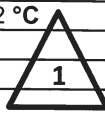
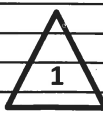


AREA:	DISCIPLINE:	DOC TYPE:	NUMBER
8510	- 070	- DAS	- 0057

PREFIX:	FUNCTION:	LOOP:	SUFFIX:
8510	- XV	- 00036	-

Santos Limited - A.B.N. 08 007 550 923		Santos		SHUTDOWN VALVE		SHEET <u>1</u> OF <u>1</u>	
Moomba Gas Plant CO2 Removal Train 8 Absorber 8510-V-8120 P&ID Drawing No. 8510-010-PID-0003				Rev	By	Date	Description
				0	SJN	27/06/14	For Purchase
				1	AKC	06/08/14	For Purchase
				Project		5335573	
				CIEP-CO2 Removal and		Utilities Expansion	
				By	Chk'd	Appr	
				AKC/	JDJ/	CS/	
General	1	Service		Solution from Main Solution Pumps to Absorber			
	2	Line No. / Vessel No.		500-BS-14769-009			
	3	Line Size / Schedule		DN500 Schedule 80			
	4	Hazardous Area Class.		Zone 2 IIA T3			
Valve	5	Body Size		Size: DN500 Full Bore 2-piece body preferred			
	6	Type		Trunnion Mounted Ball ☒ Fire-Safe to API 607 ☒ Anti-Static ☒ Emergency Seat Seal ☐ Class V Tight Shutoff			
	7	End Connection & Rating		DN500 900# R.F. - ANSI			
	8	Body & Trim Materials		Body: ASTM A105 CS		Ball: A182 F51+TCC	
	9	Seat/Stem Type & Material		A182 F6A+TCC		Stem: Min 316SS	
	10	Seal Type & Material		Body seal: Elast-O-Lion 101		Stem seal: Elast-O-Lion 101	
	11	Make & Model		Virgo			
	12	Break Away Torque Max.		17182 N.m			
	13	Trunnion Bushing		PTFE			
	Actuator	14	Type		Piston - spring return Scotch Yoke Fire-Safe ☐ With Xylan internal coating		
15		Action		Fail Closed Closing Time: 22 Secs (Note 10)			
16		Cylinder Design Pressure		660 kPag		Motor rating: N/A	
17		Operating Medium		Instrument Air		Gas Dehydrator ☐	
18		Power Fluid Press.		Min. 550 kPag		Max. 860 kPag	
19		Manual Operator Type		N/A Locking Device ☐			
20		Operation Frequency		<5 operations/annum			
21		Make & Model		Bettis G7132-SR2-CW			
22		Options		Speed Restrictor ☒ Travel Ind. ☒ Manual S/D ☐ Reservoir ☐ Man. Override ☐ Pressure reg. ☒ Output Gauge ☒ Heater ☐ Press. reg. Make & Model Fisher MR95H ☐			
Valve Control		25	Tag Number		- - -		
	26	Power Supply					
	27	Port Size		Manual Reset ☐			
	28	Action					
	29	Haz. Area Certification		Cert. No:			
	30	Body / Seal Material		/			
Junction box	31	Make & Model					
	32	Tag Number		-JB- -			
	33	Make/Model		/			
Other (Plug, socket, DVC)	34	Haz. Area Certification		Cert. No:			
	35	No. Of Term/Entries					
	36	DVC - Make/Model/Part No.		Fisher / DVC / 6200 SIS			
	37						
Limit switches	38	Haz. Area Certification		IEC EX ia T5/T6		Cert. No: IEC Ex CSA 04.0004X	
	39	Tag Number		8510-XY-00036			
	40	Tag Number		8510-ZT-00036- 4-20mA Transmitter			
	41	Details		No. of switches N/A		Type 4-20mA Rating	
Process conditions	42	Haz. Area Certification		IEC EX ia T5/T6		Cert. No: IEC Ex CSA 04.0004X	
	43	Make & Model		Part of DVC			
	44	Fluid		Benfield Solution			
	45	Flow Rate		to 1803 m³/h			
	46	Max. Operating Conditions		Temp 112 °C		Press 7103 kPag	
	47	Operating ΔP		0 kPa			
	48	Max. Shut Off ΔP		9831 kPa 			
	49	Actuator Sizing ΔP		9831 kPa			
	50	Operating MW		22.8			
	51	Operating Viscosity		0.522cP			
52	Corrosive/Erosive Contaminants						
53	Ambient Temperature		0 to 50 °C 				
Notes: [1] The valve shall be supplied with its Tag No. shown on a permanently attached stainless steel plate. [2] The valve shall be supplied with mill material and hydrotest certificates. [3] Design Conditions: 9831 kPag and 136 degC. [4] IEC Haz. Area certificates required. [5] Ingress Protection: IP 66 min. [6] Parker CPI SS Tube fittings required. [7] Valve to be controlled by Fisher DVC6200 SIS. [8] Refer Santos Spec. 1515-50-G002 "Design Practice for Valves". [9] Refer Santos Spec. 1515-50-S001-0 "Piping and Valves". [10] Closing time must be <22 Secs to avoid solution backflow to Gas/Gas Exchanger upon high level trip (LAHH-00028). [11] Max shut-off & actuator sizing dP based on 8510-P-8181 Shut-off head.							