

# TM Series Induced Draft Towers

## **TM Series™ Cooling Towers**

Delta's TM Series™ induced draft, counter flow design are available in single unit capacities from 250 to 2,000 cooling tons.

Manufactured since 2001, the TM Series™ has been very well received in both commercial and industrial applications.

The modular design allows isolation of cells for operational flexibility.

[Click here for TM Sizing Table](#)

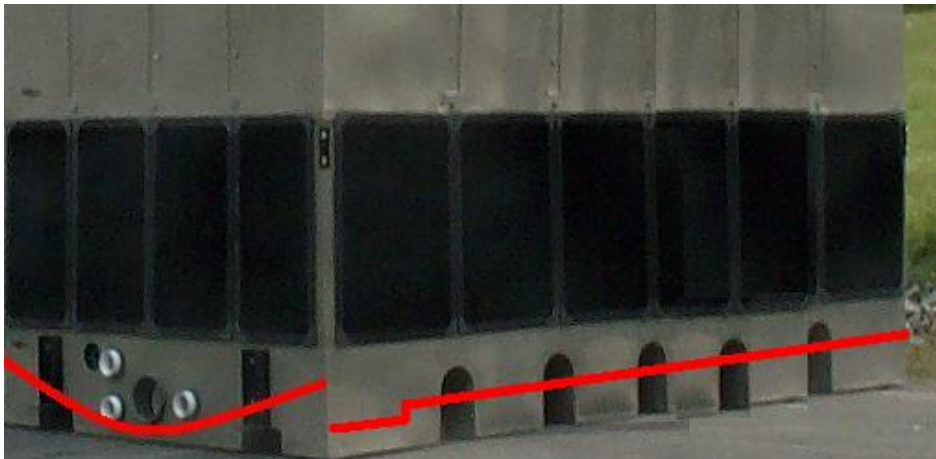
### **Standard Features:**

- Seamless Double Wall Engineered Plastic (HDPE) Shell
- Corrosion Proof Construction
- Direct Drive Fan System
- Totally Enclosed VFD Rated Motors
- Factory Assembled for Simple Installation
- 20 Year Shell Warranty
- PVC Water Distribution System with Non-clog Large Orifice Removable Nozzles
- High Efficiency PVC Fill
- Made in the USA

## Basic Specs

Model Group	Approximate Weights		Dimensions	Capacity Tons	Fan Motor HP	Sump Capacity Gallons
	Shipping	Operating	L x W x Ht			
1 Cell	6,510	11,800	16.5' x 8.5' x 15.5'	250-425	10-30	480
2 Cell	13,020	23,600	16.5' x 17.0' x 15.5'	460-820	20-60	960
3 Cell	19,530	35,400	16.5' x 25.5' x 16.5'	700-1200	30-90	1400
4 Cell	26,040	47,200	16.5' x 34' x 16.5'	910-1580	40-120	1920
5 Cell	32,550	59,000	16.5' x 42.5' x 16.5'	1120-1710	50-120	2400
6 Cell	39,060	70,800	16.5' x 51' x 16.5'	1340-2020	60-120	2880

## Detail View



All Delta Cooling Towers are factory assembled to the fullest extent possible for ease of installation and shipment. The following features are standard to our TM Series™ Induced Draft Cooling Towers:

#### Shell:

Shell is seamless, double wall, non-corroding, hi-impact high-density polyethylene (HDPE) of leak proof design. Conical transition for motor/fan assembly with separate polyethylene velocity recovery stacks. The shell exceeds ¼" average thickness. The structural shell is capable of withstanding water temperatures up to 160°F on a continual basis. Between equidistant vertical ribs along the walls are pre-contoured sections that when coupled with the structural foam between the double walls, creates a pre-stressing that adds rigidity and overall structural strength of each cell.

#### Sump:

Sump is seamless, double wall, non-corroding, hi-impact high-density polyethylene (HDPE) of leak proof design. Sump will be sloped toward outlet. Integral molded-in I-Beam support pockets allow placement on elevated I-Beams. Integral support posts 360° around sump give support to upper tower section and allows mounting of louvered inlet panels for optimum air distribution

#### Sloped "Clean" Sump Design:

Each cell's sump is molded to slope aggressively towards the center and a 3% slope towards a depressed sump box near the outlet. This limits settlement of any dirt, debris, or biological films and allows for complete drainage of the sump during planned shutdowns.

#### Water Distribution System:

Totally enclosed, non-corroding, polyvinyl chloride (PVC) pipe with large orifice non-clog spray nozzle distribution system. Threaded nozzle orifices shall be interchangeable allowing substitution of larger diameter orifices for increased flow conditions without increasing inlet pressure.

#### Wet Decking:

Rigid PVC film, corrugated and bonded for maximum cooling efficiency.

#### Fan Assembly:

The fan assembly consists of a fan ring, propeller, motor and guard. The fan ring is coated with premium plasite coating ideal for the harshest corrosive environments. An adjustable pitch propeller fan, fiberglass reinforced polypropylene with a silica alloy hub, is directly driven by a totally enclosed VFD Premium rated motor designed for cooling tower duty. A fan guard is included on the velocity recovery stack, and allows protection from the propeller and access to the motor.

#### Motor:

Totally enclosed air over (TEAO) VFD rated motor with 1.15 service factor, designed for 208 or 230/460V 3 phase 60 cycle operation and suitable for outdoor service. Motor is provided with a 5-year motor manufacturers warranty.

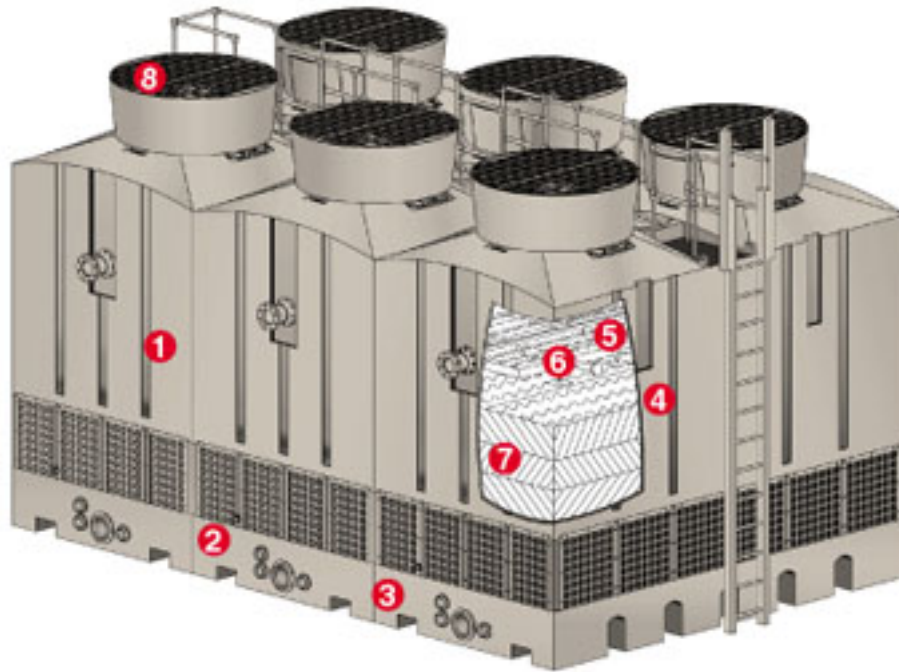
#### Fitting Connections:

PVC fittings are provided for inlet, outlet, overflow, drain and make-up connections at standard orientation locations. Orientation for special requirements is available for new and replacement installations.

#### Hardware:

All fasteners are standard 304 stainless steel. Anchor and lifting lugs are aluminum.

## Cutaway View



1 - Lightweight and Double Wall: Plastic is lighter than conventional cooling towers and integrated double-wall is more than 10 times the average wall thickness of metal towers

2 - Leak Proof Sump: Molded as Unitary (One-Piece) Structure that has no joints to leak or require recaulking and sealing

3 - Self Supporting Plastic Base: Tower can be set on flat surface or on I-Beams placed in Integrally-Molded I-Beam Pockets for elevated installations

4 - Corrosion-Proof Shell: HDPE Plastic Construction cannot corrode and is backed by 15 Year Warranty

5 - Drift Eliminator: Three pass PVC drift eliminator prevents water droplets from leaving the tower

6 - Nozzle Water Distribution System: Non-Clog large orifice removable nozzles evenly distribute the water

7 - Fill Material: High efficiency PVC cellular design for maximum cooling

8 - Direct Drive Air Moving System: Totally enclosed VFD rated cooling tower motors power multiple fiber-reinforced polypropylene axial propeller fans within a polyethylene velocity recovery stack

## Drawing & IOM

[TM Manual PDF](#)

[TM Specification PDF](#)

[\(1\) One Cell Plan & Elevation drawing PDF](#)

[\(2\) Two Cell \(3, 5, & 7.5 HP\) Plan & Elevation drawing PDF](#)

[\(2\) Two Cell \(10 & 15 HP\) Plan & Elevation drawing PDF](#)

[\(3\) Three Cell Plan & Elevation drawing PDF](#)

[\(3\) Three Cell Side View & Detail drawing PDF](#)

[\(4\) Four Cell Plan & Elevation drawing PDF](#)

[\(4\) Four Cell Side View & Detail drawing PDF](#)

[\(5\) Five Cell Plan & Elevation drawing PDF](#)

[\(5\) Five Cell Side View & Detail drawing PDF](#)

[\(6\) Six Cell Plan & Elevation drawing PDF](#)

[\(6\) Six Cell Side View & Detail drawing PDF](#)