# GTC series Bolted bonnet design

NPS 2-36 (DN 50- 900), ASME Classes 150-2500 NPS 1<sup>13</sup>/<sub>16</sub>-16<sup>3</sup>/<sub>4</sub> (DN 46-425), API Classes 5000-10000

Slab through conduit gate valves are designed and manufactured in accordance with API 6D and API 6A standards and specifically for on-off services. This valve is suited to withstand all type of process fluids, under high pressure and temperature conditions.



## **Specifications**

Valve design	As per API 6D or API 6A standards and customer requirements
Body design	Forged or cast bolted one-piece
Temperature range	-150 to 662°F (-101 to 350°C)
Face-to-face	As per API 6D or API 6A standard
End connections	RF, RTJ as per B16.5 & B16.47 BW, Butt weld as per B16.25 Hub connection 6B, 6BX as per API6A

The valve design includes a rising stem which accommodates the upward and downward movements of the gate allowing it to open and close under the line pressure. In normal operation, line fluid fills the cavity and the gate is lifted by the pressure generated from the flow path assisting the actuator spring to open the valve, resulting in a fail-open configuration.

Slab through conduit gate valves are piggable in the fully open position and generate pressure drop across the valve equal to the inside diameter of the connecting pipe.

### **Design features**

- Metal-seated with hardfacing on wedge and seats.
- Secondary seals in pure Graphite.
- Anti-static device.
- Anti-blowout stem.
- O-ring /lip seal configuration.
- Fully piggable design.
- Negligible pressure drop in fully open position.
- Relief valve in the body cavity.
- Easy in line maintenance.
- Customized design for horizontal stem installation or vertical pipeline installation available.

#### **Operator**

- Manual: Gear with handwheel.
- Actuated: Linear pneumatic/hydraulic/electric.

## **Testing & certification**

- Compliance with inspection and testing: API 6D, ISO 5208, and API 598 or API 6A.
- Fire safe and fire tested as per API 6FA/607.
- Fugitive emission as per ISO15848.
- PED 2014/68/UE.
- Available as per API 6A:
   Product specification levels PSL 1, 2, 3, 3G, and 4.

  Performance requirement levels PR1, PR2.
  Design validation as per PR2F.

