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(57) Abstract :
The Cooling Tower is a device used to wipe out the waste heat which is generated to the atmosphere through the cooling of a water stream to a lower temperature. The Water collecting Wet Cooling Towers uses evaporation to transform the heat from the water stream to the Air steam to the atmosphere, Saturated Air is discharged into the atmosphere. The High Level Water Collecting Wet Cooling Tower are used in the industries such as Thermal Power Plant, Oil refined industry, Petrochemical industries and in the Heating, ventilation, and air conditioning (HVAC). The invention disclosed here is Effects of the wind on the High Level Water Collecting Wet Cooling Tower comprising of: Water Cooling Tower (201); Electric Control (202); Fan-L (203); Fan-H (204); Heater (205); Lower Water Tank (206); Water Pump (207); Upper Water Tank (208); Water Inlet (209); Cold Water Container (210); Water Outlet (211); and Data Recorder (212); facilitates the understanding of the effect of the external wind on the thermal characteristics of the cooling tower. The performance of the cooling tower decreases when there is external wind on the tower and increased performance can be attain without any external wind applied.

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Abstract:

The Cooling Tower is a device used to wipe out the waste heat which is generated to the atmosphere through the cooling of a water stream to a lower temperature. The W collecting Wet Cooling Towers uses evaporation to transform the heat from the water stream to the Air steam to the atmosphere, Saturated Air is discharged into the atmc The High Level Water Collecting Wet Cooling Tower are used in the industries such as Thermal Power Plant, Oil refined industry, Petrochemical industries and in the Heatin ventilation, and air conditioning (HVAC). The invention disclosed here is Effects of the wind on the High Level Water Collecting Wet Cooling Tower comprising of: Water Coo Tower (201); Electric Control (202); Fan-L (203); Fan-H (204); Heater (205); Lower Water Tank (206); Water Pump (207); Upper Water Tank (208); Water Inlet (209); Cold Water Container (210); Water Outlet (211); and Data Recorder (212); facilitates the understanding of the effect of the external wind on the thermal characteristics of the cooling tc The performance of the cooling tower decreases when there is external wind on the tower and increased performance can be attain without any external wind applied.

Complete Specification

Claims:1. Effects of the wind on the High Level Water Collecting Wet Cooling Tower comprising of: Water Cooling Tower (201); Electric Control (202); Fan-L (203); Fan-H (204); Heater (205); Lower Water Tank (206); Water Pump (207); Upper Water Tank (208); Water Inlet (209); Cold Water Container (210); Water Outlet (211); and Data Recorder (212); facilitates the understanding of the effect of the external wind on the thermal characteristics of the cooling tower.

2. Effects of the wind on the High Level Water Collecting Wet Cooling Tower as claimed in claim 1, wherein Cold Water Container in the bottom of the Cooling Tower to collect the cool water from the hot vapor.

3. Effects of the wind on the High Level Water Collecting Wet Cooling Tower as claimed in claim 1, wherein it Electric control for controlling the speed of the Upper and Lower Fan, Heater temperature.

4. Effects of the wind on the High Level Water Collecting Wet Cooling Tower as claimed in claim 1, wherein Hot water from the Lower Take are moved to the Upper Wat Tank through Water Tap and further moved into the Cooling Tower.

5. Effects of the wind on the High Level Water Collecting Wet Cooling Tower as claimed in claim 1, wherein Hot water enters into Water Distribution Nozzles of the cooli tower, this nozzles splits the hot water into drops and are fall on the exchange surface of the cooling tower.

6. Effects of the wind on the High Level Water Collecting Wet Cooling Tower as claimed in claim 1, wherein Water from the vapor is drifted down and the Air with temperature approximately equal to the atmosphere will be drifted out.

7. Effects of the wind on the High Level Water Collecting Wet Cooling Tower as claimed in claim 1, wherein the Top and Bottom of the Cooling Tower we are applying th External Wind of 0.5m/s, due to this the heat transfer coefficient is reduced by approximately 12% than the heat transfer coefficient obtained without applying the exter

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