

*Revised Specification*  
**ANNEXURE-A**

**Knife Edge Gate Valve with Accumulator Tank**

Valve Type : Knife Edge Gate Valve, double seated, bidirectional, full rubber sleeve design valve  
Valve Rating : 10 kg/cm<sup>2</sup>  
End Connection : Flange : Wafer type, semi lugged design  
Drilling Standard : ANSI 16.5  
Size : 150 mm NB

**Process Condition-**

Fluid : Siliceous Uranium Slurry  
Proces Flow : 250-300 m<sup>3</sup>/hr  
Fluid Temperature : 40-50° C  
Line Pressure : 3.5-4 kg/ cm<sup>2</sup>  
Pulp Density : 1.3-1.4

**MOC-**

Valve Body : Ductile Iron  
Valve Gate & Gland : Hard Chrome plated SS 316  
Gland Follower : SS 304  
Valve Sleeve : Full natural soft rubber sleeve with Re-enforcement  
Secondary seal : EPDM  
Fasteners : SS 304  
O'Ring : EPDM  
Piston Rod : SS 304

**Actuator-**

Type : Double Acting Pneumatic Metallic Aluminium Barrel/ FRP Cylinder Actuated, having  
Fail Safe Condition through Accumulator Tank

Fail Safe Condition : Normally Closed

**Accessories-**

Gate Guard : Metallic powder coated gate guard on both sides of movement of gate  
Solenoid Valve : 5/2 WAY, Port size- 3/8" BSP(F), SS Body, Coil voltage- 24 VDC with stay put type manual override, Application- Pneumatic Air Pressure (3-6 bar), Make- Rotex, ASCO, BURKET

Position Indicator (Proximity Switch Type) : Make: P & F, 2 WIRE (1 wire extra), Operating Voltage- 20-250 V AC/20-300 V DC, IP67 with LED for local indication, Max Load Current- 300 mA

Air Lock Relay : 4- way air lock relay (Stay Put), Port size- 3/8", **Make:** Rotex, ASCO, Burket

Tubing : SS only

Counter Flanges : 2 nos. MS- IS 2062 Machined flanges with raised face of CI # 150 drilling to be provided for each valve (if sleeve retaining plate is not available)

Accessories : Provided with leather bellows to protect the cylinder piston

Acceptable Make : FLOWROX, TECHGATE, TYCO, ORBINOX, RED VALVE, FLSMIDTH (KREBS)

**Important note** : **Slurry should be in contact with sleeve only, not with the valve body.**

**Special Instruction** : Valve and actuator should be assembled at the factory of OEM of valve and the purchaser reserves the right of PDI (Pre Dispatch Inspection) of operation of assembled valve and actuator.

**Valves to have following features:**

- Valves to be Full Bore with no head loss, straight through type.
- Threaded spindles and side tie rods in stainless steel.
- Valves to give 100 % leak tight during complete closure.

✓ **Valves to have Manual override with Hand wheel for manual operation.**

**Special Note** : Party to provide 24 months of warranty for mechanical parts.

Drawing of the valve to be provided by the party.

Assistance during commissioning of the valve to be provided by party.

**Essential Spares : 2 nos. of rubber sleeves to be provided.**