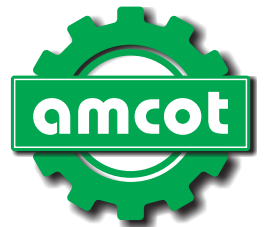


# ST Series

Counter Flow Induced Draft Cooling Tower  
Engineering Data



Amcot Cooling Tower Inc.  
Since 1986



Proud Member

## Company Overview

Amcot Cooling Tower Corporation (Liang Chi USA) was founded in 1988 to provide regional support to the Americas for Liang Chi Industries, Asia's largest producer and manufacturer of cooling towers.

Liang Chi Industries, based in Taipei, Taiwan has roots in the cooling tower industry dating back to the early 1960s as the original designer of the round fiberglass style counter flow cooling tower. Today with more than 15 product lines, 9 of which are CTI 201 certified and ASHRAE 90.1 compliant, Liang Chi remains a global leader in the cooling tower industry.

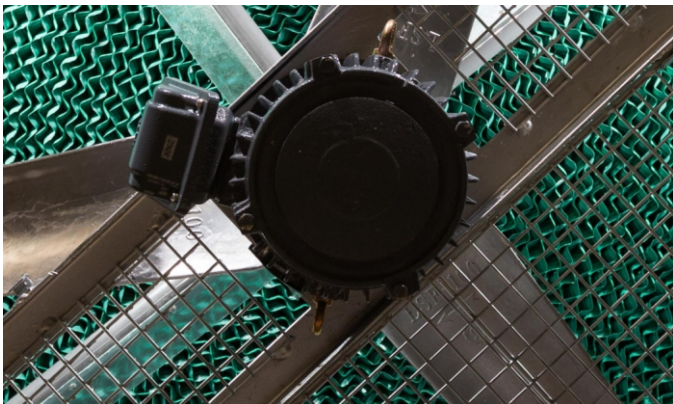


Amcot offers a variety of distinct cooling tower designs in order to help meet various project requirements and customer preferences.

The ST Series, is our FRP round style open loop counter flow cooling tower which is by far what Amcot has been known for over the past 30 years. With thousands of these units distributed throughout North, Central, South America, and the Caribbean, the Amcot ST Series unit has proven to be a reliable and cost effective solution. The ST Series models have a capacity range of 4 to 826 nominal tons.

The R-LC Series, was Amcot's first CTI 201 Certified cooling tower introduced to the market back in 1996. The R-LC series is a FRP open loop tower design, but in a cross flow configuration which has a more traditional cooling tower profile. The R-LC series towers have a single cell capacity range between 30 and 707 nominal tons. However, the R-LC is a modular type of design which allows for multiple cell configurations so that models can be selected regardless of project size. Amcot's R-LC has been used on hospitals, schools, universities, hotels, Co-gen stations, and manufacturing facilities for steel and plastic.

Amcot's D-LC Series is our newest cooling tower line which was introduced into the USA market in 2016. The unit is CTI 201 Certified under Liang Chi Industries, Amcot's international partner. The D-LC series tower offers customers a counter flow open loop modular type design constructed predominately from fiberglass materials making it ideal for harsh environments. The modular capability allows the unit to be designed and scaled according to project demands. The D-LC series single cell has a capacity ranging from 43 to 641 tons.



Over the past 30 years, Amcot has worked with clients all over the western hemisphere on a wide range of cooling tower projects. Our goal has been and always will be to provide customers with the best service possible. Our company's success over the years has been a result of clients continuing to support our products with whom we have built strong partnerships. Our entire staff at Amcot is dedicated to providing you with the support you both need and deserve and doing so in a professional and timely manner. The products we deliver shall be reliable, cost effective, efficient, and long lasting. Your satisfaction is our goal!

# ST Series Highlights

## Fan Motor

ST Series motors are direct drive on models ST-H-5 to ST-200 to minimize maintenance requirements. For models ST-225 to ST-1000 motors drive the fan by a belt drive assembly in order to achieve lower fan speeds and reduced sound. Motors are designed in accordance to IP55 standards and are CSA/UL Certified. Motors are supplied in a wide range of voltages for both single and three phase and 50 or 60 hertz power supplies.

## Water Distribution System

ST Series cooling towers utilize a unique water distribution system in which the entire assembly rotates under incoming water pressure to distribute water across the heat transfer media in a uniform fashion. This assembly negates the need for spray nozzles which can clog, break, or require a specific water flow rate to operate correctly. Our water distribution systems can easily be removed and disassembled for cleaning and quickly reassembled to minimize downtime during maintenance.

## Heat Transfer Media

The heat transfer media or fill media in the ST series cooling tower consists of PVC embossed sheets that are glued together to form fill packs which is where incoming air intersects with your hot water resulting in the transfer of heat. The fill media achieves effective cooling by increasing the waters' surface area exposure to the air. PVC fill media is designed to be resistant to rot, decay, and biological attack and capable of withstanding continuous hot water temperatures of 115°F.

For water temperatures that exceed 115°F, variations of the ST Series tower are available with high temperature fill media constructed from polypropylene or wood lath.

## Pipe Connections

The ST Series tower has conveniently located pipe connections for your supply, return, make-up, overflow, and drain piping. On smaller units up to ST-60 all pipe connections are threaded. For ST-70 and greater main supply and return lines are flanged.

## Fan Assembly

Amcot ST Series fans are axial propeller type constructed in nylon, nylon/aluminum, or all aluminum depending on the model. STH-5 to ST-50 use fixed pitch type blades while ST-60 to ST-1000 use adjustable pitch type. Fans are factory balanced and specially designed for only the ST Series cooling tower.

## FRP Construction

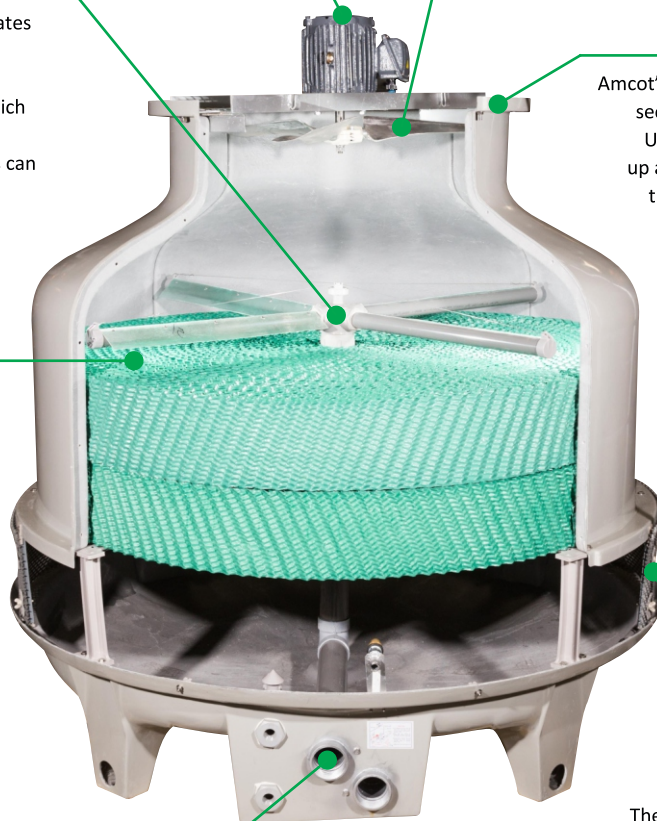
Amcot's ST Series Cooling Tower basin and casing sections are constructed from fiberglass with UV inhibitors. As the casing and basin make up a majority of the cooling tower's structure, the ST offers a lower operation weight than most other towers. In addition, the FRP construction offers superior protection against a wide range of chemicals and it does not rust or corrode like traditional steel towers. This eliminates the need for costly repair services over the life of your tower. With UV inhibitors present not just in the top coat but throughout panel construction, Amcot's FRP will far surpass the life of any other!

## Air Inlet Louvers

The air inlet louvers are located around the perimeter of the cooling tower allowing air flow to enter the unit regardless of prevailing wind directions.

Louvers can easily be removed for replacement or cleaning and are designed to prevent large debris from entering the cooling tower which can interfere with system operation.

Amcot also offers an Anti-Splash louver which replaces the standard air inlet louver screens to eliminate splash out from occurring.





# ST Series Specification

## GENERAL

### 1.0 SELECTION

Furnish \_\_\_\_ Amcot model ST-\_\_\_\_ cooling tower(s). The ST series cooling tower is a factory or field assembled, induced draft, axial fan, counter flow cooling tower with vertical air discharge. The cooling tower's overall dimensions shall not exceed \_\_\_\_ in diameter X \_\_\_\_ in height. Multiple units can be combined for larger projects.

### 1.1 PERFORMANCE

The cooling tower(s) shall be designed to provide \_\_\_\_ USGPM of total cooling capacity based on an entering hot water temperature of \_\_\_\_°F with a leaving cold water temperature of \_\_\_\_°F and an entering ambient wet-bulb temperature of \_\_\_\_°F. Units shall comply with ASHRAE 90.1 energy standards.

## MATERIALS OF CONSTRUCTION

### 2.0 COLD WATER BASIN

The cold water basin shall be constructed of heavy gauge fiber reinforced polyester (FRP) material with UV inhibitors. Cold water basin construction shall be impervious to rot, decay, biological attack and will not rust or corrode. The cold water basin design shall be sloped to promote positive drainage of the basin to the outlet and drain connections. The basin shall include piping points of connection for the overflow, make-up, drain, inlet, and outlet. Make-up, drain, and overflow connections shall be threaded type. For smaller capacity models the inlet and outlet connections shall be threaded while larger capacity units shall be furnished with flanged inlet and outlet connections. All fasteners shall be stainless steel type.

### 2.1 CASING PANELS

The casing panels shall be constructed of heavy gauge fiber reinforced polyester (FRP) material with UV inhibitors which is impervious to rot, decay, biological attack and will not rust or corrode. Panels shall be removable type to allow easy access of internal components. The casing panel shall have a viewing port for inspection of the interior components. The panels shall be fastened to the cooling tower structure with all seams designed to be watertight. All fasteners shall be stainless steel type.

## MECHANICAL COMPONENTS

### 3.0 MECHANICAL ASSEMBLY

The mechanical assembly of the cooling tower shall be constructed of hot dipped galvanized (HDG) steel (*Stainless Steel*) materials with an OSHA compliant removable fan guard for maintenance. For towers operating on motor sizes of 5 HP or less, the mechanical assembly shall be direct drive type with no belts, gears, or additional components that require maintenance. For models utilizing motor sizes 7 ½ HP and greater, the unit will be provided with a belt drive reducer that is installed external to the cooling tower and enclosed within an epoxy coated steel case to protect belts and pulleys from the outside environment.

### 3.1 MECHANICAL WARRANTY

The cooling tower's fan drive components shall be covered by a one (1), (*Five (5)*) year complete mechanical warranty. Drive components protected by this warranty shall include the fans, bearings, fan shafts, pulleys, bushings, reducers, and fan motors

### 3.2 FAN MOTOR(S)

\_\_\_\_HP motor shall be premium efficiency that is totally enclosed air over (TEAO) for direct drive units and totally enclosed fan cooled (TEFC) for units with a belt reducer. Motors shall be supplied with sealed bearings and have a minimum SF of 1.15. Motors shall be designed for cooling tower duty and be IP55 type. Motors 1 HP and greater shall be inverter duty type. Motors shall be UL/CSA compliant. Motor power requirement shall be: \_\_\_\_ volts, \_\_\_\_ phase, \_\_\_\_ Hertz.

*\*ITEMS IN ITALICS ARE OPTIONS OR ALTERNATIVE MATERIALS OF CONSTRUCTION.*

### 3.3 FAN ASSEMBLY

Fans shall be axial propeller type and dynamically balanced during manufacturing. Fan assemblies shall be directly mounted to the motor shaft for on towers that operate with a fan motor horsepower of 5HP or less. For fan assemblies on units with a motor HP of 7.5 or greater, the assembly shall be mounted to a speed reducer. On fans smaller than 48", assemblies shall be fixed pitch type which is set at the factory. For fans greater than 48" diameter, fans shall be adjustable pitch type for field adjustment at time of installation and startup. Fans shall be constructed either completely of corrosion proof nylon, nylon with aluminum fan blades, or all aluminum depending on diameter. Materials used shall be light-weight and corrosion resistant.

### 3.3 BELT REDUCER

For models with a motor size of 7 ½ HP or greater, the mechanical assembly shall be designed with a belt type speed reducer which shall be mounted externally and shall be constructed from epoxy coated steel. The reducer housing shall protect the internal banded belts and pulleys from excessive exposure to moisture and sunlight. The reducer shall be supplied with an adjustable tensioning gauge for belt tensioning and no special tension gauges shall be required.

## WATER DISTRIBUTION

### 4.0 WATER DISTRIBUTION SYSTEM

The unit shall be provided with a non-corrosive water distribution system that utilizes a single inlet connection for each tower. The spray system will be comprised of a rotating center sprinkler head constructed from nylon or aluminum (*Stainless Steel*) that rotates under incoming water pressure. Water will be distributed to the fill media by a series of spray arms with outlet orifices designed to ensure proper water loading of the fill occurs under various flow rates. Spray arms shall be constructed from PVC materials and may be removed for cleaning and maintenance.

## FILL MEDIA

### 5.0 WET-DECK FILL MEDIA

The cooling tower fill shall be PVC (Polyvinyl Chloride) of cross-fluted design for maximum heat transfer. The cross-fluted sheets shall be bonded together to form rigid cellular blocks/sections. The PVC fill shall be self-extinguishing with a flame spread rating of 25 or less per ASTM E84-81a and resistant to rot, decay and biological attack. The fill will be able to withstand continuous water temperature of 115°F and be supported by fill supports constructed of heavy-gauge hot dipped galvanized HDG steel (*Stainless Steel*) material which allows the fill media to be utilized as an internal service platform for access and maintenance on larger models.

## AIR INLET LOUVERS

### 6.0 INLET LOUVERS

Air inlet louvers shall be constructed using UV resistant polyvinyl chloride (PVC) materials. Louvers shall be designed to permit air flow into the unit along its entire perimeter while preventing large debris from entering. The louver openings shall be designed to minimize air flow resistance to ensure maximum air volume through the unit is achieved. Louvers shall be removable for cold water basin access and for maintenance or replacement.

## ACCESS

### 7.0 ACCESS

The cooling tower shall be furnished with a shipman's style ladder for units that are greater than 76" in height. The ladder shall be constructed of hot dipped galvanized (HDG) steel (*Stainless Steel*) and designed for a maximum weight load of 250 pounds. Internal components of the tower shall be accessible either by removal of the casing panel or through an access hatch in the fan guard for larger units. The fill media may be used as a working platform when following the manufacturer's O&M manual.

## QUALITY ASSURANCE

### 8.0 QUALITY CONTROL

The cooling tower manufacturer shall be certified under ISO 9001 and have a minimum of 20 years' experience in the design, fabrication, and construction of cooling towers.



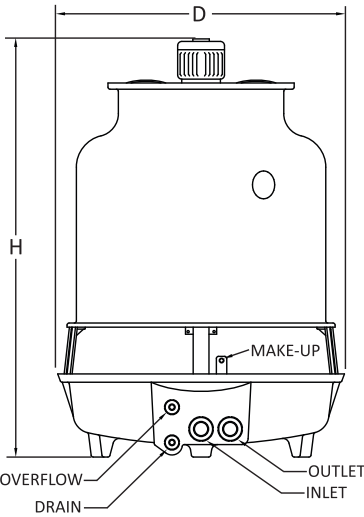
ST Series Capacity Data

Models STH-5 to ST-1000  
Single Cell Counter Flow Design  
3 to 826 Nominal Tons

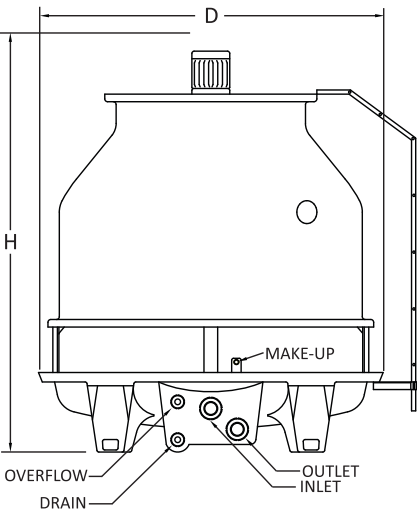
MODEL	NOMINAL TONS*	TEMPERATURES SHOWN BELOW ARE IN FAHRENHEIT (°F). FLOW RATES ARE IN USGPM.															
		HWT	90	95	90	95	90	95	90	95	90	95	90	95	95	96	98
		CWT	80	85	80	85	80	85	80	85	80	85	80	85	85	86	88
		AWB	65	65	70	70	72	72	74	74	75	75	78	78	80	80	82
STH-5	4		17	26	12	20	10	18	8	16	7	15	3	12	8	10	11
STH-8	6		27	40	20	32	16	29	13	25	11	23	6	18	13	16	17
STH-10	7		34	50	25	40	20	36	16	31	14	29	7	21	17	20	22
STH-15	11		51	75	37	60	31	54	25	47	21	44	11	33	26	31	33
STH-20	15		68	100	49	80	41	72	33	63	29	58	15	45	34	41	44
ST-25	19		85	122	62	99	52	89	42	78	37	73	20	57	44	52	56
ST-30	23		101	145	75	118	63	107	52	94	45	88	25	69	54	63	68
ST-40	31		135	192	100	157	86	142	70	126	62	118	34	93	73	85	91
ST-50	39		168	236	126	195	108	177	89	158	78	148	44	117	93	108	115
ST-60	46		202	287	151	235	128	213	105	189	92	177	51	138	109	128	137
ST-70	53		236	336	175	275	149	248	122	221	107	206	59	159	127	149	159
ST-80	62		269	380	202	313	172	283	141	252	125	236	70	186	147	172	184
ST-100	76		337	478	251	392	214	355	174	315	154	295	86	228	182	213	228
ST-125	96		420	592	316	488	270	442	221	394	196	369	110	288	231	270	288
ST-150	117		503	704	381	583	327	530	270	473	239	444	137	351	282	328	350
ST-175	135		587	827	443	682	379	619	311	552	275	517	156	405	325	379	404
ST-200	156		669	936	508	776	437	706	361	631	320	593	184	468	378	438	468
ST-225	169		761	1097	560	891	473	802	383	708	335	660	182	507	399	470	504
ST-250	191		841	1196	628	981	535	886	436	788	384	737	214	573	455	533	570
ST-300	227		1012	1447	750	1181	637	1066	517	945	454	882	250	681	539	633	678
ST-350	273		1171	1639	889	1358	764	1235	630	1105	559	1037	321	819	659	765	817
ST-400	310		1342	1887	1013	1558	868	1415	713	1262	631	1183	359	930	746	868	927
ST-500	408		1653	2236	1301	1895	1142	1745	968	1584	875	1500	544	1224	1018	1159	1231
ST-600	468		2007	2807	1525	2327	1311	2117	1082	1895	961	1778	553	1404	1132	1314	1403
ST-700	567		2319	3156	1813	2665	1585	2448	1338	2216	1204	2095	737	1701	1404	1605	1706
ST-800	624		2677	3742	2033	3103	1748	2822	1443	2526	1282	2371	737	1872	1510	1752	1870
ST-1000	826		3295	4424	2617	3769	2310	3480	1974	3171	1792	3009	1141	2478	2079	2353	2497

\*NOMINAL TONS IS BASED ON 1 TON = 3 GPM AT 95°F HWT - 85°F CWT - 78°F AMBIENT WET-BULB. 1 TON = 15,000 BTU/HR.

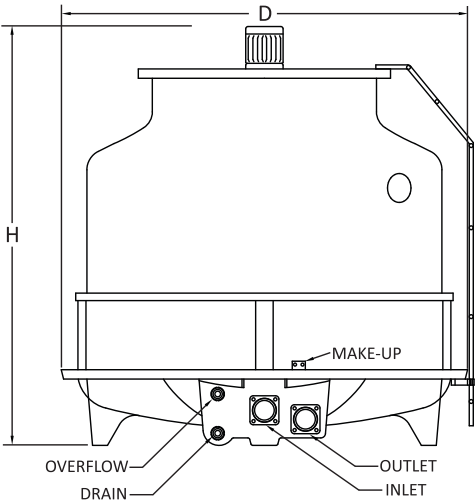
ST Series Physical Data



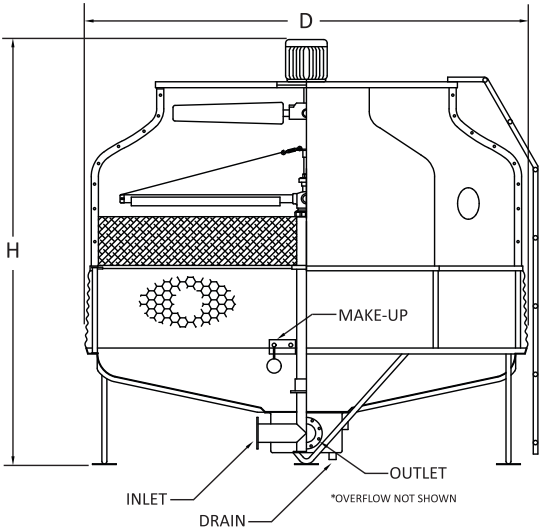
**STH-5 ~ ST-30**



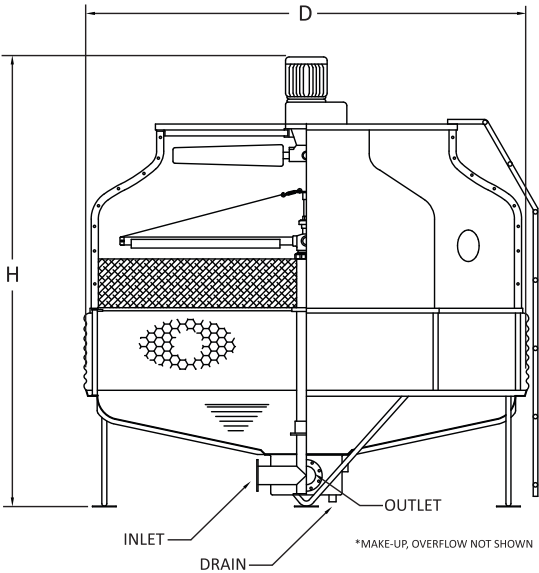
**ST-40 ~ ST-60**



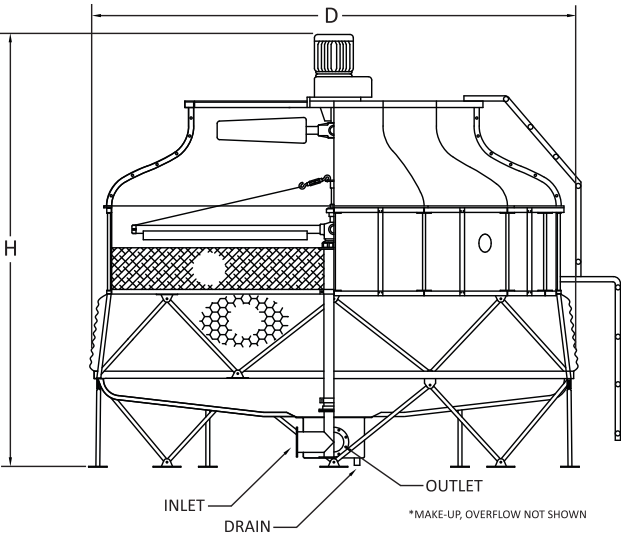
**ST-70 ~ ST-175**



**ST-200**



**ST-225 ~ ST-350**



**ST-400 ~ ST-1000**

ST Series Physical Data

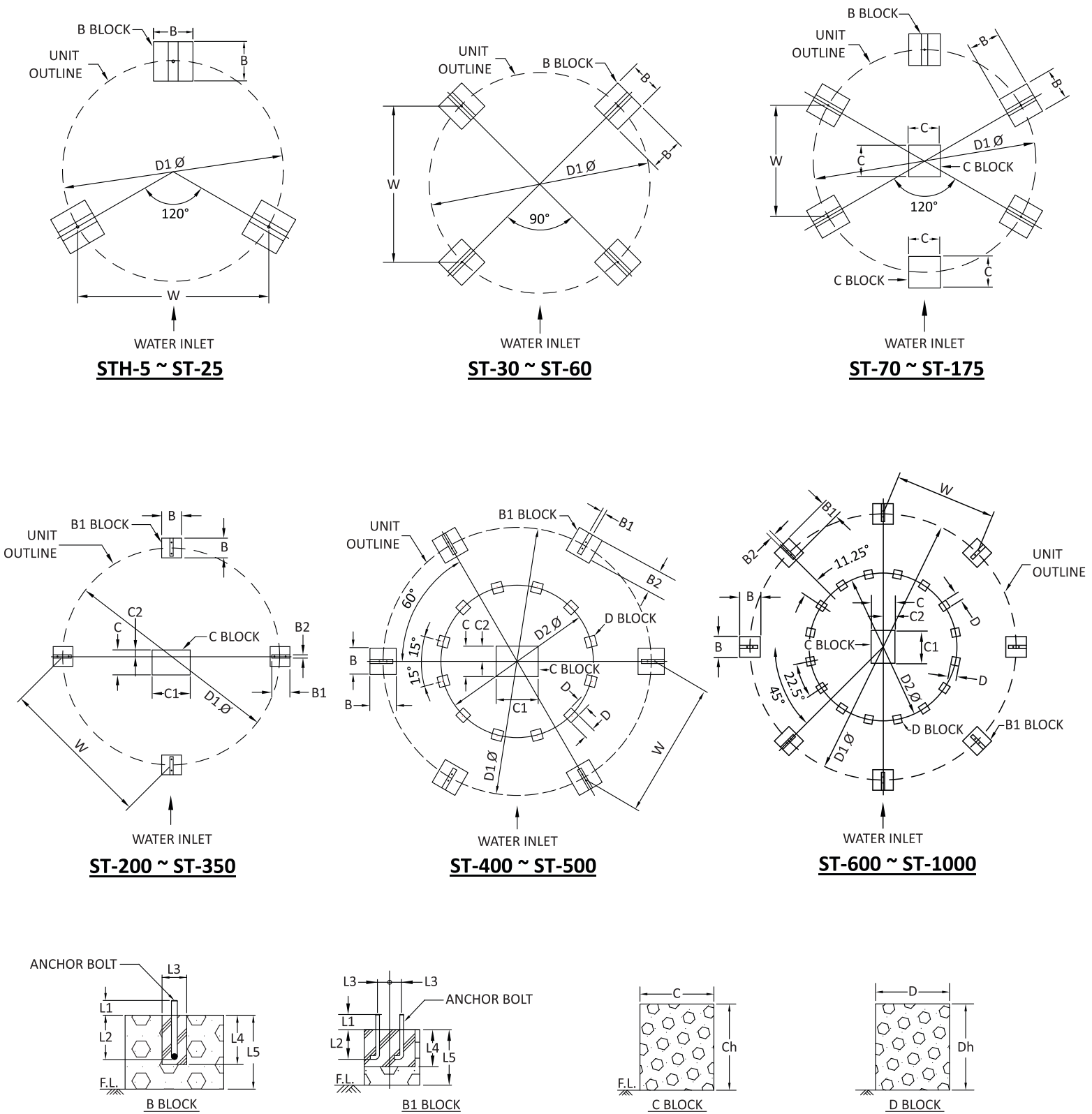
MODEL	NOMINAL TONS	NOMINAL DIMENSIONS (INCHES)		PIPING CONNECTIONS (INCHES)					FAN MOTOR (HP)	FAN DIAMETER (INCHES)	AIR VOLUME (CFM)	NOMINAL WATER FLOW (GPM)
		HEIGHT (H)	DIAMETER (D)	INLET	OUTLET	MAKE-UP	OVERFLOW	DRAIN				
STH-5	4	61	29	1 1/2	1 1/2	1/2	1	3/4	1/6	19 1/2	2100	12
STH-8	6	72	34	1 1/2	1 1/2	1/2	1	3/4	1/6	19 1/2	2620	18
STH-10	7	72	34	1 1/2	1 1/2	1/2	1	3/4	1/4	19 1/2	3500	21
STH-15	11	82	46	2	2	1/2	1	1	1/4	26 3/8	4700	33
STH-20	15	83	46	2	2	1/2	1	1	1/4	26 3/8	6300	45
ST-25	19	78	54	2 1/2	2 1/2	1/2	1	1	3/4	30 1/4	7000	57
ST-30	23	76	62	2 1/2	2 1/2	1/2	1	1	1	30 1/4	8100	69
ST-40	31	83	72	2 1/2	2 1/2	3/4	1	1	1 1/2	38 1/4	9800	93
ST-50	39	83	79	3	3	3/4	1	1	1 1/2	38 1/4	11500	117
ST-60	46	84	79	3	3	3/4	1	1	1 1/2	46	14700	138
ST-70	53	89	86	4	4	3/4	1	1	1 1/2	46	17500	159
ST-80	62	89	86	4	4	3/4	1	1	2	46	18900	186
ST-100	76	96	104	4	4	1	1	1	3	57 7/8	24500	228
ST-125	96	97	120	5	5	1	2	1	3	57 7/8	29060	288
ST-150	117	105	130	5	5	1	2	2	5	68 7/8	33260	351
ST-175	135	112	130	5	5	1	2	2	5	68 7/8	40250	405
ST-200	156	133	148	6	6	1 1/4	2	2	5	68 7/8	43760	468
ST-225	169	147	148	6	6	1 1/4	2	2	7 1/2	94 1/2	61270	507
ST-250	191	157	148	8	8	1 1/4	2	2	7 1/2	94 1/2	61270	573
ST-300	227	161	175	8	8	1 1/4	2	2	10	94 1/2	77020	681
ST-350	273	162	189	8	8	1 1/4	2	2	10	94 1/2	77020	819
ST-400	310	204	182	8	8	2	4	2	15	118 3/8	91030	930
ST-500	408	183	220	10	10	2	4	2	15	118 3/8	91030	1224
ST-600	468	206	260	10	10	2	4	2	20	133 7/8	125000	1404
ST-700	567	216	260	10	10	2	4	2	20	133 7/8	125000	1701
ST-800	624	239	299	12	12	2	4	3	30	141 3/4	175000	1872
ST-1000	826	247	299	12	12	2	4	3	30	141 3/4	175000	2478

NOTES:

- 1) NOMINAL TONS IS BASED ON 1 TON = 3 GPM AT 95°F HWT - 85°F CWT - 78°F AMBIENT WET-BULB. 1 TON = 15,000 BTU/HR.
- 2) ST-125 TO ST-175 5" INLET/OUTLET CONNECTIONS USE 6" FLANGE PATTERN.
- 3) AIR VOLUME IS NOMINAL AND MAY CHANGE DEPENDING ON SPECIFIC DESIGN CONDITIONS.
- 4) REFER TO TECHNICAL DATA SHEETS AND GA DRAWINGS FOR ADDITIONAL DATA.
- 5) DATA HEREIN IS SUBJECT TO CHANGE WITHOUT NOTIFICATION.



ST Series Foundation Data



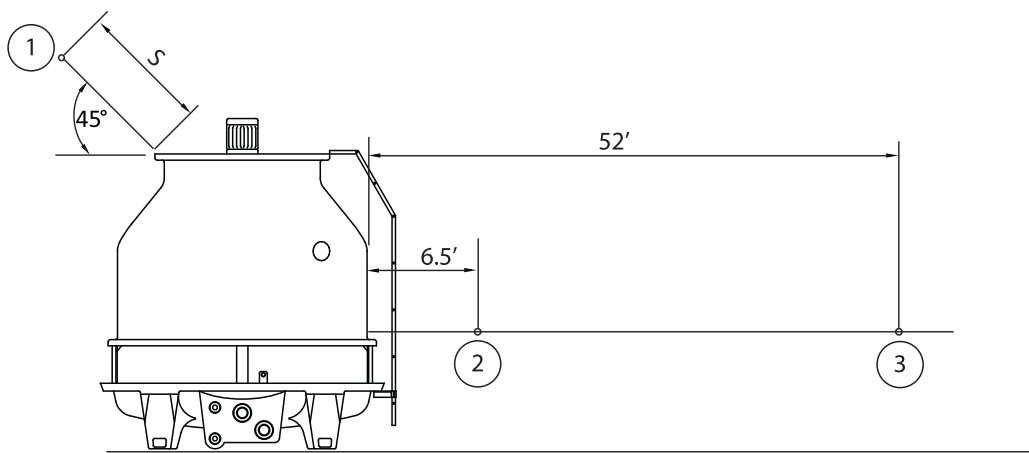
ST Series Foundation Data

MODEL	SHIPPING WEIGHT (LBS)	OPERATING WEIGHT (LBS)	DIMENSIONS																	ANCHOR BOLTS	
			D1	D2	W	B	C	Ch	B1	B2	C1	C2	D	Dh	L1	L2	L3	L4	L5	QTY	SIZE
STH-5	133	253	21 5/8"	-	18 3/4"	8"	-	-	-	-	-	-	-	-	1 1/4"	3 3/4"	2"	4"	6"	3	1/2" X 5"
STH-8	155	280	25 1/2"	-	22 1/4"	8"	-	-	-	-	-	-	-	-	1 1/4"	3 3/4"	2"	4"	6"	3	1/2" X 5"
STH-10	166	441	25 1/2"	-	22 1/4"	8"	-	-	-	-	-	-	-	-	1 1/4"	3 3/4"	2"	4"	6"	3	1/2" X 5"
STH-15	221	573	37 3/8"	-	32 3/8"	8"	-	-	-	-	-	-	-	-	1 1/4"	3 3/4"	2"	4"	6"	3	1/2" X 5"
STH-20	243	727	37 3/8"	-	32 3/8"	8"	-	-	-	-	-	-	-	-	1 1/4"	3 3/4"	2"	4"	6"	3	1/2" X 5"
ST-25	272	887	44"	-	38 1/4"	8"	-	-	-	-	-	-	-	-	1 1/4"	3 3/4"	2"	4"	6"	3	1/2" X 5"
ST-30	298	1074	52 1/2"	-	37"	8"	-	-	-	-	-	-	-	-	1 1/4"	3 3/4"	2"	4"	6"	4	1/2" X 5"
ST-40	414	1133	57 7/8"	-	40 7/8"	10"	-	-	-	-	-	-	-	-	1 1/4"	3 3/4"	2"	4"	8"	4	1/2" X 5"
ST-50	485	1313	66 1/8"	-	46 3/4"	10"	-	-	-	-	-	-	-	-	1 1/4"	3 3/4"	2"	4"	8"	4	1/2" X 5"
ST-60	559	1472	66 1/8"	-	46 3/4"	10"	-	-	-	-	-	-	-	-	1 1/4"	3 3/4"	2"	4"	8"	4	1/2" X 5"
ST-70	665	1555	69 3/8"	-	34 1/2"	10"	10"	12"	-	-	-	-	-	-	1 1/4"	3 3/4"	2"	4"	8"	5	1/2" X 5"
ST-80	697	1588	69 3/8"	-	34 1/2"	10"	10"	12"	-	-	-	-	-	-	1 1/4"	3 3/4"	2"	4"	8"	5	1/2" X 5"
ST-100	1057	2361	92 1/2"	-	46 1/4"	12"	12"	14"	-	-	-	-	-	-	1 1/2"	6 1/2"	2"	8"	12"	5	5/8" x 8"
ST-125	1390	2983	103 1/8"	-	51 1/2"	12"	12"	14"	-	-	-	-	-	-	1 1/2"	6 1/2"	2"	8"	12"	5	5/8" x 8"
ST-150	1985	5731	112 1/2"	-	56 1/4"	12"	16"	16"	-	-	-	-	-	-	1 1/2"	6 1/2"	2"	8"	12"	5	5/8" x 8"
ST-175	2195	5887	112 1/2"	-	56 1/4"	12"	16"	16"	-	-	-	-	-	-	1 1/2"	6 1/2"	2"	8"	12"	5	5/8" x 8"
ST-200	2225	7612	132"	-	93 3/8"	12"	15"	16"	11"	2"	23"	4"	-	-	1 1/2"	6 1/2"	2 3/4"	8"	12"	8	5/8" x 8"
ST-225	2320	7744	132"	-	93 3/8"	12"	15"	16"	11"	2"	23"	4"	-	-	1 1/2"	6 1/2"	2 3/4"	8"	12"	8	5/8" x 8"
ST-250	2558	7854	132"	-	93 3/8"	12"	15"	16"	11"	2"	23"	4"	-	-	1 1/2"	6 1/2"	2 3/4"	8"	12"	8	5/8" x 8"
ST-300	3131	9995	156 1/8"	-	110 3/8"	12"	15"	16"	11"	2"	23"	4"	-	-	1 1/2"	6 1/2"	2 3/4"	8"	12"	8	5/8" x 8"
ST-350	3225	10164	169 1/8"	-	119 5/8"	12"	15"	16"	11"	2"	23"	4"	-	-	1 1/2"	6 1/2"	2 3/4"	8"	12"	8	5/8" x 8"
ST-400	5225	14984	200 3/4"	114 1/2"	100 3/8"	20"	23"	16"	17"	3"	31 1/2"	11 1/2"	8"	12"	1 1/2"	6 1/2"	2 3/4"	8"	12"	12	5/8" x 8"
ST-500	5600	15550	216 1/2"	122"	108 1/4"	20"	23"	16"	17"	3"	31 1/2"	11 1/2"	8"	12"	1 1/2"	6 1/2"	2 3/4"	8"	12"	12	5/8" x 8"
ST-600	8050	23637	255 1/8"	141 3/4"	97 5/8"	20"	23"	16"	17"	3"	31 1/2"	11 1/2"	8"	12"	1 1/2"	6 1/2"	2 3/4"	8"	12"	16	3/4" x 8"
ST-700	8600	24127	255 1/8"	141 3/4"	97 5/8"	20"	23"	16"	17"	3"	31 1/2"	11 1/2"	8"	12"	1 1/2"	6 1/2"	2 3/4"	8"	12"	16	3/4" x 8"
ST-800	10500	26356	295 1/4"	163 9/16"	113"	20"	23"	16"	17"	3"	31 1/2"	11 1/2"	8"	12"	1 1/2"	6 1/2"	2 3/4"	8"	12"	16	3/4" x 8"
ST-1000	11000	27359	295 1/4"	163 9/16"	113"	20"	23"	16"	17"	3"	31 1/2"	11 1/2"	8"	12"	1 1/2"	6 1/2"	2 3/4"	8"	12"	16	3/4" x 8"

NOTES:

- 1) DIMENSION INDICATED ABOVE ARE SUBJECT TO CHANGE WITHOUT NOTIFICATION.
- 2) ANCHOR SIZES ARE RECOMMENDED MINIMUM SIZE FOR CONCRETE EMBEDMENT.
- 3) FOUNDATION DETAILS HEREIN ARE FOR CONCRETE CURBS/PIERS.
- 4) FOR STEEL I-BEAM PLEASE MAINTAIN BOLT DIAMETER AND L1 DISTANCE.
- 5) IT IS THE INSTALLER'S RESPONSIBILITY TO FOLLOW ALL APPLICABLE LOCAL/STATE/COUNTRY CODES.

ST Series Sound Data



Models STH-5 to ST-1000

MODEL	1	2	3	S
STH-5	67	63	53	5'
STH-8	68	63	53	5'
STH-10	69	64	53	5'
STH-15	70	64	54	5'
STH-20	71	64	54	5'
ST-25	72	66	54	5'
ST-30	72	67	55	5'
ST-40	86	77	65	5'
ST-50	86	77	65	5'
ST-60	86	78	66	5'
ST-70	86	78	66	5'
ST-80	86	78	66	5'
ST-100	87	78	66	5'
ST-125	87	78	66	5'

MODEL	1	2	3	S
ST-150	88	78	66	6'
ST-175	88	79	67	6'
ST-200	88	79	67	6'
ST-225	88	79	67	8'
ST-250	88	79	67	8'
ST-300	88	79	67	8'
ST-350	88	79	67	8'
ST-400	88	80	68	10'
ST-500	88	80	68	10'
ST-600	89	79	67	11'
ST-700	89	79	67	11'
ST-800	90	80	68	12'
ST-1000	90	80	68	12'

Lp SOUND PRESSURE LEVELS ARE EXPRESSED IN (dB) REFERENCE 0.0002 MICROBAR.

Models ST-LN-5 to ST-LN-1000

MODEL	1	2	3	S
ST-LN-5	66	62	53	5'
ST-LN-8	67	62	53	5'
ST-LN-10	68	63	53	5'
ST-LN-15	68	63	53	5'
ST-LN-20	69	63	53	5'
ST-LN-25	69	64	54	5'
ST-LN-30	69	64	54	5'
ST-LN-40	72	67	56	5'
ST-LN-50	72	68	57	5'
ST-LN-60	74	68	58	5'
ST-LN-70	74	69	59	5'
ST-LN-80	74	70	60	5'
ST-LN-100	75	70	61	5'
ST-LN-125	75	70	60	5'

MODEL	1	2	3	S
ST-LN-150	76	71	61	6'
ST-LN-175	76	72	62	6'
ST-LN-200	76	72	62	6'
ST-LN-225	78	73	63	8'
ST-LN-250	78	74	64	8'
ST-LN-300	79	75	65	8'
ST-LN-350	79	75	65	8'
ST-LN-400	80	76	66	10'
ST-LN-500	80	76	66	10'
ST-LN-600	80	76	66	11'
ST-LN-700	80	77	67	11'
ST-LN-800	81	77	67	12'
ST-LN-1000	81	77	67	12'

Lp SOUND PRESSURE LEVELS ARE EXPRESSED IN (dB) REFERENCE 0.0002 MICROBAR.

ST-LN is a variation of ST Series tower that incorporates lower RPM motors, extended chord fans, and water silencers to reduce overall sound levels. For more information on Low Noise models, please contact your local representative or Amcot directly.



# ST Series Field Assembly & Alternate Configurations

## Field Assembly

Amcot's ST series models STH-5 to ST-80 ship preassembled from our facility and upon arrival are ready for immediate installation. On models ST-100 to ST-175 customers may choose to either have these units ship preassembled on flatbed trailers or unassembled by way of LTL carrier while models ST-200 and greater are always shipped unassembled and require field assembly. While many towers in the industry ship in modules or in sections the knocked down aspect of the ST tower ensures that our models can travel by standard carriers on enclosed trailers versus permitted flat bed loads which are becoming increasing costly to the customer. In addition, knocked down units are very convenient especially when installation locations may have limited access or be located in an area that a crane would have trouble accessing. Rest assured however that as an installer you do not have to build the unit on your own. Amcot offers field support services related to the assembly of our units. Amcot can either send a single supervisor to work alongside your technicians or we can send an entire crew to do the assembly ourselves while you focus on other aspects of the project! For more information, please contact your local representative or Amcot directly.

## ST Series Alternate Configurations

The ST Series Cooling Towers are also offered in three (3) unique variations, each of which are designed for specific application demands:

### ST-LN Models

The ST-LN series cooling towers are designed for sound sensitive installation locations such as hotels, schools, residential towers, and commercial office buildings where units may be in close vicinity to people. The ST-LN towers incorporate an extended chord fan blade design that allows us to utilize a lower RPM motor on the unit to achieve the same air flow. By slowing the fan speed on the units we greatly reduce sound levels being generated. In addition, the water basin of the unit utilizes a water silencer installed above the water level which eliminates the rain noise which occurs as water falls from the fill media into the cold water basin.

### ST-PP Series

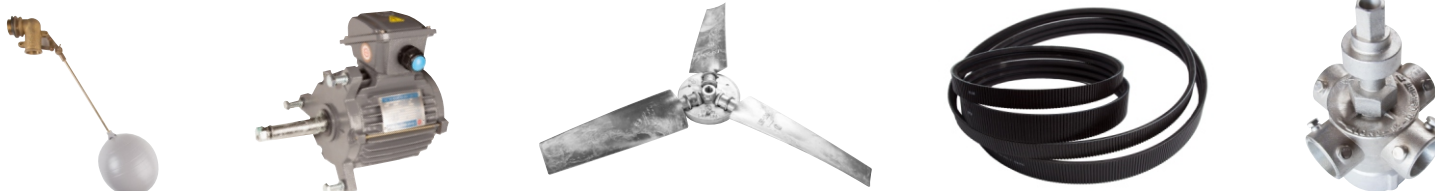
The ST-PP series cooling towers are specially designed for projects where hot water temperatures are likely to exceed the ST base models' maximum continuous operating temperature of 115°F. These scenarios tend to be found in industrial or manufacturing applications versus commercial or HVAC projects. ST-PP Series cooling towers utilize fill media constructed of Polypropylene materials that have the ability to withstand continuous hot water temperatures up to 160°F. In addition to alternate fill materials of construction, all interior PVC piping is removed and replaced by either CPVC or HDG materials to ensure proper operation under such conditions.

### ST-W Series

Amcot's ST-W series is a FRP cooling tower constructed with wood splash bar (also known as wood lath) for applications that have hot water temperatures beyond that which would be suitable for the ST-PP series or when project design may not allow for heat exchangers or bypass piping designs to be incorporated. ST-W series cooling towers are also designed for applications where the circulating system water has a high level of solids which could easily foul or damage fill media types that are constructed from plastic.

## ST Series Spare Parts

With thousands of ST Series towers constantly in operation, it is critical at Amcot that we stock a wide range of parts in our main warehouse which can quickly be packaged and shipped to customers around the world. With over 15,000 square feet of warehouse space dedicated strictly to spare part storage for the ST series towers, quick turnaround of critical components is an important part of our day to day operations. All parts that are purchased from Amcot are new, never refurbished, and are made by Amcot and our industrial partner, Liang Chi Industries. So the only parts you will ever receive are genuine Amcot parts.



## Amcot Accessories & Components

Amcot also offers the following accessories for cooling tower systems:

### Heat Exchangers

Many water systems utilize shell & tube or plate & frame style heat exchangers to help protect sensitive equipment downstream from outside pollutants or when alternate process fluids are used which cannot be exposed to the outside environment. By combining an open loop tower with a heat exchanger, clients can avoid the increasing costs associated with closed loop towers and evaporative condenser while still achieving their goals. Our heat exchangers can be designed for a wide range of applications and fluids. All of our heat exchangers are manufactured in the USA and can be provided with a wide range of certifications depending on project requirements or customer needs.



### Water Pumps

Amcot provides a wide range of water pumps designed and manufactured in the USA for a wide range of cooling tower applications. We offer pumps from ¼ horsepower up to over 100 horsepower in size. Pumps can be furnished in a wide range of styles from close coupled, split case, vertical inline just as a few examples. In addition, Amcot can offer pump skids and control panels, both of which can be customized to meet your needs. Our pump panels are available in NEMA1, 3R, and 4, and are UL/CSA rated. Panels can even incorporate VFD drives for variable flow applications when needed.

### Control Panels

Our cooling tower and pump control panels are specifically designed for cooling tower systems. Cooling tower control panels can be outfitted with a wide array of options and configurations to help support accessories such as vibration switches, electronic water level controls, and basin heaters. Panels can be supplied with either standard temperature on/off fan controls or we can install a VFD drive for added flexibility. All of our panels are manufactured and assembled in the USA and are UL/CSA recognized.



## *What Fiberglass Cooling Towers Are All About!*

**For more information please contact our local representative or Amcot directly.**

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