CONTROL VALVES

| Sr. No. | Description | Model / Brand | Quantity Required |
|------------|---|--------------------------------|----------------------|
| 1 | Control Valve with actuator and positioner for steam (1") (Specification attached at page 1/3) | | 03 (No.) |
| 2 | Control Valve with actuator and positioner for compressed air {1/2") (Specification attached at page 2/3) | Valtek/Fisher or equivalent | 02 (No.) |
| 3 | Control Valve (3 way) with actuator and positioner for Vacuum (Air) (1/2") (Specification attached at page 3/3) | | 01 (No.) |

ANNEXURE DATA SHEET 10 PROJECT SPEC TINU TAG P.O DWG Control Valves (03 Nes.) TEKM SERVICE CONTRACT *MFR. SERIAL Steam line for heating Fluid Crit Press Pc 1 Shut-Off Norm 2 Units Mux 1000 1b/hr 1500 3 Flow Rate Bar Inlet Pressure SERVICE CONDITION 5 Outlet Pressure °C 6 Inlet Temprature 175 170 7 Spec Wt /Spec Gray / Mol Wt 8 Viscosity / Spec Heats Ratio y Vapour Presence Pv 10 *Required Cv 0 11 "Travel dBA 12 Allowable Predicated SPL 13 Pipe Line Size 14 DN 25, 40s 53 Pneumatic Piston, double acting, Cylindrical & Schedule Out Valtek Fisher of Edwirole 15 DN 25, 40s 54 *Mir. & Model Size 16 Pipe Line Insulation Glass wool 55 17 *Type Single Scat Clobe 56 Regulating 18 57 Spring Action Open/Close _____ Close also should be Field reversible *Size ANSI Class Max Allowable Pressure 10 Bar/180 °C 19 Mox Press/ Temp 58 10.3 Barg ValtelyFisher of Educated 20 *Min Required Pressure 2.8 Bark 59 *Mfr. & Model BODY ! BONNET SS-304L/SS-316L Ayallable Supply Pressure 21 *Body/Bonnet Matt 22 *Liner Metrial/ID Max 6 Bar Min 4 Bar 23 Bench Range Integral Flanged 62 Knd Actuator Orientation Vertical 24 Integral Planged Connection out HandWheel Type 25 Raised Face 64 Side mounted Fly Face Finish 26 65 Air Failure Valve Yes, Pail safe Close End Ext/Matt 27 *Flow Direction 66 28 Type of Bonnet Standard 67 Input Signat 29 68 *Type Analog with I/P Lub & Iso Valve Lube 30 *Packing Material *Mfr. & Model Valtek/Fisher only 31 *On Iner Signal Output Iner/Deel____ *Packing Type 70 32 Yes Full area, double-top stem guided 71 Ganges Bypass Type 11 Rated Travel Size *Cam Characteristic 34 Characteristic Linear 73 Un-balanced 35 Balanced/Unhalanced 74 Type SWITCHES 36 75 Rated Cv XT Mir. & Model 37 *Plug/Rall/Disk Material SS-104USS-316L 76 Contacts/ Ratine 38 Seat Material SS-3041/SS-316L 77 Actuation Points 39 *Cage/Guide Material 78 40 Stom Material SS-304L/SS-3167, 79 Mir. & Model 41 80 Set Fressure 42 X1 Pasition Feedback 43 82 Output signal: 4 to 20 mA 44 83 *Hydro Pressure SPECIALS / ACCESSRIES Position transmitter: Analog 4 to 20 mA. 45 Mounting: Side mounting on the valve 84 ANSI / FCI Leakage Class 46 85 47 48 Orig Revision 49 50 51 Make; Western Europe/Japan/Canada/Malaysia /USA of Eduivalent

" Information supplied by Seller unless sirently specified.

| | | | | | | | 100 - 100 - 100 E | | | |
|-----------------------|--|-----------------|-------------------|--------------------------|-----------------|--|-------------------|-------------|----------------|-------------------------|
| | PROJECT | | | | DATA SHEET | | | Of | | |
| | דואט | TINUTTINU | | | SPEC | | | | | |
| | P.O | | | | TAG | | | | | |
| | TTEM CONTRACT MFR. SERIAL | | | | DWG | | | | | |
| | | | | | SERVICE | | | | | |
| | | | | | | | | | | |
| Fhiid | Compress | ed Air | | | Crit Pr | ess Pc | | | | |
| | 4 | Units | Max | 8 | Nor | m. | Min | | Shut- Off | |
| SERVICE CONDITION | Flow Rate | m³/hr | 80 | | 60 |) | - | | | |
| | Inlet Pressure | Bar | 8 | | 7 | | - | | | |
| | Outlet Pressure | Bar | 7.8 | | 6. | | | | | |
| | Inlet Temprature | °C | 10 | | 3.5 | | | 10.00 | | |
| | Spec Wt /Spec Gray / Mol Wt | | 10 | | | T.PT. 1. | 7 - | | | , ., |
| | Viscosity / Spec Heats Ratio | | | | | | 7/1 | | | |
| 틸 | Vapour Pressure Py | | | | N. F. a | | | | | |
| K. | | | | | | | | | _ | |
| SE | *Required Cv | % | | | | | | | 0 | |
| | *Travel | | , | | | - | 1 | | U | |
| | Allowable/*Predicated SFI. | dBA | | | | | | | | |
| | Pipe Line Size In | | | | | +mr- | | | | 11 4 2011 |
| × | & Schedule Ou | DIA | 15, 403 | 53 | | 39YT* | | Pheuma | | uble acting Cylindrical |
| LINB | | | 15, 405 | 54 | | Mir. & Me | odel | | ALVER KI | a de ajuivale |
| 10451 | Pipe Line Insulution | | Nil | 55 | | *Size | | 2007.1 | | |
| | +Type | Single Seat | Globe | 56 | | On/Off | | | Reg | ulating |
| | Size 0.5" ANSI | Class | | 57 | | Spring Action | on Open/Close | Clo | se also should | be Pield reversible |
| | *Max Press/ Temp | 2 Bar/10 | °C | 58 | Q. | | able Pressure | | | |
| | | A | of which | 1 | 5 | ASSESSED OF THE | | | | |
| H | 'MIY. & Model | CHARLES AND A | |) [| ACTUALTOR | | red Pressure | | 2,8 | Barx |
| N. | *Body/Bonnet Matt | SS-304J/SS | -316L | 60 | Ş | | apply Pressure | | | |
| BOL | *Liner MetrixVID | | | 61 | - | 00000000 AV | 6 Bar | Min | 4 | Bar |
| ALVE BODY / BONNET | Rnd In | Integral Pla | | 62 | | *Rench Ran | | | | |
| | Connection est | Integral Pla | | 63 | HandWheel Ty | | wheel Type | | Vertical | |
| | Fig Face Finish | Raised Fa | CB | 64 | | | | | Side mounted | |
| LY | End Ext/Matl | | | 65 | | Air-Failure | Valve | | Yes, Pail | safe Close |
| X | *Flow Direction | | | 66 | | | | | | |
| | *Type of Bonnet | Standar | | 67 | | | Input Signal | | 4-20 mA | |
| | Luh & Iso Valve | Lube | | 68 | × | *Type | | | Analog | with I/T |
| | *Packing Material | | | 69 | OSITIONER | *Mfr. & Model *On Incr Signal Output Incr/Deer | | | Valtek | faher only |
| | *Packing Type | | | 70 | OT. | | | - Tanck | | |
| | | rea, double-top | stum guided | 1 I | OSI | Gauges | Yes | | | |
| | A TANKS | Travel | Bunnett | 72 | - | *Cam Char | 100 | | | пент |
| | *Characteristic | Linear | | 73 | | Jan Char | | | | |
| | *Balanced/Unbalanced | Un-balanc | | 74 | | Tuna | | O | | · |
| | *Rated Cy FL | X _T | | 75 | HES | *Mfr. & Mo | | Quantity | | |
| TRIM | The second secon | | 1167 | 1 1 | 5 | • 4 7 - 6 - 6 - 6 - 6 - 6 - 6 - 6 - 6 - 6 - | | | | |
| | *Ping/Ball/Disk Material *Scat Material | SS-3041/SS- | The second second | 76 | SWITC | Contacts/ R | | | | |
| | A STATE OF THE SAME OF THE STATE OF THE STAT | 55-304L/SS- | arat, | 77 | S | Actuation P | oints | <u> </u> | | · |
| | *Cage/Guide Material | 00 30/2 /5- | 2161 | 78 | | **** | | | <u> </u> | · |
| | *Stem Material | 88-304L/8S- | 7191 | 79 | E | *Mfr. & Mo | | | | |
| | | | ¬ | 80 | AIRSET | *Set Pressur | re | | | • |
| | Daridan Pasibash | | | 81 | . 2 | Filter | | Guage | ,,,_ | |
| 200 | Position Feedback Output signal: 4 to 20 mA | | | 82 | | | | | | |
| IES | Position transmitter: Analog 4 to 20 mA Mounting: Side mounting on the valve | | 84 SL 85 EI | | *Hydro Pressure | | | | | |
| SSR | | | | ANSI / FCI Leakage Class | | | Class-IV | | | |
| SPECIALS / ACCESSRIES | 3.67 | | | 85 | Ĕ | | | 11 | | |
| | | | | 86 | | | | | | |
| | | | | Rey | Date | | Revision | | Orig | Арр |
| K | | | | | | | 44 | | | - 10 00 |
| 3 | | | | | | | 1 | | | |
| S | | | | | | | | | - | |
| | | | 4 | - | | | | | | |

DATA SHEET PROJECT SPEC UNIT TAG P.O DWG ITEM Vacuum. SERVICE CONTRACT *MFR. SERIAL Crit Press Pc Fluid Shut-Off Units Norm Min Max 2 m hr 25 Flow Rate -120 Inlet Pressure mm WG -120 -1000 -1000 Outlet Pressure mm WO 60 Iniet Temprature Spec Wt /Spec Gray / Mot Wt Viscosity / Spec Heats Ratio Vapour Pressure Pv *Required Cv 11 % 12 Allowable/ *Predicated SPL dRA Pipe Line Size TYPE DN 15, 40s 53 Procumatic Piston, double acting, Cylindrical & Schedule Out 15 Water Fisher of their valent DN 15, 40s 54 *M(r. & Model *Size 55 16 Pipe Line Insulation On/Off 56 Single Seat Three Way (Converging) Regulating 17 *Type 18 *Size ANSI Class 57 Spring Action Open/Close ____ Close also should be Field reversible 0.1 Bar/60 °C 10.3 Barg 19 Max Press/ Temp 58 *Max Allowable Pressure VILLE OF LAWN 20 Mir. & Model 59 *Mis Required Pressure 2.8 Hare 21 SS-304L/SS-316L 60 Available Supply Pressure *Body/Bonnet Matl 22 61 Mar 6 Bar Min 4 Bar *Liner Metrial/ID 23 Integral Flanged 62 Bench Range 63 Vertical 24 Integral Flanged Actuator Orientation Connection HandWheel Type Side mounted 25 Fle Pace Firish Raised Face 64 Yes, Fail safe Close 76 End Ext/Mati 65 Air Failure Valve 27 66 *Flow Direction ... 4 20 mA ZX *Type of Bonnet Standard 67 Input Signal 29 68 *Type Luh & Iso Valye Lathe Analog with I/P 30 69 *Mir. & Madel *Packing Material Valide/Fisher only 31 70 *On Iner Signal Output Iner/Decr *Packing Type 31 Type Full area, double-top stem guided 71 Gauges ___Yes Вураза__ 33 Size 72 *Cam Characteristic Lincar 73 34 *Characteristic Linear 35 Balanced/Unbalanced Un-balanced 74 Туре____ Quantity 75 XT 36 *Rated Cv *Mfr. & Model 37 SS-304L/SS-316L *Pluc/Ball/Disk Material 76 Contacts/ Rating 38 Seat Material SS-3041/SS-316L 77 Actuation Points 39 Cace/Guide Material 78 40 Stem Material SS-304L/8S-316L Mir. & Model 79 41 *Set Pressure Filter_ 21 Guzge Position Feedback 43 82 Output signal: 4 to 20 inA 44 83 "Hydro Pressure Position transmitter: Analog 4 to 20 mA SPECIALS / ACCESSRIES 45 84 ANSI / FC) Leakage Class Mounting: Side mounting on the valve 46 85 47 48 Rev Orig 49 50 51 Make: Western Europe/Jupan/Canada/Malaysia /USA of Eduto Cont

• Інда минан выручен му осмет чинам жителяту зресіней.