MESAN

MST-3000 Series

Cross Flow Induced Draft
Single Air Inlet

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MST-3000 Series

Cross Flow Induced Draft Single Air Inlet

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 have been selected as a key supplier for many renowned projects in the global market.

Most MESAN products are CTI certified. The company has be certified by ISO-9001 quality management system and ISO-14001 environmental management system. 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.

Overview

The MST-3000 is a cost-effective, induced-draft, single inlet vertical dischange cross-flow cooling tower. Single cell's capacity range is from 80m³/h to 500m³/h. The MST-3000 is ASHRAE-90.1 compliant.

Model Designation

MST-3080 - S4 - 2

Model Number

Numbers of Cells eg. 2 cells per set

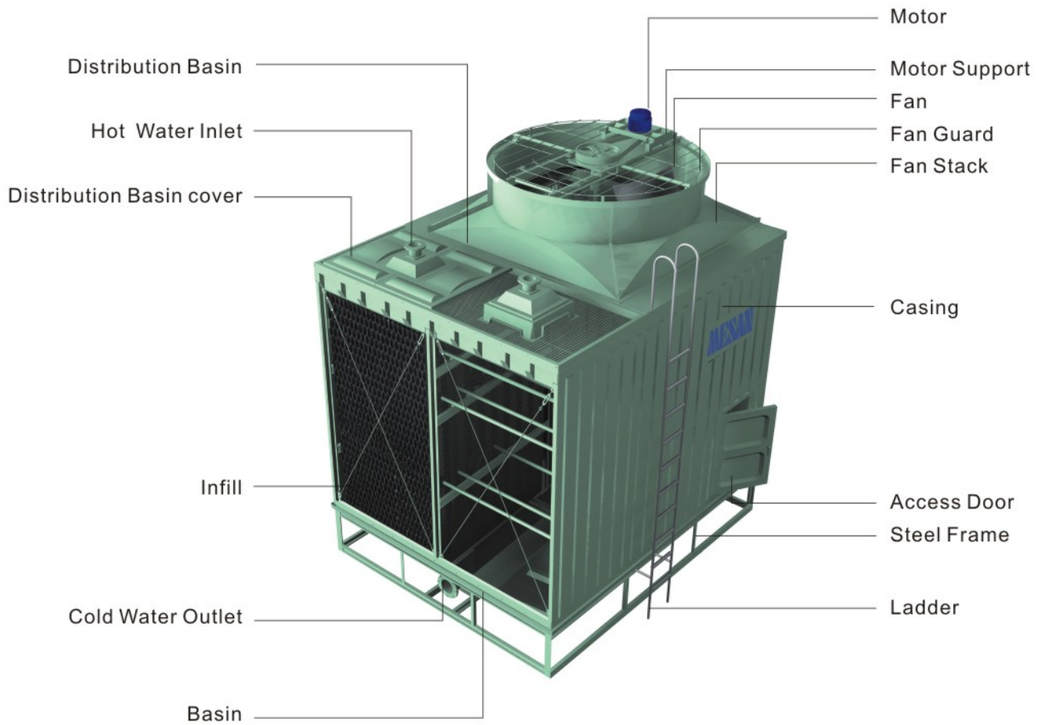
F4 - for SS304 Casing & Structure
F6 - for SS316 Casing & Structure
S4 - for FRP Casing & SS304 Structure
S6 - for FRP Casing & SS316 Structure
G - for HDGS Casing & Structure

Convenience

The MST-3000 is the ideal solution for applications requiring all the advantages of an induced draft, crossflow tower, but with limited floor space. Its single-side air intake allows for installation against a wall with minimum clearance. The MST-3000 also offers MESAN's low drift, low noise and low maintenance advantages.

Trust MESAN with your evaporative cooling needs.

Tower Structure



Optional Accessories

Motor	High Efficiency Motor	**Others**	Basin Sweeper Systems with Filter / Separator Package
	Two Speed Motor		Basin Heater
	VFD Motor		Discharge Sound Attenuator
Fan	FRP Fan		Equalizing Pipe Connection
	Low Noise Fan		FRP Louver
Reducer	180° Gear Box		OSHA Fan Guard
	90° Gear Box		OSHA Ladder Safety Cage and Handrail
Infill	ASTM PVC Infill		Removable Strainer
	High Temperature PP Infill		Variable and Constant Speed Control Panels
			Vibration Cut-off Switch

Components

Motor

TEAO motors with IP55,weatherproof, IP55 protection degree with class F insulation, high efficiency, low noise and specially insulated for running in humid environment.

* Also available with Two Speed motor and VFD motor.

High Efficiency Fan

High efficiency axial aluminum alloy fans with innovative aerodynamic blade design, adjustable pitch blades at low fan tip speeds with low noise emission ensures optimum performance and low power consumption.

* Also available with FRP fan for special application.

V-Belt Reducer

- Carbon steel rotating shaft with Japan NSK bearing and Mitsubishi transmission belts, able to withstand the adverse humid air, assure long reliable operation and higher performance.
  * Also available with Gear box reducer
- Pulley is cast iron dynamically balanced to guarantee the performance and ensures quiet operation.

Casing

UV stabilized gel coat, unsaturated polyester resin with E-glass chopped strand mat, it provides superior protection, corrosion resistance, long service life and minimal maintenance. With the high quality control of the production process assure the best quality with outstanding value.

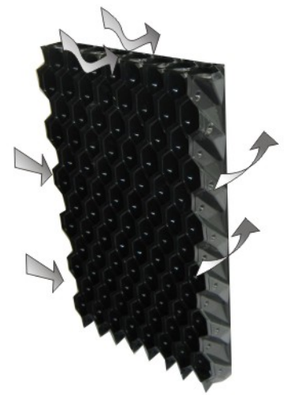
* SS304 and SS316 casings are available.

Frame Structure

Structural frames are made of high-tensile carbon steel and then hot-dip galvanized. Also available in SS304 and SS316.

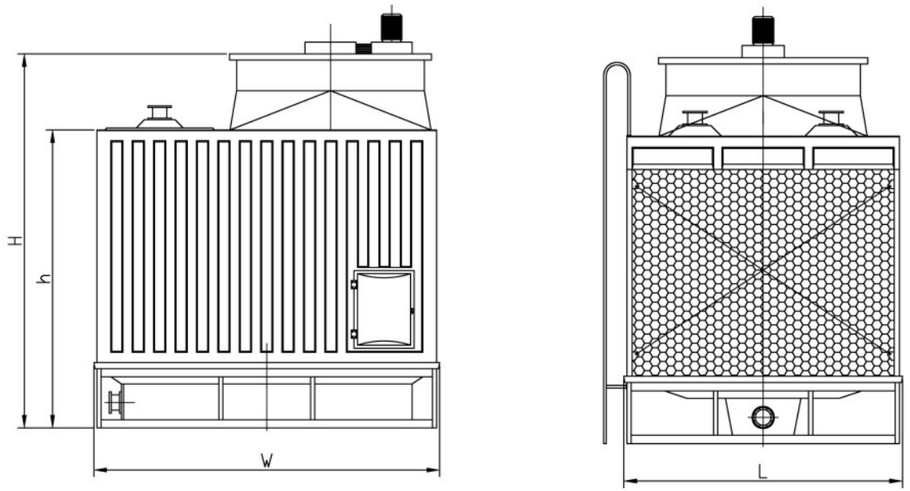
High Efficiency Low Drift Infill

- The vacuum formed PVC high efficiency hanging fill type with special wave-shape design maximizes the heat transfer. Integrated inlet louvers optimize air ventilation and the drift eliminators minimize the drift loss to 0.005% of the design water flow. 100% virgin material guarantees higher performance and longer service life.
- Adhesive-free hanging assembly design is environmentally - friendly and cost saving on shipping.
  * Also available with higher temperature PVC infill and PP infill.



Product Technical Data

MST-3080~3500



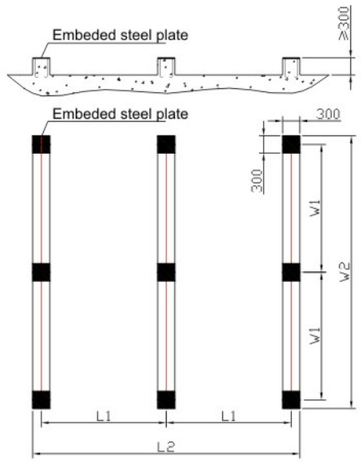
Model	Water Flow (m^3/h)	Tower Dimensions (mm)				Fan Diameter (mm)	Motor (Kw)	Air Flow (m^3/h)	Weight (Kg)		Water Pressure Drop (Kpa)
MST-3000		L	W	H	D				Dry	Operating	
3080	80	2140	3190	3400	2900	1600	3	52000	750	1550	45
3100	100	2640	3390	3650	2900	1780	4	65000	860	1750	45
3125	125	2640	3390	4150	3400	1780	4	81250	980	2150	50
3150	150	3150	3790	4180	3430	2080	5.5	97500	1150	2530	50
3175	175	3150	3790	4680	3930	2080	5.5	113750	1280	2810	55
3200	200	3150	3990	4680	3930	2360	7.5	130000	1420	3150	55
3225	225	3750	3990	4680	3930	2360	7.5	146250	1650	3630	50
3250	250	3750	3990	5180	4430	2360	11	162500	1720	3780	55
3300	300	4420	4510	5480	4530	2940	11	195000	2150	4730	55
3350	350	4420	4510	5480	4530	2940	15	227500	2280	5020	55
3400	400	4840	4910	5980	5030	3330	11	260000	2650	5830	60
3450	450	4840	4910	5980	5030	3330	15	292500	2850	6750	60
3500	500	4840	4910	6530	5580	3330	18.5	325000	2900	6800	60

Notes:

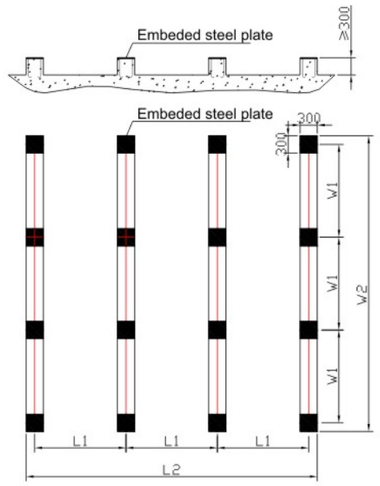
1) Nominal water flow rate of m^3/h cooled from 37°C to 32°C at 28°C entering wet-bulb temperature.
2) These are estimated nominal capacities and for more accurate sizing we encourage our customers to use our selection software.
3) Satisfactory performance is based on precise selection, proper system design and installation in a clean and well-ventilated location.

Foundation

MST-3080~3350



MST-3400~3500



Model	Foundation Dimension (mm)				Piping Connection (mm)				
MST-3000	L1	L2	W1	W2	WI	WO	OF	Drain	M-U
3080	1040	2380	1565	3430	125	125	50	40	20
3100	1290	2880	1665	3630	125×2	150	50	40	20
3125	1290	2880	1665	3630	125×2	150	50	40	25
3150	1545	3390	1865	4030	125×2	150	50	40	25
3175	1545	3390	1865	4030	125×2	150	50	40	25
3200	1545	3390	1965	4230	150×2	200	80	40	25
3225	1845	3990	1965	4230	150×2	200	80	40	25
3250	1845	3990	1965	4230	150×2	200	80	50	40
3300	2180	4660	2225	4750	150×2	200	80	50	40
3350	2180	4660	2225	4750	200×2	250	80	50	40
3400	1593	5079	1616	5148	200×2	250	80	50	40
3450	1593	5079	1616	5148	200×2	250	80	50	40
3500	1593	5079	1616	5148	200×2	250	80	50	40