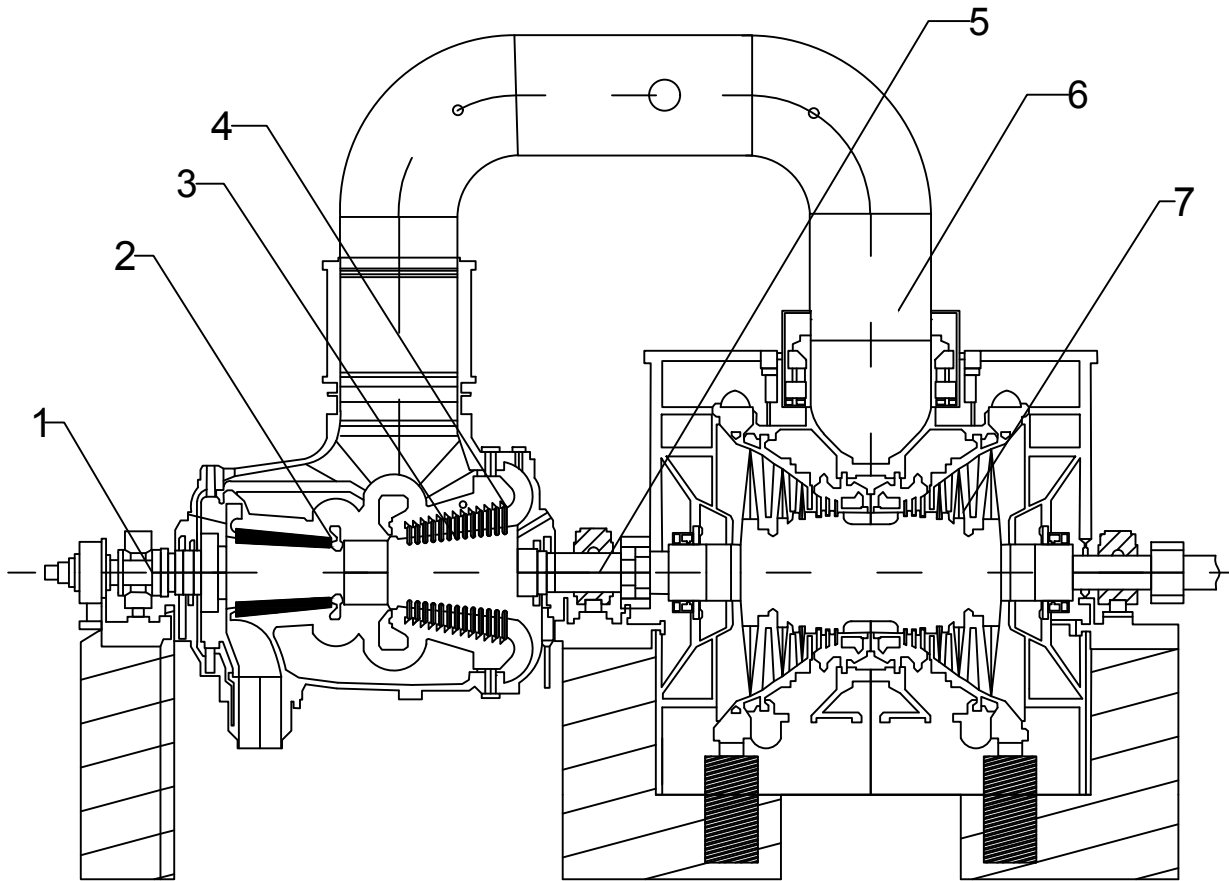


LEGEND:

NO.	DESCRIPTION		
1	TURNING GEAR	5	PUSH ROD
2	HIGH PRESSURE TURBINE	6	CROSS OVER PIPE
3	INTERMEDIATE PRESSURE TURBINE	7	LOW PRESSURE TURBINE
4	BLADE RING		



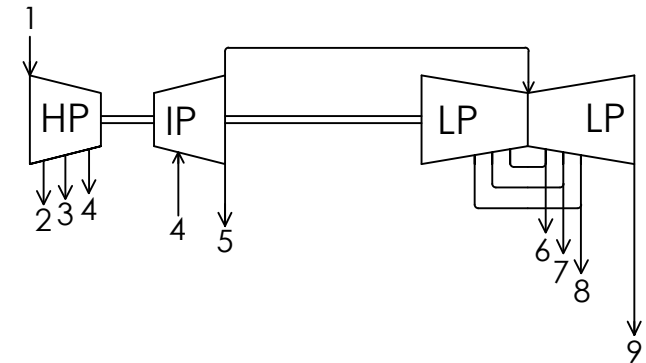
DWG 12
DETAILS OF STEAM TURBINE
SCALE: NTS

EQUIPMENT SCHEDULE FOR STEAM TURBINE

TAG NO.	QTY	MANUFACTURER	MAKE/MODEL	INLET PRESSURE	STEAM TEMP.	ELECTRICAL		
						f	φ	v
ST-10X	2	SIEMENS	SPP SST-5000	260 BAR	600 C	60	3	220

LEGEND:

CODE	DESCRIPTION
LP	LOW PRESSURE TURBINE
IP	INTERMEDIATE PRESSURE TURBINE
HP	HIGH PRESSURE TURBINE



DWG 13
TURBINE CONNECTION DIAGRAM

STEAM TURBINE SPECIFICATIONS

CAPACITY	300MW
EFFICIENCY	53%
SPEED	3600 RPM
BLADE LENGTH	66-95 cm
OPERATING PRESSURE	200 BAR
OPERATING TEMPERATURE	460°C

STEAM TURBINE MAINTENANCE SCHEDULE

OPERATING HRS.	SEVERITY
25000	MINOR
50000	MEDIUM
75000	MINOR
100000	MAJOR

FOR MINOR: VISUAL INSPECTION OF ACCESSIBLE COMPONENTS, FUNCTIONAL CHECKS, ALIGNMENT CHECKS,

FOR MEDIUM: MINOR INSPECTION SCOPE, VALVE OVERHAUL, BEARING INSPECTION, BLADE INSPECTION, AUXILIARY EQUIPMENT INSPECTION, OIL PUMP INSPECTION

FOR MAJOR: MEDIUM INSPECTION SCOPE, OPENING OF TURBINE SECTIONS, ROTOR INSPECTION, WELD INSPECTION, CLEARANCE AND WEARS CHECK, RUN-OUT CHECK, REPLACEMENT OF RELATED PARTS.

STEAM PIPE SIZING AND OUTLET

DN 12	FROM BOILER (1)
DN 5	TO FEEDWATER HEATER (2)
DN 20	TO FEEDWATER HEATER (3)
DN 20	TO REHEATER (4)
DN 24	TO FEEDWATER HEATER (5)
750mm	TO FEEDWATER HEATER (6)
1300mm	TO FEEDWATER HEATER (7)
2300mm	TO FEEDWATER HEATER (8)

NOTES:

- THE STEAM VELOCITY IS LIMITED TO 100m/s
- THE MATERIALS FOR PIPING IS ASTM A 213 T5, SCHED 40
- PIPING FOR 6,7,8 WILL BE CUSTOM BUILT(INSIDE DIA. IS GIVEN ABOVE)
- THE MATERIAL FOR BOLTS NUTS AND STUDS IS ASTM A 913 B5
- THE MATERIAL FOR WROUGHT FITTINGS IS ASTM A 234 WP5



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

PROJECT LEADER		INSTRUCTOR	
ENGR. LEMUEL ARNEL A. RIVERA MECHANICAL ENGINEER		ENGR. ALLAN B. DE VILLA PROFESSIONAL MECHANICAL ENGINEER ASEAN ENGINEER	
PRC Reg No.:	SECTION: ME - 5302	PRC Reg No.	PTR No.
TIN:	GROUP NO: 05	TIN:	Issued on:
	DATE SUB: JULY 1, 2019		Issued at:

PROJECT / LOCATION:		OWNER	
600 MW COAL-FIRED POWER PLANT LEMERY BATANGAS		MPR POWER CORPORATION ENGR. LEMUEL ARNEL A. RIVERA PRESIDENT	
BatStateU Main Campus 2 Alangilan Batangas City		PREPARED BY:	
		ENGR. BRYAN MERCADO	
		ENGR. VINCE LEMUEL PANOPIO	
		ENGR. LEMUEL ARNEL RIVERA	

No.	REVISIONS	DATE	SHEET CONTENT	SHEET NO.
			DETAILS OF STEAM TURBINE	A 7