## Item Name: UHV Gate Valves

The technical description and number of quantities required are given below:

## (a) UHV Gate Valve, Manual (Required quantity: 2)

- Actuator: Manual with crank handle.
- Bakeout temperature: actuator ≥ 60 °C
- Bakeout temperature: housing ≥ 150 °C
- Housing: Stainless steel 304
- Nominal diameter: DN 63 CF
- Should have position indicator
- Pressure max.: ≥ 1 bar
- Minimum pressure: ≤ 1 X 10<sup>-9</sup> mbar
- Service life ≥ 10000 cycle
- Tightness/leak rate: Valve seat ≤1 X 10<sup>-9</sup> mbar I/s
- Tightness: Valve body : ≤1 X 10<sup>-9</sup> mbar I/s

## (b) UHV Gate Valve, Pneumatic (Required quantity: 1)

- Actuator: Pneumatic
- Bakeout temperature: actuator ≥ 60 °C
- Bakeout temperature: housing ≥ 150 °C
- Closing/opening time: ≤ 1.5 s
- Housing: Stainless steel 304
- Nominal diameter DN 63 CF
- Should have position indicator
- Pressure max. ≥ 1 bar
- Pressure min.  $\leq 5 \times 10^{-10}$  mbar
- Seal: Bonnet = metal, Gate: FKM/viton
- Service life: ≥ 10000 cycle
- Tightness/leak rate: Valve seat ≤1 X 10<sup>-9</sup> mbar I/s
- Tightness: Valve body ≤1 X 10<sup>-9</sup> mbar l/s