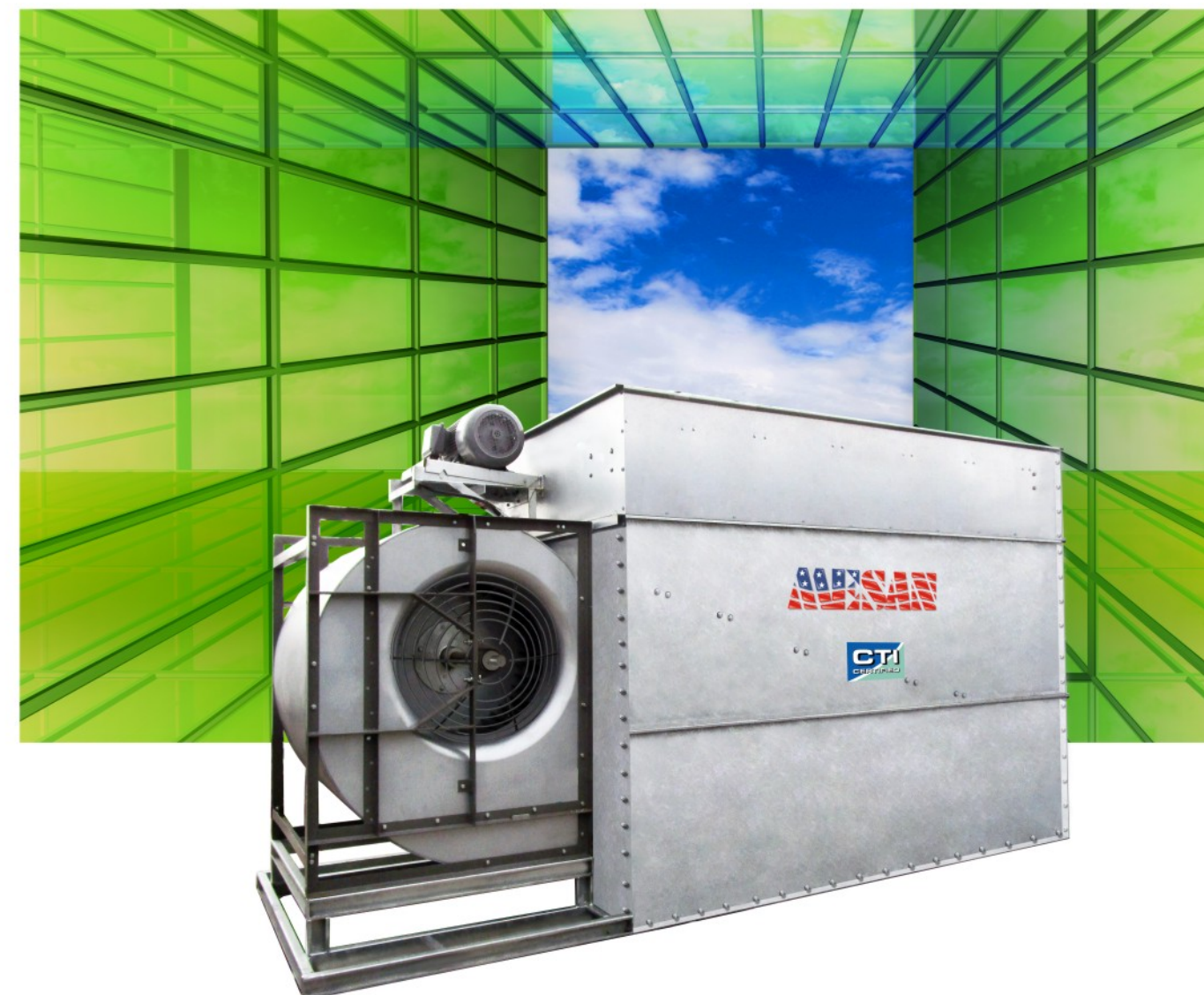




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MFD Series

Counter Flow, Forced Draft

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2016-01/MFD-EN/M



MFD Series

Counter Flow, Forced Draft



For over 40 years, the MESAN Group has engaged in the engineering and manufacturing of high quality, high efficiency evaporative cooling equipment. Through hard work, ethics, and a constant pursuit of excellence, MESAN has become a leader in the cooling tower industry in Asia. Today, MESAN continues to play a vital role in the development of new technologies and products, and is proud to have been selected as a key supplier for many renowned projects in the global market.



MESAN is an ISO-9001 and 14001 certified company; our towers were the first ones in Hong Kong and China to obtain the CTI STD-201 performance certification, all of our products are ASHRAE-90.1-2013 compliant, a requisite towards LEED certification for Green Buildings by the USGBC (United States Green Building Council). All this confirms MESAN's constant pursuit of excellence and world-class quality.

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



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

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

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

Overview

The new MFD series of forced-draft, counter-flow cooling towers, complements MESAN USA's line of high performance, energy saving induced-draft towers. Its low profile, low noise, and high-static centrifugal fans, makes the MFD the ideal solution for applications requiring the towers to be installed indoors. The MFD series, has 13 models in capacities ranging from 56 to 204 tons.

Model Designation



Advantages

- Performance guaranteed. All models are CTI-certified as per STD-201
- Low profile, allows for installation inside mechanical rooms
- Modular construction and narrow casing, for shipping inside standard containers, as factory pre-assembled sections
- Service door located at the opposite end of the fan, leaves the two casing sides free for multiple cell configurations.
- Duct flange at the top of the unit for field-installed discharge ducts
- Forward-curved centrifugal fans for quietest operation and higher static pressure handling
- Built-in outlet strainer
- Discharge and intake sound attenuation options
- Several optional accessories to fit diverse applications.

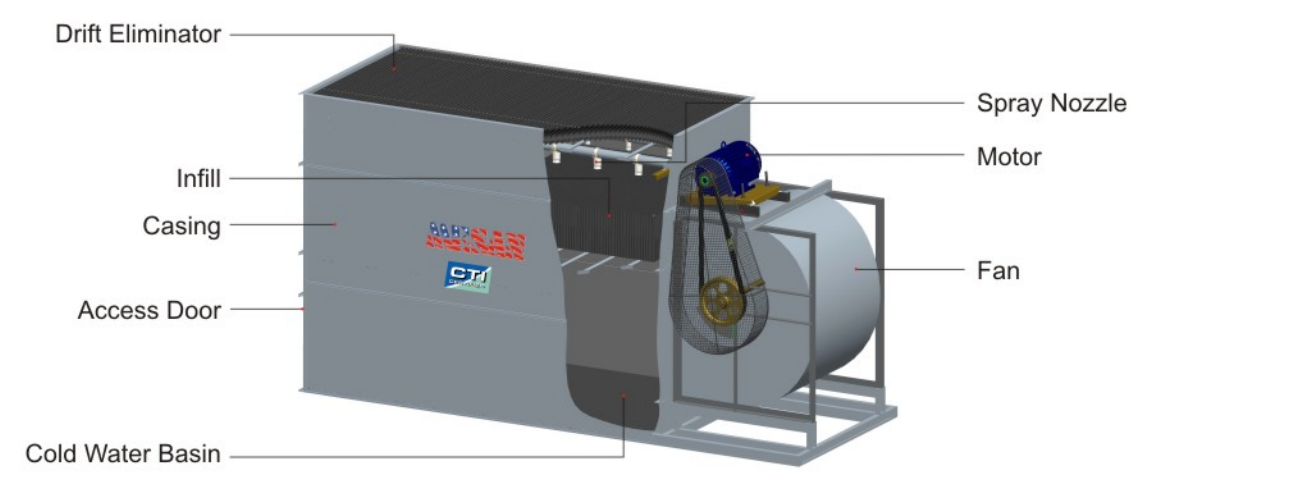
Optional Accessories

High Efficiency Motor	Basin Heater	5-Year Mechanical Warranty
Two Speed Motor	Discharge Sound Attenuator	Electronic Water Level Control
VFD Motor	OSHA Fan Guard	Oversized Access Doors
ASTM PVC Infill	Removable Strainer	Equalizing Connections
High Temperature PP Infill	Variable and Constant Speed Control Panels	ANSI-125 Flanges
CPVC Infill	Vibration Cut-off Switch	SS304 and SS316 construction

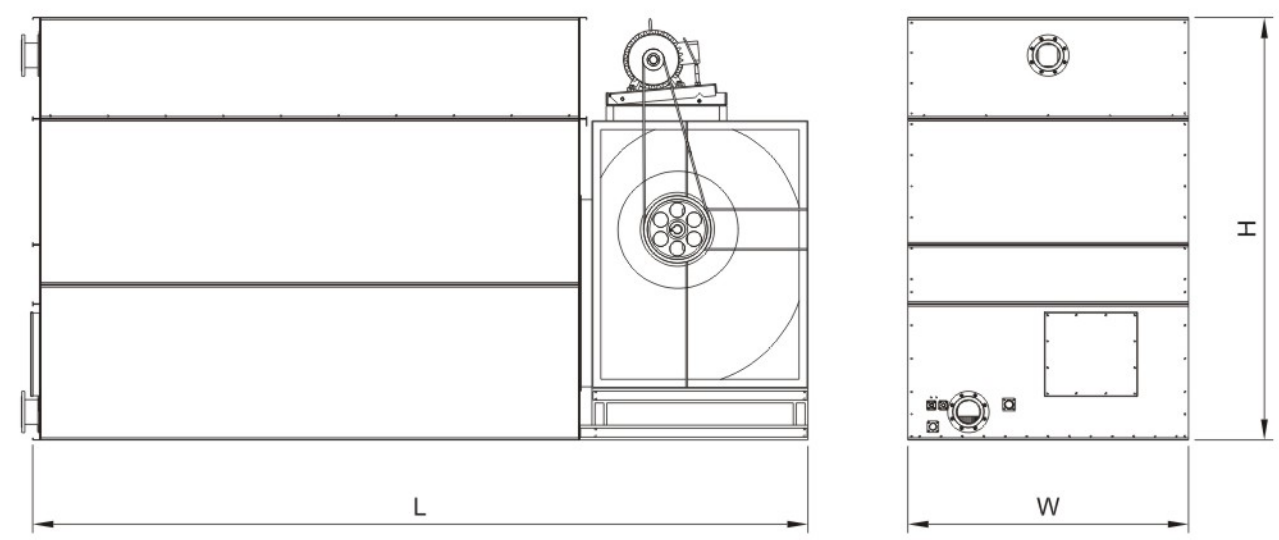
Trust MESAN with
your evaporative cooling needs.



Tower Structure



Dimensions



Mechanical Components

Motor
TEFC motor, IP55 enclosure, class F insulation, high efficiency, low noise and weatherproof, specially designed for cooling towers. Also available, two speed, and inverter-duty motors.

Casing and Structure

Casing
Casing is made of larger panels with few bolted joints to minimize the possibility of water leaks. Available in Hot-dipped galvanized steel as standard. Large access door to facilitate inspection and maintenance.

Structural Frame
Heavy-gage structural steel base frame for easier hoisting and to provide structural integrity. No additional framing is required if vibration isolators are specified.

Components

Infill
High efficiency, PVC heat transfer surfaces with proprietary design that combines excellent contact between air and water while offering very little resistance to airflow for the lowest fan energy consumption. As an option, high-temperature infill, either polypropylene or CPVC is also offered.

Product Technical Data

Model		Nominal Tons	Motor	Tower Dimensions		
MFD			HP	L	W	H
L01	3	56	5	10'- 1 1/4"	4'- 9 1/4"	8'- 10"
	4	60	5	10'- 1 1/4"	4'- 9 1/4"	8'- 10"
	5.5	67	7.5	10'- 1 1/4"	4'- 9 1/4"	8'- 10"
L02	5.5	83	7.5	13'	5'- 5"	9'- 1 3/4"
	7.5	91	10	13'	5'- 5"	9'- 1 3/4"
	11	101	15	13'	5'- 5"	9'- 1 3/4"
L03	7.5	116	10	16'- 9 1/2"	5'- 9 3/4"	9'- 5"
	11	129	15	16'- 9 1/2"	5'- 9 3/4"	9'- 5"
	15	141	20	16'- 9 1/2"	5'- 9 3/4"	9'- 5"
L04	11	166	15	17'- 2 3/4"	6'- 2 3/4"	9'- 4 1/2"
	15	180	20	17'- 2 3/4"	6'- 2 3/4"	9'- 4 1/2"
	18.5	197	25	17'- 2 3/4"	6'- 2 3/4"	9'- 4 1/2"
	22	204	30	17'- 2 3/4"	6'- 2 3/4"	9'- 4 1/2"

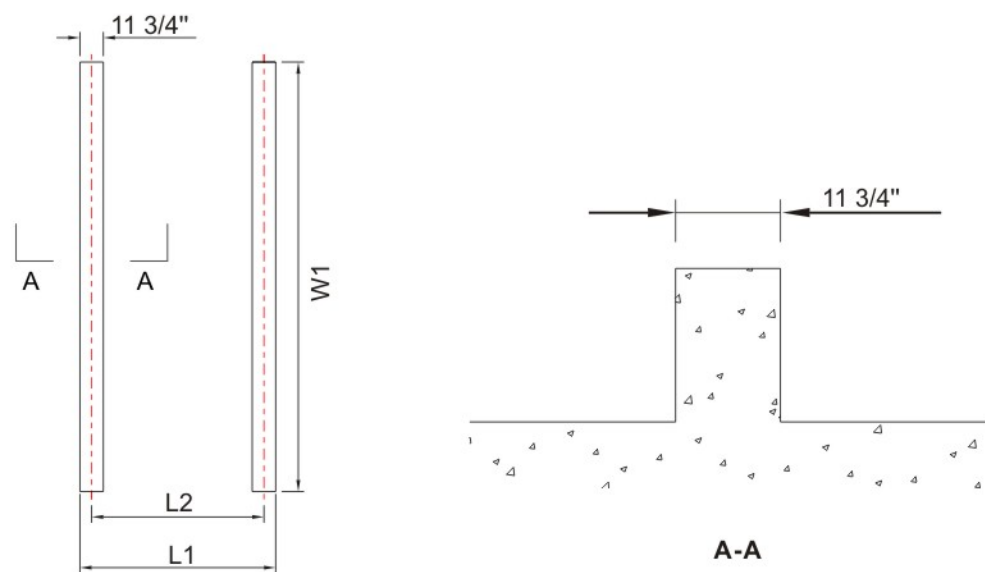
Notes:
1) Nominal cooling capacity represents 95°F EWT, 85°F LWT with 78°F WBT and 3gpm per ton.
2) Satisfactory performance is based on precise selection, proper system design and installation in a clean and well-ventilatd location.

MFD Series

Counter Flow, Forced Draft



Foundation and Piping



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Model		Foundation Dimensions			Pipe Connections				
MFD		L1	L2	W1	Inlet	Outlet	Overflow	Drain	Make-Up
L01	3	6'- 1"	5'- 1 1/4"	10'- 1 1/4"	4"	4"	1 1/2"	1"	3/4"
	4								
	5.5								
L02	5.5	6'- 8 3/4"	5'- 9"	13'	4"	4"	1 1/2"	1"	1"
	7.5								
	11								
L03	7.5	7'- 1 1/2"	6'- 1 1/2"	16'- 9 1/2"	6"	6"	1 1/2"	1 1/2"	1"
	11								
	15								
L04	11	7'- 6 1/2"	6'- 6 3/4"	17'- 2 3/4"	6"	6"	2"	1 1/2"	1"
	15								
	18.5								
	22								

Notes:
Secure the base of the cooling tower with anchor bolts. Customer is responsible for designing the foundation and any other supports according to local codes and regulations.



Our extensive range of cooling tower solutions, confirms to CTI standards. MESAN has five CTI-certified series, according to CTI-STD-201, which also are ASHRAE-90.1 compliant. Buying CTI-certified products, eliminates the need for costly field testing, and ensures that the system will perform as designed.

MXR-KM

Cross Flow, Induced Draft

MXL

IBC/FBC Compliant
Cross Flow, Induced Draft

MXC

Closed Circuit, Induced Draft

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MFD

Counter Flow, Forced Draft

MCC

Counter Flow, Induced Draft