PROCESS COOLING

ENGINEERING PROCESS WATER SYSTEMS SINCE 1963

COOLING TOWER STANDARD SYSTEMS



238–2,872
TANK VOLUME (GALLONS)

80–1,280
FLOW RANGE (GPM)

26–427
COOLING CAPACITY (TONS)

Process Cooling Systems offers a complete line of custom engineered cooling tower systems, built to cool a single machine or an entire plant while delivering excellent performance in a compact footprint. Every tower is backed by a fifteen-year exterior shell warranty and drawn from a wide list of CTI-certified models.

STANDARD FEATURES

- Structural steel stand provides a ten-foot tall outdoor mounting platform for the cooling tower.
- Stainless steel tanks resist corrosion and are fully welded with structural support for maximum integrity.
- Chemical treatment ports support cooling system water quality assurance.
- Engineered pump trim on suction, discharge, and check valve piping optimizes flow velocity and minimizes pressure loss.
- Variable frequency drive on the cooling tower fan is activated by the main control cabinet to maintain water temperature at the desired setpoint.
- Sight glass water level indicator is included as standard on all tank sizes.
- Pump and tank assembly ships in sections that bolt together for fast connection and installation.
- Motor shaft grounding ring is standard on all systems.

AVAILABLE OPTIONS

- Alarm package covers high temperature, low water level, and cooling tower fan VFD conditions for process visibility.
- Standby pump supports reliable uptime.
- Variable frequency drive is available for control of each process pump.
- Full-flow strainer with bypass piping maintains water flow during operation.
- Non-fused disconnect isolates the system during maintenance.



TECHNICAL DATA — COOLING TOWER SYSTEMS (CTS)

COOLING TOWER SYSTEMS	CTS-26	CTS-54	CTS-76	CTS-108	CTS-158	CTS-216	CTS-270	CTS-427
SYSTEM								
Cooling Tower Model	303103	404105	505105	606175	707110	808115	810120	816215
Pump Tank Model	CWPT-238	CWPT-357	CWPT-514	CWPT-700	CWPT-935	CWPT-1347	CWPT-1615	CWPT-2872
Flow Rate (GPM)	79.4	160.9	228.4	323.6	473.8	647.6	808.8	1,280.2
Cooling Capacity (Tons)[1]	26	54	76	108	158	216	270	427
Tank Volume (gal)	238	357	514	700	935	1,347	1,615	2,872
COOLING TOWER								
Dimensions (in)	44 x 38 x 115	56 x 50 x 123	68 x 62 x 127.5	80 x 74 x 127.5	92 x 86 x 136.5	104 x 98 x 156.5	128 x 98 x 156.5	200.5 x 98 x 158.5
Ship Weight (lb)	868	1,268	1,737	2,141	2,871	3,645	4,211	7,023
Operating Weight (lb)	1,178	1,833	2,717	3,482	5,428	6,767	7,834	15,113
Number of Fans	1	1	1	1	1	1	1	2
Fan Motor hp	2	5	5	7.5	10	15	20	15 (ea)
Tower Inlet	2 ½"	2 ½"	4"	4"	6"	6"	6"	8"
Tower Outlet	2 ½"	2 ½"	4"	4"	6"	6"	6"	10"
Tower Makeup	½"	½"	½"	½"	1"	1"	1"	1 ½"

[1] Cooling capacity when cooling water with an 85°F setpoint, 95°F return, and 78°F ambient wet bulb temperature.

TECHNICAL DATA — COOLING TOWER SYSTEMS (CTS)

COOLING TOWER SYSTEMS	CTS-26	CTS-54	CTS-76	CTS-108	CTS-158	CTS-216	CTS-270	CTS-427
PUMP & TANK								
Tank Size	3.2' D x 4' H	3.2' D x 6' H	3.8' D x 6' H	4.5' D x 6' H	5' x 5' x 5'	6' x 5' x 6'	6' x 6' x 6'	8' x 6' x 8'
Tower Pump hp	5	5	7.5	10	15	15	20	30
Tower Pump Flow (GPM)[2]	79.4	160.9	228.4	323.6	473.8	647.6	808.8	1,280.2
Tower Pump Pressure (psi)	28	28	28	28	28	28	28	28
Process Pump hp	10	15	15	20	30	40	40	60
Process Pump Flow (GPM)[2]	79.4	160.9	228.4	323.6	473.8	647.6	808.8	1,280.2
Process Pump Pressure (psi)	65	65	65	65	65	65	65	65
Tank Stub-In Size	2 ½"	4"	4"	6"	6"	8"	8"	10"
Return Piping Diameter	2"	3"	4"	4"	6"	6"	6"	8"
Pump & Tank Overall Dimensions (in, L x W x H)	96 x 48 x 54	96 x 48 x 78	120 x 60 x 78	120 x 72 x 78	124 x 81 x 66	136 x 81 x 78	148 x 81 x 78	168 x 105 x 78
Figure	1	1	1	1	2	2	2	2
ELECTRICAL DATA (460V / 60Hz / 3ø)								
Pump Skid Panel Size (in)	42 x 36 x 12	42 x 36 x 12	42 x 36 x 12	48 x 36 x 12	60 x 36 x 12	60 x 36 x 12	60 x 36 x 12	60 x 60 x 12
MCA[3]	44	62	66	85	130	163	174	260
MOP[4]	51	76	79	100	150	188	200	314
FLC	41	57	60	78	120	150	161	241
RDE[5]	50	70	70	100	150	175	200	300

[2] Calculated at 10°F approach. [3] MCA, Minimum Circuit Ampacity, used for minimum wire size requirement. [4] MOP, Maximum Overcurrent Protection, used for sizing maximum fuse or breaker size. [5] RDE, Recommended Dual Element Fuse, for limiting fault current.

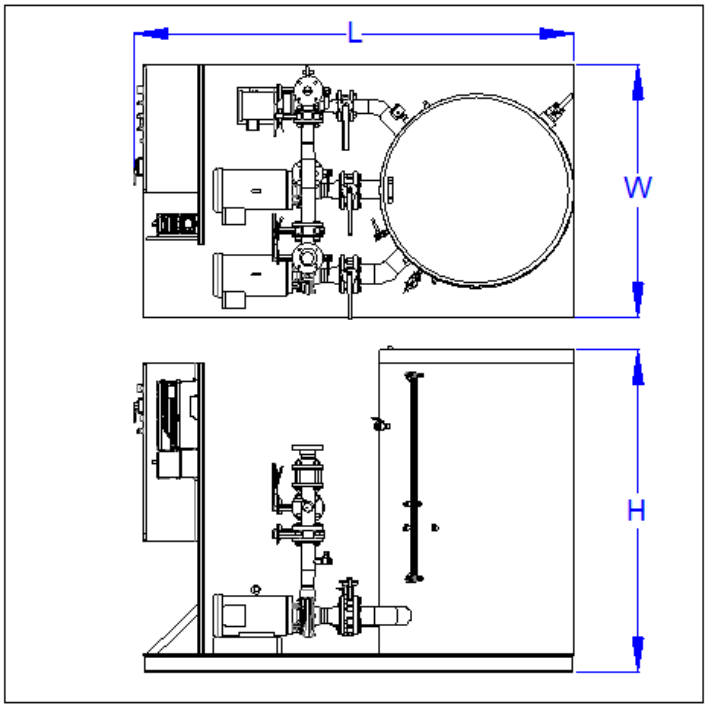


Figure 1

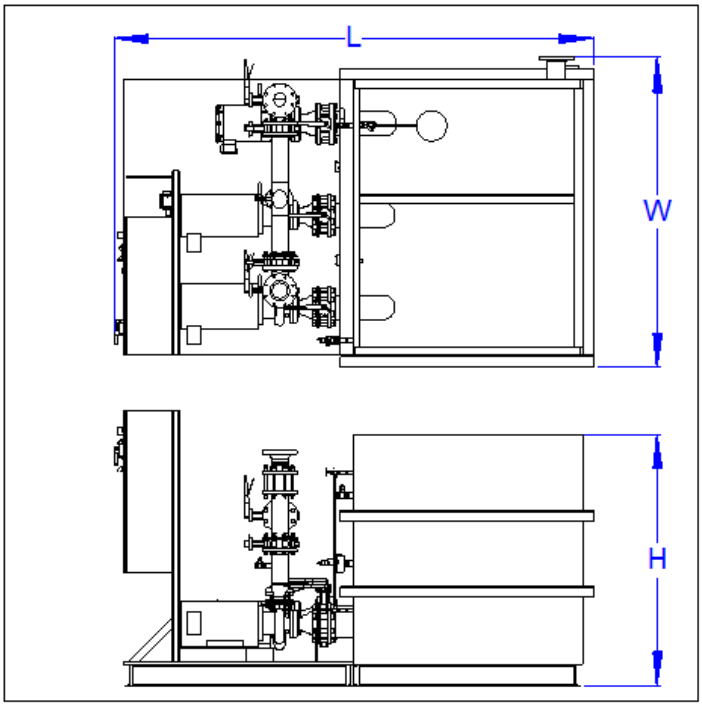


Figure 2