## ENERGY SAVING SUPER LOW NOISE



WER

High Performance Crossflow Type

**TRUWATER**<sup>®</sup>

PACKAGED COOLING

SINGLE-CELL UP TO 650HRT COOLING CAPACITY









TRUWATER

# SERIES COOLING TOWER SINGLE-CELL UP TO 650HRT COOLING CAPACITY

# INTRODUCTION

VX-S Series is an induced draft cross-flow, film filled, FRP multi-cell rectangular cooling tower designed for the equipment cooling, and industrial process cooling and air conditioning applications.

The VX-S Series Cooling Tower is designed to meet maximum performance and reliability, and minimum maintenance.

The thermal performance of VX-S Series has been certified by CTI in accordance with CTI Standard STD-201.

VX-S Series Cooling Towers are designed and provided with high quality V-belt & pulley drive system or right-angle gear reducer drive system for more reliable operation.

# ADVANTAGES

## **Space Saving & Light Weight**

Incorporation the high performance fill, the installation space and operating weight are greatly reduced.

## **Energy Saving**

The high efficiency fan and low pressure drop fill design optimize the energy consumption.

### **Low Noise Level**

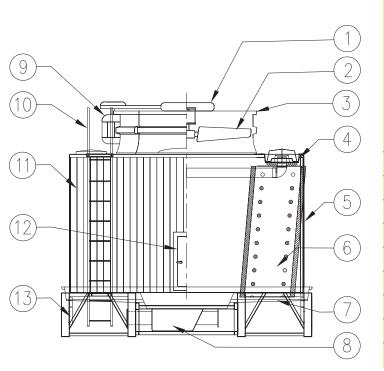
The noise level is lowered by the specifically designed low noise fan.

## **Proven Corrosion Protection**

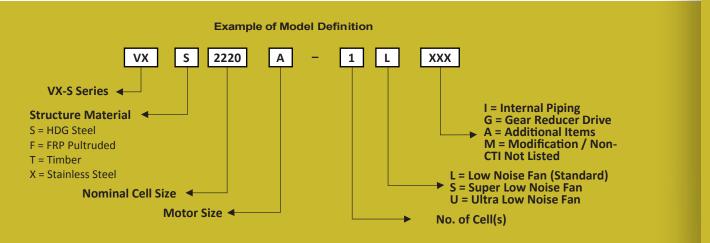
Tower components are made of anti-corrosive material suitable for cooling water application.



# FEATURES



No	Description	Material / Specification
1	V-Belt and Pulley System	FRP Pulley Cover
2	Fan Assembly	Aluminium Alloy
3	Fan Stack	FRP
4	Hot Water Basin	FRP
5	Main Frame Structure	HDG Steel
6	High Performance Film Fill Pack	PVC
7	Cold Water Basin Floor	FRP
8	Suction Sump	FRP
9	Motor	Weather Proof TEFC type
10	Ladder	HDG Steel
11	Casing	FRP
12	Inspection Door	FRP
13	Cold Water Basin Frame	HDG Steel
14	Internal Piping	Optional
15	Gear Reducer System	Optional





# VX-S







Make Up Water Line



#### **1.0 GENERAL**

The cooling tower shall be induced-draft vertical discharge type, crossflow, rectangular, film filled, FRP Cooling Tower. It shall be designed with high efficiency drift eliminators to meet current environmental standards and guidelines for microbial control.

#### 2.0 CAPACITY

Cooling Tower shall be capable of providing the thermal performance scheduled.

#### **3.0 PERFORMANCE WARRANTY**

The rated capacity shall be certified by the Cooling Tower Institute (CTI). The cooling tower manufacturer shall guarantee that the tower supplied will meet the specified performance conditions when the tower is installed according to plans.

#### **4.0 CONSTRUCTION**

The cooling tower main frame structure shall be hot dip galvanized steel (HDG). The casing shall be made from Fibre Reinforced Plastic (FRP).

#### **5.0 MECHANICAL EQUIPMENT**

- 5.1. Fan(s) shall be propeller-type, incorporating heavy-duty blades of aluminum alloy. Blades shall be individually adjustable
- 5.2. The V-belts shall be of rubber with fabric impregnated able to withstand the adverse ambient conditions of 50°C and 100% R.H. The pulleys shall be cast iron with the grooves of standard dimensions. The entire V-belt and pulley set must be fully enclosed in a FRP molded case to protect the V-belts from in contact with the humid discharge air.
- 5.3. Motor(s) shall be TEFC, weatherproof sq. caged induction type suitable for 3ph/50Hz/415V power supply and with 1450rpm.

#### 6.0 FILLS, LOUVERS AND DRIFT ELIMINATORS

- 6.1. Fill shall be high efficiency film-type, rigid, corrugated PVC sheets with integral louver and drift eliminator that are conducive to cooling tower and UV protected.
- 6.2. Fills shall be resistance to rot, decay and biological attack with maximum flame-spread rating of 5 according to ASTM E84. Fill module shall be solvent bonded supported from the bottom supporting beam. Hanging fill with structural tubing supported from the upper tower structure shall not be allowed.
- 6.3. Drift eliminators shall be efficient enough to effectively limit drift loss to 0.005% of the designed flow rate.

#### 7.0 HOT WATER DISTRIBUTION SYSTEM

An open basin above the fill bank shall receive hot water piped to each cell of the tower. Water shall enter the basin through a removable splash box. Removable and replaceable polypropylene nozzles installed in the floor of the basin shall provide full coverage of the fill by gravity flow.

#### **8.0 COLD WATER BASIN**

The cold water basin shall be of FRP and supported on HDG steel framework. The basin shall be designed with sufficient water capacity to avoid air entrainment in the outlet during operating conditions. The basin shall be equipped with suction strainer, make-up ball valve, overflow and drain. For multiple tower arrangement, equalizing pipes between basins shall be provided to maintain the same level of water in each basin.

#### 9.0 ACCESS AND SAFETY

Ladder shall be provided for inspection and maintenance purposes. HDG steel fan guard shall be provided over each fan cylinder.



...providing solution to your cooling needs





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