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CENTRIFUGAL PUMP PROCESS DATA

(METRIC UNITS)

JOB NO	7T04
PROJECT	ERC 12345
DOC. NO.	7T04-PR-21-DS-505
ITEM NO	P-2105 A/B

CLIENT	Yonsei	SERVICE	PAGE	REV.
LOCATION	Korea	OVERFLASH PUMPS	1 OF 1	14

01	PUMP TYPE	CENTRIFUGAL PUMP			REQUIRED TYPE : HORIZONTAL			
02	DRIVER TYPE	OPERATING : MOTOR			STAND-BY : MOTOR			
03	NO. REQUIRED	OPERATING : ONE			STAND-BY : ONE		(NOTE 3)	
04	DUTY	■ CONTINUOUS		□ INTERMITTENT @ APPROX.			hr/yr	
05								
06	**PROCESS REQUIREMENT**							
07	OPERATING CASE			AM FEED	AH FEED			
08	LIQUID NAME			OVERFLASH	OVERFLASH			
09	PUMPING TEMPERATURE (℃) (PT) :		NORMAL	384	384			
10			MAXIMUM					
11			MINIMUM					
12	VAPOR PRESSURE (kg/cm2A)		@ NOR. PT	0.071	0.073			
13			@ MAX. PT					
14	SPECIFIC GRAVITY		@ NOR. PT	0.777	0.777			
15			@ MIN. PT					
16	VISCOSITY (cP)			1.0	1.0			
17	CAPACITY (m3/hr) @PT :		NORMAL	71.1	70.4			
18			RATED	101 (NOTE 4)	100 (NOTE 4)			
19	SUCTION PRESSURE (kg/cm2g)		RATED	1.0	1.0			
20			MAX.	5.9	6.0			
21	DISCHARGE PRESSURE (kg/cm2g) @RATED FLOW			17.1	17.1			
22	DIFFERENTIAL PRESSURE (kg/cm2)			16.1	16.1			
23	DIFFERENTIAL HEAD (m)			207	207			
24	NPSH AVAILABLE (m)			> 8	> 8			
25	CORROSION/EROSION CAUSED BY			Sulfur (3.26 wt%)	Sulfur (3.25 wt%)			
26	SOLID		SIZE,					
27			WT%					
28	**OTHERS**							
29	MATERIAL SELECTION	CASING		API CLASS A-8 ~~(HOLD)~~				14
30		IMPELLER		API CLASS A-8 ~~(HOLD)~~				14
31		SHAFT		API CLASS A-8 ~~(HOLD)~~				14
32	CORROSION ALLOWANCE (mm)							
33	METHOD OF STARTING SPARE PUMP	■ MANUAL		□ AUTOMATIC				
34	PUMPING LIQUID CHARACTERISTICS	■ FLAMMABLE		□ SOLIDIFICATION AS AMB.				
35		□ TOXIC		□ H2S		□ CHLORIDE		
36	INSULATION REQUIREMENT	□ INSULATION		■ STEAM TRACING		□ STEAM JACKET		
37	LOCATION	□ INDOOR		■ OUTDOOR		□ UNDER ROOF		
38	LEAKAGE PERMISSIBILITY	□ YES		■ NO				
39	ESTIMATED SHUTOFF P (kg/cm2g)	27.0						
40	DRIVER STEAM	INLET	@					
41	CONDITIONS	EXHAUST	@					
42	**NOTES :**							
43	1. NPSHA IS BASED ON TOP OF FOUNDATION (0.3 METER FROM GRADE)							
44	2. DESIGN FLOW RATE FOR UNIT TURNDOWN OPERATION IS BASED ON 50% OF AH FEED.							
45	MINIMUM CONTINUOUS FLOW SHALL BE BELOW 35 m3/h.							
46	3. START-UP CONDITION							
47	FLUID : GAS OIL, OPER. TEMP. = 55 DEG C, FLOWRATE = 35.7 M3/HR							
48	DENSITY : 810 KG/M3							
49	4. THE TWO PERCENT OF ADDITIONAL OVERDESIGN IS APPLIED ON THE RATED FLOW FOR THE PROVISION OF							
50	SLOP OIL PROCESSING.							
51	5. MDMT = 2 ℃							
52								
53								

REVISION	10	11	11A	11B	12	13	14
DATE	2008-06-27	2008-07-11	2010-06-18	2010-09-08	2011-01-26	2012-08-14	2012-12-26
BY/CHECKED	HJL / SKL	WSJ / WGK	WJK / WGK	WJK / WGK	WJK / WGK	TSL / DHP	TSL / DHP