

# CAST STEEL GATE, GLOBE AND CHECK VALVES

NEWCO® cast steel gate, globe and check valves exceed all industry design requirements. These valves range from 2" to 54" (50 mm to 1350 mm) in pressure classes 150 to 1500.



## **GATES**

NEWCO cast steel gate valves are ideal for bi-directional flow and tight shutoff. Due to the flow characteristics of the wedge-to-seat design, gate valves should be operated in the full-open or full-closed position. Concentrated flow across the seats of a partially opened gate valve risks possible seat damage, therefore throttling is not recommended. Gate valves are utilized in applications where minimum pressure drop is desired.

Sizes: 2" to 54" (50 mm to 1350 mm) Ends: RF, RTJ, BW Classes: 150 to 1500 Style: Flex Wedge

Design: API 600 Materials: WCB, LCC, Alloy Grades



### **GLOBES**

NEWCO cast steel globe valves are ideal for unidirectional, controlled flow. The flow characteristics of a globe valve are repeatable, consistent and easy to control at various open positions, which makes the design ideal for general flow regulation.

In addition, we supply angle globe valves 150# & 300#. Also available in the stop check design

Sizes: 2" to 24" (50 mm to 600 mm) Ends: RF, RTJ, BW Classes: 150 to 1500 Style: Plug Type Disc

Design: API 623 Materials: WCB, LCC, Alloy Grades



# **CHECKS**

NEWCO cast steel check valves yield minimal restriction to low-velocity environments and are ideal for preventing backflow in unidirectional flow applications in horizontal or upward (vertical) flow. The tilting disc design offers closing that reduces the possibility of slamming.

Sizes: 2" to 36" (50 mm to 900 mm) Ends: RF, RTJ, BW

Classes: 150 to 1500

Design: API 594

Style: Swing and Tilting Disc
Materials: WCB, LCC, Alloy Grade

# FORGED STEEL GATE, GLOBE AND CHECK VALVES

NEWCO forged steel valves are ideal for standard and critical industry applications. While Newco forged steel is produced in bolted and welded bonnets, the welded bonnet joint eliminates the body/bonnet flanges, reducing weight and simplifying the application of exterior insulation. The welded bonnet ensures containment of the high-pressure applications experienced within the industry. This, in concert with the forged steel body, provides the highest integrity sealing available.



## **GATES**

NEWCO forged steel bolted and welded bonnet gate valves are ideal for bi-directional flow and tight shutoff. Due to the flow characteristics of the wedge-to-seat design, gate valves should be operated in the full-open or full-closed position. Gate valves are utilized in applications where minimum pressure drop is desired.

**Sizes:** 1/4" to 2" (5 mm to 50 mm) Ends: FLGD, THRD, SW, BW Classes: 150 to 4500 Materials: A105, LF2, Alloy Grades

Design: API 602



#### **GLOBES**

NEWCO forged steel bolted and welded bonnet globe valves are ideal for unidirectional, controlled flow. The flow characteristics of a globe valve are repeatable, consistent and easy to control at various open positions, which makes the design ideal for general flow regulation.

The Y-pattern globe valves offer the same flow capabilities as standard globes. The smooth Y-pattern allows for less turbulence and lower pressure drops.

**Sizes:** 1/4" to 2" (5 mm to 50 mm) Ends: FLGD, THRD, SW, BW **Classes**: 150 to 4500 Style: T-Pattern and Y-Pattern Design: API 602 Materials: A105, LF2, Alloy Grades



#### **CHECKS**

NEWCO forged steel bolted and welded bonnet check valves yield minimal restrictions to low-velocity environments and are ideal for preventing backflow in unidirectional flow applications in horizontal or upward (vertical) flow. Piston check valves with a spring allow for both horizontal and vertical installation.

Sizes: 1/4" to 2" (5 mm to 50 mm) Ends: FLGD, THRD, SW, BW **Classes**: 150 to 4500 Style: Swing and Piston

Design: API 602 Materials: A105, LF2, Alloy Grades

## PRESSURE SEALS

POWELL pressure seal valves are ideal for standard and critical power industry applications. The pressure seal bonnet joint eliminates the body/bonnet flanges, reducing weight and simplifying the application of exterior insulation. Contrary to bolted bonnet valves, internal pressure applied to a pressure seal valve forces the sealing elements into tighter contact – the higher the internal pressure, the tighter the seal. POWELL pressure seal valves comply with the design and test requirements of ASME B16.34, MSS SP-144 and the installation dimensions of ANSI B16.10.



# GATES, GLOBES, TILT DISC AND SWING CHECKS

Powell was the first to create this design and we continue to lead the Pressure Seal valve industry

- Valves are full port design per ASME B16.34 Table A-1
- Standard trim is stellite faced body seat and disc seat surfaces, and 13% chrome stem (API trim 5). Other trims available on request.
- Stem surface finish to maximize packing seal for low fugitive emissions
- Yoke arms designed for ease of gear, motor or cylinder actuator adaptation.
- Gland is two piece gland / gland flange design for optimal alignment and uniform packing compression.
- Each valves has a unique certification number that is traceable to the valve certification sheet which includes MTR data, pressure test report, inspection report and certificate of conformance.

**Classes:** 600 to 2500 ■ Gate: 2" to 24" (50 mm to 600 mm) Design: ASME B16.34 ■ Globe: 2" to 12" (50 mm to 300 mm) Ends: RF, RTJ, BW SW and Tilt Checks: 2" to 18" (50 mm to 460 mm) Materials: All Grades