

CLIENT : GASSNOVA

PROJECT TITLE : CO2 KARSTO PROJECT

JOB NUMBER : 25474

M.R. NUMBER : \_\_\_\_\_

EQUIPMENT NUMBER : MV-101,MV-102

EQUIPMENT TITLE : CO2 ABSORBER

SERIAL NUMBER : \_\_\_\_\_


CRITICALITY RATING : \_\_\_\_\_

COMMENTS:

1. 2 identical vessels are required
2. Refer to 10112936-PB-P-DAS-0002 for column internal details.
3. Internals vendor to provide all internals including distributors and demisters.

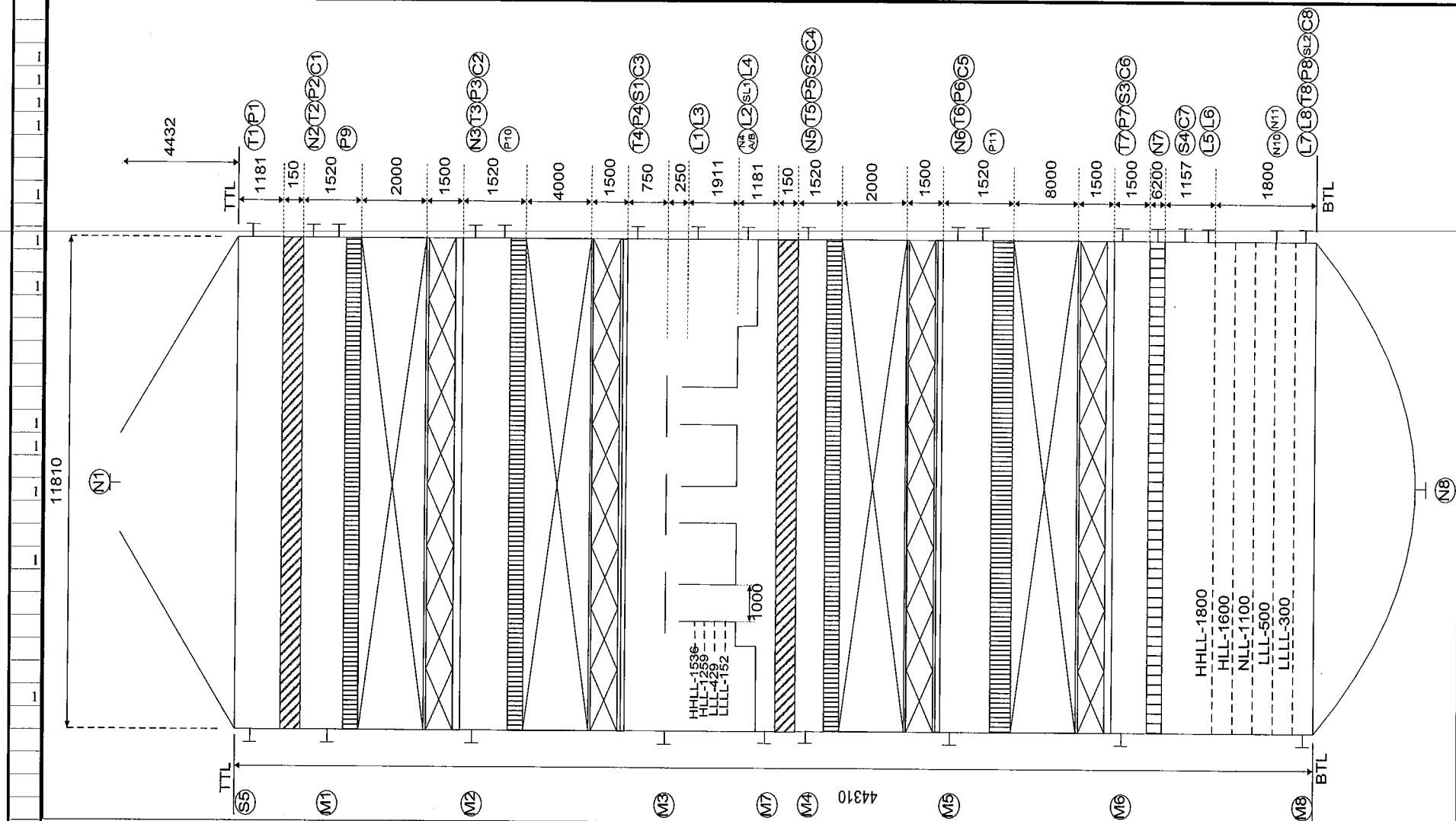
REV	DATE	DESCRIPTION	Orig.	Chkd	Lead	Review	Proj						
1	12-Nov-08	Issued for Information Including Comments <i>P0036</i>	MJC	HS	DM	ADB	BR						
0	7-Oct-08	Issued For Deliverable Milestone Schedule M2	HS	MJC	DM	ADB	BR						

	<b>PROCESS DATA SHEET VESSEL</b>	JOB No	25474	
		DATA SHEET No.	REV	
		Bechtel: 25474-000-M5D-CN-00011 Owner: 10112936-PB-P-DAS-0001		1
SHEET		1 OF 2		

REVISION

CLIENT & LOCATION : GASSNOVA, NORWAY  
 PROJECT : CO2 KARSTO  
 EQUIPMENT No : MV-101, MV-102  
 UNIT :



PROCESS NOZZLE DATA							
REF	SIZE mm (NS)	RATING	DIMENSION		PLAN ORIENT	SERVICE	REMARKS
			Y	Z			
N1	4572	150 #				Vapour Outlet	Flue gas exhaust
N2	150	150 #				Process Water Nozzle	
N3	500	150 #				Wash Water return nozzle	
N4A/B	500	150 #				Wash Water nozzle	
N5	400	150 #				Lean Amine nozzle	
N6	200	150 #				Semi Lean Amine nozzle	
N7						Flue Gas	3.1x6.2m duct inlet
N8	600	150 #				Rich Amine Nozzle	
Deleted							
N10	600	150 #				Equalising Line Nozzle	
N11	200	150 #				Pump Min. Flow Return	

INSTRUMENT / MECHANICAL NOZZLE DATA							
REF	SIZE mm (NS)	RATING	DIMENSION		PLAN ORIENT	SERVICE	REMARKS
			Y	Z			
M1-8	762	150 #				MANWAY	
T1-T8	50	150 #				TEMPERATURE	
P1-P11	50	150 #				PRESSURE	
SI-S5	50	150 #				GAS OUTLET SAMPLE	
C1-C8	50	150 #				CORROSION MONITORING	
Deleted							
SL1-SL2	50	150 #				LIQUID SAMPLE	
L1-L8	50	150 #				LEVEL	
Deleted							

PROCESS OPERATING DATA									
REF	FLUID	FLOW kg/hr	DENSITY kg/m3	TEMPERATURE °C			PRESSURE kPa g		
				NORM	MAX	MIN	NORM	MAX	MIN
N1	Flue Gas	1206228	1.08	43			ATM		
N2	Process Water	27315	998	26			245.0		
N3 A/B	Wash Water	1360777	1000	20			348.0		
N4A/B	Wash Water	1436723	988	53			2.0		
N5	Amine	1098654	1087	54			294.0		
N6	Amine	273714	1142	57			312.0		
N7	Flue Gas	1296910	1.14	50			9.0		
N8	Amine	1392444	1151	54			9.0		
Deleted									
N10	Amine	1392444	1151	54			9.0		

DESIGN DATA				MATERIALS		REFERENCE DRAWINGS	
MAX EXPECT. DESIGN PRESS. & CORRES. TEMP	PRESS kPag	TEMP °C	10	100	SHELL & HEADS	CS OR SS304L	SUPPORT SKIRT
MAX EXPECT. DESIGN TEMP. & CORRES. PRESS					INTERNAL CLADDING	SS304L or NIL	MANWAY DAVIT / HINGE
EXTERNAL DESIGN COND. (MAX/MIN TEMP)	-0.65	60			REINFORCEMENT RINGS		MISCELLANEOUS SUPPORT CLIPS
SYSTEM PSV SET AT	N/A				PIPE		INSULATION SUPPORTS
CORROSION ALLOWANCE mm					FORGINGS		ANCHOR BOLTS, LUGGS & BASE PLATE
INTERNAL CLADDING mm					SUPPORTS		PRESSURE VESSEL TOLERANCES
RADIOGRAPHY					DEMISTER PAD		DETAILS OF CLAD NOZZLES
DESIGN WIND SPEED m/s					INTERNAL CLADDING		NOZZLES AND MANWAYS
EARTHQUAKE DESIGN					INTERNAL BOLTS		MISCELLANEOUS INTERNALS
POST WELD HEAT TREATMENT REQ'D FOR					INTERNAL NUTS		NAME PLATE
					EXTERNAL FLANGE BOLTS		MISCELLANEOUS CLIPS AS BELOW & AS PER DRAWINGS
					EXTERNAL FLANGE NUTS		
					GASKETS		OTHER DETAILS :
					EXTERNAL PREPARATION		
					SHOP PAINT		
					INTERNAL PREPARATION		
					INTERNAL HS		
					INSULATION		
					FIREPROOFING		

NOTES				
1	All dimension in MM except where stated otherwise.			
2	Residence time of 6 mins provided for rich amine in column bottom (LLL - HLL).			
3	Residence time of 5 mins for wash water in pan (LLLL - HHLL). (3 mins LLL-HLL)			
4	Deleted			
5	Deleted			