



NOZZLE SCHEDULE					
MK	SIZE	RATING	TYPE	SERVICE	REMARK
N1	DN150	150#	FF SO	PICKLING LIQUID INLET	ASME B16.5 - 2020
N2	DN150	150#	FF SO	PICKLING LIQUID OUTLET	ASME B16.5 - 2020
N3	DN100	150#	RF SO	STEAM INLET	ASME B16.5 - 2020
N4	DN50	150#	RF SO	STEAM OUTLET	ASME B16.5 - 2020
V	DN10	NPT 3 / 8 "		VENT	WITH PLUG
D	DN10	NPT 3 / 8 "		DRAIN	WITH PLUG

<p>ALL DIMENSIONS ARE MM ALL WELD SIZES ARE MM</p>	
<p>TOLERANCES (UNLESS OTHERWISE SPECIFIED) TOLERANCES ARE NOT ACCUMULATIVE</p>	
<p>MACHINE: DECIMAL: 0.8 FRACTION: 1.6 ANGLE: 1/2°</p>	 <p>THIRD ANGLE PROJECTION</p>
<p>GENERAL: DECIMAL: 3 FRACTION: 3.2 ANGLE: 1°</p>	



REV#	DESCRIPTION		BY	DATE	APRVD
A	CUSTOMER REVIEW		JL	06/12/25	MC
B	CUSTOMER REVIEW		JL	06/16/25	MC
WELD PROCEDURES					
WPS	MATERIALS			WELD WIRE	
CS.1	CS STEEL			ER70S-2	
SS.2	CS STEEL TO SS STEEL			ER309L	
IS.2	CS STEEL TO ALLOY 625			ERNiCrMo-3	
IN.1	N06625 TO N06625			ERNiCrMo-3	
TA.1	TANTALUM			N/A	
AGTA.1	TANTALUM TO CARBON STEEL			SILVER	
DESIGN CONDITIONS					
DESIGNED PER ASME CODE SECTION VIII, DIVISION 1, 2023 EDITION AND TEMA ELEVENTH EDITION					
			TUBE SIDE	SHELL SIDE	
DESIGN PRESSURE		MPa	0.8	0.8	
MAWP		MPa	0.8	0.8	
OPERATING PRESSURE		MPa	0.31	0.55	
DESIGN TEMPERATURE		°C	191	191	
MDMT		°C	0	0	
OPERATING TEMP.(INLET/OUTLET)		°C	78.83/85	155.61/155.12	
LETHAL SERVICE ACC.UW-2			NO	NO	
WORKING MEDIUM			HCL-18% PICKLING LIQUID	STEAM	
FLUID QUANTITY		KG/H	207907(160M³3/H)	2002	
CORROSION ALLOWANCE		MM	0 (HEAD/SHELL)	1.6 (SHELL)	
RADIOGRAPHY			NONE	NONE	
JOINT EFFICIENCY			0.7	0.7	
HEAT TREATMENT			NONE	NONE	
HYDRO TEST PRESSURE		MPa	1.04	1.04	
EXCHANGE AREA		M²	3.83		
HEAT EXCHANGED		KCAL/H	1000000(1162.80KW)		
WEIGHT EMPTY		KG	~490		
WEIGHT FULL OF WATER		KG	~600		
IMPACT TESTING NOT REQUIRED PER: UG-20(f), UCS-66(b,c).					
MATERIALS OF CONSTRUCTION					
		TUBE SIDE		SHELL SIDE	
TUBES (33) 25.4 OD X 0.51 AVG, SEAMLESS		B-521 R05252			
TUBESHEETS / LINERS		SA-266 2 / B-708 R05252			
HEAD/SHELL		CS WITH PTFE		SA-106 B	
EXPANSION JOINT		-		SB-443-N06625	
BODY FLANGE		SA-105 / PTFE		-	
NOZZLE NECKS		-		SA-106-B	
NOZZLE FLANGES		SA-105 / PTFE		SA-105	
BAFFLES		25% G.F. PTFE			
SUPPORTS		SA-516 70			
GASKETS		RPTFE			
STUDS / NUTS		SA-193 B7 / SA-194 2H			
TANTALUM HEAT EXCHANGER					
TEMA TYPE :		BEM	TEMA CLASS :		B
CUSTOMER :		POSCO			
LOCATION :		KOREA			
MODEL# :		SM10C20			
CONTRACT #:		-			
CUSTOMER TAG #:		-			
MANUFACTURER# :		XXX-1-1			
		TITAN METAL FABRICATORS (WUXI) CO., LTD. NO. 61 HONGXIANG ROAD WUXI NEW DISTRICT, JIANGSU PROVINCE 214028 PEOPLE'S REPUBLIC OF CHINA			
DRAWN:	DATE:	MATERIAL:	FINISH:		HEAT TREAT:
CHECKED:	DATE:	TITLE: PICKLING HEAT EXCHANGER			
APPROVED:	DATE:	DN250 1000000Kcal/hr			
		GENERAL ASSEMBLY			
SCALE:	SIZE:	DWG #:	SHEET:		REV:
1:10	B	XX-1-1-01	01 of XX		B