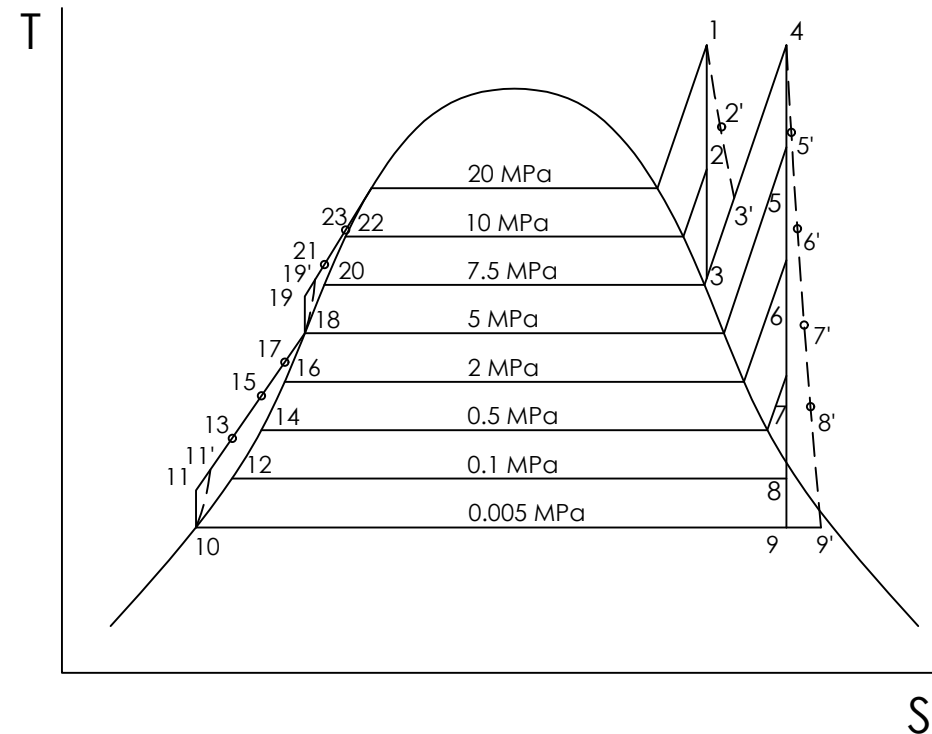


LEGEND:

CODE	DESCRIPTION
RH	REHEATER
SH	SUPERHEATER
ECO	ECONOMIZER
LP	LOW PRESSURE TURBINE
IP	INTERMEDIATE PRESSURE TURBINE
HP	HIGH PRESSURE TURBINE
G	GENERATOR
CP	CONDENSATE PUMP
FWP	FEED WATER PUMP

DWG 8 CYCLE SCHEMATIC DIAGRAM
DESIGN OPTION 2



DWG 9 T-S DIAGRAM
DESIGN OPTION 2

MASS & HEAT BALANCE

State Point	Pressure (Mpa)	Temp. (°C)	Enthalpy (kJ/kg)	Mass of Steam (kg/s)
1	20	540	3366.37	402.439
2	10	454.945	3255.865	27.381
3	7.5	404.933	3162.805	375.058
4	7.5	540	3502.65	348.708
5	5	497.647	3429.155	317.278
6	2	401.112	3250.791	282.359
7	0.5	268.311	2999.019	254.752
8	0.1	128.437	2733.612	221.856
9	0.005	32.8743	2397.241	221.856
10	0.005	32.8743	137.749	317.278
11	0.1	32.886	137.802	317.278
12	0.1	45.8063	417.921	95.423
13	0.5	81.3169	421.677	317.278
14	0.5	81.3169	640.085	31.43
15	2	155.419	656.473	317.278
16	2	212.377	908.498	34.919
17	5	219.887	943.801	317.278
18	5	263.941	1154.64	402.439
19	7.5	271.543	1192.475	402.439
20	7.5	290.535	1292.93	27.607
21	10	310.997	1299.771	402.439
22	10	310.997	1408.06	32.897
23	20	316.545	1425.491	402.439



BatStateU
BATANGAS STATE UNIVERSITY
Gov. Pablo Barbon Main Campus II
Alangilan, Batangas City
MECHANICAL ENGINEERING DEPARTMENT

PROJECT LEADER
ENGR. LEMUEL ARNEL A. RIVERA
MECHANICAL ENGINEER
PRC Reg No.: SECTION: ME - 5302
TIN: GROUP NO: 05
DATE SUB: JULY 1, 2019

INSTRUCTOR
ENGR. ALLAN B. DE VILLA
PROFESSIONAL MECHANICAL ENGINEER
ASEAN ENGINEER
PTR No.:
Issued on:
Issued at:

PROJECT / LOCATION:
600 MW COAL-FIRED POWER PLANT
LEMERY BATANGAS
BatStateU Main Campus 2
Alangilan Batangas City

OWNER
MPR POWER
CORPORATION
ENGR. LEMUEL ARNEL A. RIVERA
PRESIDENT

PREPARED BY:
ENGR. BRYAN MERCADO
ENGR. VINCE LEMUEL PANOPIO
ENGR. LEMUEL ARNEL RIVERA
No. REVISIONS DATE

SHEET CONTENT
DESIGN OPTION 2

SHEET NO.
A
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