

LEGEND:

ΙP

DESCRIPTION REHEATER SUPERHEATER CODE RH SH ECO **ECONOMIZER** LP LOW PRESSURE TURBINE

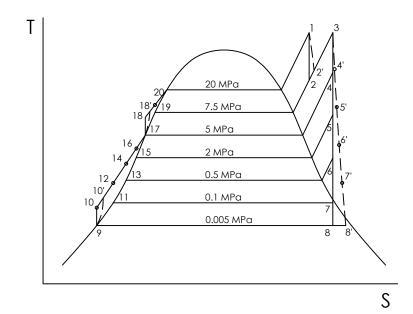
INTERMEDIATE PRESSURE TURBINE

HP HIGH PRESSURE TURBINE

G GENERATOR CP

CONDENSATE PUMP FEED WATER PUMP FWP

CYCLE SCHEMATIC DIAGRAM
DESIGN OPTION 1



T-S DIAGRAM DESIGN OPTION 1 DWG`

MASS & HEAT BALANCE

State Point	Pressure (Mpa)	Temp. (°C)	Enthalpy (kJ/kg)	Mass _{steam} (kg/s) 419.91		
1	20	540	3366.37			
2	7.5	375.498	3080.28	36.005		
3	7.5	540	3502.65	384.223		
4	5	469.812	3363.98	348.218		
5	2	330.068	3092.92	307.504		
6	0.5	163.635	2775.75	278.926		
7	0.1	99.6059	2498.25	237.867 237.867		
8	0.005	32.8743	2119.92			
9	0.005	32.8743	137.749	384.223		
10	0.1	32.8768	137.845	307.504		
11	0.1	99.6059	417.504	76.719		
12	0.5	99.6335	417.921	307.504		
13	0.5	151.831	640.085	28.578		
14	2	151.999	641.724	307.504		
15	2	212.377	908.498	40.715		
16	5	212.935	912.028	307.504		
17	5	263.941	1154.64	419.91		
18	7.5	284.692	1157.856	419.91		
19	7.5	290.535	1292.93	36.005		
20	20	295.439	1310.326	419.91		

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	BATANGAS STATE UNIVERSITY	ı
	Gov. Pablo Borbon Main Campus II	H
90	Alangilan, Batangas City	H
PHILIPPINES	MECHANICAL ENGINEERING DEPARTMENT	H

	PROJECT LEADER		INSTRUCTOR		PROJECT / LOCATION:	OWNER	PREPARED BY:	No.	REVISIONS	DATE	OUEET OONTENT	OUEET NO
ERSITY Inpus II	MECHANICAL ENGINEER PROFESSIONAL MECHAN			COO MINI CO AL FIDED DOWED DI ANIT						SHEET CONTENT S	SHEET NO.	
		ENGR. ALLAN B. DE VILLA	600 MW COAL-FIRED POWER PLANT		ENGR. BRYAN MERCADO ENGR. VINCE LEMUEL				DESIGN OPTION 1	A		
			ENGINEER LEMEDY DATANGAG									
		-				ENGINEER LEMERY BATANGAS						
s City	PRC Reg No.:	SECTION: ME - 5302	PRC Reg No.	PTR No.		ENGR. LEMUEL ARNEL A. RIVERA	PANOPIO					
RTMENT	TIN:	GROUP NO: 05	TIN:	Issued on:	BatStateU Main Campus 2 Alangilan Batangas City	PRESIDENT	ENGR. LEMUEL ARNEL RIVERA					
	•	DATE SUB: JULY 1, 2019		Issued at:					•			