

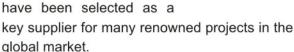




MKT Series

Counter Flow Induced Draft

For over 40 years, the MESAN Group has engaged in the engineering and manufacturing of high quality, high efficiency evaporative cooling equipment. Through hard work, ethics, and a constant pursuit of excellence, MESAN has become a leader in the cooling tower industry in Asia. Today, MESAN continues to play a vital role in the development of new technologies and products, and is proud to



MESAN is an ISO-9001 and 14001 certified company; our towers were the first ones in Hong Kong and China to obtain the CTI STD-201 performance certification, all of our products are ASHRAE-90.1-2010 compliant, a









requisite towards LEED certification for Green Buildings by the USGBC (United States Green Building Council). All this confirms MESAN's constant pursuit of excellence and world-class quality.

MESAN's focus on engineering, research and development, quality management and excellent customer service, is the powerful combination that drives the MESAN brand up on a constant and steady growth. The many patents granted, are proof of MESAN's strive for delivering new environmentally friendly technologies and energy efficient products for the global markets.



MESAN USA strategically located at the center of the Americas continent, in Miami, Florida, USA, consolidates MESAN Group's global presence and reiterates its commitment to provide world-class products for an ever-expanding market.

MESAN USA offers local presence, local inventory of equipment and spare parts and bilingual technical support as well as customer service, in English and Spanish. All products offered by MESAN USA have been engineered to

meet and exceed all codes and standards applicable in this hemisphere.



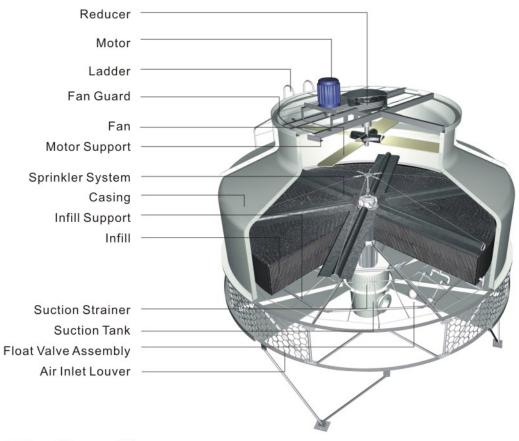
The MKT Series is a cost-effective, induced-draft counter-flow cooling tower. Its bottle shape offers very little resistance to airflow which results in very low fan energy consumption, thus high efficiency. It also performs well regardless of the prevailing winds direction, because of its round shape.

The MKT Series is available in 34 models with capacities ranging from 22 gpm to 3668 gpm. Low Noise, Super Low Noise & Low Drift models are available to meet your requirements.

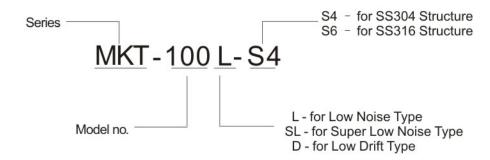


Trust MESAN with your evaporative cooling needs.

Tower Structure



Model Designation











Components

Motor

TEAO type, IP55 enclosure, class F insulation, high efficiency, and low noise. Specially designed to operate within the high-humidity environment of a cooling tower.

Fan

High efficiency axial aluminum alloy fans with innovative low drag, aerodynamic airfoil blade design, adjustable pitch blades and low-noise.*

Note: * Models MKT-6 to MKT-60 use ABS plastic fans.

Reducer

5 HP and larger fans, are driven by low-noise v-belt reducers. Our reducers have very sturdy design with large diameter, high tensile strength shafts; NSK permanently lubricated sealed bearings, isolated from the airstream within a sealed enclosure. Multi-grooved V-belts are designed to withstand the rigors of the humid environment and ensure long and reliable operation.

FRP Components

Hand-laid fiberglass with E-glass chopped strand mat, unsaturated polyester resin and UV-resistant stabilized gel coat, combine to provide excellent corrosion resistance, structural integrity and long service life with minimum maintenance.

Structural Frame

Our structure made of heavy-gauge G235 hot-dipped galvanized steel or SS-304/316 stainless steel (optional) is designed for high-wind resistance and seismic rated for up to Richter scale 7.

Water Distribution

Designed for low water pressure drop, our rotary sprinkler system, efficiently and evenly distributes the water over the entire heat exchange surfaces, ensuring dependable thermal performance. Our unique brass sprinkler head, lasts for the life of the tower, compared to other brands' aluminum sprinkler heads that have to be replaced several times over the service life of the cooling tower.

Infill

MESAN's patented infill design, maximizes the contact surface, allowing for improved heat transfer between water and air, while offering the lowest resistance to air flow, for reduced pressure drop and lowest energy consumption. All our towers, even the largest units that must be shipped disassembled, come with factory-assembled infill, for reduced installation time and labor.

Air Inlet Screen

Made of corrosion-resistant PVC, the air inlet screen keeps airborne debris, and other foreign objects, from entering the water basin and getting sucked by the pump.

Product Technical Data

MKT-6~25	MKT-30~60	MKT-70~80	MKT-90~300	MKT-330~450	MKT-500~1000

Model	Nominal Model Water Flow		nsion	Fan	Motor	Air Flow	W.	eight ₋BS)	Water Pressure Drop
Model	(GPM)	Do	Н	Diameter	(HP)	(CFM)	Dry	Operating	(PSI)
MKT-6	22	3'-1/2"	4'- 7"	1'- 11"	1/4	2707	106	265	3
MKT-8	29	3'-1/2"	5'- 4"	1'- 11"	1/4	2825	117	287	3
MKT-10	37	3'-10 1/4"	4'- 10 3/4"	2'- 6"	1/2	4120	143	419	3
MKT-12	44	3'-10 1/4"	5'- 10"	2'- 6"	1/2	4473	159	441	3
MKT-16	59	4'-6 1/4"	6'- 1/2"	2'- 6"	1/2	5297	174	463	3
MKT-20	73	4'-6 1/4"	6'- 10 3/4"	2'- 6"	3/4	6298	209	639	3
MKT-25	92	5'-3 1/2"	6'- 2 1/2"	2'- 10 3/4"	1	8888	273	1091	3
MKT-30	110	5'-10"	6'- 10 1/4"	2'- 10 3/4"	1	10653	331	1356	3
MKT-35	128	6'-1 1/2"	6'- 9 1/2"	2'- 10 3/4"	1 1/2	12419	419	1620	4
MKT-40	147	6'-1 1/2"	6'- 9 1/2"	3'- 10 1/2"	2	14185	463	1664	4
MKT-50	183	6'-10 3/4"	7'- 6"	3'- 10 1/2"	2	17775	595	2138	4
MKT-60	220	6'-10 3/4"	7'- 6"	3'- 10 1/2"	3	18835	683	2249	4
MKT-70	257	8'-1/2"	7'- 8 1/2"	4'- 9 3/4"	3	24838	739	2513	4
MKT-80	293	8'-1/2"	9'- 1/4"	4'- 9 3/4"	3	25074	772	2568	4
MKT-90	330	9'-8 1/4"	8'- 7 3/4"	4'- 9 3/4"	5	31960	1157	3549	4
MKT-100	367	9'-8 1/4"	9'- 4 1/2"	4'- 9 3/4"	5	32961	1279	3715	4
MKT-125	459	10'-10 3/4"	9'- 1/4"	5'- 10"	5	44438	1609	4553	4
MKT-150	550	12'-1 3/4"	11'- 2 3/4"	5'- 10"	5	47145	2271	6173	4
MKT-175	642	13'-5 1/2"	11'- 7"	7'- 9"	7 1/2	62154	2866	7220	4
MKT-200	734	13'-5 1/2"	11'- 7"	7'- 9"	7 1/2	69453	3020	7485	4
MKT-225	825	14'-5-1/4"	11'- 10 1/2"	7'- 9"	7 1/2	70630	3285	9215	4
MKT-250	917	14'-5-1/4"	12'- 2 1/2"	7'- 9"	10	78576	3527	9557	4
MKT-275	1009	15'-11 1/4"	13'- 4 1/4"	7'- 9"	10	86404	4034	11729	6
MKT-300	1100	15'-11 1/4"	12'- 1 3/4"	9'- 7 3/4"	10	94173	4079	11773	6
MKT-330	1211	18'-1 1/4"	14'- 2 1/2"	9'- 7 3/4"	15	117128	5159	16248	6
MKT-370	1357	18'-1 1/4"	14'- 2 1/2"	9'- 7 3/4"	15	117716	5512	16755	6
MKT-400	1467	19'-6 3/4"	15'- 9"	10'- 11"	15	142142	6724	19621	6
MKT-450	1651	19'-6 3/4"	15'- 9"	10'- 11"	20	146263	7187	20260	6
MKT-500	1834	21'-7 3/4"	15'- 8 1/4"	10'- 11"	20	177634	8444	26896	7
MKT-600	2201	21'-7 3/4"	17'- 5"	11'- 11"	25	188640	9425	28098	7
MKT-700	2568	24' 11 1/4"	18'- 9 1/2"	11'- 11"	30	220012	12500	39584	7
MKT-800	2935	26'-7"	20'- 2 1/4"	13'- 9 1/4"	30	251619	14639	39595	9
MKT-900	3301	28'-10 1/2"	19'- 11 3/4"	16'- 4 3/4"	30	319894	18739	48127	9
MKT-1000	3668	28'-10 1/2"	19'- 11 3/4"	16'- 4 3/4"	40	323720	18960	48325	9

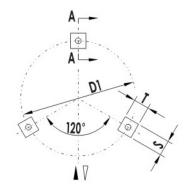
^{1.}Nominal water flow is defined as rate of water cooled from 95°F to 85°F with 78°F wet bulb temperature.

^{2.} Specifications are subject to change without prior notice.

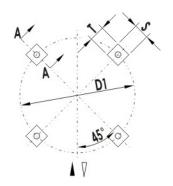


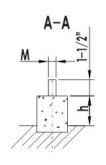
Foundation

MKT-6~20



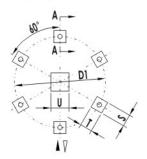
MKT-25~80



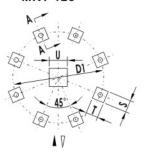


Model	D1	s	т	М	h
MKT-6	1'- 11 1/2"	9 3/4"	9 3/4"	3/8"	1′
MKT-8	1'- 11 1/2"	9 3/4"	9 3/4"	3/8"	1′
MKT-10	2'- 10 1/2"	9 3/4"	9 3/4"	3/8"	1′
MKT-12	2'- 10 1/2"	9 3/4"	9 3/4"	3/8"	1′
MKT-16	3'- 5 3/4"	9 3/4"	9 3/4"	3/8"	1′
MKT-20	3'- 5 3/4"	9 3/4"	9 3/4"	3/8"	1′
MKT-25	4'- 2 1/4"	9 3/4"	9 3/4"	3/8"	1′
MKT-30	4'- 8 1/4"	9 3/4"	9 3/4"	3/8"	1′
MKT-35	4'- 11 1/4"	9 3/4"	9 3/4"	3/8"	1′
MKT-40	4'- 11 1/4"	9 3/4"	9 3/4"	3/8"	1′
MKT-50	5'- 7 1/2"	9 3/4"	9 3/4"	3/8"	1′
MKT-60	5'- 7 1/2"	9 3/4"	9 3/4"	3/8"	1′
MKT-70	6'- 4 3/4"	9 3/4"	9 3/4"	3/8"	1′
MKT-80	6'- 4 3/4"	11 3/4″	11 3/4″	3/8"	1′

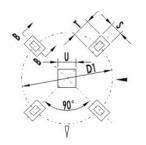
MKT-90~100

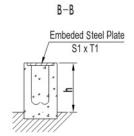


MKT-125

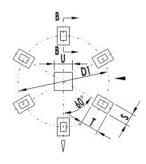


MKT-150~300

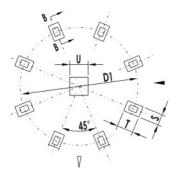




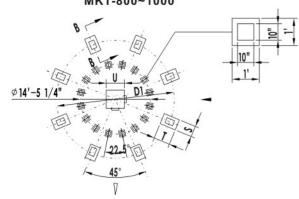
MKT-330~450



MKT-500~700



MKT-800~1000



Model	D1	U	s	т	S1×T1	h
MKT-90	9'- 2 3/4"	1'- 11 1/2"	11 3/4"	11 3/4"	8"×8"	1'
MKT-100	9'- 2 3/4"	1'- 11 1/2"	11 3/4"	11 3/4"	8"×8"	1'
MKT-125	10'- 6 1/2"	1'- 11 1/2"	11 3/4"	11 3/4"	8"×8"	1'
MKT-150	11'- 8 1/2"	1'- 11 1/2"	11 3/4"	1'- 3 3/4"	8"×11 3/4"	1'
MKT-175	13'- 1 1/2"	1'- 11 1/2"	11 3/4"	1'- 3 3/4"	8"×11 3/4"	1'
MKT-200	13'- 1 1/2"	1'- 11 1/2"	11 3/4"	1'- 3 3/4"	8"×11 3/4"	1'
MKT-225	14'- 1 1/4"	1'- 11 1/2"	11 3/4"	1'- 3 3/4"	8"×11 3/4"	1'
MKT-250	14'- 1 1/4"	1'- 11 1/2"	11 3/4"	1'- 3 3/4"	8"×11 3/4"	1'
MKT-275	15'- 5"	1'- 11 1/2"	11 3/4"	1'- 3 3/4"	8"×11 3/4"	1'
MKT-300	15'- 5"	1'- 11 1/2"	11 3/4"	1'- 3 3/4"	8"×11 3/4"	1'
MKT-330	17'- 4 3/4"	1'- 11 1/2"	11 3/4"	1'- 3 3/4"	8"×11 3/4"	1'
MKT-370	17'- 4 3/4"	1'- 11 1/2"	11 3/4"	1'- 3 3/4"	8"×11 3/4"	1'
MKT-400	19'- 1/4"	1'- 11 1/2"	11 3/4"	1'- 3 3/4"	8"×11 3/4"	1'
MKT-450	19'- 1/4"	1'- 11 1/2"	11 3/4"	1'- 3 3/4"	8"×11 3/4"	1'
MKT-500	21'- 4"	2'- 7 1/2"	1'- 7 3/4"	1'- 11 1/2"	11 3/4"× 11 3/4"	1'
MKT-600	21'- 4"	2'- 7 1/2"	1'- 7 3/4"	1'- 11 1/2"	11 3/4"× 11 3/4"	1'
MKT-700	24'- 7 1/4"	2'- 7 1/2"	1'- 7 3/4"	1'- 11 1/2"	11 3/4"× 11 3/4"	1'
MKT-800	26'- 3"	2'- 7 1/2"	1'- 11 1/2"	2'- 3 1/2"	11 3/4"× 11 3/4"	1'- 4"
MKT-900	28'- 6 1/2"	2'- 7 1/2"	1'- 11 1/2"	2'- 3 1/2"	11 3/4"× 11 3/4"	1'- 4"
MKT-1000	28'- 6 1/2"	2'- 7 1/2"	1'- 11 1/2"	2'- 3 1/2"	11 3/4"× 11 3/4"	1'- 4"

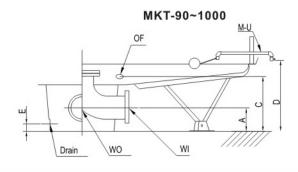


Piping Connections

Drain

MKT-6~80

WO



M - 1-1		F	iping (Connect	ion			Dimension							
Model	WI	wo	OF	Drain	M-U	OF	Α	В	С	D	E	F	G	K	
MKT-6	1 1/2"	1 1/2"	1"	1"	1/2"	_	8 1/4"	4 1/4"	8 1/2"	8 3/4"	3 1/4"	3 1/2"	4 3/4"	4"	
MKT-8	1 1/2"	1 1/2"	1"	1"	1/2"	_	8 1/4"	4 1/4"	8 1/2"	8 3/4"	3 1/4"	3 1/2"	4 3/4"	4"	
MKT-10	2"	2"	1"	1"	1/2"	-	8 3/4"	5"	9 1/4"	9 3/4"	3 1/2"	4 1/4"	5"	5 3/4"	
MKT-12	2"	2"	1"	1"	1/2"	-	8 3/4"	5"	9 1/4"	9 3/4"	3 1/2"	4 1/4"	5"	5 3/4"	
MKT-16	2"	2"	1"	1"	1/2"	-	8 3/4"	6"	10 3/4"	10 3/4"	3 1/2"	4 1/2"	6"	7"	
MKT-20	2"	2"	1"	1"	1/2"	_	8 3/4"	6"	10 3/4"	10 3/4"	3 1/2"	4 1/2"	6"	7"	
MKT-25	3"	3"	1"	1"	1/2"	_	9 3/4"	5 3/4"	11 1/2"	1'-3/4"	3 1/2"	5"	6 1/4"	5 3/4"	
MKT-30	3"	3"	1"	1"	1/2"	_	11 1/2"	5 1/2"	1'-1/4"	1'-1 1/2"	3 1/4"	6"	6"	6"	
MKT-35	3"	3"	1"	1"	3/4"	-	11"	6 1/4"	1'-1/2"	1'-3/4"	3 1/4"	6"	6"	6 3/4"	
MKT-40	3"	3"	1"	1"	3/4"	_	11"	6 1/4"	1'-1/2"	1'-3/4"	3 1/4"	6"	6"	6 3/4"	
MKT-50	4"	4"	1 1/2"	1"	3/4"	_	9 3/4"	7"	1'	1'-3 1/4"	4"	6 1/4"	7"	7 1/2"	
MKT-60	4"	4"	1 1/2"	1"	3/4"	_	9 3/4"	7"	1'	1'-3 1/4"	4"	6 1/4"	7"	7 1/2"	
MKT-70	4"	4"	1 1/2"	1"	3/4"	_	1' 1/4"	10 3/4"	1'-5 1/4"	1'-5 1/2"	5 3/4"	7"	7 3/4"	8 3/4"	
MKT-80	4"	4"	1 1/2"	1"	3/4"	_	1' 1/4"	10 3/4"	1'-5 1/4"	1'-5 1/2"	5 3/4"	7"	7 3/4"	8 3/4"	
MKT-90	6"	6"	1 1/2"	1 1/2"	1"	_	6"	6"	11"	2'-3 1/2"	2 1/4"	_	_	-1 - 1	
MKT-100	6"	6"	1 1/2"	1 1/2"	1"	_	6"	6"	11"	2'-3 1/2"	2 1/4"	_	_	_	
MKT-125	6"	6"	1 1/2"	1 1/2"	1"	1"	6"	6"	11"	2'-5 1/2"	2 1/4"	_	_	_	
MKT-150	6"	6"	2"	1 1/2"	1"	1"	9-1/2"	9-1/2"	1'-9 3/4"	3'-3"	2 1/4"	_	_	_	
MKT-175	6"	6"	3"	1 1/2"	1"	1"	1'-1"	1'-1"	2'-1/2"	3'-4 1/2"	2 1/4"	_			
MKT-200	8"	8"	3"	1 1/2"	1"	1"	9-1/2"	9-1/2"	2'-1/2"	3'-4 1/2"	2 1/4"	_	_	_	
MKT-225	8"	8"	3"	1 1/2"	1"	1"	9-1/2"	9-1/2"	2'-1/2"	3'-6 1/4"	2 1/4"	_	_	-	
MKT-250	8"	8"	3"	1 1/2"	1"	1"	9-1/2"	9-1/2"	2'-1/2"	3'-6 1/4"	2 1/4"	_	_	_	
MKT-275	8"	8"	3"	1 1/2"	1"	1"	9-1/2"	9-1/2"	2'-1/2"	3'-7 1/4"	2 1/4"	_	_	_	
MKT-300	8"	8"	3"	1 1/2"	1"	1"	9-1/2"	9-1/2"	2'-1/2"	3'-7 1/4"	2 1/4"	_		_	
MKT-330	10"	10"	4"	2"	2"	2"	9-1/2"	9-1/2"	2'-1/2"	4'-3 1/4"	4"		-	_	
MKT-370	10"	10"	4"	2"	2"	2"	9-1/2"	9-1/2"	2'-1/2"	4'-3 1/4"	4"	_	_	_	
MKT-400	10"	10"	4"	2"	2"	2"	9-1/2"	9-1/2"	2'-1/2"	4'-4"	4"	_	_	_	
MKT-450	10"	10"	4"	2"	2"	2"	9-1/2"	9-1/2"	2'-1/2"	4'-4"	4"	_	-		
MKT-500	10"	10"	4"	3"	2"	2"	9-1/2"	9-1/2"	2'-4 1/4"	4'-6 1/4"	4"	_	-	-	
MKT-600	10"	10"	4"	3"	2"	2"	9-1/2"	9-1/2"		4'-6 1/4"	4"	_	-		
MKT-700	12"	12"	4"	3"	2"	2"	1'-1/4"	1'-1/4"	2'-11 1/2"		4"	_	-	_	
MKT-800	14"	14"	4"	3"	2"	2"	1'-1/4"		2'-11 1/2"		4"	_			
MKT-900	14"	14"	4"	3"	2"	2"	1'-1/4"				4"	_	_	_	
MKT-1000	14"	14"	4"	3"	2"	2"	1'-1/4"	1'-1/4"	2'-11 1/2"	5'-4 1/4"	4"	_	_		

Options And Accessories

MESAN offers a broad range of options and accessories, designed to enhance the cooling towers performance, extend their service life, or reduce maintenance and down time.

Stainless Steel Structure and Hardware

Corrosion-resistance structure and hardware, greatly extends the life of any cooling tower, MESAN offers SS-304 & SS-316 for this option.

External Service Platform

OSHA-compliant, and designed for 50 psf or 200 lbs of concentrated live load, our service platforms, provide a safe and stable surface, for the maintenance personnel to perform routine maintenance tasks on our units.

Discharge Sound Attenuator

For noise-sensitive applications, we offer discharge sound attenuators as an extension for the fan cylinder.

Basin Heater

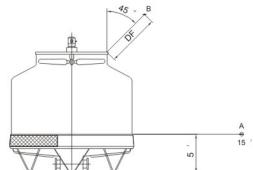
For cold climate areas to prevent freezing, we offer electric basin heaters.

Electrical Panels

Constant and variable speed configurations, UL-listed, NEMA-1 and NEMA-3R, standard and custom-made electrical panels are also available.



Sound Pressure Of Cooling Tower



Note:

The accuracy of the measuring value is ± 3 dB(A).

Remarks:

- 1. Distance "DF" is fan diameter.
- These values are based on a semi-hemispherical field, and do not consider the effect of walls or any surrounding structures.

Tower Model	MK	T-6	MK	T-8	MK	T-10	MK	T-12	MK	T-16	MK	T-20	MK	T-25	MK	T-30	MK	T-35
Test Point (Feet)	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В
Sound Pressure (dBA)	46	60	46	60	48	62	48	62	49	62.5	50	63	51	65	52	65.5	53	67
Tower Model	MK.	Γ-40	MK	Γ-50	MK	T-60	MK.	T-70	MK	T-80	MK	T-90	MKT	-100	MK	T-125	MK	Г-150
Test Point (Feet)	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В
Sound Pressure (dBA)	53	67	54	67	55	69	56	69	57	69.5	58	70	58	70	59	70.5	60	70.5
Tower Model	MKT	-175	MKT	-200	MKT	-225	MKT	-250	MK	Γ-275	MKT	-300	MKT	-330	MK	T-370	MK	Γ-400
Test Point (Feet)	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В
Sound Pressure (dBA)	60	71	61	71	62	71.5	62	72	63	73	63	73	64	73	64	73	65	74
Tower Model	MKT	-450	MKT	-500	MKT	-600	MKT	-700	MK	Г-800	MKT	-900	MKT	-1000				
Test Point (Feet)	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В	Α	В				
Sound Pressure (dBA)	65	74	66	74	66	75	67	75	68	76	69	77	70	77				



Selection Table

				95							
Model				85	85						
() () () () () () () () () ()	80	79	78	77	76	75	74				
MKT-6	18	20	22	24	26	27	29				
MKT-8	24	27	29	32	34	36	39				
MKT-10	30	33	37	40	43	44	48				
MKT-12	36	40	44	48	51	53	58				
MKT-16	48	53	59	64	68	71	77				
MKT-20	60	67	73	79	85	89	96				
MKT-25	75	83	92	99	107	111	120				
MKT-30	90	100	110	119	128	133	145				
MKT-35	105	116	128	139	149	155	169				
MKT-40	120	133	147	159	170	178	193				
MKT-50	150	166	183	199	213	222	241				
MKT-60	180	200	220	238	256	267	289				
MKT-70	210	233	257	278	298	311	337				
MKT-80	240	266	293	318	341	355	385				
MKT-90	269	299	330	357	384	400	434				
MKT-100	299	333	367	397	426	444	482				
MKT-125	374	416	459	496	533	555	602				
MKT-150	449	499	550	596	639	666	723				
MKT-175	524	582	642	695	746	777	843				
MKT-200	599	665	734	794	852	888	963				
MKT-225	674	749	825	894	959	999	1084				
MKT-250	749	832	917	993	1066	1111	1204				
MKT-275	823	915	1009	1092	1172	1222	1325				
MKT-300	898	998	1100	1191	1279	1333	1445				
MKT-330	988	1098	1211	1311	1407	1466	1590				
MKT-370	1108	1231	1357	1470	1577	1644	1782				
MKT-400	1198	1331	1467	1589	1705	1777	1927				
MKT-450	1347	1497	1651	1787	1918	1999	2168				
MKT-500	1497	1664	1834	1986	2131	2221	2409				
MKT-600	1797	1996	2201	2383	2557	2665	2890				
MKT-700	2096	2329	2568	2780	2984	3109	3372				
MKT-800	2395	2662	2935	3177	3410	3554	3854				
MKT-900	2695	2994	3301	3574	3836	3998	4336				
MKT-1000	2994	3327	3668	3972	4262	4442	4817				

Note:

- 1. The tower water flow rate is defined in gpm and the temperature is defined in $^{\circ}F$.
- $2. \ These \ are \ estimated \ nominal \ capacities \ and \ for \ more \ accurate \ sizing \ we \ encourage \ customers \ to \ use \ our \ tower \ sizing \ software.$
- 3. Satisfactory performance of the cooling tower is based on precise selection, proper system design and the installation in a clean and well-ventilated location.



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- Specifications & Design are subject to change without notice.
- One year warranty under normal operation.
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