



CONTROL VALVE
INSTRUMENT SPECIFICATION

Client's

General	Tag Number		Quantity		41-PV-705		1		
	Line No.		Class		41-24"-PL-16002				
	Pipe Size mm		Pipe Mat'l		600		ASTM A106 Gr.B		
Process Condition	Fluid		Phase						
		Liquid kg/h Gas Nm ³ /h	MaxFlow						
			NorFlow						
			MinFlow						
	1		7		5				
	7		2		0				
	0		Oper. Temp.		Molecular WT ²		5		
	Oper.Density								
	Oper.Viscosity		Visc Unit						
	CP/CV		Com. Factor						
	Vapor PressMpa(a)		Critical Press.Mpa(a)		0.24		3.58		
	Solid Mass Cont		Mass Vap						
	Control Valve	Body Type							
Body Size mm		Trim Size mm		500					
Character		Proc.Conn							
Body/Bonnet Mat'l									
Trim Mat'l		Seat Mat'l		316SS+ST		316SS+ST			
Packing Mat'l		Gasket Material							
Cv		Sizing Cv	Max.	Nor.	Min.				
Cv		Selected Cv							
Valve Opening		Max.	Nor.	Min.					
Actuator Type		Spring Range MPa							
Bonnet Type									
Failure Action to Open/Colse									
Val. Posn. when Sol. Val. De-energized									
DBA		Leakage Class		85dBA					
Transducer/Positioner	Name								
					400				
Accessories									
Miscell	Manufacturer								
	Model								
Note:									



LUOYANG PETROCHEMICAL
ENGINEERING CORP./SINOPEC

CONTROL VALVE
INSTRUMENT SPECIFICATION

	Proj.Doc.No.	Discipline Doc.No.	Rev.
LPEC's	413091D1267	50-00/R701	
Client's			
		Page 186 of	

Tag number : 41-PV-705	
1. The sizing calculation shall be carried out based on ISA S75.03 and the Manufacturer's standard equations. The sizing calculation results shall be provided with valve specification.	
2. The control valve packing glands shall be of the bolted type.	
links) travel limit stops etc shall be:	3. Miscellaneous accessories such as booster relay, quick exhaust valves, lockup valves, accumulators (air volume to be considered to maintain proper operation during Detailed Engineering Stage.
valve from 0% to 100% in 15 seconds.	4. Maximum time to open and close the valve.
SCS/PLC or DCS to the valve actuator; another signal to the SCS/PLC will also be provided to monitor the valve position.	5. In addition to the control signals from the SCS/PLC or DCS, a hand switch to select which controller (SCS/PLC or DCS) pilots the valve. SCS in normal operation or DCS during start-up.
0% maximum - Linear characteristic required. Double acting actuator recommended.	6. Hand Switch to select which controller (SCS/PLC or DCS) pilots the valve. SCS in normal operation or DCS during start-up.
valve (Cv/opening) to be submitted to AXENS for approval.	7. Accuracy of the flow control loop = 1.0%.
8. Valve data sheet and characteristic curve shall be submitted to AXENS for approval.	
9. Final I and O signal to be confirmed by the client.	
10. Fabricated at 4200 psi (300 bar) and 400°F (204°C). Design Pressure shall be confirmed by DEC.	
11. For Valve calculation and size selection DEC need to be rechecked during Detailed Engineering.	
12. Trim size and Rated CV are based on Fisher.	
13. Please refer to attachment W 3 for additional requirements.	

INSTRUMENT SPECIFICATION		Control Valve	
of 2	Rev. 1	No. 1	Date 2/28/2007
UINAE (as FEED Package)		Preliminary	
Revision		Code: 170 Dwg. No.	
Sheet = 2			



LUOYANG PETROCHEMICAL
ENGINEERING CORP./SINOPEC

CONTROL VALVE
INSTRUMENT SPECIFICATION

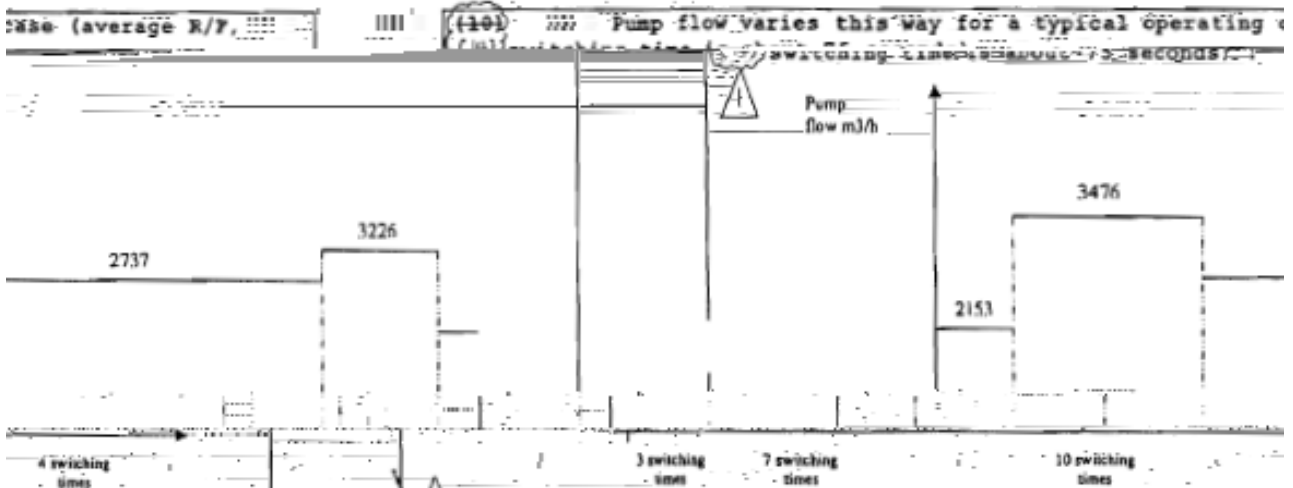
	Proj.Doc.No.	Discipline Doc.No.	Rev.
LPEC's	413091D1267	50-00/R701	
Client's			
		186	
	Page	of	

INSTRUMENT DATA SHEET : CONTROL VALVE

Job Number: 05-2678b Unit: 41b Type: 4VC PAID: PID 16/27 Page: 4/5

Client: DRAGON AROMATICS (XIAMEN) CO., LTD
DAC PY COMPLEX PROJECT, XIAMEN (P.R. China)

Valve Type: Pressure control Valves



- Engineering... characteristic... seconds... to be submitted to... : 2064... actuator, another... the correct valve... DCS pilots the valve. SCS... ally. No other failure lock... ation diagram for pumparound
- (11) Estimated shut-off pressure of 41-P-202 to be checked by En
 - (12) Accuracy of the pressure control loop is 1.0% maximum. Linear required. Double acting actuator recommended.
 - (13) Maximum time to open and close the valve from 0 to 100% is 15 s
 - (14) Valve data sheet and characteristic curve (Cv vs opening) to AXENS for approval.
 - (15) Estimated min. design Cv : 653, estimated maximum operating Cv
 - (16) In addition to the control signal from SCS/PLC to the valve, a hand switch to select which controller (SCS/PLC) is in normal operation or DCS during start-up.
 - (17) Hand Switch to select which controller (SCS/PLC) is in normal operation or DCS during start-up.
 - (18) Fail Lock position is ensured by the positioner or
 - (22) arrangement is required. Refer to typical instrument valves.

1. Engineering contractor to check
during static and dynamic deviation trend,
lifecycle diagnostic recommended compare
controller is recommended.
Condition monitoring is required.

- (23) Valve shall be provided with Anti cavitation A-Trim design or equivalent during detail engineering.
- (24) Intelligent valve controller, with embedded lifecycle diagnostics including actuators load trends, valve diagnosis, real predictive maintenance based to valve signature approach.
- (25) Unique supplier for package valve, actuator and intelligent valve controller.
- (26) Field devices management software FDT-DTM technology based with