MESAN

MXC - FC SERIES

Closed Circuit Induced Draft

CTI CERTIFIED

The green Builder's Choice

MXC – FC SERIES

Overview

The MXC-FC closed circuit cooling tower runs the circulating cooling water in a fully closed circulation system to avoid contamination with the outside air, ensure the cleanness and stability of the circulating water, and ensure the system operation is safer and more reliable while reducing the evaporation of cooling water, energy saving, and environmental protection. There is a total of 14 towers and more than 200 models in the whole series, and the operating water volume from 23 - 500m³/h, to meet more market demand.

Compliant with the following international standards and certification:

- **CTI STD-201**
- **ASHRAE 90.1**
- **GB/T 7190**

MANUFACTURER'S PUBLISHED THERMAL PERFORMANCE IS CERTIFIED BY THE COOLING TECHNOLOGY INSTITUTE UNDER THE PROVISIONS OF STD-201 (21)
CERTIFICATION VALIDATION NO.:
C26H-12R02

Model Designation

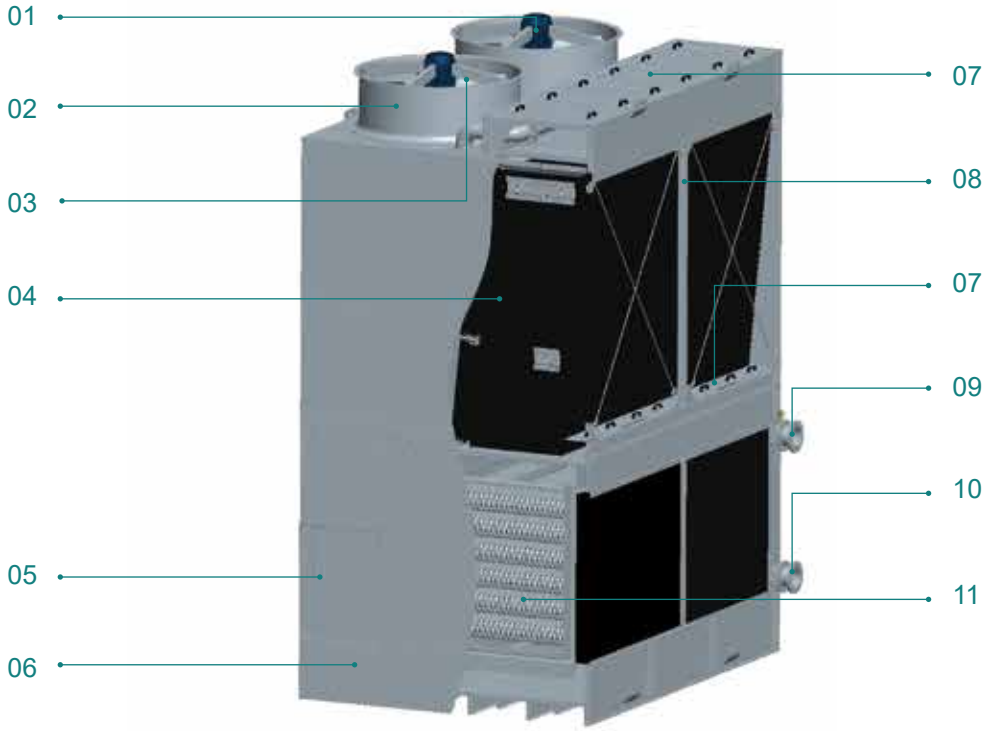
Model Series		Box Size	SS304 coil	Fan Motor Power		Numbers of Cells, eg. 2 cells per set
MXC–FC	2028E –	S –	A –	S –	3 –	S4 – 2

A - A Type Coil Design
B - B Type Coil Design

S - Standard Design Coil Pressure Drop
L - Low Coil Pressure Drop

F4/F6 - for SS304/316 Casing & Structure
S4/S6 - for SS304/316 Structure

Tower Structure



01	Motor	04	Infill	07	Hot Water Basin	10	Water inlet
02	Fan Stack	05	Access Door	08	Structure	11	Coil
03	Fan	06	Cold Water Basin	09	Water outlet		

Advantages

Long Service Life

The Casing and structure are made of hot-dipped galvanized steel (HDGS) for corrosion resistance, to guarantee a long service life.

- Optional magnesium-aluminum-zinc-plated steel or 304/316 stainless steel casing and structure is available to meet higher standards of corrosion resistance.

High Efficiency

The coils are made of 304 stainless steel pipes with excellent corrosion resistance, and the effect of anti-corrosion inside and outside the pipes is consistent, helps to maintain excellent thermal conductivity and service life. Coils are made from a single pipe bend to achieve the best airtightness. All coils are pressure tested to 15 bar to ensure adequate pressure resistance during transportation, installation and in operation.

Using axial flow type high efficiency fan, aluminum alloy blades with hollow airfoil design, low noise, high efficiency; surface anodizing treatment, strong corrosion resistance. Dynamically balanced fan assembly. Adjustable fan angle to meet a wide range of air volume to meet the needs of different sites.

- Optional ultra-low noise fan to cope with lower noise requirements.
- Optional FRP fan to cope with higher anti-corrosion requirements.

Adopted efficient PVC infill, corrugated design to maximize heat transfer area. The honeycomb type air inlet structure that effectively reduce the wind resistance, helps to minimize energy consumption and make the thermal performance of the cooling tower optimal. High efficiency drift eliminator for reducing the drift rate to less than 0.001%.

- High temperature PVC and PP infills are available as option.

Low Installation and operating cost

The tower adopts a modular design and can be assembled in a factory, which minimizes the on-site installation time. Enclosed system design reduces the daily maintenance costs and maintain the efficient performance of the equipment for a long time.

- Under certain conditions, the use of "dry running" mode in winter can further save energy consumption.

The fan is direct driven, eliminates the efficiency loss due to drive components.

- Optional belt drive is available
- Optional Accessories such as Low noise fan, Finned coil-pipe are available.

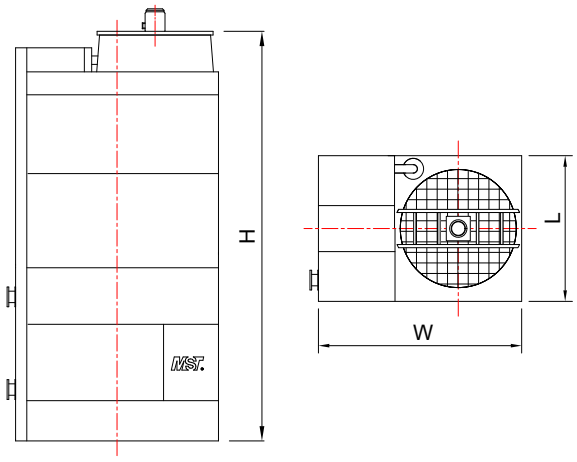
Water saving

- Optional filtration system cleans the cooling tower basin, keeping the cooling tower system running efficiently and reducing the cost of cleaning maintenance and chemical use. That meets the LEED program standards set by the U.S. Green Building Council and contributes to earning 2 points.

MXC – FC SERIES

Product Technical Data

1522E、2028E



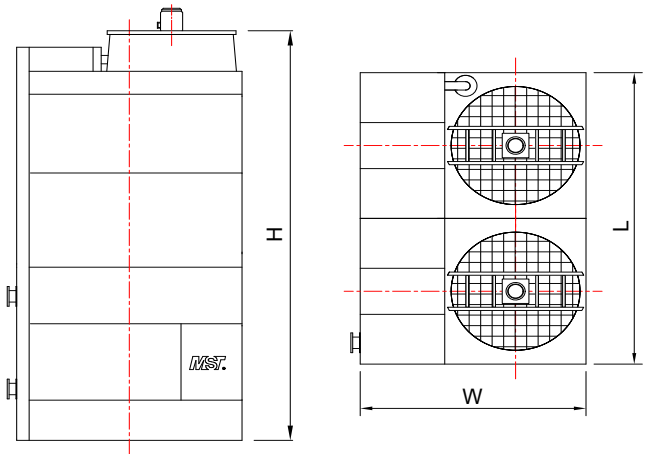
Model	Motor (kW)	WFR (m^3/h)	Dimensions (mm)		
MXC-FC			L	W	H
1522ESAS	2.2	23	1,550	2,280	4,505
	3	26			
	4	29			
1522ESBS	2.2	25	1,550	2,280	4,505
	3	29			
	4	32			
2028ESAS	3	50	1,975	2,800	5,505
	4	55			
	5.5	61			
	7.5	67			
	11	76			
2028ESBS	3	55	1,975	2,800	5,505
	4	61			
	5.5	67			
	7.5	74			
	11	84			
2028ESAL	5.5	55	1,975	2,800	5,505
	7.5	61			
	11	69			
2028ESBL	4	55	1,975	2,800	5,505
	5.5	61			
	7.5	67			
	11	76			

PS:

❶ Nominal water flow is defined as rate of water cooled from 37°C to 32°C with 28°C wet-bulb temperature.
❷ Optional velocity recovery cylinder (add suffix/V) will increase the capacity. For details, please contact our engineers.
❸ Satisfactory performance is based on precise selection, proper system design and installation in a clean and well-ventilated location.

Product Technical Data

3022E、3028E



Model	Motor (kW)	WFR (m^3/h)	Dimensions (mm)		
MXC-FC			L	W	H
3022ESAS	2.2×2	46	3,000	2,280	4,505
	3×2	52			
	4×2	58			
3022ESBS	2.2×2	51	3,000	2,280	4,505
	3×2	57			
	4×2	64			
3022ESAL	2.2×2	42	3,000	2,280	4,505
	3×2	47			
	4×2	53			
3022ESBL	2.2×2	46	3,000	2,280	4,505
	3×2	52			
	4×2	58			
3028ESAS	1.5×2	66	2,930	2,800	5,505
	2.2×2	75			
	3×2	83			
	4×2	92			
	5.5×2	102			
	7.5×2	113			
3028ESBS	1.5×2	73	2,930	2,800	5,505
	2.2×2	83			
	3×2	91			
	4×2	101			
	5.5×2	112			
	7.5×2	124			

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MXC – FC SERIES

Product Technical Data

Model	Motor (kW)	WFR (m^3/h)	Dimensions (mm)		
MXC-FC			L	W	H
3028ESAL	1.5×2	60	2,930	2,800	5,505
	2.2×2	68			
	3×2	75			
	4×2	84			
	5.5×2	93			
	7.5×2	103			
3028ESBL	1.5×2	66	2,930	2,800	5,505
	2.2×2	75			
	3×2	83			
	4×2	92			
	5.5×2	102			
	7.5×2	113			
3928ESAS	3×2	100	3,850	2,800	5,505
	4×2	109			
	5.5×2	121			
	7.5×2	133			
	11×2	152			
3928ESBS	3×2	110	3,850	2,800	5,505
	4×2	120			
	5.5×2	133			
	7.5×2	146			
	11×2	167			
3928ESAL	3×2	91	3,850	2,800	5,505
	4×2	99			
	5.5×2	110			
	7.5×2	121			
	11×2	138			
3928ESBL	3×2	100	3,850	2,800	5,505
	4×2	109			
	5.5×2	121			
	7.5×2	133			
	11×2	152			
3936ESAS	4×2	146	3,850	3,600	6,055
	5.5×2	162			
	7.5×2	180			
	11×2	204			
	15×2	226			
3936ESBS	4×2	161	3,850	3,600	6,055
	5.5×2	178			
	7.5×2	198			
	11×2	224			
	15×2	249			
3936ESAL	4×2	133	3,850	3,600	6,055
	5.5×2	147			
	7.5×2	164			
	11×2	185			
	15×2	205			
3936ESBL	4×2	146	3,850	3,600	6,055
	5.5×2	162			
	7.5×2	180			
	11×2	204			
	15×2	226			

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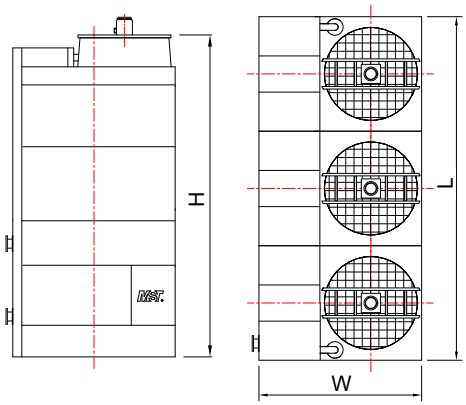
Product Technical Data

4422E、5736E



Model	Motor (kW)	WFR (m^3/h)	Dimensions (mm)		
MXC-FC			L	W	H
4422ESAS	2.2×3	69	4,450	2,280	4,505
	3×3	78			
	4×3	87			
4422ESBS	2.2×3	76	4,450	2,280	4,505
	3×3	86			
	4×3	96			
4422ESAL	2.2×3	63	4,450	2,280	4,505
	3×3	71			
	4×3	79			
4422ESBL	2.2×3	69	4,450	2,280	4,505
	3×3	78			
	4×3	87			
5736ESAS	4×3	219	5,725	3,600	6,055
	5.5×3	243			
	7.5×3	270			
	11×3	306			
5736ESBS	4×3	241	5,725	3,600	6,055
	5.5×3	267			
	7.5×3	297			
	11×3	337			
5736ESAL	4×3	199	5,725	3,600	6,055
	5.5×3	221			
	7.5×3	245			
	11×3	278			
	15×3	308			
5736ESBL	4×3	219	5,725	3,600	6,055
	5.5×3	243			
	7.5×3	270			
	11×3	306			
	15×3	339			

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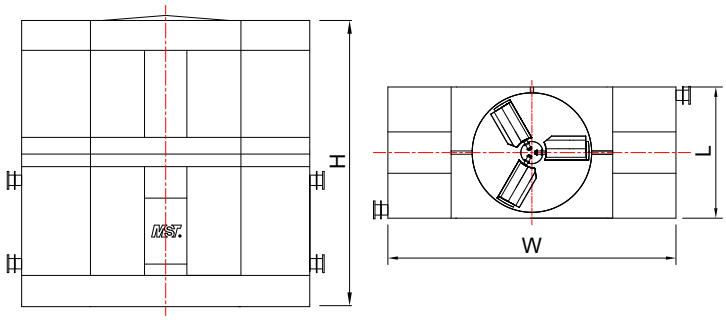
MXC – FC SERIES

Product Technical Data

1943E、2246E



Model	Motor (kW)	WFR (m^3/h)	Dimensions (mm)		
MXC-FC			L	W	H
1943ESAS	2.2	60	1,975	4,336	4,485
	3	66			
	4	72			
	5.5	80			
1943ESBS	2.2	66	1,975	4,336	4,485
	3	73			
	4	79			
	5.5	88			
1943ESAL	4	65	1,975	4,336	4,485
	5.5	73			
1943ESBL	3	66	1,975	4,336	4,485
	4	72			
	5.5	80			
2246ESAS	4	90	2,200	4,634	4,987
	5.5	100			
	7.5	110			
	11	125			
2246ESBS	4	99	2,200	4,634	4,987
	5.5	110			
	7.5	121			
	11	138			
2246ESAL	5.5	91	2,200	4,634	4,987
	7.5	100			
	11	114			
2246ESBL	4	90	2,200	4,634	4,987
	5.5	100			
	7.5	110			
	11	125			

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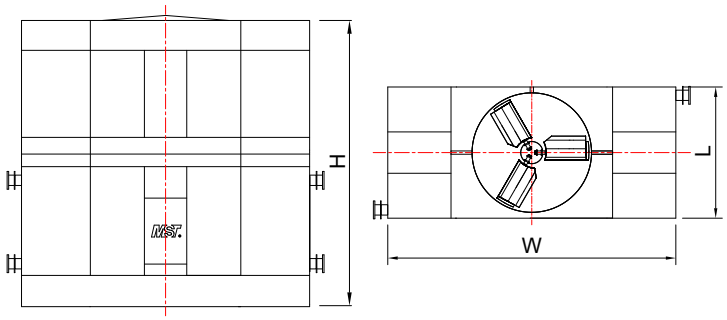
Product Technical Data

2952E、2963E



Model	Motor (kW)	WFR (m^3/h)	Dimensions (mm)		
MXC-FC			L	W	H
2952ESAS	7.5	150	2,940	5,276	5,579
	11	170			
	15	188			
	18.5	200			
	22	212			
2952ESBS	7.5	165	2,940	5,276	5,579
	11	187			
	15	207			
	18.5	220			
	22	233			
2952ESAL	7.5	136	2,940	5,276	5,579
	11	155			
	15	171			
	18.5	182			
	22	193			
2952ESBL	7.5	150	2,940	5,276	5,579
	11	170			
	15	188			
	18.5	200			
	22	212			
2963ESAS	22	243	2,940	6,376	6,131
	30	270			
	37	285			
	45	300			
2963ESBS	22	267	2,940	6,376	6,131
	30	297			
	37	314			
	45	330			
2963ESAL	22	221	2,940	6,376	6,131
	30	245			
	37	259			
	45	273			
2963ESBL	22	243	2,940	6,376	6,131
	30	270			
	37	285			
	45	300			

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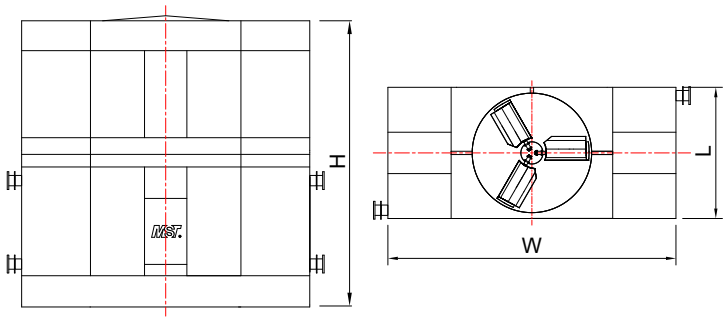
Product Technical Data

3674E、4378E



Model	Motor (kW)	WFR (m^3/h)	Dimensions (mm)		
MXC-FC			L1	W1	H1
3674ESA	22	310	3,600	7,476	6,136
	30	345			
	37	370			
	45	390			
	55	415			
3674ESBS	22	341	3,600	7,476	6,136
	30	380			
	37	407			
	45	429			
	55	457			
3674ESAL	22	282	3,600	7,476	6,136
	30	314			
	37	336			
	45	355			
	55	377			
3674ESBL	22	310	3,600	7,476	6,136
	30	345			
	37	370			
	45	390			
	55	415			
4378ESAS	22	360	4,270	7,876	6,184
	30	399			
	37	427			
	45	455			
	55	485			
4378ESBS	22	396	4,270	7,876	6,184
	30	439			
	37	470			
	45	500			
4378ESAL	22	327	4,270	7,876	6,184
	30	363			
	37	388			
	45	414			
	55	441			
4378ESBL	22	360	4,270	7,876	6,184
	30	399			
	37	427			
	45	455			
	55	485			

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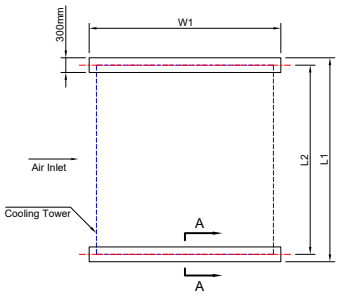
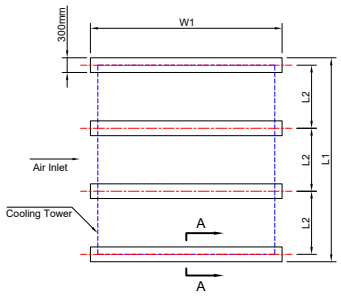
Foundation

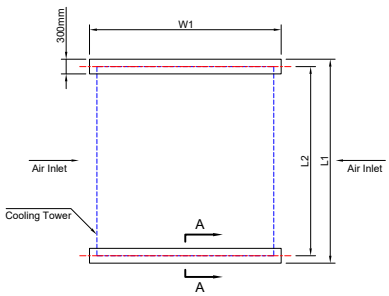
1522E、3022E
2028E、3028E



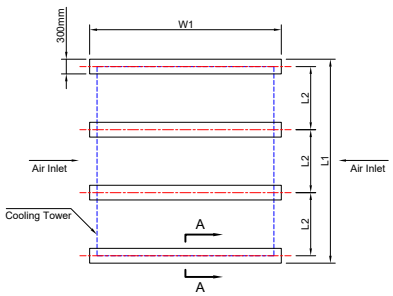
4422E、3928E
3936E、5736E

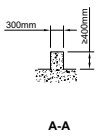


1943E、2246E
2952E、2963E



3674E、4378E





Model	Foundation Dimensions(mm)				Piping Dimensions				
MXC-FC	L1	L2	L3	W1	WI	WO	OF	Drain	M–U
1522E	1,550	-	-	2,580	DN80	DN80	DN40	DN25	DN20
3022E	3,000	-	-	2,580	DN100	DN100	DN40	DN40	DN20
2028E	1,975	-	-	3,100	DN100	DN100	DN40	DN40	DN20
3028E	2,930	-	-	3,100	DN125	DN125	DN50	DN40	DN20
4422E	4,450	1,480	1480	2,580	DN125	DN125	DN50	DN40	DN20
3928E	3,850	1,280	1280	3,100	DN150	DN150	DN50	DN40	DN20
3936E	3,850	1,280	1280	3,900	DN200	DN200	DN80	DN40	DN25
5736E	5,725	1,905	1905	3,900	DN200	DN200	DN80	DN50	DN40
1943E	1,975	-	-	4,640	DN100×2	DN100×2	DN50	DN40	DN20
2246E	2,200	-	-	4,940	DN100×2	DN100×2	DN50	DN40	DN20
2952E	2,940	-	-	5,580	DN125×2	DN125×2	DN80	DN40	DN20
2963E	2,940	-	-	6,680	DN150×2	DN150×2	DN80	DN50	DN40
3674E	3,600	1,200	1200	7,780	DN200×2	DN200×2	DN80	DN50	DN40
4378E	4,270	1,420	1420	8,180	DN200×2	DN200×2	DN100	DN100	DN50

PS:

1. Secure the base of the cooling tower with anchor bolts.
2. All foundation support surfaces are on the same horizontal plane, and the elevation deviation is less than 5mm.
3. Buyer is responsible for the tower support and for the diameter of the anchoring bolts to comply with local building codes.

MESAN

www.mesanct.com

sales@mesanct.com


MXH


MXL


MFD


MXC


MXC - FC


MCC


MHD

2024-1M / MXC-FC-EN