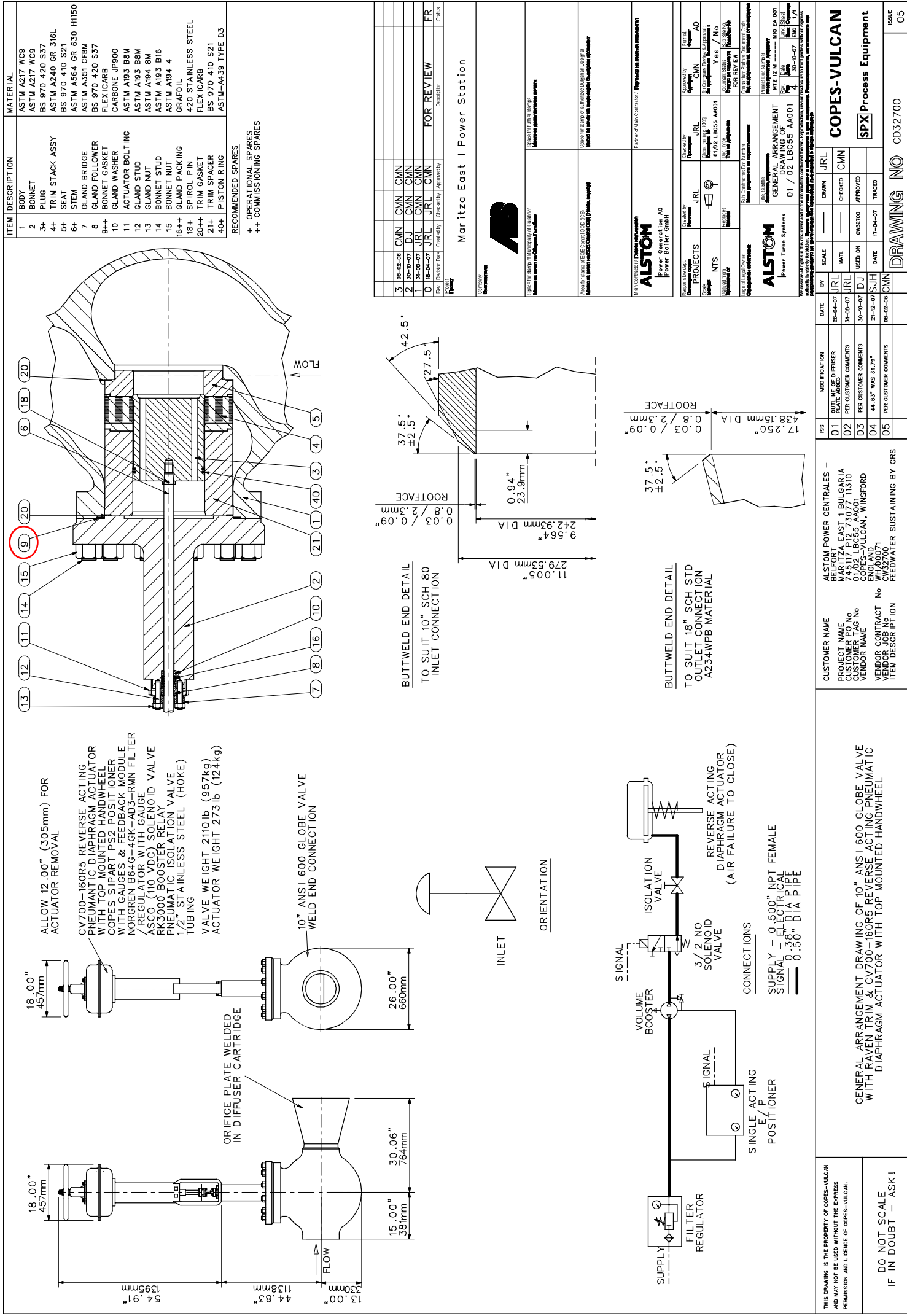


COPES-VULCAN, SPX Process Equipment Road Two, Industrial Estate, Winsford, Cheshire. United Kingdom Phone: +44 (0)1606 552041 Fax: +44 (0)1606 558275							CONTROL VALVE SPECIFICATION SHEET			
Customer Name: ALSTOM POWER CENTRALES - BELFORT Customer Inquiry: EMAIL Customer PO: 745117 P12 73077 Ultimate User: MARITZA EAST 1 BULGARIA Tag: 01/02 LBC55 AA001 Application: FEEDWATER SUSTAINING BY CRS							CV Inquiry: DMS/060909/PM1 CV Job: WH/00071 CV Job Ref: CW32700 CV Serial#: 07CW32700/01-02 Item: 01 Quantity: 2			
Description : 10 Inch, Class 600 STD, BW, A217 WC9, SD, CV700 160-5R+TMHW										
FLUID: Steam		SERVICE CONDITIONS								
	FLOW t/hr	P1 bar.a	P2 bar.a	Temp deg C	Cv	Cv (%)	Travel (%)	Valve Outlet Vel. ft/min	Noise (dBA)	Exit Vel. Head bar.a
COND 1	43.2	13.3	3.779	333.3	323.2	83%	85%	29212	77	1.49
COND 2	32.8	13.3	3.341	333.3	243.4	63%	65%	24298	78	1.66
COND 3										
COND 4										
COND 5										
SHUTOFF		54	1.01	370.0	Allowable Leakage:			Predicted noise level with		Insulation 3.0 Inch
DESIGN		54		370.0	ANSI FCI 70-2 Class IV			Insulation (IEC 60534-8-3)		
BODY AND BONNET										
Style: SD-Severe Duty, Globe Size: 10 Inch ASME Class: 600 Standard Body Inlet: Butt Weld, Sch 80 Per ANSI B16.25, Fig. 2b Body Outlet: Butt Weld, Sch STD Per ANSI B16.25, Fig. 2b Material: ASTM A217 WC9 Inlet Pipe: 10" x 8mm WT Outlet Pipe: 18" Sch STD					Bonnet Type: Bolted w/Extension Packing Material: Grafoil Packing Hardware: Stainless Steel Options: Single Packed Service: Continuous Modulation  Outlet Expander : 10" x 18" Sch STD, Length: 15.00 In., Material: A-234 WPB					
TRIM										
Size: 10 Inch with 4 Turns Style: RAVEN (Balanced with Piston rings) Flow Direction: UNDER THE WEB Stem Diameter: 1.00 Inch LINEAR					Seat Type: Metal Trim Material: 400/70 SST & 300 SST Disc Stack Max. Cv Available: 388.2 @Max Travel of 3" (+/-1/8) Min. Controllable Cv of Trim: 11.08					
ACTUATOR										
Actuator Model: CV700 160-5R+TMHW  Action: Reverse (Air Fail Closed) Handwheel: Top Mounted Frame Material: Ductile Iron Air Pressure Available: 4.0 bar.g Air Pressure Required: 3.2 bar.g					Actuator Mounting Style: 4 x Studded Actuator Spring: 357580 Spring Rate: 768 lbf/in Max Stem Thrust Required to Close: 1605 lbf Max Stem Thrust Required to Open: 806 lbf Bench Set: 20-35 psi.g					
ACCESSORIES										
Positioner: Copes SIPART PS2, Single Acting Positioner Input Range: 4-20 mA Position FeedBack Module (4-20mA): YES Alarm Module: NO HART Module: NO  Piping: 1/2" Stainless Steel Tubing (Hoke) Limit Switches: None					Airlock: None Filter/Regulator: Norgren B64G-4GK-AD3-RMN Qty: 1 Solenoid Valve: ASCO (110 VDC) Qty: 1 De-energize to vent actuator Booster Relay: RK3000 Qty: 1 Additional Acc'y: Pneumatic Isolation Valve Qty: 1					
COMMENTS										
Downstream multi-orifice diffuser cartridge fitted - See Separate Data Sheet Outlet pressure shown on this datasheet are those prior to the diffuser plate  Stroking speed Opening or Closing shall be less than 10 seconds										
					04	CMN	Per customer comments			Aug-31-2007
					03	IJW	Revised For Contract Use			Jan-23-2007
					02	MW	Revised per L2 meeting			Nov-20-2006
					01	MW	Stroking speed added			Oct-25-2006
					00	MW	Original Data Sheet			Sep-15-2006
					Rev	Initials	Description			Date
Program Rev Level: LIK-1-2 (WS Version)										



## RECOMMENDED SPARES LIST

CUSTOMER NAME	ALSTOM POWER CENTRALES - BELFORT	VENDOR CONTRACT N°	WH00071	DATE	21-May-07
PROJECT NAME	MARITZA EAST 1 BULGARIA	DOCUMENT N°	CW32700/01-02	AFTERMARKET REF	DGE070206/RS L8
CUSTOMER PO N°	745117 P12 73077	REV STATUS	0	CONTACT	D.G. EDWARDS

Qty Of Valves	2 OFF	Description	SD - Globe 10" ANSI 600
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Tag N°	Serial N°	Qty Installed Per Valve	CD Drawing N°	Drawing Item	Description	Part N°	Notes	Recommended 2 Yrs Operation
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01/02 LBC55AA001	CW32700/01 & 02	1	CD32700	3,4,5,18,20,21,40	Assy Trim, Raven 10" 4T 48P Consisting Of #	C99108EAGA		1
01/02 LBC55AA001	CW32700/01 & 02	1	CD32700	3+	Plug #	C33791-XMC		1
01/02 LBC55AA001	CW32700/01 & 02	1	CD32700	4+	Trim Stack #	C33789-AQA		1
01/02 LBC55AA001	CW32700/01 & 02	1	CD32700	5+	Seat #	C33790-XMA		1
01/02 LBC55AA001	CW32700/01 & 02	1	CD32700	18+	Spirol Pin #	U20-120		1
01/02 LBC55AA001	CW32700/01 & 02	2	CD32700	20++	Trim Gasket #	S267466Q	1	8
01/02 LBC55AA001	CW32700/01 & 02	1	CD32700	21+	Trim Spacer #	C33792-XMA		1
01/02 LBC55AA001	CW32700/01 & 02	2	CD32700	40++	Piston Ring #	S339357	1	4
01/02 LBC55AA001	CW32700/01 & 02	1	CD32700	6+	Stem	STM320332504	1	1
01/02 LBC55AA001	CW32700/01 & 02	1	CD32700	9++	Bonnet Gasket	S286657	1	4
01/02 LBC55AA001	CW32700/01 & 02	1	CD32700	10+	Gland Washer	S373408		1
01/02 LBC55AA001	CW32700/01 & 02	1	CD32700	16++	Gland Packing	S368493	1	4
01/02 LBC55AA001	CW32700/01 & 02	1	See Manual	14,30,32,33,35,36	Actuator Spares Kit 160R-L 1" Consisting of ###	C80141-AQA		1
01/02 LBC55AA001	CW32700/01 & 02	1	See Manual	14+	Diaphragm ###	S195964BPP		1
01/02 LBC55AA001	CW32700/01 & 02	1	See Manual	32++	Gasket ###	S356989		1
01/02 LBC55AA001	CW32700/01 & 02	1	See Manual	33+	U Cup Seal ###	S357800		1
01/02 LBC55AA001	CW32700/01 & 02	1	See Manual	35+	O Ring (Inner) ###	S357801		1
01/02 LBC55AA001	CW32700/01 & 02	1	See Manual	36+	O Ring (Outer) ###	S357802		1
01/02 LBC55AA001	CW32700/01 & 02	1	See Manual	30+	Bushing	S356093		1

### NOTES

1

### COMMENTS

Please note that items marked with a [ 1 ], must be changed during an inspection or maintenance overhaul it should be ensured that these items are available before commencing the inspection.

Do Not Re-Use