

TXA SERIES CROSSFLOW COOLING TOWER SPECIFICATION

1.0 GENERAL

The cooling tower shall be induced-draft, crossflow, rectangular, film filled, HDGS Cooling Tower with single side air intake and side air discharge. Cooling tower shall be Truwater TXA Series or approved equivalent.

2.0 CAPACITY

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

3.0 PERFORMANCE WARRANTY

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 mainframe structure shall be hot dip galvanized steel (HDG). The casing shall be made of fiberglass-reinforced polyester (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. Fan blades shall be factory balanced and assembled. Pitch angle should be variable to allow flexibility.

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.

5.3 Motor(s) shall be TEFC, weatherproof sq. caged induction type suitable for 3ph /50Hz/415V power supply and with 1450 rpm. Motor shall be installed outside the discharge air stream.

6.0 INFILL

6.1 Infill shall be high efficiency film type, rigid, corrugated PVC sheets with integral louver and drift eliminator that are conducive to cooling water and UV protected. The design shall meet 0.02% drift loss of the circulation water flow.

7.0 HOT WATER DISTRIBUTION SYSTEM

An open FRP basin above the infill 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 infill 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 & maintenance purposes. HDG steel fan guard shall be provided over each fan cylinder.