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EXPERTS IN COLD AND HEAT SYSTEMS >>

Weifang Heng An Imp&Exp Co.,Ltd
HACST Heat Transfer Technology (Shandong) Co., Ltd.

About HACST

HACST Heat Transfer Technology (Shandong) Co., Ltd. is a high-tech enterprise integrating the scientific research and development, production and manufacturing, marketing and engineering services of low-carbon environmental protection and energy-saving products. The main products are cooling tower, evaporative condenser, air cooled heat exchanger, adiabatic cooler and other custom design heat exchange equipment. The products are widely used in petroleum, chemical industry, medicine, coal, power, steel, food and other fields.

Our "HACST" and "Hengan" brands have formed a high reputation at home and abroad after decades of development. The products have been exported to more than 100 countries and regions, including the United States, Canada, Russia, Germany, Australia, Saudi Arabia, South Africa, Latin America, Southeast Asia. HACST has become a strategic partner of many worldwide famous enterprises, such as COCA-COLA, MAYEKAWA, EMERSON, SRF, HAMON. HACST's R&D Center has more than 20 professional R&D personnel, 9 with senior professional titles, and 6 external doctors. With the continuous development and progress of the company over the years, we have in-depth cooperation with domestic and foreign universities and research institutions such as Shandong University and Xi'an Jiaotong University to establish industry-university-research cooperation bases and dynamic mold laboratories; we have more than 10 invention patents and more than 30 practical applications. New patented technology, participating in a number of major provincial scientific research and innovation projects. The company has passed the CTI certification, Class D pressure

vessel manufacturing license, China's energy-saving and water-saving certification, AS1210 pressure vessel certification, CE, TUV, BV, SGS, ISO9001, ISO14001, ISO45001 and other systems and certified product.

After decades of continuous development, we have accumulated a lot of experience in design, modification, installation, maintenance, replacement etc. Our services have been upgraded from standardization to customization, and we create the best design solutions for customers in different industries and regions. Deeply empower customers for high-quality development.

Vision:

Manufacturing leading products,
striving for the world's leading brand!

Value:

Integrity. Innovation. Sustainability

Mission:

Manufacturing Quality Products.
Pursuit of Excellence. Contributing to Society!

Slogan:

Be honest, work steadfastly, work happily and live seriously!



Company certificate



Closed Circuit Cooling Tower

- BHX Series Combined Flow
- BNX Series Counter Flow
 - (optional Hybrid Flow)
- BCX Series Cross Flow



Closed Circuit Cooling Towers are routinely selected for numerous commercial and industrial process cooling applications. Some examples include:

- Water-source heat pumps
- Self-contained cooling units
- Chillers
- Hybrid evaporative /Dry cooling
- Cooling special fluids
- Compressor jacket cooling,intercooling,after cooling
- Machine jacket cooling
- Induction furnaces

Closed circuit cooling towers, also known as evaporative fluid coolers, keep the system clean and contaminant-free in a closed loop. This creates two separate fluid circuits: (1) an external circuit, in which spray water circulates over the coil and mixes with the outside air, and (2) an internal circuit, in which the process fluid to be cooled circulates inside the coil. During operation, heat is transferred from the warm fluid in the coil to the spray water, and then to the atmosphere as a portion of the water evaporates.



Closed circuit cooling towers provide energy-efficient operation in a reduced footprint compared to dry coolers, due to evaporation being used as the primary method of cooling. Because blowdown of the basin water is reduced on closed-loop systems, water conservation is also improved when compared to open-loop systems.



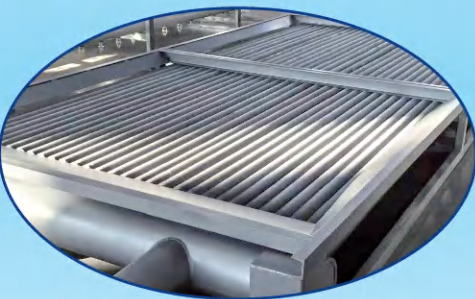
Closed Circuit Cooling Tower Main Parts

Drift eliminator :

PVC/Aluminum Zinc-alloy
U type /W type/Honeycomb type

Tube Coil:

Round Tube/Oval Tube
Hot Dip Galvanized Steel/SS304/SS316L/Copper
Fin Coil:Hot Dip Galvanized/SS304/SS316L



Water pump :

Cast Iron/ SS304/SS316L
WEG/ABB/SIEMENS/CHINA BRAND

AC/EC Fan :

Protection class IP55/56/65/66
Low energy consumption
Multi-wing Blade (optional)
WEG/ABB/SIEMENS/CHINA BRAND

Nozzle :

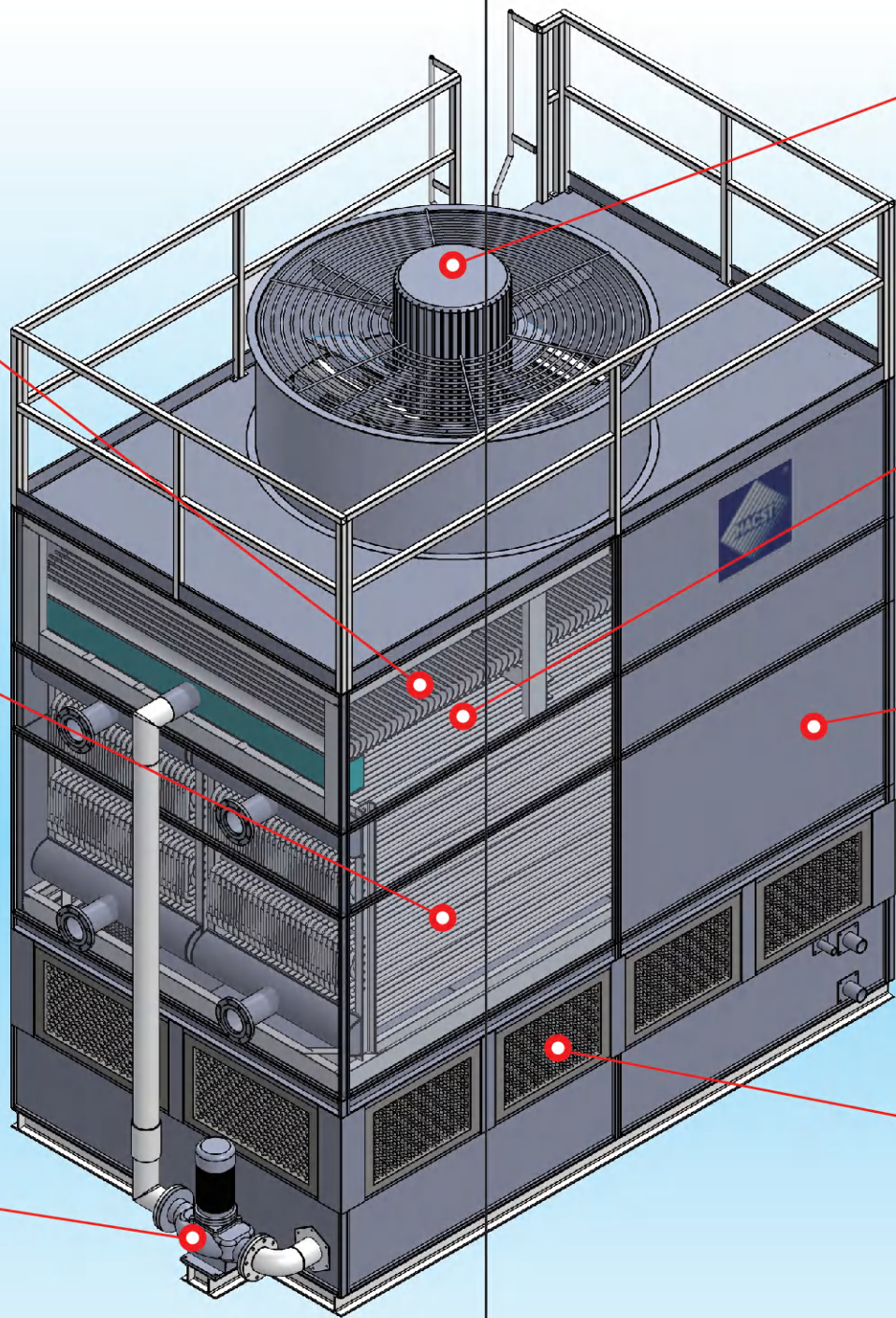
ABS/PP/SS304

Casing :

Imported Galvanized Steel Sheet G235/
with PowderCoating//SuperDyma Steel
SS304/SS316L/FRP
(optional for counter flow)

Air-inlet louver (optional) :

Hot Dip Galvanized Steel/SS304/SS316L/PVC with
UV Protection





一、Closed Circuit Cooling Tower Data Sheet

1.1 Combined Flow Closed Circuit Cooling Tower Data Sheet

Model	Capacity (m³/h)	Fan			Water Pump			Inlet and outlet pipe DN(mm)	Weight (kg)		Dimension(mm)		
		Unit	Power (kw)	Fan capacity (m³/h)	Unit	Power (kw)	Flow rate (m³/h)		Shipping	Operating	Length	Width	Height
BHX-30	30	1	3	46000	1	1.1	53	DN80/DN80	2390	3790	1925	2380	4220
BHX-40	40	1	4	60000	1	1.1	53	DN100/DN100	2510	3910	1925	2380	4220
BHX-50	50	1	5.5	65000	1	1.5	70	DN100/DN100	2760	4340	1925	2580	4220
BHX-60	60	1	5.5	75000	1	1.5	70	DN100/DN100	3290	5140	1925	2980	4220
BHX-70	70	1	7.5	87000	1	1.5	70	DN100/DN100	3680	5530	1925	2980	4450
BHX-80	80	2	4	2*45000	1	2.2	100	DN100/DN100	4230	7650	3770	2200	4220
BHX-90	90	2	4	2*45000	1	2.2	100	DN125/DN125	4510	7930	3770	2200	4720
BHX-100	100	2	4	2*45000	1	2.2	100	DN125/DN125	4620	8040	3770	2200	4965
BHX-110	110	3	4	3*45000	1	3	150	DN125/DN125	6170	10170	4240	2200	4720
BHX-125	125	3	4	3*45000	1	3	150	DN125/DN125	6510	10510	4240	2200	4965
BHX-135	135	4	4	4*45000	1	4	180	DN125/DN125	7100	11950	5610	2200	4220
BHX-150	150	4	4	4*45000	1	4	180	DN125/DN125	7310	12160	5610	2200	4730
BHX-165	165	4	4	4*45000	1	4	180	DN125/DN125	7590	12440	5610	2200	4965
BHX-180	183	4	4	4*45000	1	5.5	230	2-DN125/2-DN125	8920	15580	7450	2200	4220
BHX-200	200	4	4	4*45000	1	5.5	230	2-DN125/2-DN125	9330	15990	7450	2200	4720
BHX-225	226	4	4	4*45000	1	5.5	230	2-DN125/2-DN125	9550	16210	7450	2200	4965
BHX-250	250	5	4	5*45000	2	2*3	2*150	2-DN125/2-DN125	11650	19090	9300	2200	4720
BHX-265	265	5	4	5*45000	2	2*3	2*150	2-DN125/2-DN125	12350	19790	9300	2200	4965
BHX-280	280	6	4	6*45000	2	2*3	2*150	2-DN125/2-DN125	12490	19930	9300	2200	4965
BHX-300	300	6	4	6*45000	2	2*4	2*180	2-DN125/2-DN125	13410	20220	10400	2200	4965

1.2 Counter Flow Closed Circuit Cooling Tower Data Sheet

Model	Capacity (m³/h)	Fan			Water Pump			Inlet and outlet pipe DN(mm)	Weight (kg)		Dimension(mm)		
		Unit	Power (kw)	Fan capacity (m³/h)	Unit	Power (kw)	Flow rate (m³/h)		Shipping	Operating	Length	Width	Height
BNX-07	8	1	0.75	15000	1	0.37	16	DN50/DN50	860	1630	1230	1150	3180
BNX-10	12	1	1.5	18000	1	0.55	23	DN50/DN50	890	1660	1230	1150	3440
BNX-20	21	1	2.2	30000	1	0.75	28	DN50/DN50	1370	2480	1925	1150	3650
BNX-30	33	1	3	45000	1	1.1	53	DN80/DN80	1990	3620	1925	1840	3840
BNX-40	43	1	4	60000	1	1.1	53	DN80/DN80	2120	3790	1925	1840	4220
BNX-50	51	1	5.5	75000	1	1.5	70	DN100/DN100	2420	4490	2470	1840	4220
BNX-60	61	1	7.5	87000	1	1.5	70	DN100/DN100	2690	4760	2470	1840	4450
BNX-70	70	1	7.5	100000	1	2.2	84	DN100/DN100	3650	6080	2790	1840	4450
BNX-80	80	2	4	2*65000	1	2.2	100	DN125/DN125	4150	7480	3770	1840	4020
BNX-90	90	2	4	2*65000	1	2.2	100	DN125/DN125	4680	8010	3770	1840	4220
BNX-100	100	2	4	2*65000	1	2.2	100	DN125/DN125	5120	8450	3770	1840	4450
BNX-110	110	2	5.5	2*75000	1	3	120	2-DN100/2-DN100	5360	9430	3770	2200	4220
BNX-125	125	2	5.5	2*75000	1	3	120	2-DN100/2-DN100	5980	10050	3770	2200	4450
BNX-135	135	2	5.5	2*87000	1	4	180	2-DN100/2-DN100	6230	11270	4846	2200	4350
BNX-150	150	2	7.5	2*100000	1	4	180	2-DN100/2-DN100	6560	11590	4846	2200	4650
BNX-165	165	3	4	3*65000	1	5.5	230	2-DN125/2-DN125	7850	13730	5610	2200	4350
BNX-180	183	3	5.5	3*75000	1	5.5	230	2-DN125/2-DN125	8450	14330	5610	2200	4650
BNX-200	200	3	5.5	3*80000	1	5.5	230	2-DN125/2-DN125	9180	15380	5610	2200	4680
BNX-225	225	3	7.5	3*87000	2	3	2*120	4-DN100/4-DN100	9780	17340	6510	2200	4650
BNX-250	250	4	5.5	4*75000	2	3	2*120	4-DN100/4-DN100	10860	18520	7230	2200	4650
BNX-265	265	4	5.5	4*75000	2	3	2*120	4-DN100/4-DN100	11480	20880	7450	2200	4650
BNX-280	280	4	5.5	4*75000	2	3	2*150	4-DN100/4-DN100	11720	21120	8050	2200	4965
BNX-300	300	4	7.5	4*87000	2	4	2*180	4-DN125/4-DN125	12580	22670	8640	2200	4965

Notes:

- 1.Do not use for construction. This brochure includes data current at the time of publication which should be reconfirmed at the time of purchase
- 2.All location dimensions for coil connections are approximate and should not be used for prefabrication of connecting piping
- 3.Design conditions: wet bulb temperature 28 ℃ ,inlet water temperature 37 ℃ ,outlet water temperature 32 ℃

Open Circuit Cooling Tower

A cooling tower is an integral element of industrial applications. Its primary task is to remove heat from water, generated during industrial processes. Cool air is used to reduce the temperature of the hot water. It is then sent back to the plant for reuse. The cooling tower acts as a heat exchanger for cooling hot water. The cooling tower system is widely used in a variety of industries, including food processing plants, petroleum refineries, natural gas plants, and petrochemical plants and HVAC.

Cross flow type



Counter flow type



Industry type



Concrete type



Advantage:

- Modular Design Suitable For Container Transportation
- Casing:Imported Galvanized Steel Sheet G235 /with Powder Coating//SuperDyma Steel SS304/SS316L/FRP
- Fill:PVC,CPVC,PP

Drift Eliminator :
PVC/Aluminum Zinc-alloy
U type /W type/ honeycomb type
Nozzles:ABS/PP/SS304
Spraying Pipe:PVC/Hot Dip Galvanized/
SS304 /SS316L
Fan:Protection class IP55/56/65/66
Low energy consumption
FRP /Aluminum Zinc-alloy /Multi-wing Blade
(optional)
WEG/ABB/SIEMENS/CHINA BRAND



1.1 Main parameters of DBNL3-series of low-noise counterflow FRP cooling towers

Specification		T=28℃ Water flow (m³/h)		T=27℃ Water flow (m³/h)		Dimension (mm)		Air flow (m³/h)	Fan diameter (mm)	Motor Power (KW)	Connect Pipe DN (mm)				Weight (kg)		Inlet Pressure kpa	NoisedB(A)			Dm
		Δt=5℃	Δt=8℃	Δt=5℃	Δt=8℃	Height	Diameter				Inlet &outlet	Overflow	Drain	filling	Shipping	Operation		Dm	10m	16m	
Model	DBNL3-5	5	3	7	4	1440	820	4900	600	0.37	40/40	25	25	15	71.2	224	18.7	53	39.2	36.1	1.3
	DBNL3-8	8	6	10	7	1650	820	5800	600	0.37	40/40	25	25	15	88	275	19.2	53	39.8	36.9	1.3
	DBNL3-12	12	9	15	10	2033	1210	7200	700	0.6	50/100	25	25	15	164.8	484	19.6	54	40.3	36.6	1.5
	DBNL3-20	20	15	24	17	2123	1460	12400	800	0.8	50/100	25	25	15	184	514	20	54	41.1	37.5	1.5
	DBNL3-30	30	22	35	27	2342	1912	18000	1200	0.8	80/125	25	25	15	324.8	956	22.1	55	43.5	39.9	1.8
	DBNL3-40	40	30	46	34	2842	1912	21500	1200	1.1	80/125	25	25	20	382.4	1118	26	55	43.5	39.9	1.8
	DBNL3-50	50	37	57	44	2830	2215	28000	1400	1.5	80/125	32	25	20	476.8	1480	26.5	55	44.7	41.1	2.1
	DBNL3-60	60	44	68	51	3080	2215	32300	1400	1.5	80/125	32	25	20	513.6	1592	29	56	45.7	42.1	2.1
	DBNL3-70	70	51	79	60	3094	2629	39200	1600	2.2	125/200	40	40	20	632	2064	27.8	56	47	43	2.5
	DBNL3-80	80	61	92	70	3344	2629	43400	1600	2.2	125/200	40	40	20	700	2243	30.3	56.5	47.5	43.5	2.5
	DBNL3-100	100	74	114	86	3294	3134	56000	1800	3	125/200	40	40	20	778.4	3064	28.6	57	50	46	3
	DBNL3-125	125	92	142	108	3544	3134	67200	1800	4	125/200	40	40	20	850	3290	31.5	58	50.7	47.4	3
	DBNL3-150	150	112	171	129	3553	3732	84000	2400	4	150/250	80	50	25	1356	4125	29	58.5	52	48.6	3.6
	DBNL3-175	175	131	200	150	3803	3732	94300	2400	5.5	150/250	80	50	25	1468	4461	31.5	59.5	53	49.6	3.6
	DBNL3-200	200	153	231	180	3835	4342	112000	2800	5.5	150/250	80	50	32	1705	5592	30.1	60	54.6	51.3	4.2
	DBNL3-250	250	186	283	215	4085	4342	134300	2800	7.5	150/250	80	50	32	1875	6365	32.6	61	55.6	52.3	4.2
DBNL3-300	300	225	334	260	4223	5134	168000	3400	7.5	200/300	80	50	40	2350	9229	35	61	56.8	53.5	5	
DBNL3-350	350	267	395	304	4473	5134	187400	3400	11	200/300	80	50	40	2702	9906	37.5	61.5	57.3	54	5	
DBNL3-400	400	301	455	341	4618	6044	224000	3800	11	250/300	100	50	50	3010	12086	36	62	58.8	55.7	5.9	
DBNL3-450	450	343	514	387	4868	6044	242000	3800	11	250/300	100	50	50	3252	13646	38.5	62	58.8	55.7	5.9	
DBNL3-500	500	375	576	427	5219	6476	280000	4200	15	300/350	100	80	50	4037	16258	37	62	60	56.9	6.6	
DBNL3-600	600	454	680	516	5719	6476	302200	4200	18.5	300/350	100	80	50	4599	18360	42	63	61	57.4	6.6	
DBNL3-700	700	528	790	600	5589	7766	393500	5000	18.5	350/400	100	80	80	4840	23194	39.5	63	61.4	58.4	7.6	
DBNL3-800	800	590	890	685	6089	7766	408000	5000	22	350/400	100	80	80	5588	25982	44.5	63	61.4	58.4	7.6	
DBNL3-900	900	685	1035	790	6040	8836	505200	6000	22	350/450	100	80	80	6253	32568	42.5	63.5	62.6	59.7	8.6	
DBNL3-1000	1000	783	1139	880	6540	8836	510300	6000	30	350/450	100	80	80	7392	36420	47.5	64	63.1	60.2	8.6	

Notes:
Do not use for construction. This brochure includes data current at the time of publication which should be reconfirmed at the time of purchase

1.2 Main parameters of CDBNL3 series low-noise counterflow FRP cooling tower

Specification		t=28℃ Water flow (m³/h)		t=27℃ Water flow (m³/h)		Dimension (mm)		Air flow (m³/h)	Fan diameter (mm)	Motor Power (kW)	Connect Pipe DN (mm)				Weight (kg)		Inlet Pressure kpa	NoisedB(A)			Dm
		Δt=5℃	Δt=8℃	Δt=5℃	Δt=8℃	Height	Diameter				Inlet &outlet	Overflow	Drain	filling	Shipping	Operation		Dm	10m	16m	
Model	CDBNL3-12	12	9	15	10	2972	1600	7200	700	50/100	25	25	15	0.6	244	584	19	50	37.1	33.5	1.5
	CDBNL3-20	20	15	24	17	3062	2000	18000	800	50/100	25	25	15	0.8	264	644	20	50	36.3	32.6	1.5
	CDBNL3-30	30	22	35	27	3281	2400	18000	1200	80/125	25	25	15	0.8	436	1100	22.1	51	39.5	35.9	1.8
	CDBNL3-40	40	30	46	34	3781	2400	21500	1200	80/125	25	25	20	1.1	494	1258	26	51	39.5	35.9	1.8
	CDBNL3-50	50	37	57	44	3816	2800	28000	1400	80/125	32	25	20	1.5	604	1640	26.5	51	40.7	37.1	2.1
CDBNL3-60	60	44	68	51	4066	2800	32300	1400	80/125	32	25	20	1.5	760	1752	29	52	41.7	38.1	2.1	
CDBNL3-70	70	51	79	60	4153	3300	39200	1600	125/200	40	40	20	2.2	798	2272	27.8	52	43	39	2.5	
CDBNL3-80	80	61	92	70	4403	3300	43400	1600	125/200	40	40	20	2.2	866	2451	30.3	52.5	43.5	39.5	2.5	
CDBNL3-100	100	74	114	86	4410	3900	56000	1800	125/200	40	40	20	3	984	3322	28.6	53	46	42	3	
CDBNL3-125	125	92	142	108	4690	3900	67200	1800	125/200	40	40	20	4	1056	3422	31.5	54	46.7	43.4	3	
CDBNL3-150	150	112	171	129	4765	4600	84000	2400	150/250	80	50	25	4	1636	4475	29	54	47.5	44.1	3.6	
CDBNL3-175	175	131	200	150	5015	4600	94300	2400	150/250	80	50	25	5.5	1745	4808	31.5	55	48.5	45.1	3.6	
CDBNL3-200	200	153	231	180	5194	5700	112000	2800	150/250	80	50	32	5.5	1917	6123	30.1	55	49.6	46.3	4.2	
CDBNL3-250	250	186	283	215	5444	5700	134300	2800	150/250	80	50	32	7.5	2012	6892	32.6	56	50.6	47.3	4.2	
CDBNL3-300	300	225	334	260	5713	6400	168000	3400	250/300	80	50	40	7.5	2892	9805	35	56	51.8	48.5	5	
CDBNL3-350	350	267	395	304	5963	6400	187400	3400	250/300	80	50	40	11	3103	10479	37.5	56.5	52.3	49	5	
CDBNL3-400	400	301	455	341	6269	7400	224000	3800	250/300	100	50	50	11	3996	12782	36	57	53.8	50.7	5.9	
CDBNL3-450	450	343	514	387	6519	7400	242000	3800	250/300	100	50	50	11	3738	14160	38.5	57	53.8	50.7	5.9	
CDBNL3-500	500	375	576	427	6890	8200	280000	4200	300/350	100	80	50	15	4628	17102	37	57	55	51.9	6.6	
CDBNL3-600	600	454	680	516	7390	8200	302200	4200	300/350	100	80	50	18.5	5189	12904	42	58	56	52.4	6.6	

Notes:
Do not use for construction. This brochure includes data current at the time of publication which should be reconfirmed at the time of purchase

1.3 Main parameters of MBNL3 series industrial counterflow FRP cooling tower

Specification Model		t=28℃ Water flow (m³/h)			t=27℃ Water flow (m³/h)			Dimension (mm)		Air flow (m³/h)	Fan diameter (mm)	Motor Power (KW)	Connect Pipe DN (mm)				Weight (kg)		Inlet Pressure kpa	NoisedB(A)			Dm
		Δt=10℃	Δt=20℃	Δt=25℃	Δt=10℃	Δt=20℃	Δt=25℃	Height	Diameter				Inlet &outlet	Overflow	Drain	filling	Shipping	Operation		10m	16m		
	GBNL3-8	8	6	4	11	7	5	2033	1210	7200	700	0.55	40/40	25	25	15	306	584	19	54	40.3	36.6	1.5
	GBNL3-12	12	10	8	14	11	9	2123	1460	12400	800	0.75	50/100	25	25	15	330	644	20	54	41.1	37.5	1.5
	GBNL3-20	20	17	14	23	19	16	2342	1912	18000	1200	0.75	50/100	25	25	15	548	1100	22.1	55	43.5	39.9	1.8
	GBNL3-25	25	21	18	29	23	24	2842	2215	21500	1200	1.1	50/100	25	25	15	618	1258	26	55	44.7	41.1	2.1
	GBNL3-30	30	25	21	34	28	25	2830	2215	28000	1400	1.5	80/125	25	25	15	756	1640	26.5	56	45.7	42.1	2.1
	GBNL3-40	40	33	28	45	37	33	3080	2215	32300	1600	2.2	80/125	25	25	20	998	2272	27.8	56	45.7	42.1	2.1
	GBNL3-50	50	41	35	55	45	41	3094	2629	39200	1600	2.2	80/125	32	25	20	755	2064	29	56	47	43	2.5
	GBNL3-60	60	49	42	66	54	49	3344	2629	43400	1600	2.2	80/125	32	25	20	825	2243	30.3	56.5	47.5	43.5	2.5
	GBNL3-70	70	64	56	77	68	60	3294	3134	40800	1800	2.2	125/200	40	40	20	943	3034	28.6	57	50	46	3
	GBNL3-80	80	73	65	88	78	68	3544	3134	54000	1800	3	125/200	40	40	20	1003	3230	31.5	58	50.7	47.4	3
	GBNL3-100	100	91	83	110	96	85	3553	3732	71300	2400	3	150/250	80	50	25	1695	4125	29	58.5	52	48.6	3.6
	GBNL3-125	125	114	100	137	120	106	3803	3732	84000	2400	4	150/250	80	50	25	1835	4461	31.5	59.5	53	49.6	3.6
	GBNL3-150	150	136	119	166	145	127	3835	4342	106000	2800	4	150/250	80	50	32	2132	5592	30.1	60	54.6	51.3	4.2
	GBNL3-175	175	157	139	192	168	148	4085	4342	118000	2800	5.5	150/250	80	50	32	2344	6365	32.6	61	55.6	52.3	4.2
	GBNL3-200	200	180	159	220	191	169	4223	5134	141300	3400	5.5	200/300	80	50	40	3408	9080	35	61	56.8	53.5	5
	GBNL3-250	250	225	199	275	239	212	4473	5134	167900	3400	7.5	200/300	80	50	40	3697	9743	37.5	61.5	57.3	54	5
	GBNL3-300	300	270	240	332	290	253	4618	6044	212000	3800	11	250/300	100	50	50	4180	12560	36	62	58.8	55.7	5.9
	GBNL3-350	350	316	276	386	336	296	4868	6044	235300	3800	11	250/300	100	50	50	4526	13344	38.5	62	58.8	55.7	5.9
	GBNL3-400	400	360	315	442	383	338	5219	6476	282800	4200	11	300/350	100	80	50	5588	16078	37	62	60	56.9	6.6
	GBNL3-450	450	406	358	495	431	381	5719	6476	285000	4200	15	300/350	100	80	50	6390	18180	42	63	61	57.4	6.6
	GBNL3-500	500	449	393	550	477	422	5589	7766	353200	5000	15	350/400	100	80	80	6430	22709	39.5	63	61.4	58.4	7.6
	GBNL3-600	600	545	480	660	576	507	6089	7766	381400	5000	18.5	350/400	100	80	80	7566	25565	44.5	63	61.4	58.4	7.6
	GBNL3-700	700	629	558	775	673	591	6040	8836	495500	6000	22	350/450	100	80	80	8574	32210	42.5	63.5	62.6	59.7	8.6
	GBNL3-800	800	728	644	880	772	680	6540	8836	507500	6000	30	350/450	100	80	80	10200	36040	47.5	64	63.1	60.2	8.6

Notes:
Do not use for construction. This brochure includes data current at the time of publication which should be reconfirmed at the time of purchase

2.1 Main parameters of DFN series square counterflow FRP cooling tower

Specification Model		T=28℃ Water flow (m³/h)		T=27℃ Water flow (m³/h)		Dimension (mm)		Air flow (m³/h)	Fan diameter (mm)	Motor Power (KW)	Connect Pipe DN (mm)				Weight (kg)		Inlet Pressure kpa	NoisedB(A)			Dm
		Δt=5℃	Δt=8℃	Δt=5℃	Δt=8℃	Height	Diameter				Inlet &outlet	Overflow	Drain	filling	Shipping	Operation		Dm	10m	16m	
	DFNDP-20	20	14.8	22.8	17.6	2850	1150	12000	900	1.1	65	40	40	20	0.35	1.1	23	58	50	45	1.3
	DFNDP-30	30	22.2	34.2	26.4	2850	1150	18000	900	1.5	65	40	40	20	0.38	1.13	23	58	50	45	1.3
	DFNDP-40	40	29.6	45.6	35.2	2850	1480	20000	900	1.5	80	40	40	20	0.41	1.18	23	58	50	45	1.68
	DFNL -50					2940									0.48	0.87					
	DFNDP-50	50	37	57	44	3320	1700	36000	1200	1.5	80	50	40	20	0.55	1.24	26	58	50	45	2
	DFNGP-50					3640									0.64	1.68					
	DFNL -65					2940									0.53	0.91					
	DFNDP-65	65	48.3	77	55.9	3320	1900	43400	1200	2.2	100	50	40	20	0.62	1.4	26	58	50	45	2.26
	DFNGP-65					3640									0.75	1.9					
	DFNL -80					3230									0.58	0.94					
	DFNDP-80	80	61	92	70	3690	2160	45000	1200	3	100	50	50	20	0.69	1.55	31	59	52	46	3
	DFNGP-80					3990									0.85	2.12					
	DFNL -100					3830									1.25	1.9					
	DFNDP-100	100	74.4	118.7	86	4390	2400	79000	1800	4	125	80	50	25	1.32	3.42	43	59	62	47	3.02
	DFNGP-100					4690									1.93	3.95					
	DFNL -125					3830									1.35	1.55					
	DFNDP-125	125	93	148.4	107.5	4390	2700	100000	2200	4	150	80	50	25	1.42	3.52	44	59	62	47	3.02
	DFNGP-125					4690									2.03	4.15					
	DFNL -150					4050									2.08	3.32					
	DFNDP-150	150	109.8	175.1	126.9	4670	3000	115000	2200	5.5	150	80	50	25	2.32	5.07	45	60.5	54	50.6	3.47
	DFNGP-150					4970									2.64	7.63					
	DFNL -175					4050									2.23	3.65					
	DFNDP-175	175	128.1	204.3	148	4670	3200	125000	2200	5.5	200	80	50	25	2.58	5.86	46	60.5	54	50.6	3.73
	DFNGP-175					4970									3.09	9.1					
	DFNL -200					4340									2.48	4.13					
	DFNDP-200	200	148.9	237.4	172.1	4960	3400	140000	2500	7.5	200	80	50	25	2.84	6.66	47	62	55.6	52.3	3.95
	DFNGP-200					5260									3.55	10.56					
	DFNL -225					4360									2.75	5.23					
	DFNDP-225	225	167.5	267	193.6	4980	3600	160000	2500	7.5	200	80	50	40	3.1	6.85	47	62	55.6	52.3	4.15
	DFNGP-225					5280									3.76	10.76					
	DFNL -250					4660									2.81	5.46					
	DFNDP-250	250	186.1	296.8	215.1	5200	3800	175000	2500	7.5	200	80	50	40	3.36	7.36	47	62	55.6	52.3	4.4
	DFNGP-250					5580									3.93	11.68					

Specification Model		T=28℃ Water flow (m³/h)		T=27℃ Water flow (m³/h)		Dimension (mm)		Air flow (m³/h)	Fan diameter (mm)	Motor Power (KW)	Connect Pipe DN (mm)				Weight (kg)		Inlet Pressure kpa	NoisedB(A)			Dm
		Δt=5℃	Δt=8℃	Δt=5℃	Δt=8℃	Height	Diameter				Inlet &outlet	Overflow	Drain	filling	Shipping	Operation		Dm	10m	16m	
DFNL -300						5010									2.94	5.88					
DFNDP-300		300	224.9	350.6	258.3	5690	4100	220000	2950	11	250	80	50	40	3.52	9.48	47	62	57.6	54.5	4.63
DFNGP-300						5990									4.13	14.79					
DFNL -350						5070									3.15	6.36					
DFNDP-350		350	262.4	409	301.35	5750	4500	240000	2950	11	250	100	50	50	3.58	9.65	53	62	57.6	54.5	5.1
DFNGP-350						6050									4.35	15.7					
DFNL -400						5300									3.71	7.14					
DFNDP-400		400	299.9	476.4	344.4	6040	4800	280000	3400	15	250	100	50	50	4.27	10.57	53	62.5	58.8	55.7	5.51
DFNGP-400						6340									4.87	18.02					
DFNL -450						5300									3.95	7.38					
DFNDP-450		450	337.38	536	387.5	6040	5100	320000	3400	15	250	100	50	50	4.39	11.68	53	62.5	58.8	55.7	5.77
DFNGP-450						6340									5.26	18.6					
DFNL -500						5900									4.62	8.85					
DFNDP-500		500	374.9	584.3	430.4	6700	5300	350000	3600	15	300	100	50	50	5.3	13.11	57	62.5	59.3	56.2	6.08
DFNGP-500						7000									6.04	19.7					
DFNL -600						6140									5.89	11.3					
DFNDP-600		600	448.5	698.9	514.9	6980	6000	395000	3600	18.5	300	100	50	50	6.77	22.56	57	62.5	60.5	57.4	6.88
DFNGP-600						7280									7.95	28.13					
DFNL -700						6140									6.56	12.3					
DFNDP-700		700	523.3	815	601	6980	6600	470000	4200	22	300	100	80	50	7.33	22.86	60	62.5	60.5	57.4	7.46
DFNGP-700						7280									8.3	30.28					
DFNL -750						6440									7.56	14.5					
DFNDP-750		750	561.7	875.3	644.9	7290	6800	470000	4200	22	350	100	80	50	8.68	23.51	60	63	61.4	58.4	7.79
DFNGP-750						7590									9.68	36.04					
DFNL -800						6440									7.92	15.1					
DFNDP-800		800	600	933.7	687.9	7290	6900	530000	4200	22	350	100	80	50	9.3	24.2	60	63	61.4	58.4	7.95
DFNGP-800						7590									10.26	37.1					
DFNL -900						6950									8.75	16.76					
DFNDP-900		900	673.4	1049.5	773.2	7900	7200	600000	4200	30	350	100	80	50	10.05	25.46	60	63.8	62.9	60	8.36
DFNGP-900						8200									11.15	38.13					
DFNL -1050						7150									10.57	19.97					
DFNDP-1050		1050	786.6	1225.9	903.1	8100	7600	670000	4700	37	400	100	80	50	12.05	31.82	60	64.6	63.1	53.9	8.93
DFNGP-1050						8400									13.25	48.14					

Notes:
Do not use for construction. This brochure includes data current at the time of publication which should be reconfirmed at the time of purchase

2.2Main parameters of GFN series square counterflow fiberglass cooling tower

Specification Model	t=28℃ Water flow (m³/h)		t=27℃ Water flow (m³/h)		Dimension (mm)		Air flow (m³/h)	Fan diameter (mm)	Motor Power (KW)	Connect Pipe DN (mm)				Weight (kg)		Inlet Pressure kpa	NoisedB(A)			Dm	
	Δt=10℃	Δt=20℃	Δt=25℃	Δt=10℃	Δt=20℃	Δt=25℃	Height	Width			Inlet &outlet	Overflow	Drain	filling	Shipping	Operation		Dm	10m	16m	
GFNDP-20	20	18.22	18	22.84	20	19.59	2850	1150	18000	1.5	65	40	40	20	0.38	1.13	23	58	50	45	1.3
GFNL -30							2940								0.48	0.87					
GFNDP-30	30	27.36	27.13	34.29	29.91	29.41	3320	1700	36000	1.5	65	40	40	20	0.55	1.24	26	58	50	45	2
GFNGP-30							3640								0.64	1.68					
GFNL -40							2940								0.53	0.91					
GFNDP-40	40	36.44	36.1	45.67	39.83	39.18	3320	1900	43400	2.2	80	40	40	20	0.62	1.4	26	58	50	45	2.26
GFNGP-40							3640								0.75	1.9					
GFNL -50							3230								0.58	0.94					
GFNDP-50	50	45.52	45.15	57.05	49.76	48.94	3690	2160	45000	3	80	50	40	20	0.69	1.55	31	59	52	46	3
GFNGP-50							3990								0.85	2.12					
GFNL -70							3830								1.25	1.45					
GFNDP-70	70	63.8	63.27	79.96	69.74	68.59	4390	2400	79000	4	100	50	50	20	1.32	3.42	43	59	62	47	3.02
GFNGP-70							4690								1.93	3.95					
GFNL -100							4050								2.08	3.32					
GFNDP-100	100	89.2	87.7	115	98.1	95.7	4670	3000	115000	5.5	125	80	50	25	2.32	5.07	45	60.5	54	50.6	3.47
GFNGP-100							4970								2.64	7.63					
GFNL -125							4050								2.23	3.65					
GFNDP-125	125	111.5	109.6	143.8	122.6	119.6	4670	3200	125000	5.5	150	80	50	25	2.58	5.86	46	60.5	54	50.6	3.73
GFNGP-125							4970								3.09	9.1					
GFNL -150							4340								2.48	4.13					
GFNDP-150	150	137.4	136.2	172.2	150.2	147.7	4960	3400	140000	7.5	150	80	50	25	2.84	6.66	47	62	55.6	52.3	3.95
GFNGP-150							5260								3.55	10.56					
GFNL -175							4660								2.81	5.46					
GFNDP-175	175	160.3	158.9	200.9	175.2	172.3	5200	3800	175000	7.5	200	80	50	25	3.36	7.36	47	62	55.6	52.3	4.4
GFNGP-175							5580								3.93	11.68					
GFNL -200							5010								2.94	5.88					
GFNDP-200	200	182.8	181.3	229.1	199.8	196.5	5690	4100	220000	11	200	80	50	25	3.52	9.48	47	62	57.6	54.5	4.63
GFNGP-200							5990								4.13	14.79					
GFNL -225							5070								3.15	6.36					
GFNDP-225	225	205.7	204	257.7	224.8	221	5750	4500	240000	11	200	80	50	40	3.58	9.65	53	62	57.6	54.5	5.1
GFNGP-225							6050								4.35	15.7					

Specification Model	t=28℃ Water flow (m³/h)		t=27℃ Water flow (m³/h)		Dimension (mm)		Air flow (m³/h)	Fan diameter (mm)	Motor Power (KW)	Connect Pipe DN (mm)				Weight (kg)		Inlet Pressure kpa	NoisedB(A)			Dm	
	Δt=10℃	Δt=20℃	Δt=25℃	Δt=10℃	Δt=20℃	Δt=25℃	Height	Width		Inlet &outlet	Overflow	Drain	filling	Shipping	Operation		Dm	10m	16m		
GFNL -250							5300								3.71	7.14					
GFNDP-250	250	228.2	226.3	286	249.4	245.3	6040	4800	280000	15	200	80	50	40	4.27	10.57	53	62.5	58.8	55.7	5.51
GFNGP-250							6340								4.87	18.02					
GFNL -275							5300								3.95	7.38					
GFNDP-275	275	251	248.9	314.6	274.3	269.8	6040	5100	320000	15	200	80	50	40	4.39	11.68	53	62.5	58.8	55.7	5.77
GFNGP-275							6340								5.26	18.6					
GFNL -300							5300								3.95	7.38					
GFNDP-300	300	273.6	271.3	342.9	299.1	294.1	6040	5100	320000	15	250	80	50	40	4.39	11.68	53	62.5	58.8	55.7	5.77
GFNGP-300							6340								5.26	18.6					
GFNL -350							5900								4.62	8.85					
GFNDP-350	350	319.2	316.5	400	348.95	343.1	6700	5300	350000	15	250	100	50	50	5.3	13.11	57	62.5	59.3	56.2	6.08
GFNGP-350							7000								6.04	19.7					
GFNL -400							6140								5.89	11.3					
GFNDP-400	400	364.4	361.4	456.7	398.3	391.8	6980	6000	395000	18.5	250	100	50	50	6.77	22.56	57	62.5	60.5	57.4	6.88
GFNGP-400							7280								7.95	28.13					
GFNL -450							6140								6.56	12.3					
GFNDP-450	450	410	406.6	513.8	448	440.8	6980	6600	470000	22	250	100	50	50	7.33	22.86	60	62.5	60.5	57.4	7.46
GFNGP-450							7280								8.3	30.28					
GFNL -500							6440								7.56	14.5					
GFNDP-500	500	455.2	451.5	570.5	497.6	489.4	7290	6800	470000	22	300	100	50	50	8.68	23.51	60	63	61.4	58.4	7.79
GFNGP-500							7590								9.68	36.04					
GFNL -550							6440								7.92	15.1					
GFNDP-550	550	500.7	496.7	627.6	547.4	538.3	7290	6900	530000	22	300	100	50	50	9.3	24.2	60	63	61.4	58.4	7.95
GFNGP-550							7590								10.26	37.1					
GFNL -600							6950								8.75	16.76					
GFNDP-600	600	546	541.5	684.3	596.9	587.1	7900	7200	600000	30	300	100	50	50	10.05	25.46	60	63.8	62.9	60	8.36
GFNGP-600							8200								11.15	38.13					
GFNL -700							7150								10.57	19.97					
GFNDP-700	700	638	632.7	799.6	697.4	685.9	8100	7600	670000	37	350	100	80	50	12.05	31.82	60	64.6	63.1	53.9	8.93
GFNGP-700							8400								13.25	48.14					

Notes:
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3.1 Main parameters of FKH series cross-flow fiberglass cooling tower

Specification Model	Water Flow m³/h		Fan No.	Fan Diameter (mm)	Motor (kW)	Air flow m³/h	length (mm)	Width (mm)	Height (mm)	Connect pipe DN (mm)					Inlet pressure (kpa)	Shipping weight (T)	Operation weight (T)	Noise dB(A)
	t=28℃	t=27℃								Inlet	Outlet	Overflow	Drain	filling				
FKH-50	50	59	1	900	1.5	23000	1480	2980	2330	50X2	100	50	40	25	30	0.6	1.6	59
FKH-60	60	70.8	1	900	2.2	28000	1480	2980	2330	50X2	100	50	40	25	30	0.65	1.7	59
FKH-70	70	82.6	1	1400	2.2	33000	1825	3518	2450	80X2	125	50	40	25	30	0.8	1.85	59
FKH-80	80	94.4	1	1400	3	45000	1825	3518	2450	80X2	125	50	40	25	35	0.85	1.9	59
FKH-100	100	118	1	1500	3	60000	2220	3750	3340	100X2	150	80	50	25	35	0.97	2.3	59
FKH-125	125	148	1	1500	4	79000	2220	3750	3340	100X2	150	80	50	25	41	1.03	2.5	59
FKH-150	150	177	1	2000	5.5	100000	2580	4050	3340	125X2	150	80	50	25	41	1.33	3.5	59
FKH-175	175	207	1	2200	5.5	105000	2850	4250	3340	125X2	200	80	50	25	41	1.47	3.68	60
FKH-200	200	236	1	2200	7.5	125000	3230	4450	3850	125X2	200	80	80	40	46	1.6	4.02	60
FKH-225	225	265	1	2200	7.5	130000	3230	4450	4010	125X2	200	80	80	40	46	1.7	4.12	60
FKH-250	250	296	2	1500	4	79000	4440	3750	3340	100X4	150X2	80X2	50X2	25X2	41	1.94	4.65	61
FKH-300	300	354	2	2000	5.5	100000	5160	4050	3340	125X4	150X2	80X2	50X2	25X2	41	2.54	6.65	61
FKH-350	350	414	2	2200	5.5	105000	5700	4250	3340	125X4	200X2	80X2	50X2	25X2	41	2.82	7.01	61
FKH-400	400	472	2	2200	7.5	125000	6460	4450	3850	125X4	200X2	80X2	80X2	40X2	46	3.08	7.69	62
FKH-450	450	530	2	2200	7.5	130000	6460	4450	4010	125X4	200X2	80X2	80X2	40X2	46	3.36	7.89	62
FKH-500	500	592	4	1500	4	79000	8880	3750	3340	100X8	150X4	80X4	50X4	25X4	41	4.1	10.75	62
FKH-525	525	621	3	2200	5.5	105000	8550	4250	3340	125X6	200X3	80X3	50X3	25X3	41	3.71	10.95	62
FKH-600	600	708	3	2200	7.5	125000	9690	4450	3850	125X6	200X3	80X3	80X3	40X3	46	4.56	11.45	62
FKH-700	700	828	4	2200	5.5	105000	11400	4250	3340	125X8	200X4	80X4	50X4	25X4	41	4.94	14.1	63
FKH-800	800	944	4	2200	7.5	125000	12920	4450	3850	125X8	200X4	80X4	80X4	40X4	46	6.08	15.27	63
FKH-875	875	1035	5	2200	5.5	105000	14250	4250	3340	125X10	200X5	80X5	50X5	25X5	41	6.57	17.38	63
FKH-900	900	1082	6	2000	5.5	100000	15480	4050	3340	125X12	150X6	80X6	50X6	25X6	41	6.73	18.2	64
FKH-1000	1000	1180	5	2200	7.5	125000	16150	4450	3850	125X10	200X5	80X5	80X5	40X5	46	7.6	19.93	65
FKH-1200	1200	1416	6	2200	7.5	125000	19380	4450	3850	125X12	200X6	80X6	80X6	40X6	46	9.12	22.5	65

Notes:
Do not use for construction. This brochure includes data current at the time of publication which should be reconfirmed at the time of purchase

3.2 Main parameters of FDKH series cross-flow single unit fiberglass cooling tower

Specification Model	Water Flow m³/h		Fan No.	Fan Diameter (mm)	Motor (kW)	Air flow m³/h	length (mm)	Width (mm)	Height (mm)	Connect pipe DN (mm)					Inlet pressure (kpa)	Shipping weight (T)	Operation weight (T)	Inlet & outlet temperature (℃)
	t=28℃	t=27℃								Inlet	Outlet	Overflow	Drain	filling				
FDKH-250	250	292	1	2400	7.5	175000	3250	5160	4480	150X2	250	80	80	32	46	2.01	4.5	37/32
FDKH-300	300	351	1	2800	7.5	185000	3500	5500	4960	150X2	250	100	100	32	48	2.45	5.35	37/32
FDKH-350	350	409	1	2800	11	213000	3500	5860	4960	150X2	250	100	100	32	48	2.5	5.5	37/32
FDKH-400	400	468	1	3000	11	220000	3750	5860	4960	150X4	300	100	100	50	50	2.98	6.05	37/32
FDKH-450	450	531	1	3000	11	235000	3850	6050	4960	150X4	300	100	100	50	50	3.55	7.4	37/32
FDKH-500	500	585	1	3400	15	305000	4250	6050	5010	150X4	300	100	100	50	52	3.75	8.05	37/32
FDKH-600	600	702	1	3600	18.5	350000	4510	6335	5010	150X4	350	100	100	50	54	4.4	9.5	37/32
FDKH-700	700	826	1	3600	18.5	395000	5500	6335	5010	150X4	350	100	100	50	54	5.05	10.5	37/32
FDKH-800	800	936	1	4300	22	455000	5500	7680	5180	200X4	350	100	100	50	58	5.95	12.1	37/32
FGKH-250	250	292	1	2400	7.5	175000	3250	5160	5580	150X2	250	80	80	32	46	2.21	4.71	40/32
FGKH-300	300	351	1	2800	7.5	185000	3500	5500	6060	150X2	250	100	100	32	48	2.57	5.51	40/32
FGKH-350	350	409	1	2800	11	213000	3500	5860	6060	150X2	250	100	100	32	48	2.6	5.72	40/32
FGKH-400	400	468	1	3000	11	220000	3750	5860	6060	150X4	300	100	100	50	50	3.1	6.21	40/32
FGKH-450	450	531	1	3000	11	235000	3850	6050	6060	150X4	300	100	100	50	50	3.7	7.7	40/32
FGKH-500	500	585	1	3400	15	305000	4250	6050	6360	150X4	300	100	100	50	52	4.16	8.46	40/32
FGKH-600	600	702	1	3600	18.5	350000	4510	6335	6360	150X4	350	100	100	50	54	4.84	9.95	40/32
FGKH-700	700	826	1	3600	18.5	395000	5500	6335	6360	150X4	350	100	100	50	54	5.56	11.1	40/32
FGKH-800	800	936	1	4300	22	455000	5500	7680	6530	200X4	350	100	100	50	58	6.55	12.7	40/32

Notes:
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Evaporative Condenser

- ZHX Series Combined Flow
- ZNX Series Counter Flow
- ZCX Series Cross Flow

Evaporative Condenser is widely used in energy chemical industry, Pharmaceuticals coal, electricity, industrial refrigeration, beer, beverage, food processing, cold storage etc

- Energy saving ,water saving
- Environmental-friendly
- Low maintenance costs
- Convenient transportation and installation

The food industry

- Poultry Slaughtering Plant
- Multi-purpose cold Storage
- Beer and beverage industry
- Industrial ice/Skating Rink
- Ice cream factory
- Fish processing industry



Chemical medicine

- Inter-cooling of methanol/methanol synthetic ammonia compressor
- Syngas cooling condensation
- Methanol distillation process cooling condensation
- Gas cooling of natural gas or coke gas exchange process
- Purification process as well as cooling condensation
- Steam condensation of turbine
- Ethyl acetate condensation



Evaporative Condenser Main Parts

AC/EC Fan :

Protection class IP55/56/65/66
Low energy consumption
Multi-wing Blade (optional)
WEG/ABB/SIEMENS/CHINA BRAND

Tube Coil:

Round tube/Oval tube
Hot Dip Galvanized Steel/SS304/SS316L/Copper
Plate Coil:SS304/SS316L



Drift eliminator :

PVC/Aluminum Zinc-alloy
U type/W type/honeycomb type

Water pump :

Cast iron/SS304/SS316L
WEG/ABB/SIEMENS/CHINA BRAND

Nozzle :

ABS/ PP/SS304

Casing :

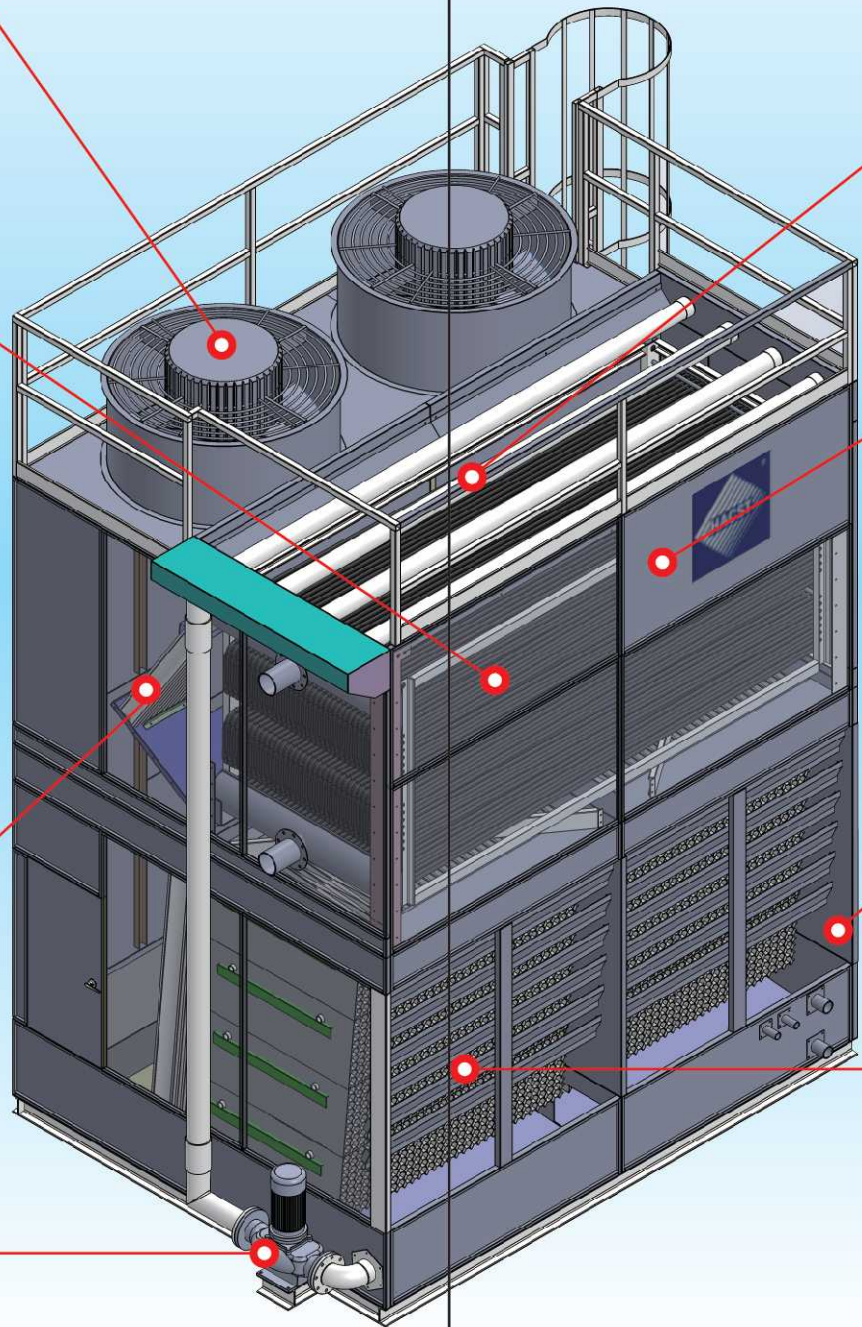
Imported Galvanized Steel Sheet G235
/with Powder Coating/Super Dyma Steel
SS304/SS316L/FRP(optional for counter flow)

Air-inlet louver (optional) :

Hot Dip Galvanized Steel/SS304/SS316L/PVC with
UV protection

Fill:

PVC/CPVC/PP



Heat rejection correction index for R717

Condensing temperature	Air inlet wet bulb temperature																		
	10	12	14	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
℃																			
29	0.72	0.78	0.86	0.96	1.01	1.09	1.18	1.30	1.43	1.60	1.84	2.16	2.66	/	/	/	/	/	/
30	0.68	0.73	0.81	0.88	0.94	1.00	1.07	1.15	1.27	1.40	1.59	1.79	2.13	/	/	/	/	/	/
31	0.64	0.68	0.74	0.82	0.86	0.91	0.97	1.04	1.12	1.22	1.36	1.52	1.71	2.06	/	/	/	/	/
32	0.61	0.65	0.69	0.74	0.80	0.84	0.89	0.95	1.02	1.10	1.20	1.34	1.49	1.70	2.02	/	/	/	/
33	0.57	0.61	0.65	0.70	0.73	0.78	0.82	0.87	0.92	0.99	1.07	1.16	1.29	1.45	1.66	1.96	/		
34	0.55	0.58	0.62	0.66	0.69	0.72	0.76	0.80	0.86	0.90	0.96	1.04	1.14	1.27	1.42	1.63	/	/	/
35	0.52	0.54	0.58	0.62	0.64	0.67	0.70	0.73	0.78	0.83	0.88	0.94	1.02	1.11	1.23	1.37	1.59	1.86	2.16
36	0.50	0.52	0.55	0.59	0.61	0.63	0.66	0.69	0.72	0.75	0.81	0.86	0.92	1.00	1.09	1.22	1.35	1.54	1.76
37	0.47	0.49	0.52	0.55	0.57	0.59	0.61	0.64	0.67	0.70	0.73	0.79	0.84	0.90	0.97	1.06	1.21	1.32	1.52
38	0.45	0.47	0.49	0.53	0.55	0.56	0.58	0.60	0.62	0.65	0.68	0.72	0.76	0.82	0.88	0.96	1.04	1.19	1.35
39	0.43	0.45	0.47	0.50	0.52	0.53	0.54	0.56	0.58	0.61	0.63	0.67	0.70	0.74	0.80	0.86	0.95	1.02	1.18
40	0.42	0.43	0.45	0.48	0.49	0.50	0.52	0.53	0.55	0.58	0.60	0.62	0.66	0.69	0.73	0.78	0.85	0.93	1.01
41	0.40	0.41	0.43	0.45	0.46	0.47	0.49	0.50	0.52	0.54	0.58	0.58	0.61	0.64	0.67	0.71	0.76	0.83	0.92
42	0.39	0.40	0.41	0.43	0.44	0.45	0.47	0.48	0.49	0.51	0.55	0.55	0.57	0.60	0.62	0.66	0.70	0.74	0.82
43	0.37	0.38	0.39	0.41	0.42	0.43	0.44	0.45	0.46	0.48	0.51	0.51	0.53	0.55	0.58	0.61	0.65	0.69	0.72
44	0.36	0.37	0.38	0.39	0.40	0.41	0.42	0.43	0.44	0.46	0.49	0.49	0.50	0.52	0.54	0.57	0.60	0.64	0.68
45	0.34	0.35	0.36	0.37	0.38	0.39	0.40	0.41	0.42	0.43	0.46	0.46	0.47	0.49	0.51	0.53	0.56	0.59	0.63

Heat rejection correction index for R22 and R134a

Condensing temperature	Air inlet wet bulb temperature															
℃	10	12	14	16	18	19	20	21	22	23	24	25	26	28	30	32
29	0.86	0.94	1.03	1.15	1.37	1.43	1.55	1.65	1.92	2.10	2.52	3.10	/	/	/	/
31	0.77	0.83	0.90	0.99	1.10	1.10	1.24	1.34	1.47	1.62	1.83	2.10	2.48	/	/	/
33	0.69	0.73	0.79	0.86	0.94	1.00	1.02	1.10	1.20	1.28	1.40	1.56	1.75	2.38	/	/
35	0.62	0.66	0.70	0.76	0.83	0.86	0.90	0.93	1.00	1.07	1.18	1.25	1.38	1.68	2.12	2.68
37	0.57	0.60	0.63	0.67	0.72	0.76	0.78	0.82	0.85	0.90	0.96	1.02	1.10	1.30	1.56	1.89
39	0.55	0.57	0.59	0.62	0.65	0.68	0.70	0.72	0.75	0.79	0.84	0.88	0.95	1.10	1.26	1.46
41	0.48	0.49	0.52	0.54	0.57	0.59	0.61	0.63	0.66	0.68	0.71	0.75	0.78	0.90	1.03	1.19
43	0.44	0.46	0.48	0.50	0.52	0.54	0.55	0.57	0.59	0.61	0.63	0.66	0.68	0.75	0.86	0.97
45	0.41	0.42	0.44	0.46	0.48	0.49	0.50	0.52	0.53	0.55	0.58	0.58	0.61	0.66	0.74	0.83

- 1、Model Selection

1, Confirm Total System Heat Rejection Capacity: Total System Heat Rejection Capacity=Total latent heat of condensing medium inside + Total heat rejection of condensing medium (For refrigeration system, it could be selected based on system refrigeration capacity)

2, Confirm the design conditions: Condensing Medium, Condensation Temperature, and Wet Bulb Temperature3, Determine the correction coefficient'R'by lookup correction coefficient table.

4, Determine Corrected Heat Rejection Capacity: Correct- ed Heat Rejection Capacity= Total System Heat Rejection Capacity*'R' (correction coefficient).

5, Model selection: select the evaporative condenser model with rated capacity equal to or greater than the Corrected Heat Rejection Capacity.
- 2- Example
(Take Ammonia refrigeration as an example)

1, Total Heat Rejection Capacity of the ammonia refrigeration system is 1200 kw. (Total Heat Rejection Capacity= Compressor refrigerating capacity+ Compressor shaft power)

2. Operating condition: Condensation temperature 36 C. Wet Bulb Temperature 28 ℃.

3, Lookup 'Correction Coefficient Table for R717',and get the correction coefficient 1.22.

4, Determine Corrected Heat Rejection Capacity:1200kwx 1.22=1464kw

5, According to ZHX model table of HAC evaporative condenser, select model ZHX-1520 as it's the smallest one in these models with capacity greater than1464 kw.

一、Evaporative Condenser Data Sheet

1.1 Combined Flow Evaporative Condenser Data Sheet

Model	Capacity (KW)	Fan			Water Pump			Inlet and outlet pipe DN(mm)	Weight (kg)		Dimension(mm)		
		Unit	Power (kw)	Fan capacity (m³/h)	Unit	Power (kw)	Flow rate (m³/h)		Shipping	Operating	Length	Width	Height
ZHX-320	320	1	3	46000	1	1.1	53	DN100/DN80	2390	3790	1925	2380	4220
ZHX-430	430	1	4	60000	1	1.1	53	DN100/DN80	2510	3910	1925	2380	4220
ZHX-525	525	1	5.5	65000	1	1.5	70	DN100/DN80	2760	4340	1925	2580	4220
ZHX-595	595	1	5.5	75000	1	1.5	70	DN100/DN80	3290	5140	1925	2980	4220
ZHX-700	700	1	7.5	87000	1	1.5	70	DN100/DN80	3680	5530	1925	2980	4450
ZHX-800	800	2	4	2*45000	1	2.2	100	DN100/DN80	4230	7650	3770	2200	4220
ZHX-870	870	2	4	2*45000	1	2.2	100	DN100/DN80	4510	7930	3770	2200	4720
ZHX-980	980	2	4	2*45000	1	2.2	100	DN100/DN80	4620	8040	3770	2200	4965
ZHX-1100	1100	3	4	3*45000	1	3	150	DN125/DN100	6170	10170	4240	2200	4720
ZHX-1250	1250	3	4	3*45000	1	3	150	DN125/DN100	6510	10510	4240	2200	4965
ZHX-1380	1380	4	4	4*45000	1	4	180	DN125/DN100	7100	11950	5610	2200	4220
ZHX-1520	1520	4	4	4*45000	1	4	180	DN125/DN100	7310	12160	5610	2200	4730
ZHX-1680	1680	4	4	4*45000	1	4	180	2-DN100/DN100	7590	12440	5610	2200	4965
ZHX-1840	1840	4	4	4*45000	1	5.5	230	2-DN100/2-DN100	8920	15580	7450	2200	4220
ZHX-2010	2010	4	4	4*45000	1	5.5	230	2-DN100/2-DN100	9330	15990	7450	2200	4720
ZHX-2245	2245	4	4	4*45000	1	5.5	230	2-DN125/2-DN100	9550	16210	7450	2200	4965
ZHX-2450	2450	5	4	5*45000	2	2*3	2*150	2-DN125/2-DN100	11650	19090	9300	2200	4720
ZHX-2600	2680	5	4	5*45000	2	2*3	2*150	2-DN125/2-DN100	12350	19790	9300	2200	4965
ZHX-2820	2820	6	4	6*45000	2	2*3	2*150	2-DN125/2-DN100	12490	19930	9300	2200	4965
ZHX-3000	3000	6	4	6*45000	2	2*4	2*180	2-DN125/2-DN100	13410	20220	10400	2200	4965

1.2 Counter Flow Evaporative Condenser Data Sheet

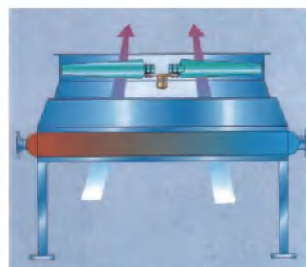
Model	Capacity (KW)	Fan			Water Pump			Inlet and outlet pipe DN(mm)	Weight (kg)		Dimension(mm)		
		Unit	Power (kw)	Fan capacity (m³/h)	Unit	Power (kw)	Flow rate (m³/h)		Shipping	Operating	Length	Width	Height
ZNX-70	70	1	0.75	15000	1	0.37	16	DN50/DN50	860	1630	1230	1150	3180
ZNX-100	100	1	1.5	18000	1	0.55	23	DN50/DN50	890	1660	1230	1150	3440
ZNX-200	200	1	2.2	30000	1	0.75	28	DN50/DN50	1370	2480	1925	1150	3650
ZNX-320	320	1	3	45000	1	1.1	53	DN80/DN80	1990	3620	1925	1840	3840
ZNX-430	430	1	4	60000	1	1.1	53	DN80/DN80	2120	3790	1925	1840	4220
ZNX-525	525	1	5.5	75000	1	1.5	70	DN80/DN80	2420	4490	2470	1840	4220
ZNX-595	595	1	7.5	87000	1	1.5	70	DN100/DN80	2690	4760	2470	1840	4450
ZNX-700	700	1	7.5	100000	1	2.2	84	DN100/DN80	3650	6080	2790	1840	4450
ZNX-800	800	2	4	2*65000	1	2.2	100	DN100/DN80	4150	7480	3770	1840	4220
ZNX-870	870	2	4	2*65000	1	2.2	100	DN100/DN80	4680	8010	3770	1840	4220
ZNX-980	980	2	4	2*65000	1	2.2	100	DN100/DN80	5120	8450	3770	1840	4450
ZNX-1100	1100	2	5.5	2*75000	1	3	120	2-DN100/2-DN80	5360	9430	3770	2200	4220
ZNX-1250	1250	2	5.5	2*75000	1	3	120	2-DN100/2-DN80	5980	10050	3770	2200	4450
ZNX-1380	1380	2	5.5	2*87000	1	4	180	2-DN100/2-DN80	6230	11270	4846	2200	4350
ZNX-1520	1520	2	7.5	2*100000	1	4	180	2-DN100/2-DN80	6560	11590	4846	2200	4650
ZNX-1680	1680	3	4	3*65000	1	5.5	230	2-DN100/2-DN80	7850	13730	5610	2200	4350
ZNX-1840	1840	3	5.5	3*75000	1	5.5	230	2-DN100/2-DN100	8450	14330	5610	2200	4650
ZNX-2010	2010	3	5.5	3*80000	1	5.5	230	2-DN100/2-DN100	9180	15380	5610	2200	4680
ZNX-2245	2245	3	7.5	3*87000	2	3	2*120	4-DN100/4-DN80	9780	17340	6510	2200	4650
ZNX-2450	2450	4	5.5	4*75000	2	3	2*120	4-DN100/4-DN80	10860	18520	7230	2200	4650
ZNX-2600	2600	4	5.5	4*75000	2	3	2*120	4-DN100/4-DN80	11480	20880	7450	2200	4650
ZNX-2820	2820	4	5.5	4*75000	2	3	2*150	4-DN100/4-DN80	11720	21120	8050	2200	4965
ZNX-3000	3000	4	7.5	4*87000	2	4	2*180	4-DN100/4-DN80	12580	22670	8640	2200	4965

- Notes:
- 1.Do not use for construction. This brochure includes data current at the time of publication which should be reconfirmed at the time of purchase
- 2.All location dimensions for coil connections are approximate and should not be used for prefabrication of connecting piping



Air cooled heat exchanger is an equipment that use air as the cooling medium to cool or condense the fluid inside of its fin-tube. An air cooled heat exchanger consists of fin tube bundles, fan, louver, framework, maintenance platform and other components required by the users. Air cooled heat exchangers feature low maintenance cost, safe and reliable operation and long service life. Many users select air cooled heat exchangers in their project because water usage issue and water pollution issue are eliminated. So it's mainly used in the area lack of water. Air cooled heat exchangers are widely used in metallurgy, petrochemical industry, chemical industry, pharmaceutical industry, coal industry, electric power industry, etc.

Induced Draft Type



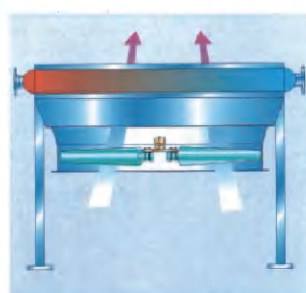
The fin-tube bundle is mounted below the fan and air duct. Induced draft type air cooled heat exchanger has stable heat exchange performance because the air duct can keep the fin tube bundle from dust, rain, snow and exposure. Meanwhile, it has advantages of equal air distribution, low noise, long service time and less heat exchange circulation.

Pent-roof Type



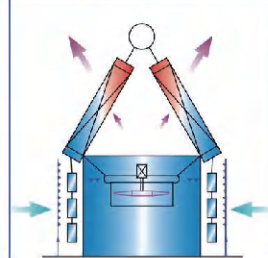
The fin-tube bundles are mounted on the top of the framework at a slant angle of 60°, this covers a smaller area and suitable for gas condensing. The resistance of inside tube and heat transfer coefficient of pent-roof air cooled heat exchanger are better than the horizontal type.

Forced Draft Type



Forced draft type air cooled heat exchanger is easy for maintenance because the fin tube bundle is mounted on the top of the fan and air duct; the fan motor is mounted below of the equipment. In addition, the fan motor has longer service life because of the lower work temperature.

Integrative Type

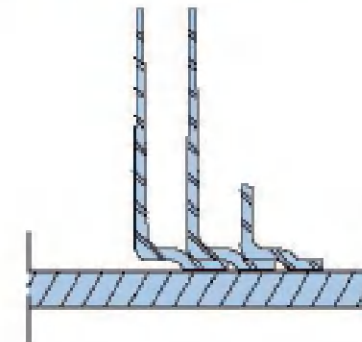


Fin-tube bundle (Part I) is mounted on the top of framework at a slant angle of 60°, it covers a smaller area. Fin-tube bundles (Part II) are placed at the both sides of the fan air inlet, and the water spraying system is installed at the windward side of the tube bundles. The water spraying system will greatly enhance the thermal discharge performance of the equipment under the condition of extremely high temperature.



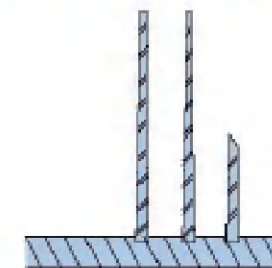
Fin-tube is the most important heat exchange components for air cooled heat exchanger, and its structure determines the overall performance of the air cooled heat exchanger. In addition, the way of connection between fin and bare tube also affects the heat transfer performance. The fin connected to steel tube or stainless steel tube is mainly made from aluminum, steel or hot-dip galvanized steel. High-efficiency heat exchange fin tube

Double L type twined tube



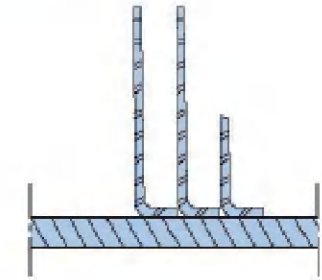
The aluminum tape is made into double L shape after twisting. The root of the fin overlaps each other and contacts well with the tube wall. This ensures the full coverage of the wall, and improves the corrosion resistance. It is applicable to the system temperature within 200°C, and can be applied in wet air cooler, but it is difficult to process and the cost is accordingly high.

G type embedded fin tube



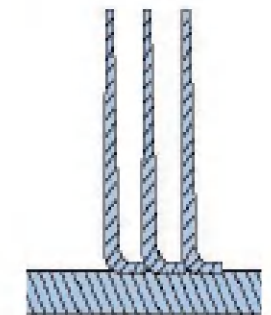
The surface of bare tube is dug with equidistant grooves before the installation of fin. After that the rolling on the edge of grooves helps form a strong connection between fin and tube. This technology features with high heat transfer efficiency, and hardly being affected by the high temperature and external force, but it is not resistant to corrosion and the cost is low.

L type twined tube



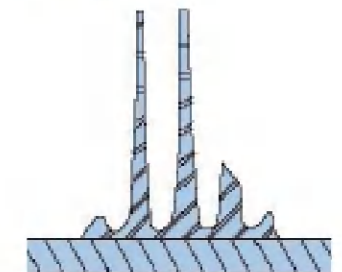
The aluminum tape is prefabricated into L type and spirally twines around the bare tube, this technology increases the contact area between the aluminum tape and the bare tube. Heat is transferred from the surface of bare tube to the fin tube, and larger contact area greatly improve the heat exchange efficiency. L type twined tube is suitable to be used under low temperature condition. It is applicable to the system with low budget and the system temperature does not exceed 150°C.

KL knurling type fin tube



It is an improvement of L type twined tube. The bare tube surface was knurled and followed by rolling on the root of "L" which implants part of the root of "L" into the parent tube surface. This process improves the heat exchange efficiency and anti-corrosion ability, making the operating temperature could reach up to 250°C.

DR type fin tube

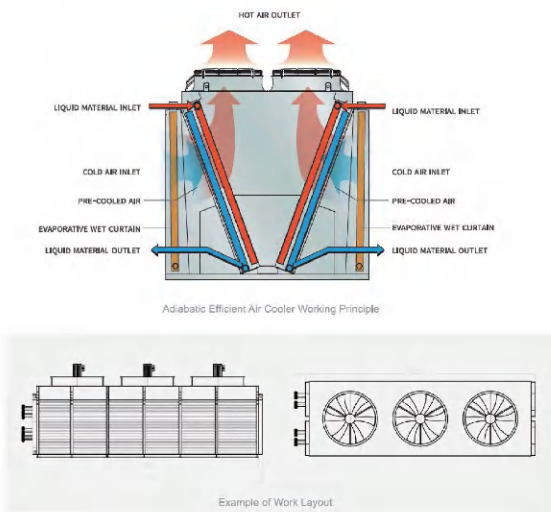
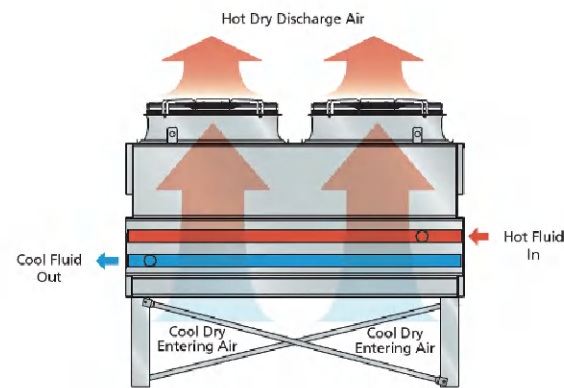


The aluminum tube is mechanically rolled on the bare tube. This manufacturing process makes the corrosion resistant performance of fin tube is good and the heat transfer efficiency is high. And also the integrity of the fin and rigidity is great. The DR type fin tube is easy to clean but the cost is very high and requires large consumption of aluminum.

Adiabatic cooler

Adiabatic coolers-dry cooler are widely used in various industries, such as HVAC (heating, ventilation, and air conditioning), power generation, data centers, and industrial process cooling. We could develop the Modular design and custom design to fully satisfy the specific request of our customers with design to be energy-efficient and environmentally friendly.

- Product features and specifications:
- Tube material: Aluminum, copper, or stainless steel
 - Fan type: Axial or centrifugal
 - Fan quantity: Single or multiple
 - Fan motor: AC or EC
 - Fin type: Corrugated or flat
 - Fin spacing: 2.1mm, 2.5mm, or 3.0mm
 - Ambient temperature range: -40°C to 50°C
 - Design models :V-type design model and Flat-type design model
 - Cooling capacity: Up to 2500 kW

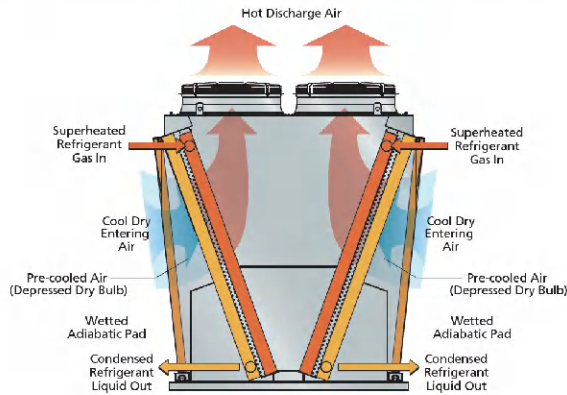


For special request of outlet temperature, we have developed the pre-cooling wet pad and Spray system to decrease the temperature of environment ambient temperature to get the lower outlet temperature.

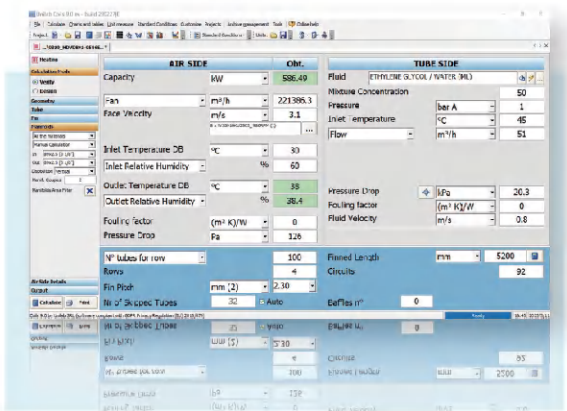


Adiabatic coolers-adiabatic condenser .Water consumption is an ever increasing important criterion for choosing equipment. The growing scarcity of water and rising costs of water inspire us to offer eco-friendly products to help minimize natural resource consumption.

HACST adiabatic condenser uses the latest in heat transfer and controls technology. The delivery system utilizes water management and cooling pads to maximize adiabatic efficiency, minimize water consumption and safely manage water usage. Water consumption can be reduced 60% to 90% versus a conventional water cooled system and reduces peak energy demand versus an air cooled system.



We adopt 3D design software such as Solidworks, and the performance design is assisted by professional fin heat exchanger design software Coil 8.0, EASY production software, and Mcoil sales design software and quotation software and other auxiliary tools.



EBM, ZIEHL-ABEGG and Kemao; Fan type AC and EC; The number of fans can range from 1 to 22, and the length of the product is 13.5 meters. Can be designed to match the diameter from 300mm to 1250, 1800 more specifications of axial fan radiator.

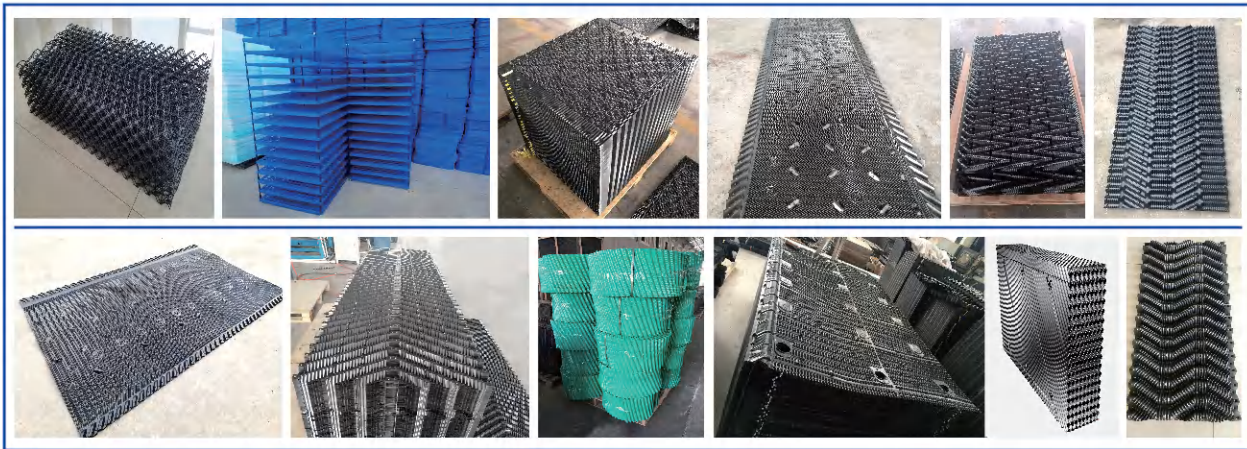


COOLING TOWER PARTS

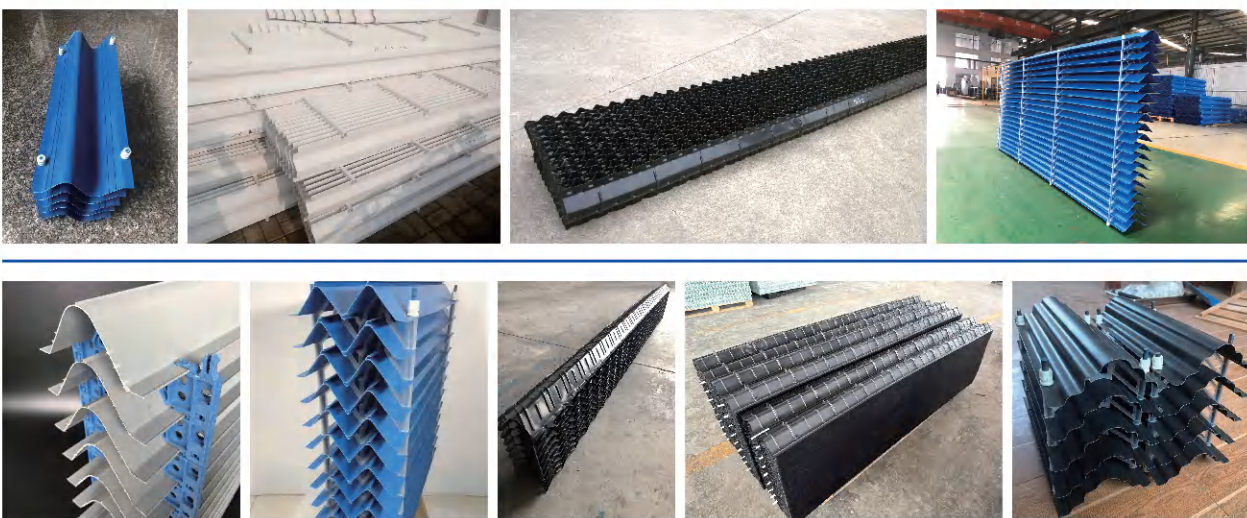
Main parts: cooling tower fill,drift eliminator,air inlet louver, spray nozzle,sprinkler head,ect
We use high quality raw material,with good toughness, high strength and long service life

Cooling tower fill

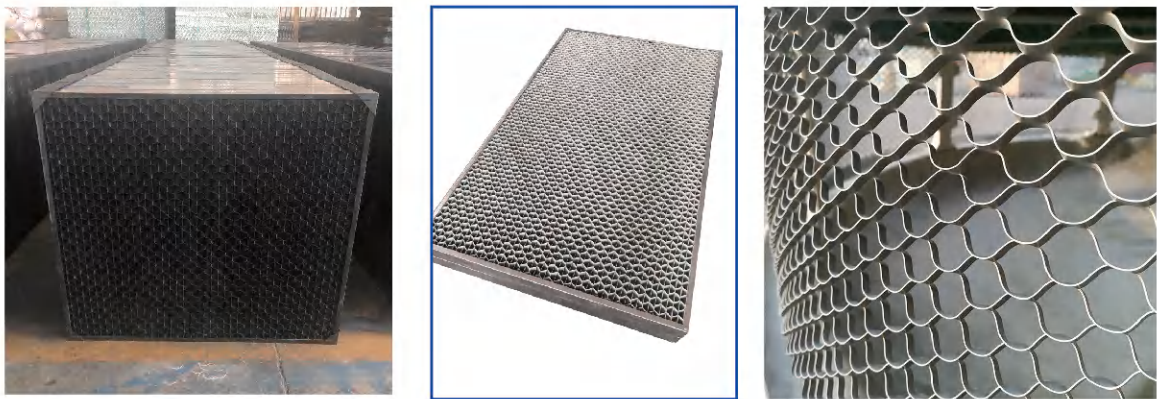
Material: PVC, CPVC, PP
Raw material thickness: 0.28-0.8mm
We can replace BAC,EVAPCO,Liangchi,Marley,Brentwood,Kuken,spindle etc brand cooling tower fill



Drift eliminator,material: PVC,PP, thickness:0.4-2.5mm



Air inlet louver, material: PVC thickness:0.6-0.8mm



Spray nozzle& Sprinkler head &fan blades&motor

