

FAN
 DRIFT ELIMINATOR
 WATER DISTRIBUTION SYSTEM
 FILL
 SLOPE WATER BASIN
 COOLING WATER SAMPLING TAP (MONTHLY TESTING)

PHYSICAL WATER TREATMENT EQUIPMENT (ALTERNATIVE TO CHEMICAL TREATMENT)

CHEMICAL WATER TREATMENT SYSTEM (FULLY AUTOMATIC CHEMICAL WATER TREATMENT SYSTEM SHALL BE ADOPTED TO CONTROL CHEMICAL CONCENTRATION ACCURATELY AND TO AVOID LARGE FLUCTUATIONS IN CHEMICAL LEVELS.)

CONDENSING WATER PUMPS (PROVISION OF RECIRCULATING PUMP CONTROLLED BY A TIMER TO CIRCULATE WATER THROUGH THE SYSTEM PERIODICALLY (AT LEAST ONCE A WEEK) IS RECOMMENDED WHEN COOLING TOWERS ARE TEMPORARY NOT IN USE.)

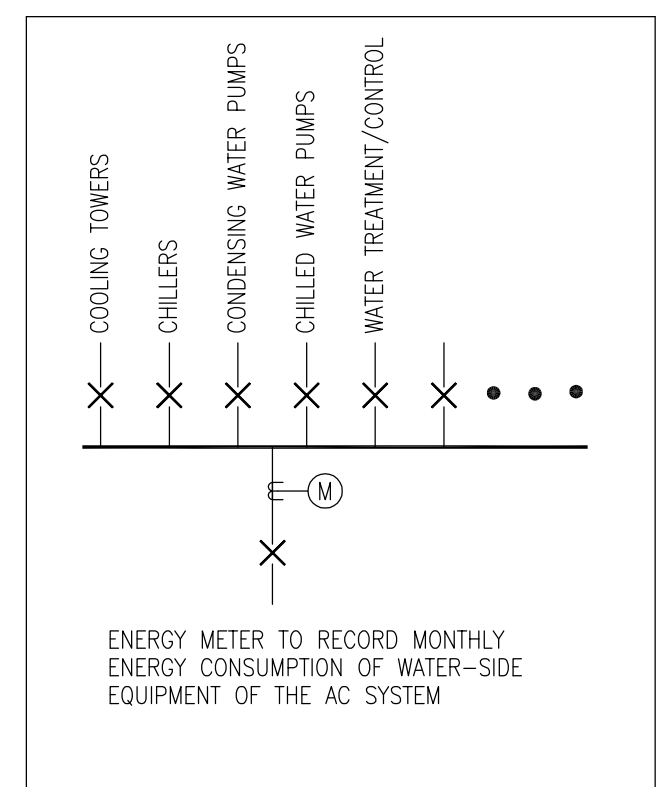
FLUSHING WATER TANK (WITH CONTROL ARRANGEMENT TO PRIORITIZING THE FLOW OF BLEED OFF WATER INTO FLUSHING WATER TANK OVER THE FLUSHING WATER SUPPLY IF BLEED-OFF WATER IS DIRECTLY DISCHARGED TO THE FLUSHING WATER TANK, ADEQUATE CAPACITY IN THE FLUSHING WATER TANK SHALL BE RESERVED TO PREVENT OVERFLOWING. THE BLEED-OFF WATER SHALL BE PRIORITIZED TO REFILL THE FLUSHING TANK.)

WATER METER TO RECORD MONTHLY MAKE-UP WATER QUANTITY
 MAKE-UP WATER TANK
 MAKE-UP WATER FROM CITY MAIN

OVERFLOW PIPE CONNECTS TO BLEED-OFF TANK WITH A SEPARATE WARNING PIPE BEING DISCHARGED INTO A CONSPICUOUS POSITION

WATER METER TO RECORD MONTHLY BLEED-OFF WATER QUANTITY
 BLEED-OFF WATER SAMPLING TAP (QUARTERLY TESTING)
 BLEED-OFF WATER RETENTION TANK (MIN. 2HRS HOLDING CAPACITY)

FLUSHING WATER TANK
 FLUSHING WATER FROM CITY MAIN
 TO FLUSHING (REUSE FOR FLUSHING UNLESS A SPECIAL PERMISSION FOR DIRECT DISCHARGING IS GRANTED.)



ENERGY METER TO RECORD MONTHLY ENERGY CONSUMPTION OF WATER-SIDE EQUIPMENT OF THE AC SYSTEM

NOTES

1. COOLING TOWER WATER CIRCULATION SYSTEM PIPEWORK SHALL BE DESIGNED TO AVOID DEAD-LEG AND STAGNANT CORNERS. SIMPLE PIPEWORK DESIGN SHALL BE ADOPTED. IF THE EXISTENCE OF DEAD-LEG CANNOT BE AVOIDED, MITIGATION MEASURES FOR DEAD-LEG SHALL BE PROVIDED, SUCH AS INSTALLATION OF MANUAL/AUTOMATIC DRAIN VALVE FOR WEEKLY PURGING OF 15 MINUTES.
2. THE PIPEWORK OF THE SAMPLING TAP SHALL NOT BE EXCESSIVELY LONG AND SHALL BE POSITIONED AS CLOSE TO THE MAIN PIPE AS POSSIBLE SO AS TO AVOID THE PROBLEM OF DEAD LEG.
3. ISOLATION VALVES SHOULD BE INSTALLED FOR SYSTEM WITH MULTIPLE COOLING TOWERS TO FACILITATE CLEANSING AND DISINFECTION OF INDIVIDUAL COOLING TOWER.

REMARK

THIS TYPICAL SCHEMATIC DIAGRAM IS PREPARED AS A GENERAL REFERENCE ON PROPER PROVISION IN THE COOLING TOWER SYSTEM FOR EFFECTIVE OPERATION AND COMPLYING WITH COP(FWCT). THIS TYPICAL SCHEMATIC DRAWING IS FOR REFERENCE ONLY, THE DESIGNERS SHOULD EXERCISE PROFESSIONAL JUDGMENT TO MODIFY THE THIS DIAGRAM AS APPROPRIATE.

TYPICAL SCHEMATIC DIAGRAM OF FRESH WATER COOLING TOWERS CONDENSING WATER CIRCUIT