





API Heat Transfer ...world leaders in heat transfer technology

Thermal Products, Inc. / Phone: (518) 877-0231 / Email: sales@thermalproducts.com / Website: www.thermalproducts.com



Standard Designs Provide Reliable, Cost Effective Performance and Fast Deliveries.

Supplying the industry with a variety of Shell and Tube Products under the Basco brand for over 60 years, API Heat Transfer offers a complete line of standard low cost U-Tube Heat Exchangers and Tank Immersion Heaters.

Standard Heat Exchanger Designs Deliver Cost Effective Performance

To address the market need for low cost shell & tube heat exchangers designed to handle many basic industrial heating and cooling applications, API Heat Transfer has expanded our product portfolio further with our highly standardized 3/4" U-Tube models.

Our Model BWS (Water-to-Steam) and Model BW (Water-to-Water) Heat Exchangers are shell and tube construction built to ASME code. All units are supplied with a "U" stamp.

These U-Tube models are designed for instantaneous heating or cooling of water or other low viscosity fluids. Both models are available in either 2- or 4-pass designs, with the U-bend tubes roller expanded into the stationary tube sheet. This construction easily allows for thermal expansion and contraction caused by temperature variations.

Features and Benefits

- Rugged steel shells provide for long service life.
- Heavy-duty "U"-bend construction protects unit from inherent forces produced during thermal expansion and contraction.
- 2- and 4-pass designs provide for a wide range of flow rates and pressure drops.
- Constructed in accordance with ASME Code, Section VIII, Division 1.

Typical Applications

- Water Heating with Steam
- Condensate Cooling
- Boiler Feedwater Preheater
- Cooling Tower Trim Cooling
- Glycol Cooling
- Oil Cooling





Materials and Pressures

							Pressure	s-PSI		
					TE	ST		OPERAT	TING	MAX.
UNIT DIAM.	TUBING COPPER	SHELLS	TUBE PLATES	HEADS	TUBES	SHELL	2-PASS	4-PASS	TYPE B 2-PASS ONLY	OPER. TEMP.
4″	3⁄4″	Steel	Steel	Cast Iron	300	225	150	150	150	375° F
6″	3⁄4″	Steel	Steel	Cast Iron	300	225	150	150	150	375° F
8″	3⁄4″	Steel	Steel	Cast Iron	300	225	150	150	150	375° F
10″	3⁄4″	Steel	Steel	Cast Iron	300	225	—	150	150	375° F
10″	3⁄4″	Steel	Steel	Cast Iron	250	225	150*	—	150	375° F
12″	3⁄4″	Steel	Steel	Cast Iron	250	225	150*	150*	150	375° F
14″	3⁄4″	Steel	Steel	Cast Iron	250	225	150*	150*	150	375° F
16″	3⁄4″	Steel	Steel	Cast Iron	250	225	150*	150*	150	375° F
18″	3⁄4″	Steel	Steel	Cast Iron	250	225	150*	150*	150	375° F
20″	3⁄4″	Steel	Steel	Cast Iron	250	225	150*	150*	150	375° F

* Cast heads have 125# flat face

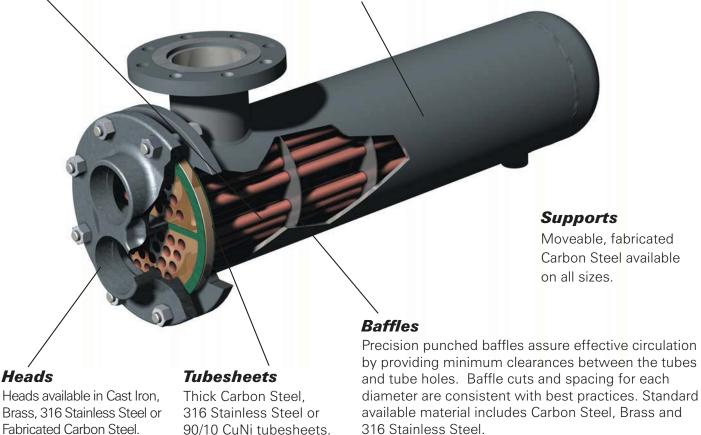
Construction Features

Tubes

Available in Copper, 90/10 CuNi, 316 Stainless Steel, Admiralty or Carbon Steel. Tubes are roller expanded.

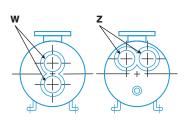
Shells

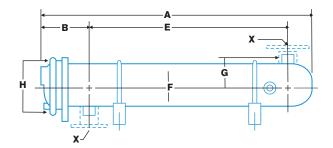
Rugged shell available in Steel and 316 Stainless Steel. Minimum clearances between shell and baffles reduce by-pass and maximize heat transfer.



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Model BW Water-To-Water Heat Exchangers



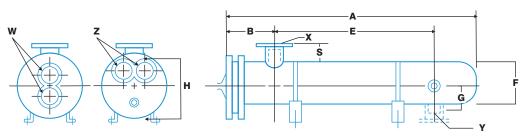


Dimensional Data

Model		2-Pa	2-Pass Standard			4-Pass Standard			2-Pass and 4-Pass					
2-Pass	4-Pass	Α	в	w	Α	в	z	E	F	G	н	x	Wt. (lbs)	
BW-42-22	BW-42-42	28			28			16 1⁄2					60	
43-22	43-42	40	-		40			28 1/2				-	76	
44-24	44-42	52	6 3⁄4	1 ¼ NPT	52	6 3⁄4	1 NPT	40 1/2	4 1/2	3 3⁄4	7 1⁄4	1 1⁄2 NPT	92	
45-22	45-42	64			64			52 ½					108	
46-22	46-42	76	_		76			64 1/2				_	124	
47-22	47-42	88			88			76 1/2					140	
BW-62-23	BW-62-43	28 ³ ⁄ ₄ 40 ³ ⁄ ₄	-		28 ⁵ /8 40 ⁵ /8			16 28				-	115 140	
63-23 64-24	63-43 64-43	40 %4 52 %	-		40 % 52 5/8			40				-	140	
65-23	65-43	64 ³ ⁄4	- 7 %	2 NPT	64 ⁵ /8	7 3⁄4	1½ NPT	52	6 ⁵ /8	4 3/4	10 1⁄2	2 NPT	190	
66-23	66-43	76 3⁄4			76 5/8			64					215	
67-23	67-43	88 3⁄4			88 5/8			76					240	
68-23	68-43	100 3⁄4			100 5⁄8			88					265	
BW-82-24	BW-82-44	30			29 5⁄8			14 1⁄2				_	150	
83-24	83-44	42	_		41 5/8			26 1/2				_	190	
84-24	84-44	54	-		53 5/8			38 1/2				_	230	
85-24	85-44	66	9 1/2	3 NPT	65 5/8	9 1/8	2 NPT	50 1/2	8 5/8	5%	12 1⁄2	3 NPT	270	
86-24	86-44 87-44	78	-		77 5/8			62 ½ 74 ½				-	310	
87-24 88-24	87-44	90 102	-		89 5/8 101 5/8			74 1/2 86 1/2				-	350 390	
89-24	89-44	114	-		113 5/8			98 1/2				-	430	
BW-102-25	BW-102-45	31 1/4			31 1/4			14 1/2					226	
103-25	103-45	43 1/4	-		43 1/4			26 1/2				-	284	
104-25	104-45	55 1/4	-		55 1/4			38 1/2				-	342	
105-25	105-45	67 1⁄4			67 1⁄4			50 ½					400	
106-25	106-45	79 ¼	10 1⁄4	4 NPT	79 ¼	10 1⁄4	3 NPT	62 ½	10 3⁄4	7	14 5⁄8	3 NPT	458	
107-25	107-45	91 ¼	-		91 1⁄4			74 ½					516	
108-25	108-45	103 ¼	_		103 1⁄4			86 1/2				_	574	
109-25	109-45	115 1⁄4	-		115 1/4			98 1/2				_	632	
1010-25	1010-45	127 1/4			127 1/4			110 1/2					690	
BW-123-24 124-24	BW-123-44 124-44	44 ¼ 56 ¼	-		44 ¼ 56 ¼			26 38				-	396 466	
125-24	125-44	68 ¹ /4	-		68 ¹ /4			50				-	536	
126-24	126-44	80 1/4	-		80 1/4			62				-	606	
127-24	127-44	92 1/4	11 3⁄8	4 NPT	92 1/4	11 3⁄8	4 NPT	74	12 3⁄4	10 3⁄4	16 5/8	4 FLG	676	
128-24	128-44	104 1⁄4			104 1/4			86					746	
129-24	129-44	116 1⁄4			116 1⁄4			98					816	
1210-24	1210-44	128 1⁄4			128 ¼			110					886	
BW-144-2	BW-144-44	56 ½	_		55 7⁄8			35				_	648	
145-2	145-44	68 ½	-		67 7/8			47				_	748	
146-2	146-44	80 1/2			79 7/8	7/		59					848	
147-2	147-44	92 1/2	13 1⁄2	6 NPT	91 7/8	127%	4 NPT	71	14	11 1⁄2	17 7⁄8	6 FLG	948	
148-2 149-2	148-44 149-44	104 ½ 116 ½	-		103 7/8 115 7/8			83 95				-	1048	
149-2	1410-44	128 1/2	-		113 78			107				-	1248	
BW-164-24	BW-164-44	57 1/4			56 1/2			34 1/2					812	
165-24	165-44	69 ¹ / ₄	-		68 1/2			46 1/2				-	922	
166-24	166-44	81 1⁄4]		80 1/2	13 ½	4 NPT	58 ½	16	121/2	19 7⁄8	6 FLG	1032	
167-24	167-44	93 1⁄4	14 ¼	6 NPT	92 ½			70 ½					1142	
168-24	168-44	105 ¼			104 1⁄2			82 ½					1252	
169-24	169-44	117 1⁄4	-		116 1/2			94 1⁄2					1362	
1610-24	1610-44	129 ¹ /4			128 1/2			106 1/2					1472	
BW-184-24	BW-184-44	56 ³ ⁄4	-		56 ³ ⁄4			33 ½				-	1000	
185-24 186-24	185-44 186-44	68 ³ ⁄4 80 ³ ⁄4			68 ³ ⁄4 80 ³ ⁄4			45 ½ 57 ½				-	1130 1260	
186-24	186-44 187-44	92 ³ ⁄4	14	6 NPT	92 ³ ⁄4	14	4 NPT	69 ½	18	13 1⁄2	22	6 FLG	1260	
187-24	188-44	92 %4 104 ¾	- 14	UNFI	92 % 104 ¾	14	7 117 1	81 ½	10	10 72	~~	-	1520	
189-24	189-44	116 3/4	-		116 3/4			93 ½				-	1650	
1810-24	1810-44	128 3/4	-		128 3/4			105 1/2				-	1780	
BW-204-24	BW-204-44	58 1/4			57 1/4			30 1/2					1370	
205-24	205-44	70 1⁄4			69 ¼			42 ½					1540	
206-24	206-44	82 1⁄4			81 1⁄4			54 ½					1710	
207-24	207-44	94 1⁄4	17	8 NPT	93 1⁄4	16	6 NPT	66 1/2	20	13	24	8 FLG	1880	
208-24	208-44	106 1⁄4	_		105 1⁄4			78 ½					2050	
209-24	209-44	118 1⁄4	-		117 1/4			90 1/2					2220	
2010-24	2010-44	130 1⁄4		1	129 1⁄4			102 1⁄2					2390	

All dimensions in inches and for reference only.

Model BWS Water-To-Steam Heat Exchangers



Dimensional Data

Мо	dol	2-Das	e Sta	ndard	A-Das	e Sta	ndard			2-Pas	s and	A-Das	e		
2-Pass	4-Pass		B	W	A	В	Z	E	F	G	H	S	x	Y	Wt. (lbs)
		A		•••	A		2			G		N			
BWS-42-2	BWS-42-4	28			28			15 3/4					2 NPT	1 NPT	60
43-2 44-2	43-4	40 52	7 1⁄2	1 ¼ NPT	40 52	7 1⁄2	1 NPT	27 ³ ⁄4 39 ³ ⁄4	4 1/2	3 1/2	7 1/4	3 3/8	2 NPT 2 NPT	1 NPT 1 NPT	76 92
44-2	44-4	64	1 72	1 94 INF I	64	1 72	I INF I	59 %4 51 ¾	4 72	3 72	1 74	3 78	2 1/2 NPT		108
46-2	46-4	76			76			63 3/4					2 1/2 NPT		124
47-2	47-4	88			88			75 ¾					2 1/2 NPT	1 1/4 NPT	140
BWS-62-2	BWS-62-4	28 3⁄4			28 5/8			15					1 1/2 NPT		73
63-2	63-4	40 3⁄4			40 5/8			27					2 NPT		110
64-2	64-4	52 ³ /4	0.5/		52 5/8	0.1/	4.1/ NDT	39	0.5/	45/	10.1/	7.2/	2 1/2 NPT		125
65-2 66-2	65-4 66-4	64 ³ ⁄4 76 ³ ⁄4	8 5/8	2 NPT	64 ⁵ /8 76 ⁵ /8	8 1⁄2	1 1⁄2 NPT	51 63	6 5/8	4 5/8	10 1⁄2	7 3⁄4	2 1/2 NPT 3 NPT	1 NPT	151 175
67-2	67-4	88 3/4			88 5/8			75					3 NPT	-	200
68-2	68-4	100 3/4			100 5/8			87					3 NPT		226
BWS-82-2	BWS-82-4	29 ¾			29			13					2 NPT	1 NPT	116
83-2	83-4	41 3⁄8			41			25					2 1/2 NPT	1 NPT	155
84-2	84-4	53 ¾			53			37					3 NPT	1 NPT	190
85-2	85-4	65 ³ /8	10 5/8	3 NPT	65	10 1⁄4	2 NPT	49	8 5/8	5 5/8	12 ½	8 3/4	4 NPT	1 NPT	225
86-2 87-2	86-4	77 ³ ⁄8 89 ³ ⁄8			77 89			61 73						1 ¼ NPT 1 ¼ NPT	260 295
87-2	87-4	101 3/8			101			85						1 1/4 NPT	330
89-2	89-4	113 3/8			113			97						1 1/4 NPT	365
BWS-102-2	BWS-102-4	30 1/8			30 1/8			12 1/2						1 1/2 NPT	190
103-2	103-4	42 ½			42 1/8			24 ½					4 NPT	1 1⁄2 NPT	236
104-2	104-4	54 ½			54 1⁄8			36 1⁄2					6 NPT	2 NPT	282
105-2	105-4	66 ½			66 ½			48 ½					6 NPT	2 NPT	328
106-2	106-4	78 ½	11 5⁄8	4 NPT	78 1⁄8	11 5⁄8	3 NPT	60 1⁄2	10 3⁄4	6 5/8	14 5⁄8	9 3⁄4	6 NPT	2 NPT	374
107-2	107-4	90 ½			90 1/8			72 1/2					6 NPT	2 NPT	420
108-2	108-4	102 1/8			102 1/8			84 ½ 96 ½					6 NPT 6 NPT	2 NPT 2 NPT	466 512
109-2 1010-2	109-4	114 ¹ /8 126 ¹ /8			114 1/8 126 1/8			108 1/2					6 NPT	2 NPT 2 NPT	558
BWS-123-2	BWS-123-4	42 3/4			42 3/4			22 3/4					6 NPT	2 NPT	302
124-2	124-4	54 3/4			54 3/4			34 3/4					6 NPT	2 NPT	371
125-2	125-4	66 3⁄4			66 3⁄4			46 ³ ⁄ ₄					6 NPT	2 NPT	440
126-2	126-4	78 ¾	13 5⁄8	4 NPT	78 ¾	13 5⁄8	4 NPT	58 ¾	12 ¾	7 3⁄4	16 5⁄8	10 3⁄4	6 NPT	2 NPT	509
127-2	127-4	90 3⁄4			90 3⁄4			70 3⁄4						2 1/2 NPT	578
128-2	128-4	102 3/4			102 3/4			82 3/4						2 1/2 NPT	647
129-2 1210-2	129-4 1210-4	114 3⁄4 126 3⁄4			114 ³ ⁄4 126 ³ ⁄4			94 ³ ⁄4 106 ³ ⁄4						2 1/2 NPT 2 1/2 NPT	716
BWS-143-2	BWS-143-4	43 3/4			43 1/8			22					6 NPT	2 92 NFT	458
144-2	144-4	40 /4 55 ³ /4			55 1/8			34					6 NPT	2 NPT	543
145-2	145-4	67 ³ ⁄4			67 1/8			46						2 1/2 NPT	628
146-2	146-4	79 ¾			79 ½			58					8 NPT	2 1⁄2 NPT	713
147-2	147-4	91 3⁄4	14 ¾	6 NPT	91 ½	14 1⁄8	4 NPT	70	14	8 1⁄2	17 7⁄8	11 1⁄2	·	2 1⁄2 NPT	798
148-2	148-4	103 3/4			103 1/8			82						2 1/2 NPT	883
149-2	149-4	115 3/4			115 1/8			94 106						2 1/2 NPT	968
1410-2 BWS-163-2	1410-4 BW-163-4	127 ¾ 44 ¾			127 1/8 43 5/8			106		9 ½				2 1/2 NPT 2 1/2 NPT	1053 582
164-2	164-4	56 ¾			55 5/8			31 3/4		9 1/2				2 1/2 NPT	692
165-2	165-4	68 ³ /8			67 5/8			43 3/4		9 1/2			,	2 1/2 NPT	802
166-2	166-4	80 3⁄8	17	6 NPT	79 5⁄8	16 1⁄8	4 NPT	55 ¾	16	9 ½	19 7⁄8	12 ½	8 NPT	2 1⁄2 NPT	912
167-2	167-4	92 ¾			91 5⁄8			67 ¾		9 1/2			-	2 1⁄2 NPT	1022
168-2	168-4	104 3⁄8			103 5/8			79 ³ ⁄ ₄		12 1/2			10 NPT	3 NPT	1132
169-2	169-4	116 3/8			115 5/8			91 3/4		12 1/2			10 NPT	3 NPT	1242
1610-2 BWS-183-2	1610-4 BWS-183-4	128 3/8			127 5/8			103 ³ ⁄ ₄		12 1⁄2			10 NPT	3 NPT	1352 740
BWS-183-2 184-2	BWS-183-4 184-4	44 56			44 56			18 ½ 30 ½						-	740 865
184-2	185-4	68			56 68			42 ½						ŀ	990
186-2	186-4	80	16 3⁄/8	6 NPT	80	16 3⁄8	4 NPT	54 ½	18	13 1⁄2	22	13 1⁄2	10 FLG	4 FLG	1115
187-2	187-4	92			92			66 1/2	-						1240
188-2	188-4	104			104			78 ½							1365
189-2	189-4	116			116			90 ½							1490
1810-2	1810-4	128			128			102 1⁄2							1615
BWS-203-2	BWS-203-4	45 1/2			44 1/2			13 1/2							1020
204-2 205-2	204-4	57 ½			56 ½			25 1/2						-	1180
	205-4	69 ½ 81 ½	22 ³ /8	8 NPT	68 ½ 80 ½	22 3/8	6 NPT	37 ½ 49 ½	20	14	24	16	12 FLG	4 FLG	1340 1500
			22 78	ONPI		ZZ 78	ONPI		20	14	24	10	12 FLG	4 FLG	1660
206-2	206-4				92 1/2			61 1/2							
	206-4 207-4 208-4	93 ½ 105 ½			92 ½ 104 ½			61 ½ 73 ½							1820
206-2 207-2	207-4	93 ½													

All dimensions in inches and for reference only.

Tank Immersion Heaters

F	imum Recommended low of Boiler Water rough Tank Heaters
Size	
4″	27 USGPM
6″	69 USGPM
8″	135 USGPM
10"	260 USGPM
12″	375 USGPM
14″	510 USGPM

At these flows, pressure drop through the heaters may be approximated as 0.6 ft. head per foot of length.

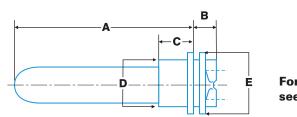
	dard Materials Construction
Material	Comments
Tubing	34" O.D. No. 18 BWG Copper
Tubesheet	Carbon Steel
Tube Supports	Brass
Head	Cast Iron

	Standard Design Pressures								
Size									
4″	150 psig								
6"	150 psig								
8"	150 psig								
10"	125 psig								
12″	125 psig								
14″	125 psig								

Units with special materials, higher design pressures or in large sizes are available.

Notes

- Capacities given for Tank Heaters may be used when tanks have a capacity at least equal to the hourly demand. For other conditions, consult with an API Heat Transfer representative.
- 2. Capacities given do not incorporate allowances for fouling or scaling. Extra length of Heater should be provided if needed, according to water conditions.
- 3. It is recommended a vacuum breaker and air vent be installed on all heaters used on steam pressure systems. Tappings are provided in heater head for this purpose.



For dimensions see table

BTHS for Heating with Steam

BTHW for Heating with Boiler Water

Heater Number BTHW Using Boiler Water	U.S. Ga Heati Water 4	acity in Ils. per Hr. ing Tank 0 to 140 F. Diler Water		Dimens	ions in	Inches	Heac (Heating Surface			
BTHS Using Steam	180 [°] F.	180 [°] F.	Α	в	с	D	Е	BT		BTHW In &	Sq. Ft
	Gravity	Pumped			C		-	Stm.	Cond.	out	
BTHW-BTHS - 412	20	32	12	-							1.5
418 424	30 40	48 64	18 24								2.3 3.1
424	50	80	30								3.1
436	60	96	36	2 3/4	6	4 1/2	7 1⁄4	11/4	3/4	1 1/4	4.7
448	80	128	48								6.2
460	100	158	60								7.8
472	120	186	72								9.4
484	140	232	84								10.9
496	160	280	96								12.5
BTHW_BTHS - 612	48	77	11 ¼ 17 ¼								3.5
618 624	68 86	108 138	17 ¼ 23 ¼								5.4 7.6
630	106	130	23 1/4								9.4
636	124	198	35 1/4	3 3/8	6 1/2	6 5/8	10 ½	2	1	2	11.5
648	164	262	47 1/4					-		-	15.3
660	202	324	59 1⁄4								19.3
672	240	384	71 ¼								23.1
684	280	450	83 1⁄4								27.1
696	318	510	95 1⁄4								31.0
BTHW-BTHS - 824	127	279	24								15.0
830 836	195	353 427	30								19.0
836 842	264 308	427	36 42	-							23.0 27.0
848	350	560	42	4 1/4	8	8 5/8	12 ½	3	11/4	3	31.0
860	408	655	60		Ū	0 /8	12 /2	U	174	J	38.0
872	500	805	72								46.0
884	588	930	84								54.0
896	665	1070	96								62.0
BTHW–BTHS – 1030	430	690	30	_							35.5
1036	510	820	36	_							43.0
1042	603	966	42								50.5
1048	698	1120	48	_	0.14	10.3/	14 84	,	~		58.0
1060 1072	872 1045	1398 1670	60 72	5	8 1/2	10 3⁄4	14 %	4	2	4	73.0 88.0
1072	1190	1910	84								102.0
1096	1360	2190	96								117.0
10108	1535	2460	108								132.0
BTHW-BTHS - 1236	710	1136	36								61.0
1242	835	1338	42								72.0
1248	950	1540	48								83.0
1254	1070	1742	54								94.0
1260	1190	1944	60	5 5/8	10	12 3⁄4	16 %	4	2	4	104.0
1272	1425	2348	72								126.0
1284 1296	1660 1900	2752 3156	84 96								147.0 169.0
1296	2140	3156	108								169.0
12108	2140	3964	108								212.0
BTHW-BTHS - 1436	970	1535	36								83.0
1442	1130	1797	42								98.0
1448	1290	2060	48								112.0
1454	1455	2330	54								127.0
1460	1620	2605	60	6 1⁄2	10 ½	14	17 %	6	3	6	142.0
1472	1940	3120	72								171.0
1484	2260	3670	84								200.0
1496	2580	4220	96								230.0
14108 14120	2900 3240	4750 5310	108 120								259.0 289.0

All dimensions in inches and for reference only.

For higher temperature boiler water, or when using steam as heating medium, consult an API representative.

Basco Type 500

3″–8″ Diameter Commercial Standard Models

Standard Materials of Construction

- Shell: Steel Pipe or Tubing
- Tubes: Copper, Admiralty or 90/10 CuNi
- Tubesheets: Steel, Stainless Steel or 90/10 CuNi
- Bonnets: Cast Iron
- Baffles: Carbon Steel
- Gaskets: Compressed Fiber

3"–8" Diameter Stainless Steel Models

Standard Materials of Construction

- Shell: Welded 304 Stainless
- Tubes: 304 Stainless Steel
- Tubesheets: 304 Stainless Steel
- Bonnets: Cast 304 Stainless
- Baffles: 304 Stainless Steel
- Gaskets: Compressed Fiber

5″–12″ Diameter ASME and TEMA C Models

Standard Materials of Construction

- Shell: Carbon Steel
- Tubes: Copper, Admiralty, 90/10 CuNi, SS
- Tubesheets: Carbon Steel, 90/10, Stainless Steel
- Bonnets: Carbon Steel, Cast Ductile Iron
- Baffles: Carbon Steel, SS
- Gaskets: Compressed Fiber

Model shown is removable tubesheet U-tube with type 304 Stainless Steel tubing. Fixed bundle models also available.

Whitlock Type HTR and AHTR

3"-12" Diameter Models

Fixed or removable U-Tube bundles. HTR features non-ferrous construction while AHTR has all 316 stainless steel shell materials. Models available with ASME Code Stamp. AHTR models in 10" and 12" shell diameters have fabricated heads.

Standard Materials of Construction

- Shell: 2"–3" Copper or SS; 4"–8" Red Brass or Stainless Steel
- Tubes: Copper, Admiralty or Stainless Steel
- Tubesheets: Forged Brass or Stainless Steel
- Bonnets: Cast Iron, Bronzed or Stainless Steel
- Baffles: Brass or SS
- Bolting: Alloy Steel
- Gaskets: Compressed Fiber
- Brackets: Steel

Whitlock Type HTR Heat Exchangers shown is available from 3" thru 12" in diameter and up to 96" long in fixed or removable bundles.

API Heat Transfer

API Heat Transfer, Inc. 2777 Walden Avenue Buffalo, New York 14225 (716) 684-6700 www.apiheattransfer.com

Divisions:

API Airtech ISO-9001 Certified Air Cooled Aluminum Heat Exchangers 91 North Street • P.O. Box 68 Arcade, New York 14009-0068 (585) 496-5755 • Fax: (585) 496-5776

API Basco ISO-9001 Certified

Basco®/Whitlock® Shell & Tube Heat Exchangers 2777 Walden Avenue Buffalo, New York 14225 (716) 684-6700 • Fax: (716) 684-2129

API Schmidt-Bretten Americas

Plate Heat Exchangers and Thermal Systems 2777 Walden Avenue Buffalo, New York 14225 (716) 684-6700 • Fax: (716) 684-2129

API Schmidt-Bretten GmbH. & Co. KG

ISO-9001 Certified Plate Heat Exchangers and Thermal Systems Langenmorgen 4 D-75015 Bretten, Germany (49)725253-0 • Fax: (49)725253-200

API Heat Transfer (Suzhou) Co. Ltd.

Air Cooled Aluminum Heat Exchangers Shell & Tube Heat Exchangers Plate Heat Exchangers 156 Qingqiu Street, 3rd District Suzhou Industrial Park Suzhou, Jiangsu 215126 China (86)512-88168000 • Fax: (86)512-88168003

Contact your local API Sales Representative or API Heat Transfer directly toll-free @ 1-877-API-HEAT e-mail @ sales@apiheattransfer.com

Other Products Available from API Heat Transfer

OptiDesign

Straight-tube, removable bundle exchangers made from standard components. Floating tube sheet for seal leak detection and easy maintenance. Diameters from 3" (7.6 cm) to 42" (106.68 cm). ASME, API, TEMA, ABS and other codes available.

Moisture Separators



Compact centrifugal separators efficiently remove entrained moisture and solids from compressed air or gas streams. Available in capacities from 22 to 4,000 SCFM, the Type TC comes with an integral trap assembly and the Type T is designed for a remote trap.

Brazed Plate Heat Exchangers



Off-the-shelf, standard units reflect the latest in plate heat exchanger technology for maximum performance and low cost. Ideal for OEM or after market applications. Many models stocked and ready to ship. Models for process or refrigeration applications.

Gasketed Plate Heat Exchangers



The Schmidt line of gasketed plate & frame heat exchangers provide excellent heat transfer in a compact space. Plates are pressed from stainless steel, titanium and other alloys. Gaskets of nitrile, EPDM, Viton[®], compressed fiber and Teflon[®] are used. Capacities range from 0.5 to 10,000 GPM. TEMA Shell and Tube



A wide variety of TEMA types are available using pre-engineered or custom designs in various size and materials. Shell diameters from 6" (15.24 cm) to 60" (152.4 cm), ASME, TEMA, API, ABS, TUV, ISPESL and other code constructions available.

Hubbed Shell and Tube Heat Exchangers



Straight or U-tube, fixed or removable tubesheet general purpose exchangers designed to cool oil, water, compressed air and other industrial fluids. A variety of port configurations and materials are available. Diameters from 3" (7.62 cm) to 12" (30.48 cm).

SigmaWig Welded Plate Heat Exchangers



Fully welded and require no gaskets. Available in all 316SS construction, titanium and other higher alloy materials. These units have a design temperature of 750°F and can handle operating pressures as high as 360 psi with an ASME Code stamp.

Air-Cooled Heat Exchangers



High efficiency, brazed aluminum coolers for cooling a wide variety of liquids and gases with ambient air. Lightweight, yet rugged. Capable of cooling multiple fluids in single unit. Models can be supplied with cooling fan and a variety of drives.

Thermal Products, Inc. / Phone: (518) 877-0231 / Email: sales@thermalproducts.com / Website: www.thermalproducts.com