

GROVE Fabricated API 6D Gate Valve

Enhanced technical reliability for pipeline transmission and storage applications

APPLICATIONS

- Oil and gas transmission and storage
 - Pipeline main valves
 - Manifold valves
 - Tank and station valves
 - Pig launchers and receivers
 - Storage tanks
 - Block and bleed valves
 - Meter bypass valves
 - Hot tap valves

BENEFITS

- Reduced product contamination due to low internal volume
- Improved operational certainty through enhanced sealing integrity
- Time and cost savings through inline reparability

FEATURES

- API Spec. 6D monogram
- API 6D double block-and-bleed design
- Fire-test certification to ISO 10497 and API Spec. 6FA
- Minimal fabricated body cavity volume
- Highly reliable fugitive-emissions-tested stem packing
- Fabricated body construction with nondestructively examined weld seams
- Through-conduit, self-cleaning floating slab gate
- Stem backseat
- Primary soft and secondary metal-to-metal seat seal
- Floating seat that is always in contact with the gate
- Built-in sealant injection system for emergency sealing
- Stem protector and gate position indicator
- Top-entry body for inline maintenance
- Range of optional features
 - Reverse-acting gate
 - Stem and yoke tube extensions
 - Actuated handwheel operators, bevel-gear operators, or bare stem

Market and industry demands require enhanced operational safety and reliability with reduced total cost of ownership. Operators deploy fabricated gate valves in pipelines because their lower internal body volume reduces product contamination.

The fabricated API 6D gate valve in the GROVE* valve portfolio includes the option of nondestructively examined pressure-containing welds along with field-proven and reliable SLS* spring-loaded lip seal, stem backseat, seat injection, and orientation flexibility.

Enhanced fabricated body construction

The fabricated gate valve design has an enhanced body construction in which all pressure-containing welds are capable of volumetric and surface examination per American Society of Mechanical Engineers (ASME) codes.

Single SLS spring-loaded lip seal

The single SLS seal system optimizes performance while reducing maintenance requirements. The seal is hydrocarbon fugitive-emissions tested and fire tested. The self-adjusting SLS seal requires no plastic packing to energize.

Stem backseat

The API 6D-compliant stem backseat serves as a secondary stem seal and retention device to prevent stem ejection. A metal-to-metal seal is created when the stem is in the up position, isolating the stem seal from line pressure.

Seat injection

Seats can be lubricated to reduce operating torques, effect a seal in an emergency situation, and promote long life.



The fabricated API 6D gate valve in the GROVE valve portfolio helps to minimize product contamination in critical pipeline transmission and storage applications.

GROVE Fabricated API 6D Gate Valve

Industry Specification Compliance

Valve assembly	■ API 6D ■ CSA Z245.15[†]
End flanges	■ ASME Standards B16.5 and B16.47[‡]
Weld ends	■ ASME B16.25, B31.3, B31.4, and B31.8
Fire testing	■ ISO 10497 and API Spec. 6FA certification
Sour service	■ NACE MR0175/ISO 15156
Piping codes	■ ASME B31.3 ■ ASME B31.8
Quality system	■ ISO 9001 ■ API Q1

Regulatory Compliance

U.S.	■ Code of Federal Regulations • Liquid pipelines—CFR Title 49, Part 195[§] • Gas pipelines—CFR Title 49, Part 192^{††}
Canada	Canadian Registration Number (CRN) [†]

[†]Available upon request.

[‡]B16.5 for sizes 2 through 20 in and 24 in. B16.47 for sizes 26 in and larger.

[§]Requires testing only to API 6D, which is standard.

^{††}Requires manufacturing in accordance with API 6D but not necessarily monogramming.

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