Boiler Feedwater Pump

SECT HRSG DEPT. Proposal & Basic Design
CLASS PI PAGE
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CUSTOMER : 남동발전
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PROPOSAL NO : LATER
PROJECT NAME : 분당열병합

General

Plant Configuration	1 (GT) x 1 (HRSG) x 1 (ST)		
Quantity	3 Set	(50% X 3 Sets)	per 1 HRSG, Total 3 Sets
Type	Centrifugal, Multi-stage, Motor driven, Constant Speed		
Frequency	60 Hz		
Voltage	6,600 V		

Pump Operating Condition (Based on 50% X 1 Set)

		Design	Case 1 (G, -12C) M1, 100%	Case 2 (G, -12C) M1, 100%	Case 3 (G, 5C) M1, 100%	Case 4 (G, 15C) M3, 100%	Case 5 (G, 32C) M3, 500MW	Case 1 (G, -12C) M4, 100%
Pump suction flow	kg/hr	290,000	233,587	247,475	221,090	221,194	203,177	227,011
Pump suction flow	m^3/hr	324.8	261.6	276.2	247.4	247.4	227.0	254.5
Pump discharge flow(HP)	kg/hr	240,000	197,500	210,405	192,435	185,612	174,165	192,716
Pump interstage bleed(IP)	kg/hr	50,000	36,087	37,070	28,654	35,582	29,011	34,295
Density	kg/m^3	892.8	892.8	896.0	893.6	894.1	895.2	891.9
Suction Pressure	bar.g	7.83	7.83	7.19	7.65	7.57	7.36	8.01
Suction Temperature	℃	174.5	174.5	171.4	173.7	173.3	172.2	175.4
Discharge TDH	m	2,350	By supplier	By supplier	By supplier	By supplier	By supplier	By supplier
Minimum bleed head	m	550	By supplier	By supplier	By supplier	By supplier	By supplier	By supplier
NPSHa	m	27.0						
NPSHr	m	By supplier	By supplier	By supplier	By supplier	By supplier	By supplier	By supplier
Auxiliary Power Consumption	kW	-	By supplier	By supplier	By supplier	By supplier	By supplier	By supplier

Note

1. NPSHr x 1.5 ≤ NPSHa

ISSUED BY	REVIEWED BY	REVIEWED BY	APPROVED BY	DESCRIPTION & REMARKS
0 2026-09-01				For Proposal
1				
2				