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Customer Name: **ALSTOM POWER CENTRALES - BELFORT**
Customer Inquiry: **EMAIL**
Customer PO: **745117 P12 73077**
Ultimate User: **MARITZA EAST 1 BULGARIA**
Tag: **01/02LAB40 AA002**
Application: **DRUM LEVEL NORMAL CONTROL VALVE**

CV Inquiry: **DMS/060909/PM1**
CV Job: **WH/00071**
CV Job Ref: **CW32702**
CV Serial#: **07CW32702/01-02**
Item: **03**
Quantity: **2**

Description : 8 Inch, Class 2500 STD, BW, A217 WC6, SD, Pneumatic Piston

FLUID: Water

SERVICE CONDITIONS

	FLOW t/hr	P1 bar.a	P2 bar.a	Temp deg C	Cv	Cv (%)	Travel (%)	Valve Outlet Vel. ft/sec	Noise (dBA)	Trim Exit Vel. m/sec
COND 1	960.5	213.7	203.7	182.4	402.5	85%	79%	32	<75	20.17
COND 2	889.2	210.0	200.0	179.0	371.8	79%	71%	29	<75	20.17
COND 3	864.0	225.6	215.7	173.6	361.9	77%	69%	28	<75	20.07
COND 4	449.6	197.6	187.6	152.1	185.1	39%	34%	14	<75	20.17
COND 5	304.9	189.5	179.0	137.0	121.6	26%	23%	10	<75	20.67
SHUTOFF		333	1.01		Allowable Leakage:			Predicted noise level with Insulation (IEC 60534-8-3)		Insulation 0.0 Inch
DESIGN		333		195	ANSI FCI 70-2 Class V					

BODY AND BONNET

Style: **SD-Severe Duty, Globe**
 Size: **8 Inch**
 ASME Class: **2500 Standard**
 Body Inlet: **Butt Weld, Sch 160 Per ANSI B16.25, Fig. 2b**
 Body Outlet: **Butt Weld, Sch 160 Per ANSI B16.25, Fig. 2b**
 Material: **ASTM A217 WC6**
 Inlet Pipe: **310mm ID x 25.5mm WT** Inlet Reduc
 Outlet Pipe: **310mm ID x 25.5mm WT** Outlet Expand

Bonnet Type: **Pressure Seal**
Packing Material: **Teflon**
Packing Hardware: **Stainless Steel**
Options: **Single Packed**
Service: **Continuous Modulation**

TRIM

Size: **8 Inch with 2 Turns**
 Style: **RAVEN (Balanced with Ucup seal)**
 Flow Direction: **OVER THE WEB**
 Stem Diameter: **1.25 Inch**
 Characteristic: **RAVEN**

Seat Type: **Metal**
Trim Material: **400/70 SST & 300SST Disc Stack**
Max. Cv Available: **472.2 @Max Travel of 4.5" (+/-1/8)**
trollable Cv of Trim: **1.29**

ACTUATOR

Actuator Model: **Pneumatic Piston**
18" Diameter
 Action: **Direct** (Air Fail Open)
 Handwheel: **None**
 Frame Material: **Ductile Iron**
 Air Pressure Available: **5.0** **bar.g**
 Air Pressure Required: **3.5** **bar.g**

Actuator Mounting Style: **Studded**
 Actuator Spring: **TBA**
 Spring Rate: **TBA** lbf/in
 Max Stem Thrust Required to Close: **12286** lbf
 Max Stem Thrust Required to Open: **4577** lbf
 Bench Set: **N/A** psi.g

ACCESSORIES

Positioner: **Siemens SIPART PS2, Single Acting**
 Positioner Input Range: **4-20 mA**
 Position FeedBack Module (4-20mA): **YES**
 Alarm Module: **NO**
 HART Module: **NO**

Airlock:	None	
Filter/Regulator:	Davis Pneumatics, w/Gauge	Qty: 1
Solenoid Valve:	None	
Booster Relay:	As Required for Stroke Speed	
Additional Acc'y:	Pneumatic Isolation Valve	Qty: 1

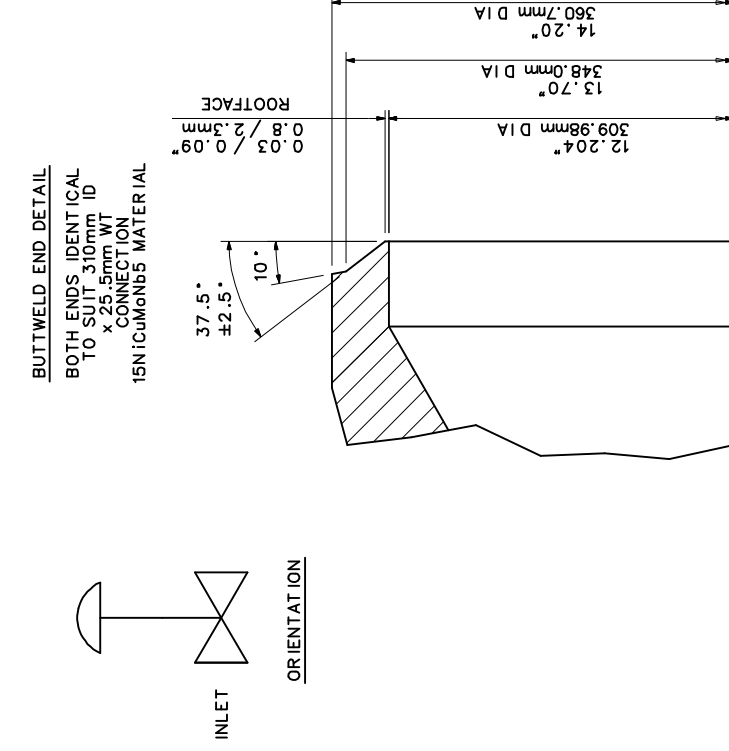
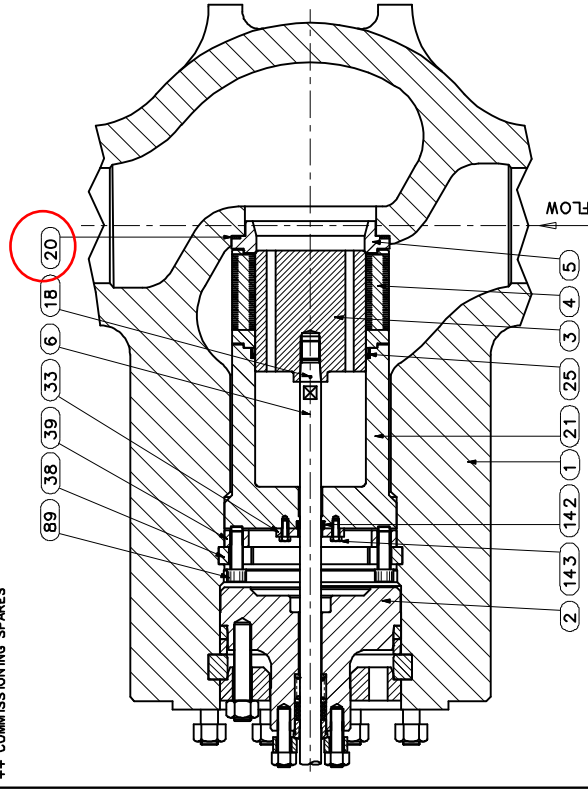
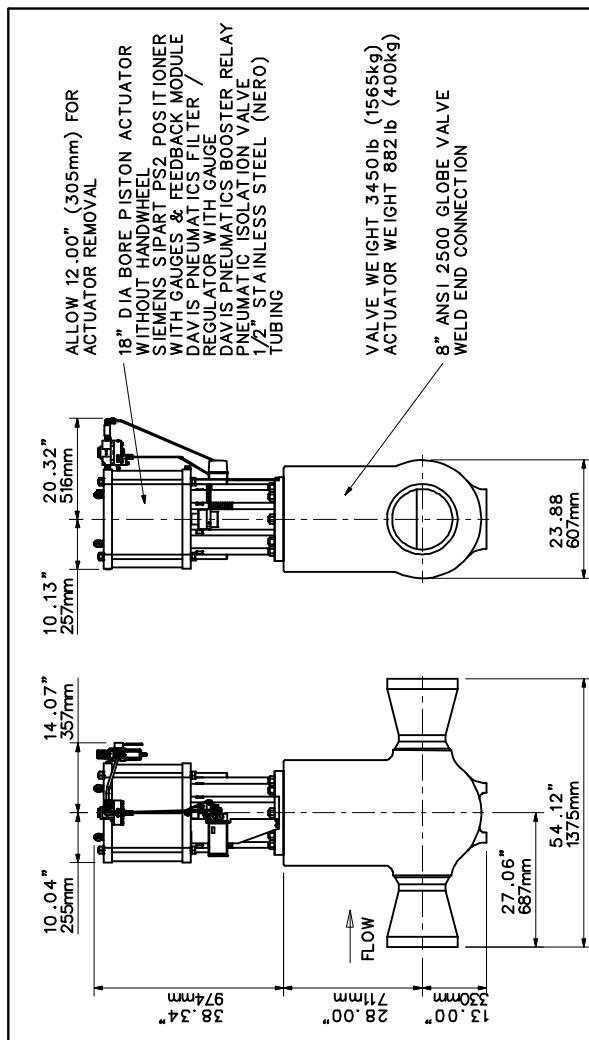
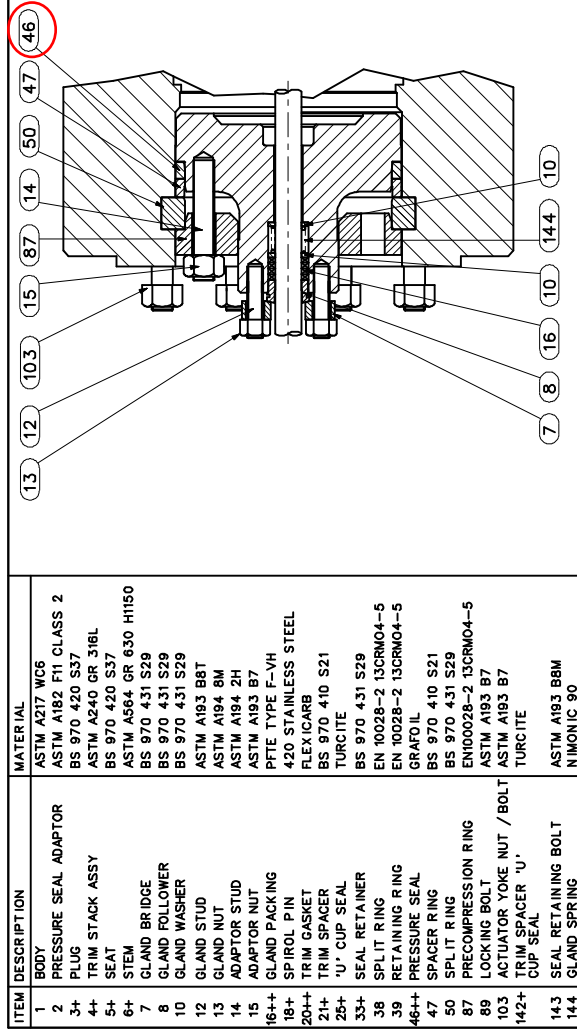
Piping: **1/2" Stainless Steel Tubing (NERO)**
Limit Switches: **None**

COMMENTS

Trim Exit Velocities are Shown
Reducer / Transition pieces shall be provided on the inlet & Outlet Connection to match the customer pipe size and material.

06	CMN	Design and Shut Off Pressures were 331 Customer Req	Dec-24-2007
05	CMN	Shut Off was Class IV	Nov-14-2007
04	ADA	DESIGN REVIEW	Mar-28-2007
03	IJW	Issued For Contract Use	Jan-24-2007
02	MW	Revised Per L2 Meeting	Nov-20-2006
01	MW	Revised to RAVEN Trim	Oct-25-2006
00	MW	Original Data Sheet	Sep-15-2006
Rev	Initials	Description	Date

Program Rev Level:	UK-1-2 (WS Version)
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BUTTWELD END DETAIL

BOTH ENDS IDENTICAL
TO SUIT 310mm ID
x 25.5mm WT
CONNECTION
15N1CuMoNb5 MATERIAL

[illegible]

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IF IN DOUBT - ASK!

GENERAL ARRANGEMENT DRAWING OF 8" ANSI 2500 GLOBE VALVE
WITH RAVEN TRIM & 18" PNEUMATIC PISTON ACTUATOR

CUSTOMER NAME	ALSTOM POWER CENTRALES -
PROJECT NAME	NEW TZA EAST 1 BULGARIA
CUSTOMER PO No	745117 P12 7.3077
CUSTOMER TAG No	0102LAB40 AAO02
VENDOR NAME	COPEL-VULCAN, WINSFORD ENGLAND
VENDOR CONTRACT No	EN20771
VENDOR JOB NAME	CM2002
ITEM DESCRIPTION	DRUM LEVEL NORMAL CONTROL VALVE

ISS	MODIFICATION	DATE
01	PER CUSTOMER COMMENTS	31-08
02	PER CUSTOMER COMMENTS	30-10

BY	SCALE	JRL	DRAWN	JRL
7 D U	JRL	MNL	CHECKED	CMW
USED ON	QMS2702	APPROVED		
DATE	21-04-07	TIMED		

COPES-VULCAN
Process Equipment

SPX Process Equipment

LISTEN...INNOVATE...DELIVER

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RECOMMENDED SPARES LIST

CUSTOMER NAME	ALSTOM POWER CENTRALES - BELFORT	VENDOR CONTRACT N°	WH/00071	DATE	21-May-07
PROJECT NAME	MARITZA EAST 1 BULGARIA	DOCUMENT N°	RSL/CW32702/01 & 02	AFTERMARKET REF	DGE/070206/IRSL8
CUSTOMER PO N°	745117 P12 73077	REV STATUS	0	CONTACT	D.G. EDWARDS

Qty Of Valves	2 OFF	Description	SD Globe 8" ANSI 2500
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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
01/02LAB40AA002	CW32702/01 & 02	1	CD32702	3,4,5,18,20,21,22,25,39,88,107,142	Assy Trim, 8" Raven 2T 32P Consisting Of #	C99107VQAQ		1
01/02LAB40AA002	CW32702/01 & 02	1	CD32702	3+	Plug #	C33751-XMC		1
01/02LAB40AA002	CW32702/01 & 02	1	CD32702	4+	Trim Slack #	C33745-AQA		1
01/02LAB40AA002	CW32702/01 & 02	1	CD32702	5+	Seat#	C32826-XMC		1
01/02LAB40AA002	CW32702/01 & 02	1	CD32702	18+	Spirol Pin #	U20-126		1
01/02LAB40AA002	CW32702/01 & 02	1	CD32702	20++	Trim Gasket #	S269593	1	4
01/02LAB40AA002	CW32702/01 & 02	1	CD32702	21+	Trim Spacer #	C33754-XMA	1	1
01/02LAB40AA002	CW32702/01 & 02	1	CD32702	25++	U Cup Seal #	C27727-BPP	1	4
01/02LAB40AA002	CW32702/01 & 02	1	CD32702	39	Retaining Ring #	C33040-XHE		1
01/02LAB40AA002	CW32702/01 & 02	1	CD32702	89,107	Assy Split Ring Bolt & Bar #	C33042-AQA		1
01/02LAB40AA002	CW32702/01 & 02	16	CD32702	89	Split Ring Bolt #	C33038-XHR		16
01/02LAB40AA002	CW32702/01 & 02	14	CD32702	107+	Locking Bar #	SBF0030X0120		14
01/02LAB40AA002	CW32702/01 & 02	1	CD32702	142++	U Cup Seal #	C33753-BPP	1	4
01/02LAB40AA002	CW32702/01 & 02	1	CD32702	6+	Stem	STM330431004		1
01/02LAB40AA002	CW32702/01 & 02	1	CD32702	46++	Pressure Seal	C22971UBPP	1	4
01/02LAB40AA002	CW32702/01 & 02	1	CD32702	16++	Gland Packing	C11578-BPP	1	4
01/02LAB40AA002	CW32702/01 & 02	1	CD32702	144+	Gland Spring	C08421-BPP		1
01/02LAB40AA002	CW32702/01 & 02	1	See Manual		Actuator Repair Kit	AKX25-256		1

NOTES	COMMENTS
1	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