

KST-N



KS COOLING TOWER

**COUNTERFLOW, BOTTLE TYPE
F.R.P. STRUCTURE**



MEMBER OF THE CTI

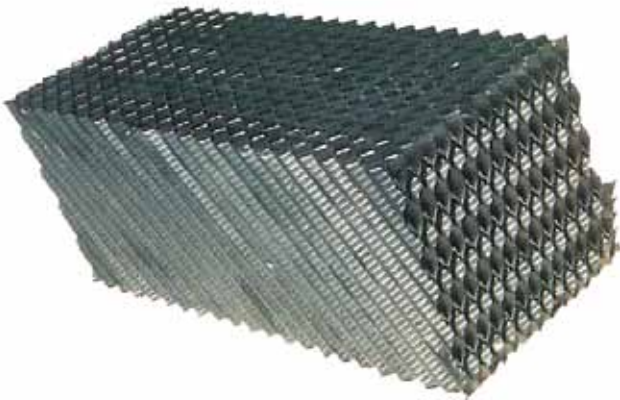
KING SUN INDUSTRY CO., LTD.

THE FEATURES OF KST-N

VACUUM FORMED FILL

KST-N series cooling towers use vacuum formed film type cellular fill. The heat exchange performance of it is about 20% higher than the hot press winded fill of ordinary round type cooling tower.

The fashion of the vacuum formed fill will always keep constant without changing after being glued. However, the ordinary hot press winded fill always lose it's fashion in the process of winding, pressing and gluing. Because the fashion lose it's constancy, the air flow is obstructed and heat exchange efficiency is reduced. Thus, about 20% performance of the cooling tower is lost.



VACUUM FORMED FILL



CUT TO BE ROUND TYPE FOR KST-N

2" DIA DRAIN SOCKET

In the range KST-N-20 through 1000, the drain socket are 2". This is very much helpful for cooling tower maintenance because of time saving.

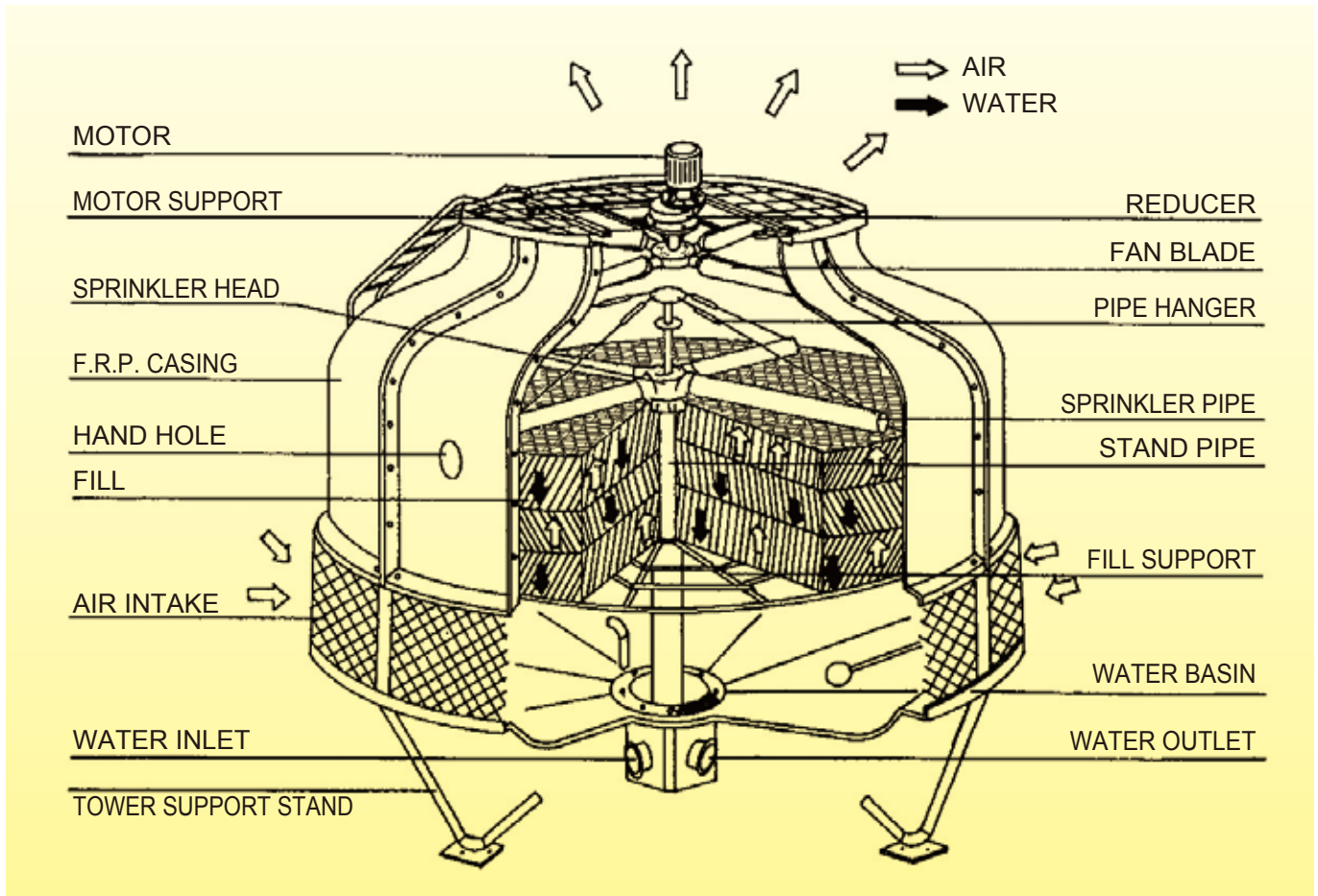
EXTRA DRAIN PLUG

In the range KST-N-3 through 80, in the lowest position of the basin, we install an extra drain plug. After the cleaning work of the basin, the contaminated water could be fully drained off from this drain plug. This is very much helpful for cooling tower maintenance work to get rid of the contaminated water which is lower than drain socket.

OPTIONAL DRIFT ELIMINATOR

In the range KST-N-25 and up, the drift eliminator could be installed as an optional parts. The drift loss after the installation of the drift eliminator would be less than 0.005%.

MATERIAL OF KST-N



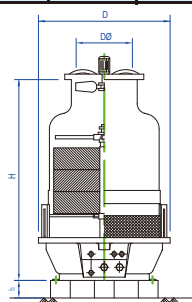
MODEL	3	8	10	20	30	60	80	100	225	250	300	500	1500RT		
MOTOR	220, 346, 380, 415V, 50Hz/60Hz (others available)														
FAN DRIVE	DIRECT									225 SPEED REDUCER					
FAN BLADE	REINFORCED PLASTIC					50	ALUMINIUM ALLOY			200	225	F.R.P.		400	ALUMINIUM ALLOY
CASING	F.R.P.														
WATER BASIN	F.R.P.														
SPRINKLER HEAD	REINFORCED PLASTIC						80	ALUMINIUM ALLOY							
FILL	PVC VACUUM FORMING														
AIR MESH	P.V.C. MESH														
FLOAT VALVE	SINGLE VALVE														
LADDER	NOT FITTED					70	HOT DIP GALVANIZED STEEL PIPE								
TOWER SUPPORT	F.R.P.										350	H.D.G. STEEL PIPE			
WATER SUMP	NOT FITTED										300	350	F.R.P.		

KST-N SELECTION TABLE

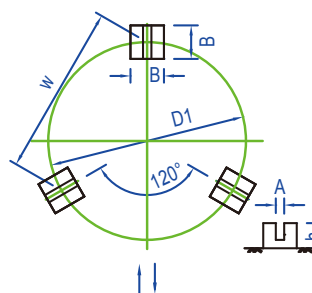
MODEL No.	Normal Temperature								Medium Temperature		High Temperature	
	27°C		28°C		29°C		30°C		27°C	28°C	27°C	28°C
Wet bulb(°C)	37°C	37.5°C	37°C	37.5°C	37°C	37.5°C	38°C	38.5°C	42°C	42°C	60°C	60°C
MODEL	32°C	32°C	32°C	32°C	32°C	32°C	33°C	33°C	32°C	32°C	35°C	35°C
3	39	36	33	30	26	24	28	26	23	20	23	20
5	65	60	55	50	43	41	46	43	39	32	39	36
8	104	95	88	80	70	66	76	70	63	55	63	60
10	130	120	100	95	88	82	95	88	78	68	78	75
15	195	180	152	148	133	123	142	133	118	100	118	110
20	260	240	220	200	177	165	190	177	157	135	157	145
25	325	300	275	255	220	210	240	220	196	170	196	185
30	390	360	330	305	270	250	290	266	240	205	240	230
40	520	480	440	415	375	355	395	375	340	300	340	330
50	650	600	550	530	470	440	500	470	400	370	400	390
60	780	720	660	615	560	520	590	560	480	450	520	490
70	910	840	770	740	660	620	700	660	580	530	620	570
80	1040	962	892	826	733	700	788	743	655	570	660	610
100	1300	1210	1120	1025	925	829	937	877	830	729	790	750
125	1625	1513	1398	1304	1152	1104	1237	1166	1034	940	1070	1000
150	1950	1814	1680	1563	1391	1330	1495	1415	1251	1093	1260	1190
175	2275	2108	1963	1837	1624	1541	1728	1634	1460	1310	1510	1430
200	2600	2419	2241	2114	1849	1786	1990	1895	1659	1456	1760	1660
225	2925	2736	2514	2380	2100	1990	2220	2090	1890	1680	1950	1830
250	3250	2995	2791	2610	2330	2180	2480	2310	2090	1860	2140	2040
300	3900	3634	3355	3135	2810	2605	2910	2760	2488	2220	2520	2395
350	4550	4223	3932	3696	3330	3130	3486	3293	2952	2615	3050	2890
400	5200	4832	4490	4250	3800	3518	3960	3748	3350	2992	3450	3220
500	6500	6100	5660	5330	4788	4520	5023	4780	4356	3880	4440	4230
600	7800	7280	6749	6340	5613	5330	5960	5650	5100	4550	5250	4950
700	9100	8470	7965	7350	6725	6300	7000	6660	6127	5482	6220	5930
800	10400	9710	8984	8520	7650	7270	8090	7680	7000	6280	7270	6930
1000	13000	12180	11430	10710	9756	9200	10100	9700	8965	8050	9250	8840
1250	16250	15350	14300	13550	12250	11700	12900	12250	11300	10300	12000	11400
1500	19500	18420	17160	16260	14700	14050	15480	14700	13600	12200	14200	13200

KST-N-3~20

MODEL KST-N	Dimension m/m		Pipe Connection m/m						Fan Motor hp	Fan Dia. m/m	Water Flow l/min	Pump Head m	Weight: kg	
			OUTLET	INLET	OVERFLOW	DRAIN	AUTOMATIC FILLER	QUICK FILLER					Dry	Operating
	H	D	S	De	O	Dr	Ba	Q						
3	1318	750	40	40	25	25	15	--	1/6	500	39	1.3	30	75
5	1318	750	40	40	25	25	15	--	1/6	500	65	1.5	35	85
8	1563	860	40	40	25	25	15	15	1/6	500	104	1.5	41	120
10	1563	860	40	40	25	25	15	15	1/4	500	130	1.7	45	130
15	1773	1165	50	50	25	25	15	15	1/4	600	195	1.7	66	210
20	1773	1165	50	50	25	25	15	15	1/2	600	260	1.8	90	260

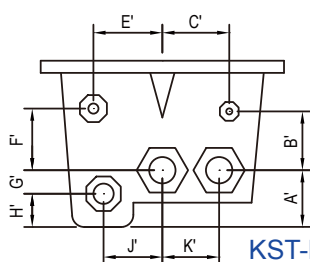


KST-N-3~20

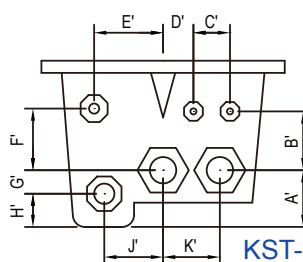


KST-N-3~20

MODEL KST-N	D1 m/m	W m/m	A m/m	B m/m	h m/m	Anchor Bolt		
						Size	Length m/m	Quantity
3	560	485	50	200	150	M12	120	3
5	560	485	50	200	150	M12	120	3
8	660	572	50	200	150	M12	120	3
10	660	572	50	200	150	M12	120	3
15	956	828	50	200	150	M12	120	3
20	956	828	50	200	150	M12	120	3



KST-N-3~5



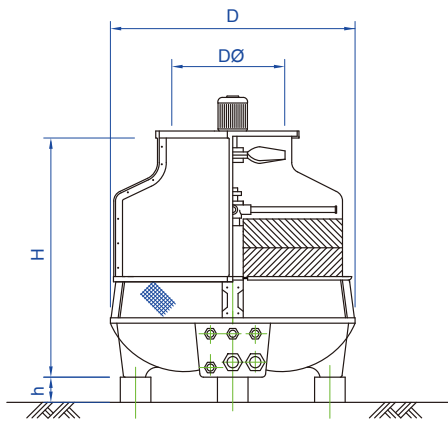
KST-N-8~20

KST-N	A'	B'	C'	D'	E'	F'	G'	H'	J'	K'
3	95	100	120	0	120	100	55	40	117	107
5	95	100	120	0	120	100	55	40	117	107
8	105	134	75	60	117	65	100	40	117	107
10	105	134	75	60	117	65	100	40	117	107
15	105	133	108	70	165	110	55	50	165	130
20	105	133	108	70	165	110	55	50	165	130

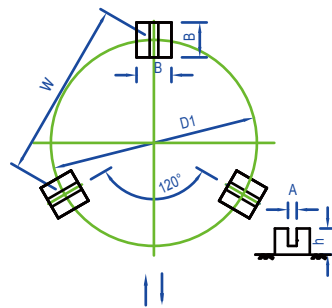
The design condition of KST-N cooling tower is based on 37°C Inlet Water, 32°C Outlet Water and 27°C Wet Bulb temperature. Under these assumptions, 13LPM Water Flow is regarded as one ton. If we divide the Water Flow figure in this page by 13, the figure we get is the actual tonnage of this model.

KST-N-25~70

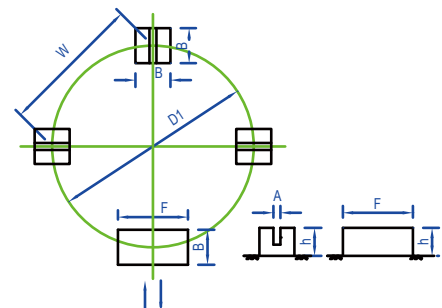
MODEL KST-N	Dimension m/m		Pipe Connection m/m						Fan Motor hp	Fan Dia. m/m	Water Flow l/min	Pump Head m	Weight: kg	
			OUTLET	INLET	OVERFLOW	DRAIN	AUTOMATIC FILLER	QUICK FILLER					Dry	Operating
	H	D	S	De	O	Dr	Ba	Q						
25	1795	1440	65	65	25	50	15	15	1	700	325	1.8	137	505
30	1795	1440	65	65	25	50	15	15	1	700	390	2	144	522
40	1775	1560	65	65	25	50	15	15	1	700	520	2	185	577
50	1845	1800	80	80	25	50	20	20	2	900	650	2	228	650
60	1845	1800	80	80	25	50	20	20	2	900	780	2	277	719
70	2140	1900	80	80	25	50	20	20	2	1200	910	2	337	798



KST-N-25~70



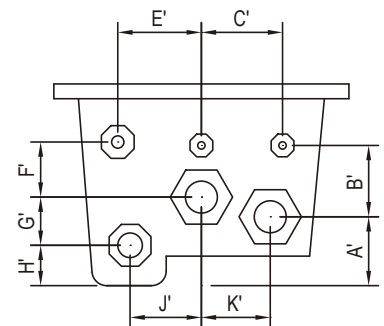
KST-N-25~40



KST-N-50~70

MODEL KST-N	D1 m/m	W m/m	A m/m	B m/m	C m/m	h m/m	Anchor Bolt		
							Size	Length m/m	Quantity
25	1116	966	50	200		150	M12	120	3
30	1116	966	50	200		150	M12	120	3
40	1180	1022	50	200		150	M12	120	3
50	1418	1003	50	250	500	200	M12	120	3
60	1418	1003	50	250	500	200	M12	120	3
70	1440	1018	50	250	500	200	M12	120	3

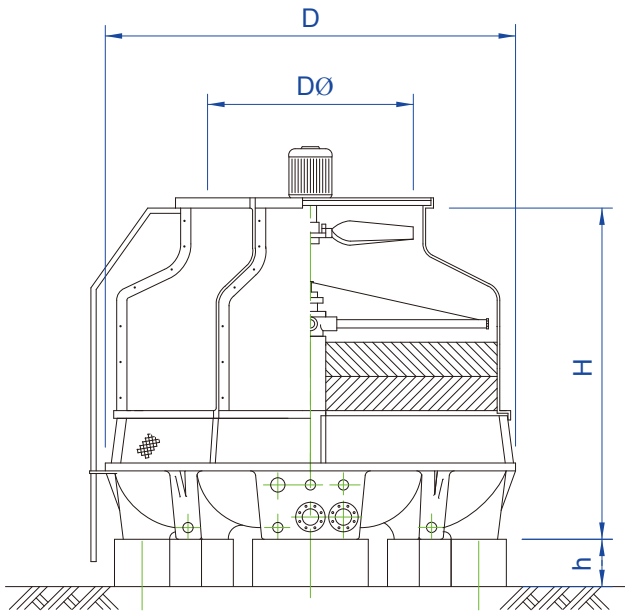
KST-N	A'	B'	C'	D'	E'	F'	G'	H'	J'	K'
25	135	145	162	0	170	150	75	60	160	147
30	135	145	162	0	170	150	75	60	160	147
40	135	145	162	0	170	150	75	60	160	147
50	140	125	120	80	70	125	60	80	148	155
60	140	125	120	80	70	125	60	80	148	155
70	140	125	120	80	70	125	60	80	148	155



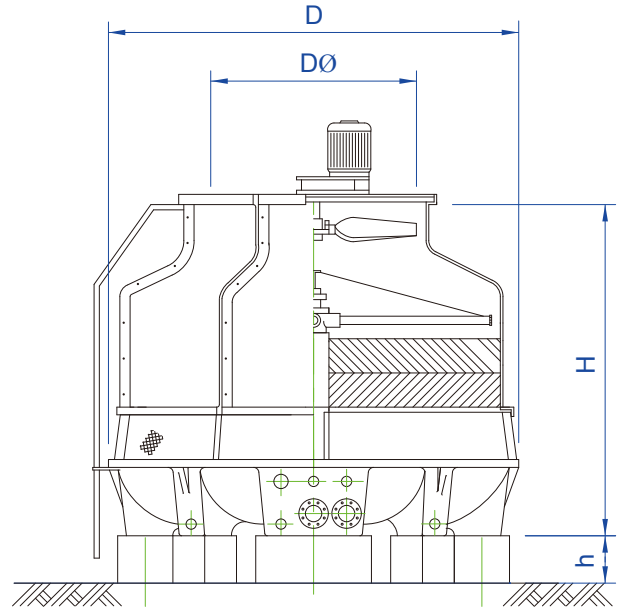
KST-N-25~70

The design condition of KST-N cooling tower is based on 37°C Inlet Water, 32°C Outlet Water and 27°C Wet Bulb temperature. Under these assumptions, 13LPM Water Flow is regarded as one ton. If we divide the Water Flow figure in this page by 13, the figure we get is the actual tonnage of this model.

KST-N-80~300



KST-N-80~200

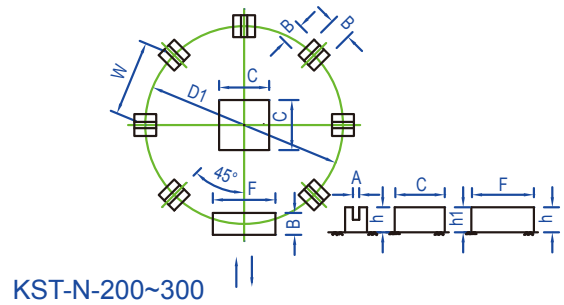
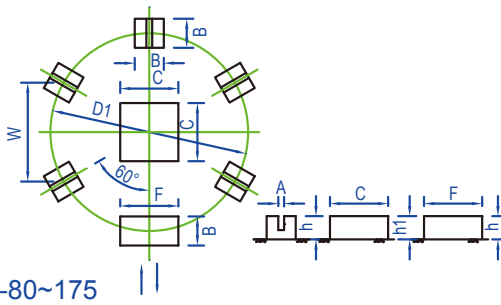


KST-N-225~300

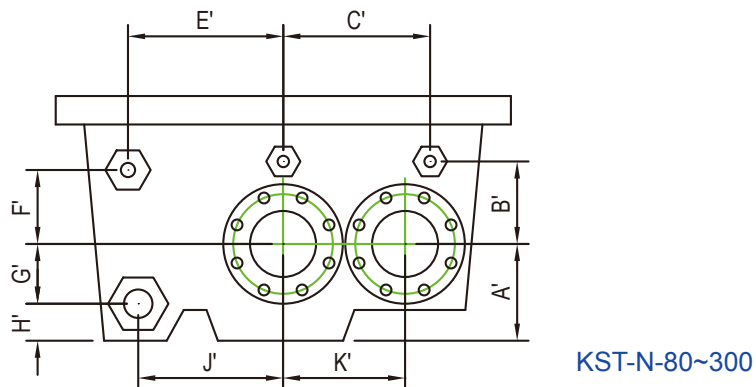
KST-N	Dimension m/m		Pipe Connection m/m						Fan Motor hp	Fan Dia. m/m	Water Flow l/min	Pump Head m	Weight: kg	
			OUTLET	INLET	OVERFLOW	DRAIN	AUTOMATIC FILLER	QUICK FILLER					Dry	Operating
	H	D	S	De	O	Dr	Ba	Q						
80	1980	2140	100	100	25	50	20	20	2	1200	1040	2	352	982
100	2365	2410	125	125	25	50	25	25	3	1500	1300	2.5	474	1205
125	2330	2730	125	125	25	50	25	25	3	1500	1625	3	524	1336
150	2465	3050	125	125	50	50	25	25	5	1800	1950	3	702	3212
175	2465	3050	125	125	50	50	25	25	5	1800	2275	3.1	855	3415
200	2450	3280	150	150	50	50	32	32	5	1800	2600	3.3	937	3570
225	2405	3280	150	150	50	50	32	32	7 1/2	2400	2925	3.3	1022	3661
250	2740	3760	200	200	50	50	32	32	7 1/2	2400	3250	3.6	1172	3885
300	2835	4160	200	200	50	50	32	32	10	2400	3900	3.6	1331	4125

The design condition of KST-N cooling tower is based on 37°C Inlet Water, 32°C Outlet Water and 27°C Wet Bulb temperature. Under these assumptions, 13LPM Water Flow is regarded as one ton. If we divide the Water Flow figure in this page by 13, the figure we get is the actual tonnage of this model.

KST-N-80~300



MODEL KST-N	D1 m/m	W m/m	A m/m	B m/m	C m/m	F m/m	h m/m	h1 m/m	Anchor Bolt		
									Size	Length m/m	Quantity
80	1700	850	50	250	500	500	200		M12	120	5
100	2100	1050	50	300	500	1000	300		M16	200	5
125	2120	1060	50	300	500	1000	300		M16	200	5
150	2464	1232	50	300	600	900	300		M16	200	5
175	2464	1232	50	300	600	900	300		M16	200	5
200	2690	1029	50	300	600	900	300	300	M16	200	7
225	2690	1029	50	300	600	900	300	300	M16	200	7
250	3160	1209	100	350	800	1000	400	400	M16	200	7
300	3550	1358	100	350	800	1000	400	400	M16	200	7

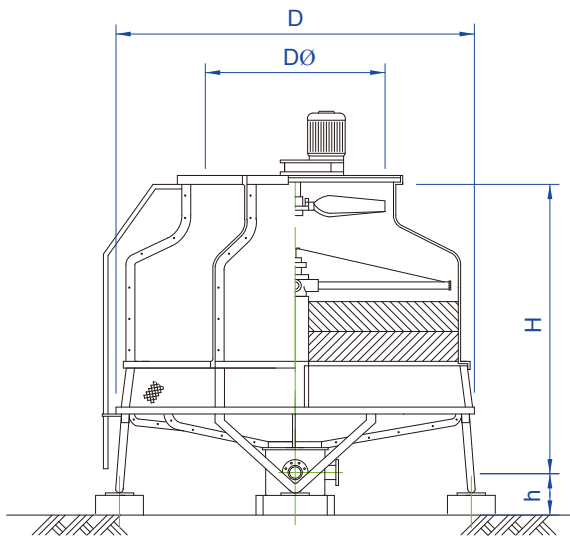


KST-N	A'	B'	C'	D'	E'	F'	G'	H'	J'	K'
80	170	145	250	0	273	145	90	80	270	235
100	190	165	255	0	260	180	110	80	285	265
125	180	190	250	0	250	190	100	80	250	330
150	205	227	285	0	288	165	125	80	288	285
175	205	227	285	0	288	165	125	80	288	285
200	205	227	285	0	288	165	125	80	288	285
225	205	227	285	0	288	165	125	80	288	285
250	230	265	342	0	385	180	150	80	385	355
300	230	265	342	0	385	180	150	80	385	355

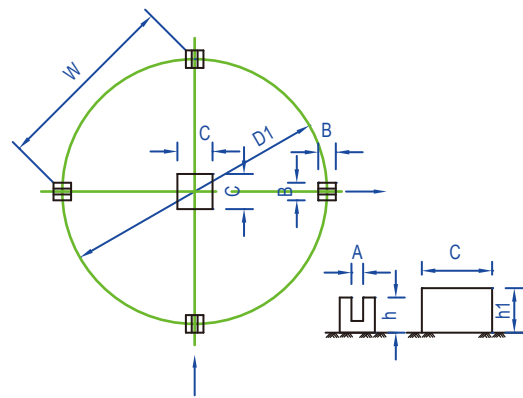
The design condition of KST-N cooling tower is based on 37°C Inlet Water, 32°C Outlet Water and 27°C Wet Bulb temperature. Under these assumptions, 13LPM Water Flow is regarded as one ton. If we divide the Water Flow in this page by 13, the figure we get is the actual tonnage of this model.

KST-N-350~500

MODEL KST-N	Dimension m/m		Pipe Connection m/m						Fan Motor hp	Fan Dia. m/m	Water Flow l/min	Pump Head m	Weight: kg	
			OUTLET	INLET	OVERFLOW	DRAIN	AUTOMATIC FILLER	QUICK FILLER					Dry	Operating
	H	D	S	De	O	Dr	Ba	Q						
350	3370	4600	200	200	80	50	32	32	10	2400	4550	4.1	1560	5690
400	3375	4600	200	200	80	50	32	32	15	3000	5200	4.3	1902	6145
500	4264	4870	250	250	80	50	40	40	15	3000	6500	4.4	2165	6837

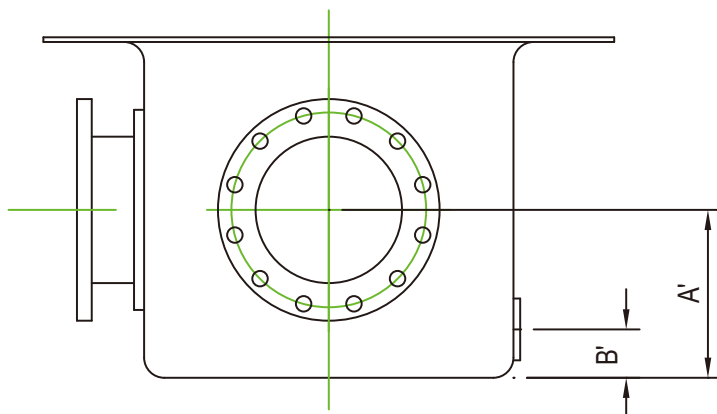


KST-N-350~500



KST-N-350~500

MODEL KST-N	D1 m/m	W m/m	A m/m	B m/m	C m/m	h m/m	h1 m/m	Anchor Bolt		
								Size	Length m/m	Quantity
350	4520	3196	100	300	600	300	380	M16	200	8
400	4520	3196	100	300	600	300	380	M16	200	8
500	4740	3352	100	300	600	300	380	M16	200	8



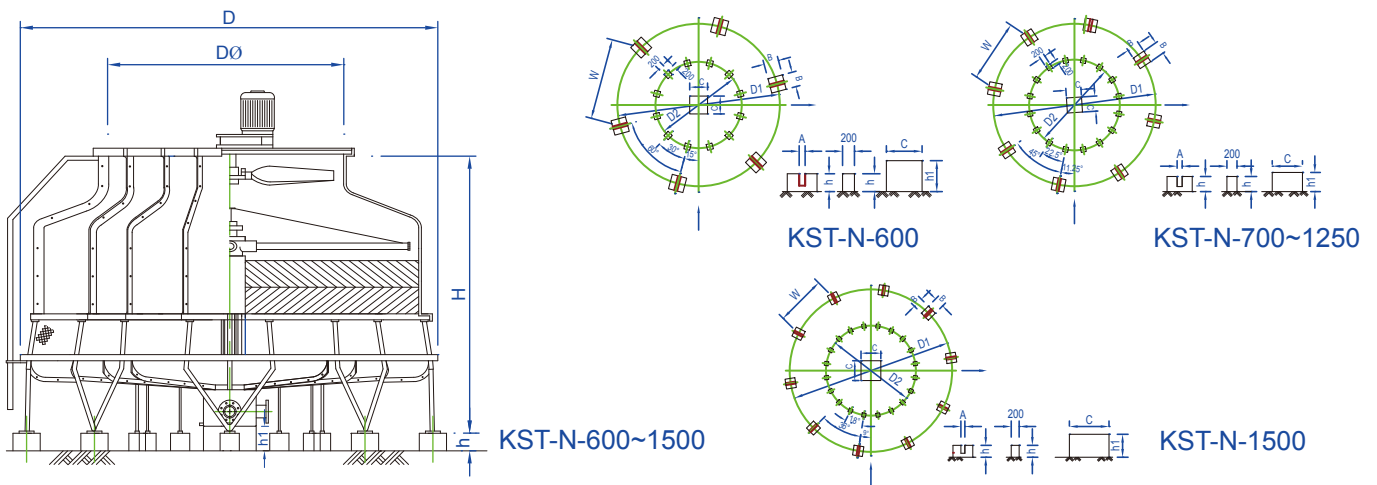
A' : 250
B' : 72

KST-N-350~500

The design condition of KST-N cooling tower is based on 37°C Inlet Water, 32°C Outlet Water and 27°C Wet Bulb temperature. Under these assumptions, 13LPM Water Flow is regarded as one ton. If we divide the Water Flow figure in this page by 13, the figure we get is the actual tonnage of this model.

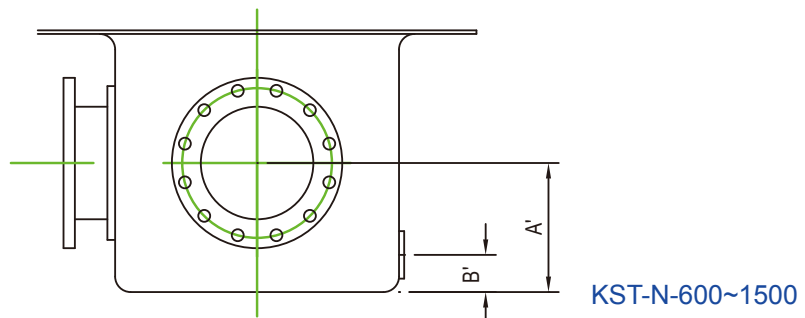
KST-N-600~1500

MODEL KST-N	Dimension m/m		Pipe Connection m/m						Fan Motor hp	Fan Dia. m/m	Water Flow l/min	Pump Head m	Weight: kg	
			OUTLET	INLET	OVERFLOW	DRAIN	AUTOMATIC FILLER	QUICK FILLER					Dry	Operating
	H	D	S	De	O	Dr	Ba	Q						
600	3990	5580	250	250	80	50	40	40	20	3400	7800	5.1	2909	8052
700	4200	6550	250	250	100	50	50	50	20	3400	9100	5.1	3411	11734
800	4200	6550	300	300	100	50	50	50	30	3400	10400	5.8	3963	12690
1000	4935	6550	300	300	100	50	50	50	30	3600	13000	6.1	4512	13465
1250	5315	7600	300	300	100	65	65	65	40	4200	16250	6.3	4650	14500
1500	5605	8430	300	300	100	65	65	65	50	4200	19500	6.5	5500	21500



MODEL KST-N	D1 m/m	W m/m	D2 m/m	A m/m	B m/m	C m/m	h m/m	h1 m/m	Anchor Bolt		
									Size	Length m/m	Quantity
600	5460	2730	2900	100	500	600	300	520	M20	200	12
700	6450	2468	3600	100	500	600	300	380	M20	200	16
800	6450	2468	3600	100	500	600	300	380	M20	200	16
1000	6450	2468	3600	100	500	600	300	380	M20	200	16
1250	7630	2920	4155	100	500	900	300	380	M20	200	16
1500	8200	2534	4540	100	500	1000	300	580	M20	200	20

KST-N	A'	B'
600	250	72
700	250	72
800	240	72
1000	240	72
1250	275	95
1500	275	95



The design condition of KST-N cooling tower is based on 37°C Inlet Water, 32°C Outlet Water and 27°C Wet Bulb temperature. Under these assumptions, 13LPM Water Flow is regarded as one ton. If we divide the Water Flow figure in this page by 13, the figure we get is the actual tonnage of this model.

JOB REFERENCES ABROAD



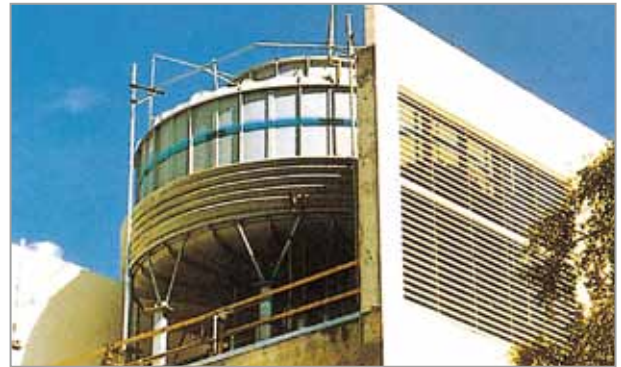
● Commercial building, Chicago, USA



● Mitsui ship building plant, Japan



● Prime minister office, Cambodia



● Miami beach conversion center, USA



● GSI power plant, Japan



● Broward community college, USA



● Exhibition center, port of Singapore authority



● Jizza steel plant, Jordan

JOB REFERENCES IN TAIWAN



● KLN Low Noise Type Cooling Tower



● KSTH High Temperature Wood Fill Cooling Tower



● KHT Crossflow Industrial Cooling Tower



● KCW Counterflow Industrial Cooling Tower



● KH Crossflow Modular Type Cooling Tower



● KFT Counterflow Modular Type Cooling Tower



KING SUN INDUSTRY CO., LTD.