

**MESAN**  
**USA**

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**MXL Series**  
Low Profile, Cross Flow  
Induced Draft

# MXL Series

Low Profile, Cross Flow, Induced 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 products are CTI certified, and its quality management system is ISO-9001 certified. 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.

## Overview

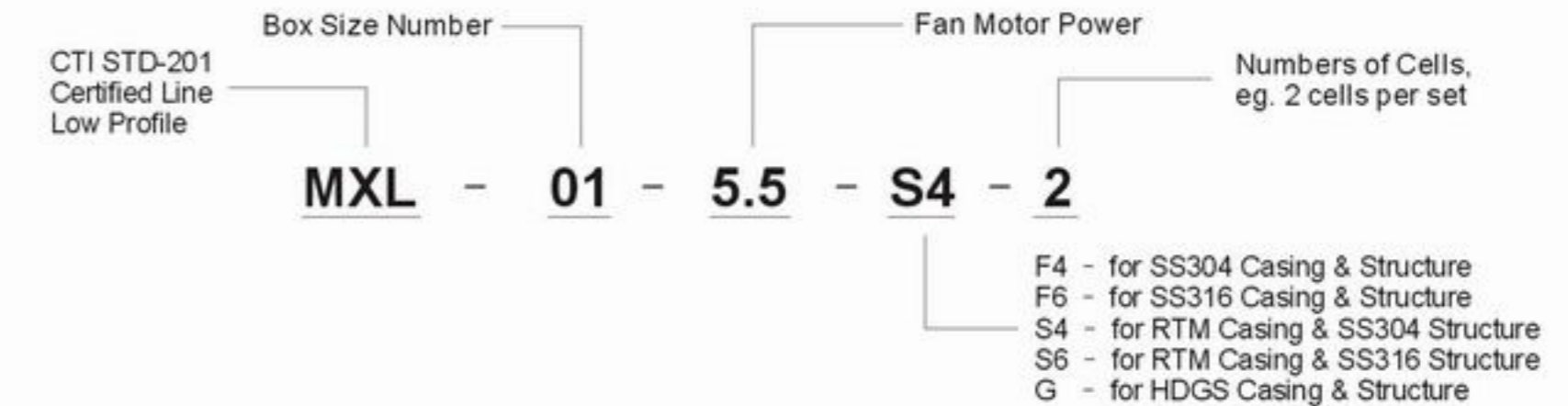
The MXL series, is MESAN's response to a need in the market for a high efficiency, energy-saving, an induced-draft cross-flow cooling tower, with a noticeably lower overall height.



Advantages of its lower height are better high wind resistance, better seismic resistance, and more aesthetically appealing appearance, especially for jobs where architectural or code constraints, limit the height of equipment installed on buildings rooftops

The MXL series is available in 10 boxes with 55 models with capacities ranging from 470 to 2127 gpm.

## Model Designation



## Advantages

### Low Energy Consumption

Maximizing energy savings is at the core of every MESAN product. Low energy consumption is the most important variable to consider when pursuing LEED certification. Thanks to our proprietary heat-exchange surfaces design (infill), with very low air pressure drop, our towers have the lowest motor hp rating per ton of capacity in our industry. All models are fully ASHRAE-90.1-2010 compliant, largely exceeding this standard's gpm/hp requirements.

The MXL series is also available in the IBC/FBC version, structurally designed and rated to comply with the stringent requirements of the International and Florida Building Codes, to withstand hurricane force winds up to 150 psf. This is an important feature to consider for applications where high-speed winds may be expected.



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

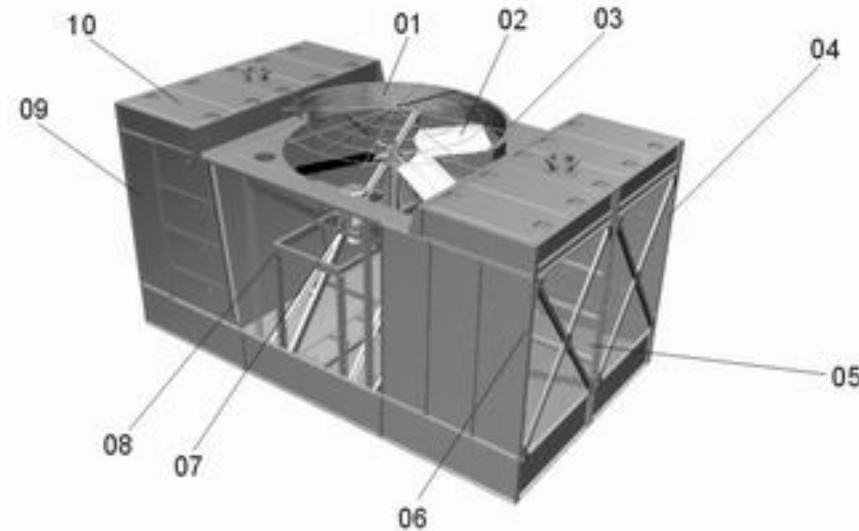
products offered by MESAN USA have been engineered to meet and exceed all codes and standards applicable in this hemisphere.

# Trust MESAN with your evaporative cooling needs.



## Tower Structure

- 01 Fan Guard
- 02 Fan
- 03 Fan stack
- 04 Framework
- 05 Basin
- 06 Casing
- 07 Motor
- 08 Motor Support
- 09 Infill
- 10 Hot Water Basin



## Components

### Casing and Structure

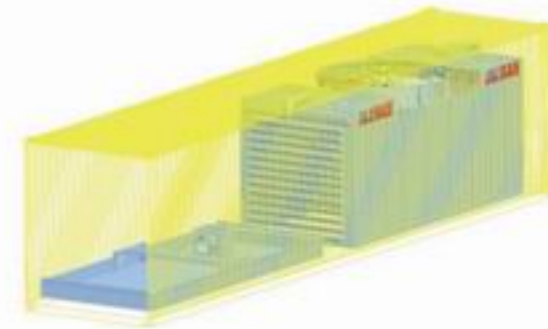
The MXL series is available in several construction materials:

- RTM fiberglass (Resin Transfer Molding), which is a special manufacturing process that produces very smooth surfaces on both sides of the components and higher structural strength. RTM allows for self-supporting fiberglass casings with almost no steel structure. Smooth inner surfaces on wet parts reduces bacteria growth and facilitates maintenance. This material provides the ultimate corrosion resistance.
- HDGS (Hot Dipped Galvanized Steel), this is a cost effective alternative to casing construction, with good structural strength and adequate corrosion resistance. G235 quality is the highest galvanized grade in the market.
- SS-304 or SS-316 stainless steel construction are also available for the highest corrosion resistance



### Convenience

Sizes 08 to 10, up to water flow 2127gpm can be containerized. For contractors, to be able to take delivery of fully assembled units means reduced installation labor and costs with unsurpassed turn around times. It also ensures the best quality and sealing between wet surfaces.



## Options/Accessories

|  |   |
|--|---|
| High Efficiency Motor                                | Basin Sweeper Systems with Filter / Separator Package |
| Two Speed Motor                                      | Basin Heater  |
| VFD Motor  | Discharge Sound Attenuator                            |
| FRP Fan  | Equalizing Pipe Connection                            |
| Low Noise Fan  | FRP / SS / HDGS Louver                                |
| 180° Gear Box  | OSHA Safety Fan Guard                                 |
| 90° Gear Box   | OSHA Ladder Safety Cage and Handrail                  |
| ASTM PVC Infill                                      | Removable Strainer                                    |
| High Temperature PP Infill                           | Variable and Constant Speed Control Panels            |
| Service Platform to Fully Cover the Cold Water Basin | Vibration Cut-off Switch                              |

## Product Technical Data

| Model | Specification |          | Tower Dimensions |             |             |            | Pipe Connections |         |          |        |        |       |
|-------|---------------|----------|------------------|-------------|-------------|------------|------------------|---------|----------|--------|--------|-------|
|       | Nominal gpm   | Motor HP | L                | W           | H           | h          | Inlet            | Outlet  | Overflow | Drain  | M-U    |       |
| 01    | 4             | 470      | 8'-5"            | 16'-7 3/4"  | 9'-10"      | 8'-7 1/4"  | 4" x 2           | 6"      | 2"       | 1 1/2" | 1"     |       |
|       | 5.5           | 521      |                  |             |             |            |                  |         |          |        |        | 7 1/2 |
|       | 7.5           | 576      |                  |             |             |            |                  |         |          |        |        | 10    |
|       | 11            | 657      |                  |             |             |            |                  |         |          |        |        | 15    |
| 02    | 4             | 532      | 9'-5"            | 17'-3 1/2"  | 9'-10"      | 8'-7 1/4"  | 4" x 2           | 6"      | 2"       | 1 1/2" | 1"     |       |
|       | 5.5           | 591      |                  |             |             |            |                  |         |          |        |        | 7 1/2 |
|       | 7.5           | 657      |                  |             |             |            |                  |         |          |        |        | 10    |
|       | 11            | 745      |                  |             |             |            |                  |         |          |        |        | 15    |
| 03    | 5.5           | 627      | 10'-4 3/4"       | 18'-3 1/4"  | 9'-10"      | 8'-7 1/4"  | 5" x 2           | 8"      | 3"       | 1 1/2" | 1"     |       |
|       | 7.5           | 697      |                  |             |             |            |                  |         |          |        |        | 10    |
|       | 11            | 789      |                  |             |             |            |                  |         |          |        |        | 15    |
|       | 15            | 866      |                  |             |             |            |                  |         |          |        |        | 20    |
| 04    | 7.5           | 800      | 12'-1/2"         | 20'-3"      | 9'-10"      | 8'-7 1/4"  | 5" x 2           | 8"      | 3"       | 1 1/2" | 1"     |       |
|       | 11            | 906      |                  |             |             |            |                  |         |          |        |        | 15    |
|       | 15            | 994      |                  |             |             |            |                  |         |          |        |        | 20    |
|       | 18.5          | 1067     |                  |             |             |            |                  |         |          |        |        | 25    |
| 05    | 7.5           | 1045     | 13'-4 1/4"       | 21'-6 3/4"  | 11'-5 3/4"  | 10'-1/2"   | 5" x 4           | 10"     | 3"       | 2"     | 1 1/2" |       |
|       | 11            | 1185     |                  |             |             |            |                  |         |          |        |        | 15    |
|       | 15            | 1317     |                  |             |             |            |                  |         |          |        |        | 20    |
|       | 18.5          | 1383     |                  |             |             |            |                  |         |          |        |        | 25    |
| 06    | 11            | 1218     | 14'-4"           | 22'-10 1/2" | 11'-5 3/4"  | 10'-1/2"   | 5" x 4           | 10"     | 3"       | 2"     | 1 1/2" |       |
|       | 15            | 1350     |                  |             |             |            |                  |         |          |        |        | 20    |
|       | 18.5          | 1434     |                  |             |             |            |                  |         |          |        |        | 25    |
|       | 22            | 1519     |                  |             |             |            |                  |         |          |        |        | 30    |
| 07    | 11            | 1361     | 16'-3 3/4"       | 24'-2 1/4"  | 11'-5 3/4"  | 10'-1/2"   | 5" x 4           | 10"     | 3"       | 2"     | 1 1/2" |       |
|       | 15            | 1508     |                  |             |             |            |                  |         |          |        |        | 20    |
|       | 18.5          | 1618     |                  |             |             |            |                  |         |          |        |        | 25    |
|       | 22            | 1717     |                  |             |             |            |                  |         |          |        |        | 30    |
| 08    | 3             | 411      | 7'-5 1/4"        | 17'-3 1/2"  | 9'-10"      | 8'-7 1/4"  | 4" x 2           | 6"      | 2"       | 1 1/2" | 1"     |       |
|       | 4             | 451      |                  |             |             |            |                  |         |          |        |        | 7 1/2 |
|       | 5.5           | 506      |                  |             |             |            |                  |         |          |        |        | 7 1/2 |
|       | 7.5           | 561      |                  |             |             |            |                  |         |          |        |        | 10    |
|       | 11            | 638      |                  |             |             |            |                  |         |          |        |        | 15    |
|       | 15            | 708      |                  |             |             |            |                  |         |          |        |        | 20    |
| 09    | 3             | 477      | 7'-5 1/4"        | 17'-3 1/2"  | 12'-3 3/4"  | 11'-1/4"   | 5" x 2           | 8"      | 3"       | 1 1/2" | 1"     |       |
|       | 4             | 525      |                  |             |             |            |                  |         |          |        |        | 7 1/2 |
|       | 5.5           | 587      |                  |             |             |            |                  |         |          |        |        | 7 1/2 |
|       | 7.5           | 653      |                  |             |             |            |                  |         |          |        |        | 10    |
|       | 11            | 745      |                  |             |             |            |                  |         |          |        |        | 15    |
|       | 15            | 825      |                  |             |             |            |                  |         |          |        |        | 20    |
| 10    | 3-2           | 1130     | 14'-8"           | 17'-3 1/2"  | 16'-10 3/4" | 15'-5 1/2" | 6" x 4           | 10" x 2 | 2" x 2   | 2" x 2 | 1" x 2 |       |
|       | 4-2           | 1251     |                  |             |             |            |                  |         |          |        |        | 15    |
|       | 5.5-2         | 1401     |                  |             |             |            |                  |         |          |        |        | 15    |
|       | 7.5-2         | 1559     |                  |             |             |            |                  |         |          |        |        | 20    |
|       | 11-2          | 1779     |                  |             |             |            |                  |         |          |        |        | 30    |
|       | 15-2          | 1981     |                  |             |             |            |                  |         |          |        |        | 40    |

### Notes:

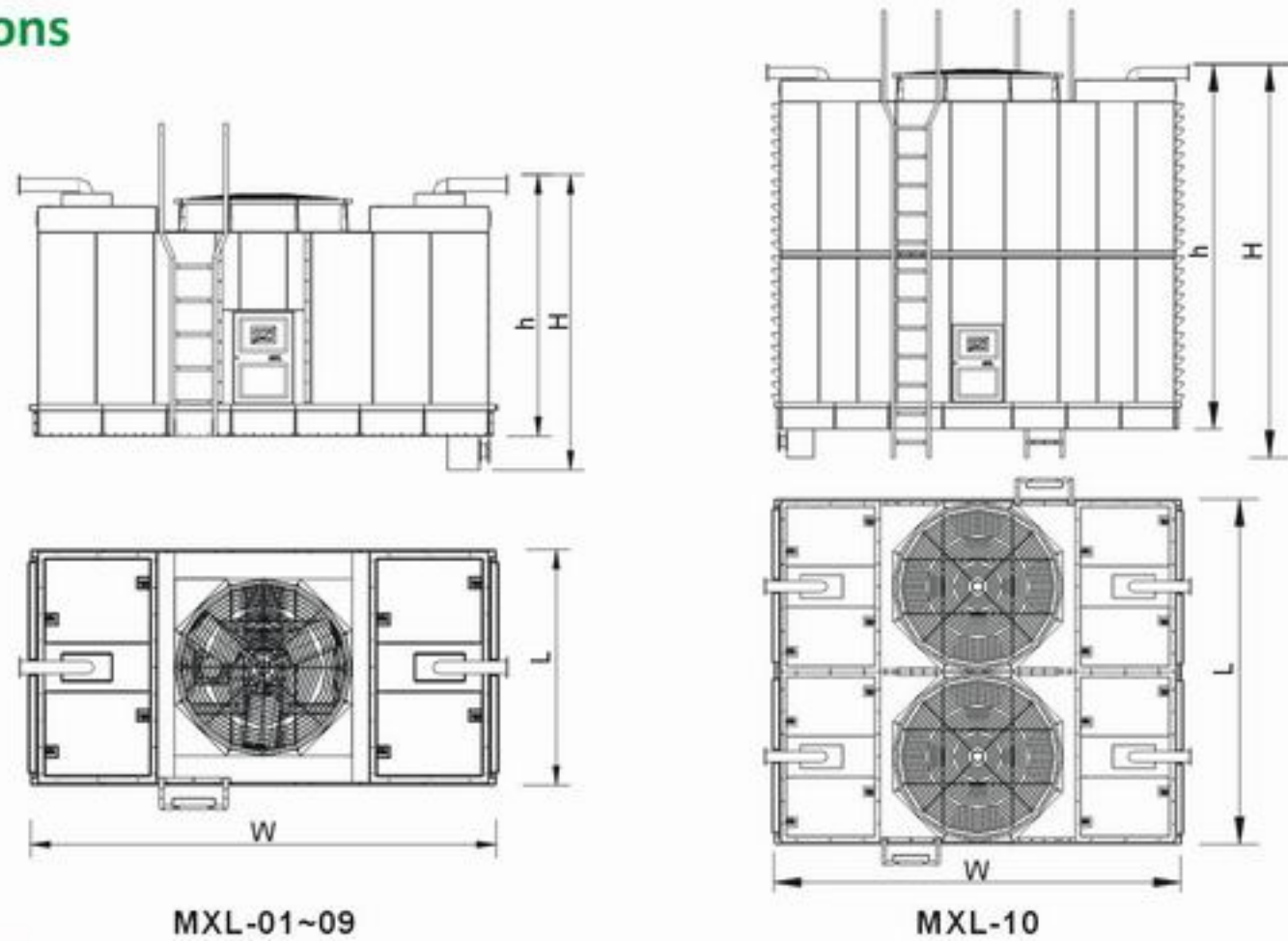
- 1) Nominal water flow rate is for gpm of water cooled from 95°F to 85°F with 78°F wet-bulb temperature.
- 2) Sizes 08-10 are containerized.
- 3) Satisfactory performance is based on precise selection, proper system design and installation in a clean and well-ventilated location.

# MXL Series

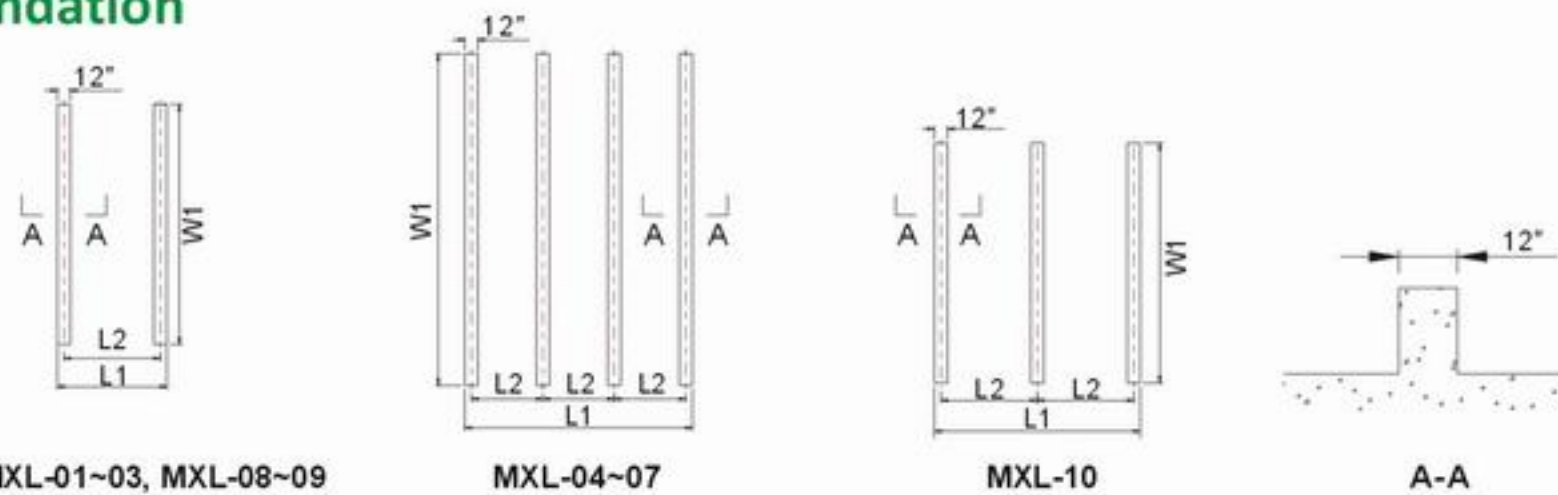
Low Profile, Cross Flow, Induced Draft



## Dimensions



## Foundation



| Model | Foundation Dimensions |             |              |
|-------|-----------------------|-------------|--------------|
|       | L1                    | L2          | W1           |
| 01    | 9'- 2 1/2"            | 8'- 2 1/2"  | 17'- 4 3/4"  |
| 02    | 10'- 2 1/4"           | 9'- 2 1/2"  | 18'- 1/2"    |
| 03    | 11'- 2"               | 10'- 2 1/4" | 19'- 1/4"    |
| 04    | 12'- 9 1/2"           | 3'- 11 1/4" | 21'          |
| 05    | 14'- 1 1/2"           | 4'- 4 1/2"  | 22'- 3 3/4"  |
| 06    | 15'- 1 1/4"           | 4'- 8 1/2"  | 23'- 7 1/2"  |
| 07    | 17'- 1"               | 5'- 4 1/4"  | 24'- 11 1/4" |
| 08    | 8'- 2 1/2"            | 7'- 2 3/4"  | 18'- 1/2"    |
| 09    | 8'- 2 1/2"            | 7'- 2 3/4"  | 18'- 1/2"    |
| 10    | 15'- 5 1/2"           | 7'- 2 3/4"  | 18'- 1/2"    |

**Notes:**  
Secure the base of the cooling tower with the anchor bolts. Buyer is responsible for the tower support and for the positioning and diameter of the anchoring bolts to comply with local building codes.

MESAN guarantees the thermal performance of its CTI certified products. All CTI models are fully compliant with ASHRAE 90.1. Cooling Technology Institute (CTI) is dedicated to promoting truthful rating of cooling tower capacity, provides a third party independent verification and periodic monitoring of the products thermal efficiency. Having CTI certified products eliminates the need for costly onsite field test and ensures the system performance will meet the design objectives, for the benefit of the building owners, operators and public.

MXR-KM

MXL



MXC

MCC

