GATE VALVE
JEC Gate Valves are Outside Screw, Rising Stem, Bolted Bonnet Construction, Threads are away from the line fluid and easy to lubricate.

### Gate Valve
- **OS & Y Type**, Rising Stem, Bolted Bonnet
- **Design Standard:** API 600
- **Size Range:** 1” to 12”
- **Pressure Rating:** 125#/ 150#/ 300#
- **End Connection:** Flanged End

### Forged Steel Gate Valve
- **OS & Y Type**, Rising Stem, Bolted Bonnet
- **Design Standard:** API 602
- **Pressure Rating:** 800#/ 1500#
- **End Connection:** Screwed / Socket Weld / Butt Weld End

### MATERIAL OF CONSTRUCTION

<table>
<thead>
<tr>
<th>Material</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cast Iron</td>
<td>IS 210 Gr FG 200</td>
</tr>
<tr>
<td>Cast Carbon Steel</td>
<td>ASTM A 216 Gr WCB</td>
</tr>
<tr>
<td>Cast Stainless Steel</td>
<td>ASTM A 351 Gr CF 8/CF 8M</td>
</tr>
<tr>
<td>Forged Carbon Steel</td>
<td>ASTM A 105</td>
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<tr>
<td>Forged Stainless Steel</td>
<td>ASTM A 182 Gr F304 / F316</td>
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<tr>
<td>End Connection</td>
<td>Screwed AS PER BSP/BSPT/NPT</td>
</tr>
<tr>
<td>Socketweld</td>
<td>AS PER ANSI B 16.11</td>
</tr>
<tr>
<td>Flanged</td>
<td>AS PER ANSI B 16.5</td>
</tr>
<tr>
<td>Pressure Rating</td>
<td>ASA 125#, 150#, 300#, 600#, 800#</td>
</tr>
<tr>
<td>Engineering Option</td>
<td>Gear Operated, Electrical Actuated,</td>
</tr>
<tr>
<td>Size Range</td>
<td>15 mm to 300 mm</td>
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</tbody>
</table>
APPLICATIONS
- Oil
- Gas
- Air Slurries
- Heavy liquids
- Steam
- Noncondensing gases
- Corrosive liquids

BEST SUITED FOR
- Frequent on-off service
- Processes where “instantly” large flow is needed

ADVANTAGES
- High Capacity
- Tight Shutoff
- Low Cost
- Little resistance to flow

RECOMMENDED USES
- Fully open/closed, non-throttling
- Infrequent operation
- Minimal fluid trapping in line

LIMITATIONS
- Cannot be used for pressure control
- Cavitate at low pressure drops
- Cannot be used for throttling

SALIENT FEATURES

- **WEDGE**
  Flexible wedge for improved seating ease of operation, especially in high-temperature service, wedges are accurately guided through the entire stroke.

- **BOBY BONNET CONNECTION**
  The body & bonnet between casing 150 to 600 bolted bonnet for 900 and above pressure seal design.

- **GASKET**
  Stainless steel flexible graphite spiral wound gasket is used for 150 to 600 class, ring joint gasket is also optional for class 900 valves, for class 900 and above pressurized seal design is used.

- **PACKING SEAL**
  Die-moulded pure graphite rings with top and bottom ring of braided graphite with inconel wire reinforcement.

- **STEM NUT**
  Usually made of ASTM A439 D2, for large size of valves rolling bearing is fitted at the two sides of the stem nut in order to minimize the open and close torque of valve.

- **HANDWHEEL**
  Handwheel or Gear box is usually used for gate valve actuation. Chain wheel, pneumatic cylinder and electrical actuator can also be used for the valve actuation if being requested by customer.

- **BACK SEAT**
  All our gate valve have back seat design, carbon steel valves is fitted with removable back seat for stainless steel integral machined with bonnet.

- **SEAT FACES**
  Seat faces lapped for smooth finish and superior sealing. Optional renewable threaded seat or welded seats are as per customer specification.

- **STEM**
  Stems are non-rotating with surface finish to maximize packing seal for low fugitive emissions.

SPECIAL OPTIONS
- Extended Bonnet design for low temperature and cryogenic services.
- Flexible / Solid Wedge / Double Disc Type
- Gland Seal Design (Water Seal) With Lantern Ring
- Bolted Bonnet / Pressure Seal Bonnet
- Gear / Pneumatic Cylinder / Hydraulic Cylinder / Electrical Actuator Operated
- Locking Arrangement
- With NACE MR 0175
- Tailor Made Valve

DESIGN & TESTING INTERNATIONAL STANDARD

<table>
<thead>
<tr>
<th>Valve Design</th>
<th>API 600 / API 602 / API 603 / IS 780 / BS 14846</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure Testing</td>
<td>API 598</td>
</tr>
<tr>
<td>Face To Face</td>
<td>ANSI B 16.10</td>
</tr>
<tr>
<td>Flange Drilling</td>
<td>ANSI B 16.5 / BS 10 Table / DIN / IS 6392</td>
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<tr>
<td>Butt Weld End</td>
<td>ANSI B 16.25</td>
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<tr>
<td>Socket Weld End</td>
<td>ANSI B 16.11</td>
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<tr>
<td>Screwed End</td>
<td>ANSI B 1.20.1(BSP/NPT)</td>
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