

LEGEND:

- NO.

DESCRIPTION
- 1

WATER INLET
- 2

WATER OUTLET
- 3

TURBINE BYPASS PIPES
- 4

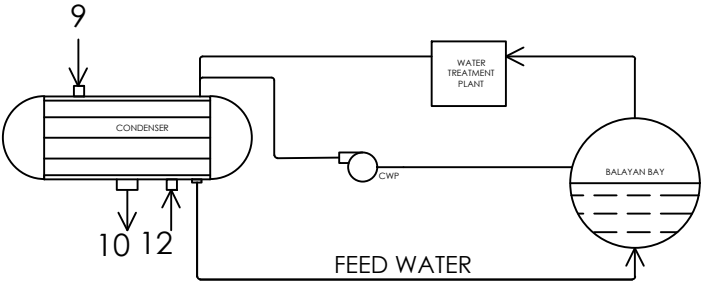
STEAM HEADER
- 5

COOLING SURFACE
- 6

SHELL
- 7

HOTWELL
- 8

STEAM INLET



DWG

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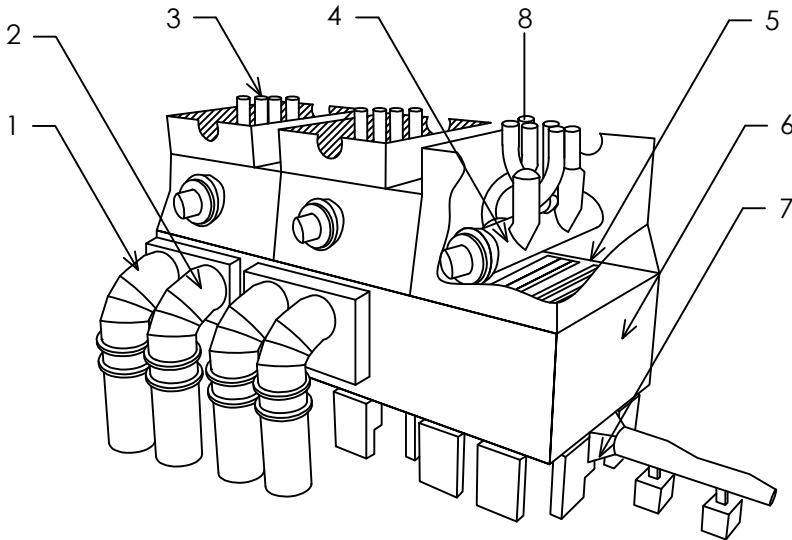
FEED WATER CONNECTION DIAGRAM

NOTE:

STEAM ENTERS THE CONDENSER FROM THE TURBINE FROM STATE POINT 9 AND FROM THE FEED WATER HEATERS THROUGH STATE POINT 12. CONDENSATE WATER IS DISCHARGED THROUGH STATEPOINT 9.

MASS FLOWRATE OF COOLING WATER IS 50m³/s FROM BALAYAN BAY. THE COOLING WATER OPERATING TEMPERATURE IS 30°C AND WILL BE EXPECTED TO INCREASE TO 33.44°C. DENR PERMITS AN INCREASE OF 3°C FOR WASTE WATER DISPOSAL, THEREFORE COOLING IS REQUIRED PRIOR TO WASTE WATER DISCHARGE.

FOR THE WATER TREATMENT PLANT DIAGRAM AND THE DEMINERALIZATION PLANT DIAGRAM, VIEW SHEET NO. 13.



DWG

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DETAILS OF CONDENSER

SCALE: NTS

CONDENSER SPECIFICATIONS

TYPICAL REFERENCE SOLUTIONS FOR:	1000 MW
CONDENSER VACUUM TYPE	SINGLE
CONDENSER THERMAL LOAD (MW)	1820
ABSOLUTE PRESSURE AT TURBINE/CONDENSER CONNECTION (MBAR)	5
MAX CONDENSATE O ₂ CONTENT AT 100 % LOAD (PPM)	20
CIRCULATING WATER	
CIRCULATING WATER TEMPERATURE DESIGN (°C)	30
CIRCULATING WATER NATURE	SEAWATER, ONCE-THROUGH
CIRCULATING WATER FLOW (M ³ /S)	50
CIRCULATING WATER TEMPERATURE RISE (°C)	10
TUBES	
EXCHANGE SURFACE (M ²)	76000
MATERIAL	TITANIUM
LENGTH (M)	16.5
TUBE TO TUBESHEET JOINT	EXPANDED/WELDED
WEIGHTS	
OPERATION (TONS)	2200
WATER FILLING (TONS)	3600
DIMENSIONS	
HOTWELL BOTTOM TO TURBINE (M)	13

EQUIPMENT SCHEDULE FOR CONDENSER

TAG NO.	QTY	MANUFACTURER	MAKE/MODEL	CONDENSING PRESSURE	CIRCULATING WATER TEMP	ELECTRICAL		
						f	ϕ	v
C-101	2	BAC	VACUUM TYPE	0.03 bar	14.1 C	60	3	220