WW-8-4-84	88 1/4	84	13 1/2	8 5/8	6	78	5	2	4	4" Flange	4" Flange	3" NPT	2" NPT	58	294
WW-8-2-96	WW-8-4-96	100 1/4	96	13 1/2	8 5/8	6	90	5	2	4	4" Flange	4" Flange	3" NPT	2" NPT	67	330
<b>10 inch</b>																
WW-10-2-24	WW-10-4-24	28 7/8	24	16	10 3/4	6	17	6 1/4	2 1/4	5 1/2	4" Flange	4" Flange	3" NPT	3" NPT	27	190
WW-10-2-36	WW-10-4-36	40 7/8	36	16	10 3/4	6	29	6 1/4	2 1/4	5 1/2	4" Flange	4" Flange	4" NPT	3" NPT	43	232
WW-10-2-48	WW-10-4-48	52 7/8	48	16	10 3/4	6	41	6 1/4	2 1/4	5 1/2	4" Flange	4" Flange	4" NPT	3" NPT	57	280
WW-10-2-60	WW-10-4-60	64 7/8	60	16	10 3/4	6	53	6 1/4	2 1/4	5 1/2	4" Flange	4" Flange	4" NPT	3" NPT	72	325
WW-10-2-72	WW-10-4-72	76 7/8	72	16	10 3/4	6	65	6 1/4	2 1/4	5 1/2	4" Flange	4" Flange	4" NPT	3" NPT	86	368
WW-10-2-84	WW-10-4-84	88 7/8	84	16	10 3/4	6	77	6 1/4	2 1/4	5 1/2	4" Flange	4" Flange	4" NPT	3" NPT	102	416
WW-10-2-96	WW-10-4-96	100 7/8	96	16	10 3/4	6	89	6 1/4	2 1/4	5 1/2	4" Flange	4" Flange	4" NPT	3" NPT	116	465
<b>12 inch</b>																
WW-12-2-36	WW-12-4-36	65 3/4	60 1/4	19	12 3/4	8	53	8	3	6	6" Flange	6" Flange	4" NPT	4" NPT	71	435
WW-12-2-48	WW-12-4-48	77 3/4	72 1/4	19	12 3/4	8	65	8	3	6	6" Flange	6" Flange	4" NPT	4" NPT	83	505
WW-12-2-60	WW-12-4-60	89 3/4	84 1/4	19	12 3/4	8	77	8	3	6	8" Flange	8" Flange	4" NPT	4" NPT	104	575
WW-12-2-72	WW-12-4-72	101 3/4	96 1/4	19	12 3/4	8	89	8	3	6	8" Flange	8" Flange	4" NPT	4" NPT	126	640
WW-12-2-84	WW-12-4-84	113 3/4	108 1/4	19	12 3/4	8	101	8	3	6	8" Flange	8" Flange	4" NPT	4" NPT	148	708
WW-12-2-96	WW-12-4-96	125 3/4	120 1/4	19	12 3/4	8	113	8	3	6	8" Flange	8" Flange	4" NPT	4" NPT	169	773
WW-12-2-108	WW-12-4-108	137 3/4	132 1/4	19	12 3/4	8	125	8	3	6	8" Flange	8" Flange	4" NPT	4" NPT	191	839
WW-12-2-120	WW-12-4-120	149 3/4	144 1/4	19	12 3/4	8	138	8	3	6	8" Flange	8" Flange	4" NPT	4" NPT	212	906

# 14"-24" WATER TO WATER TYPE HEAT EXCHANGER

## MODEL NUMBER KEY

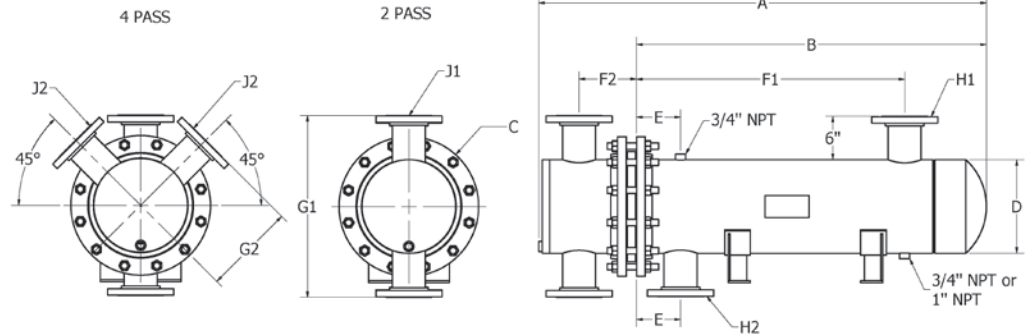
WW - [ ] - [ ] - [ ]

TUBE BUNDLE LENGTH [IN]

NO OF TUBE PASSES

NOMINAL SHELL DIA.

SERVICE TYPE (WATER TO WATER)



Model Number		Dimensions [in.]									Connection Details				Htg. Surf	Weight Approx
2 Pass	4 Pass	A	B	C	D	E	F1	F2	G1	G2	H1	H2	J1	J2	[Sq.ft]	Lbs
<b>14 inch</b>																
WW-14-2-36	WW-14-4-36	65 7/8	49 1/4	21	14	10	40 1/2	11 5/8	26	13	4" Flange	4" Flange	4" Flange	3" Flange	88	534
WW-14-2-48	WW-14-4-48	77 7/8	61 1/4	21	14	10	52 1/2	11 5/8	26	13	4" Flange	4" Flange	4" Flange	3" Flange	116	619
WW-14-2-60	WW-14-4-60	89 7/8	73 1/4	21	14	10	64 1/2	11 5/8	26	13	4" Flange	4" Flange	4" Flange	3" Flange	146	701
WW-14-2-72	WW-14-4-72	101 7/8	85 1/4	21	14	10	76	11 5/8	26	13	4" Flange	4" Flange	4" Flange	3" Flange	175	789
WW-14-2-84	WW-14-4-84	113 7/8	97 1/4	21	14	10	88	11 5/8	26	13	4" Flange	4" Flange	4" Flange	3" Flange	204	874
WW-14-2-96	WW-14-4-96	125 7/8	109 1/4	21	14	10	100	11 5/8	26	13	4" Flange	4" Flange	4" Flange	3" Flange	234	959
WW-14-2-108	WW-14-4-108	137 7/8	121 1/4	21	14	10	112	11 5/8	26	13	4" Flange	4" Flange	4" Flange	3" Flange	263	1044
<b>16 inch</b>																
WW-16-2-36	WW-16-4-36	66 3/8	49	23 1/2	16	11	40	12 1/8	28 1/2	14 1/4	6" Flange	6" Flange	6" Flange	4" Flange	115	675
WW-16-2-48	WW-16-4-48	78 3/8	61	23 1/2	16	11	52	12 1/8	28 1/2	14 1/4	6" Flange	6" Flange	6" Flange	4" Flange	150	780
WW-16-2-60	WW-16-4-60	90 3/8	73	23 1/2	16	11	64	12 1/8	28 1/2	14 1/4	6" Flange	6" Flange	6" Flange	4" Flange	188	885
WW-16-2-72	WW-16-4-72	102 3/8	85	23 1/2	16	11	76	12 1/8	28 1/2	14 1/4	6" Flange	6" Flange	6" Flange	4" Flange	227	990
WW-16-2-84	WW-16-4-84	114 3/8	97	23 1/2	16	11	87 1/2	12 1/8	28 1/2	14 1/4	6" Flange	6" Flange	6" Flange	4" Flange	265	1095
WW-16-2-96	WW-16-4-96	126 3/8	109	23 1/2	16	11	99 1/2	12 1/8	28 1/2	14 1/4	6" Flange	6" Flange	6" Flange	4" Flange	304	1200
WW-16-2-108	WW-16-4-108	138 3/8	121	23 1/2	16	11	111 1/2	12 1/8	28 1/2	14 1/4	6" Flange	6" Flange	6" Flange	4" Flange	342	1305
<b>18 inch</b>																
WW-18-2-36	WW-18-4-36	66 1/2	48 1/2	25	18	13	39 1/2	12 5/8	30	15	8" Flange	8" Flange	6" Flange	4" Flange	150	836
WW-18-2-48	WW-18-4-48	78 1/2	60 1/2	25	18	13	51	12 5/8	30	15	8" Flange	8" Flange	6" Flange	4" Flange	195	960
WW-18-2-60	WW-18-4-60	90 1/2	72 1/2	25	18	13	62 1/2	12 5/8	30	15	8" Flange	8" Flange	6" Flange	4" Flange	242	1084
WW-18-2-72	WW-18-4-72	102 1/2	84 1/2	25	18	13	74 1/2	12 5/8	30	15	8" Flange	8" Flange	6" Flange	4" Flange	290	1208
WW-18-2-84	WW-18-4-84	114 1/2	96 1/2	25	18	13	86 1/2	12 5/8	30	15	8" Flange	8" Flange	6" Flange	4" Flange	339	1332
WW-18-2-96	WW-18-4-96	126 1/2	108 1/2	25	18	13	98 1/2	12 5/8	30	15	8" Flange	8" Flange	6" Flange	4" Flange	387	1456
WW-18-2-108	WW-18-4-108	138 1/2	120 1/2	25	18	13	110 1/2	12 5/8	30	15	8" Flange	8" Flange	6" Flange	4" Flange	435	1585
<b>20 inch</b>																
WW-20-2-36	WW-20-4-36	68 3/8	48 3/4	27 1/2	20	13	39 1/2	14 1/8	36 1/2	16 1/4	8" Flange	8" Flange	8" Flange	6" Flange	194	1158
WW-20-2-48	WW-20-4-48	80 3/8	60 3/4	27 1/2	20	13	50 1/2	14 1/8	36 1/2	16 1/4	8" Flange	8" Flange	8" Flange	6" Flange	259	1315
WW-20-2-60	WW-20-4-60	92 3/8	72 3/4	27 1/2	20	13	62 1/2	14 1/8	36 1/2	16 1/4	10" Flange	10" Flange	8" Flange	6" Flange	324	1472
WW-20-2-72	WW-20-4-72	104 3/8	84 3/4	27 1/2	20	13	74 1/2	14 1/8	36 1/2	16 1/4	12" Flange	12" Flange	8" Flange	6" Flange	388	1629
WW-20-2-84	WW-20-4-84	116 3/8	96 3/4	27 1/2	20	13	86 1/2	14 1/8	36 1/2	16 1/4	12" Flange	12" Flange	8" Flange	6" Flange	453	1785
WW-20-2-96	WW-20-4-96	128 3/8	108 3/4	27 1/2	20	13	98 1/2	14 1/8	36 1/2	16 1/4	12" Flange	12" Flange	8" Flange	6" Flange	517	1943
WW-20-2-108	WW-20-4-108	140 3/8	120 3/4	27 1/2	20	13	110 1/2	14 1/8	36 1/2	16 1/4	12" Flange	12" Flange	8" Flange	6" Flange	582	2100
<b>24 inch</b>																
WW-24-2-48	WW-24-4-48	87 5/8	62	32	24	14	49	17 7/8	37 1/2	18 1/2	12" Flange	12" Flange	10" Flange	8" Flange	394	1880
WW-24-2-60	WW-24-4-60	99 5/8	74	32	24	14	61	17 7/8	37 1/2	18 1/2	12" Flange	12" Flange	10" Flange	8" Flange	490	2098
WW-24-2-72	WW-24-4-72	111 5/8	86	32	24	14	73	17 7/8	37 1/2	18 1/2	12" Flange	12" Flange	10" Flange	8" Flange	586	2316
WW-24-2-84	WW-24-4-84	123 5/8	98	32	24	14	85	17 7/8	37 1/2	18 1/2	12" Flange	12" Flange	10" Flange	8" Flange	681	2534
WW-24-2-96	WW-24-4-96	135 5/8	110	32	24	14	97	17 7/8	37 1/2	18 1/2	14" Flange	14" Flange	10" Flange	8" Flange	777	2752
WW-24-2-108	WW-24-4-108	147 5/8	122	32	24	14	109	17 7/8	37 1/2	18 1/2	12" Flange	12" Flange	10" Flange	8" Flange	873	2970
WW-24-2-120	WW-24-4-120	159 5/8	134	32	24	14	121	17 7/8	37 1/2	18 1/2	12" Flange	12" Flange	10" Flange	8" Flange	969	3188

# COMPONENT / CUSTOM DESIGN

Materials of Construction		
Part	Standard	Optional
Shell	Carbon Steel	Stainless Steel (304/316)
Tubes	Copper	SS 304, SS 316, 90/10 Cu Ni, Titanium, Hastelloy
Tubesheet	Carbon Steel	Cu Ni, Brass, SS 304, SS 316, Titanium, Hastelloy
Connections	Carbon Steel	SS 304/316
Head	Cast Iron/Steel	SS 304/316
Gaskets	Compressed Fiber, Spiral Wound, Metal Jacketed	



**PRECISION DRILLED  
TUBESHEETS**



**REPLACEMENT TUBE BUNDLES**

**CONDENSATE COOLERS**



**DOMESTIC WATER  
PRE HEATERS**