RESILIENT WEDGE GATE VALVES

4” THROUGH 20”
MODEL 2638

The original, and the definitive standard.

AWWA C515 250 PSI • UL/FM Approved 200 PSI • NSF 61 Certified • Full Water Way • Fusion Bond Epoxy Coated • 10 Year Limited Warranty

Clow Valve is a division of McWane, Inc.

www.clowvalve.com
In 1975, Clow recognized the increased requirements and escalating maintenance cost of water systems in the United States. Clow responded by introducing the first R/W (Resilient Wedge) Valve in America. This introduction revolutionized the valve market in the U.S.

Clow is the first to introduce, and still leads in the design and technical development, of the bubble-tight resilient seating valve.

The Clow Resilient Wedge Valve, with its unique features and benefits, is the first to be manufactured with both AWWA and UL/FM approval for all water system requirements.

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### Table of Values

| VALVE SIZE | A   | B   | C   | D   | E   | F   | G   | H   | J   | K   | L   | M   | N   | P   | Q   | R   | S   | U   | V   | NO GEAR | GEARED | W   | X   | Y   |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 4”         | 9   | 4-1/2 | 6-3/4 | 14-3/4 | 4-5/8 | 6-3/4 | –   | –   | –   | –   | 4-1/2 | 22-3/4 | 18-1/4 | 10 | 6-3/4 | 9-1/4 | 13-1/2 | –   | –   | –   | –   | 13-1/2 | –   | –   | –   | –   |
| 6”         | 10-1/2 | 5-1/2 | 7-7/8 | 19 | 5-1/4 | 8   | –   | –   | –   | –   | 5   | 30-1/8 | 23-3/4 | 12 | 8   | 10-1/2 | 19-1/2 | –   | –   | –   | –   | –   | –   | –   | –   |
| 8”         | 11-1/2 | 8-1/8 | 8-1/2 | 22-1/2 | 5-5/8 | 9-3/4 | –   | –   | –   | –   | 5-1/2 | 37-3/4 | 29-1/4 | 14 | 10-3/4 | 13-1/4 | 25-1/2 | –   | –   | –   | –   | –   | –   |
| 10”        | 13   | 10-1/2 | 10 | 26-1/2 | 7   | 11-3/4 | –   | –   | –   | –   | 7   | 45-3/4 | 35-3/8 | 18 | 11-3/4 | 14-7/8 | 31-1/2 | –   | –   | –   | –   | –   | –   | –   |
| 12”        | 14   | 10-3/4 | 11-1/4 | 30 | 8-1/2 | 12-7/8 | –   | –   | –   | –   | 8-1/2 | 53-1/8 | 40-3/8 | 18 | 12-3/8 | 15   | 37-3/4 | –   | –   | –   | –   | –   | –   | –   |
| 20”        | 18   | 11   | –   | –   | –   | 14-1/2 | 57 | 12 | 51-3/4 | 10-1/8 | –   | –   | 14-1/2 | 18   | –   | 189 | 90-7/8 | 70-1/8 | 74-5/8 |

**NOTE:**

It is recommended that valves be installed with stems vertical when used in raw sewage or sludge applications or in water with excessive sediment. Flanged end connections not recommended for buried service.

www.clowvalve.com
ENGINEERING FEATURES

**THRUST BEARINGS**
Delrin thrust bearings above and below the thrust collar reduce friction and minimize operating torques.

**STAINLESS STEEL HARDWARE**
304 stainless steel nuts and bolts provide long-life corrosion protection.

**COPPER ALLOY STEM**
Long, trouble free life with high strength, non-corrosive copper alloy stem and stem nut.

**100% COATED WEDGE**
100% coated wedge ensures bubble-tight seal every time up to 250 PSI. With twin seal design.

**ELLiptical BOLT HOLES**
Hole design on MJ connection eliminates the need for anti-rotation bolts (4”–12”).

**REPLACEABLE O-RINGS**
Two O-ring seals are replaceable with the valve fully open and subjected to full-rated working pressure.

**NO FLAT GASKETS**
O-ring seals at stuffing box and bonnet to body flanges to ensure the best possible seal.

**MINIMAL FLOW LOSS**
Smooth, unobstructed waterway is free of pockets, cavities, and depressions allowing for minimal flow loss and lower pumping costs. All valves accept full size tapping cutter.

**EASY STORAGE**
Pads on the bottom of all valves keep valve in upright position for easier storage and protection from the elements.

**EPoxy COATING**
Clow corrosion resistant fusion-bonded epoxy coating, conforming to AWWA C550 and NSF 61 Certified, protects both inside and outside of valve.

**VALVE RATING:** All valves are rated at 250 PSI for AWWA service and hydrostatically tested to 500 PSI. Valves through 16” are rated at 200 PSI for UL/FM service.
COMMITTED TO ENVIRONMENTAL RESPONSIBILITY

CLOW VALVE COMPANY IS COMMITTED TO PROTECTING OUR NATURAL RESOURCES THROUGH ENVIRONMENTALLY RESPONSIBLE MANUFACTURING PRACTICES, INCLUDING THE USE OF 80+% RECYCLED CONTENT IN OUR HYDRANTS AND VALVES.

To learn more about our commitment to the environment, call 800-829-2569.

RECOMMENDED SPECIFICATIONS

1. Valves shall conform to the latest revision of AWWA Standard C515 covering resilient seated gate valves for water supply service.

2. The valves shall have a ductile iron body, bonnet, and O-ring plate. The wedge shall be totally encapsulated with rubber.

3. The sealing rubber shall be permanently bonded to the wedge per ASTM D429.

4. Valves shall be supplied with O-ring seals at all pressure retaining joints. No flat gaskets shall be allowed.

5. The valves shall be either non-rising stem or rising stem, opening by turning left or right, and provided with 2” square operating nut or a handwheel with the word “Open” and an arrow to indicate the direction to open.

6. Stems shall be cast copper alloy with integral collars in full compliance with AWWA. All stems shall operate with copper alloy stem nuts independent of wedge and of stem (in NRS valves).

7. Stems shall have two O-rings located above thrust collar and one O-ring below. Stem O-rings shall be replaceable with valve fully opened and subjected to full pressure. The stems on 4” – 20” shall also have two low torque thrust bearings located above and below the stem collar to reduce friction during operation.

8. Waterway shall be smooth, unobstructed and free of all pockets, cavities and depressions in the seat area. Valves 4” and larger shall accept a full size tapping cutter.

9. The body, bonnet and O-ring plate shall be fusion-bond epoxy coated, both interior and exterior on body and bonnet. Epoxy shall be applied in accordance with AWWA C550 and be NSF 61 Certified.

10. Each valve shall have maker’s name, pressure rating, and year in which it was manufactured cast in the body. Prior to shipment from the factory, each valve shall be tested by hydrostatic pressure equal to the requirements of AWWA C515 (and UL/FM where applicable).

11. Valves shall have all component parts cast and assembled in the USA and shall be manufactured by the Clow Valve Company.

ISO 9001
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RECOMMENDED SPECIFICATIONS

1. Valves shall conform to AWWA Standard C515 covering Resilient Seated Gate Valves for Water Supply Service, and be rated for 250 PSIG cold water working pressure.

2. The valves shall have a ductile iron body, bonnet, and stuffing box. The wedge shall be ductile iron and totally encapsulated with rubber.

3. The sealing rubber shall be permanently bonded to the wedge per ASTM D429.

4. Valves shall be supplied with O-ring seals at all pressure retaining joints. No flat gaskets or conventional type packing shall be allowed on NRS valves.

5. The valves shall be non-rising stem, opening by turning clockwise or counter-clockwise, and provided with a 2” square operating nut or a handwheel.

6. Stems for NRS assemblies shall be copper alloy with integral collars in full compliance with AWWA. Stems shall operate with copper alloy stem nuts independent of wedge and stem. NRS stems shall have two O-rings located above thrust collar and two O-rings below. Stem O-rings above the thrust collar shall be replaceable with valve fully opened and subjected to full pressure. The stems shall also have one low-torque thrust bearing located above and one below the stem collar to reduce friction during operation.

7. Valves shall accept a full size tapping cutter.

8. The body, bonnet and stuffing box shall be epoxy coated, both interior and exterior. Epoxy shall be applied in accordance with AWWA C550 and be NSF 61 Certified.

9. Each valve shall have maker’s name, pressure rating, and year in which it was manufactured cast in the body. Prior to shipment from the factory, each valve shall be tested by hydrostatic pressure equal to the requirements of AWWA C515.

10. Valves shall be provided with bevel gears (horizontal) or spur gears (vertical) as indicated.

11. Valves in sizes 30” and larger shall have brass bushings where the stem passes through the bonnet.

12. All external bolting materials shall be stainless steel and have hexagonal heads.

13. All valves shall include CleanTrack™ Technology. CleanTrack™ consists of bronze rollers housed in a bronze scraper on the both sides of the wedge, traveling in a 316 stainless steel track.

14. Valves shall have component parts cast, machined, assembled, and tested in the USA and shall be Clow Valve, Oskaloosa, Iowa.

www.clowvalve.com
Resilient wedge valves and resilient wedge gate valves from Clow bring the latest technology and more than a century of engineering expertise to your water system. They’re designed to meet or exceed AWWA standards and have, for decades, been recognized as the original and definitive standard. Trust your water system to the durability and precision engineering of resilient wedge gate valves from Clow.

**RESILIENT WEDGE GATE VALVE** with CleanTrack™ Technology

In America today, systems are increasing their demand for larger-sized water lines. With these growing demands, Clow has made the commitment to meet, and surpass, previous large resilient seated gate valve requirements with a new concept — CleanTrack™ technology.

Sediment buildup in valves has been a costly proposition since the first water valves were created. In years past, systems with sediment-laden valves faced time consuming and costly valve removal or repair. Advanced large double disc technologies of decades past used various methods to clear the line of debris prior to closing. Clow’s 24”– 54” gate valves have taken the best of the century-old double disc design and integrated it with the best of the latest resilient seated gate valve design and technology, to create valves with CleanTrack™ technology. CleanTrack™ uses a unique roller-scaper system that automatically cleans the track in the valve body when the valve is closing. Less sediment buildup makes for improved performance which means reduced maintenance and lower potential replacement costs.

**AVAILABLE SIZES**

<table>
<thead>
<tr>
<th>VALVE SIZE</th>
<th>24”</th>
<th>30”</th>
<th>36”</th>
<th>42”</th>
<th>48”</th>
<th>54”</th>
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<tbody>
<tr>
<td>B</td>
<td>10-3/8</td>
<td>14-7/8</td>
<td>14-7/8</td>
<td>17</td>
<td>17</td>
<td>17</td>
</tr>
<tr>
<td>C</td>
<td>62-5/8</td>
<td>80</td>
<td>89-11/16</td>
<td>108-1/2</td>
<td>111-1/2</td>
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<tr>
<td>D</td>
<td>12</td>
<td>14</td>
<td>14</td>
<td>16</td>
<td>16</td>
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<tr>
<td>E</td>
<td>75-1/8</td>
<td>75-1/8</td>
<td>89-11/16</td>
<td>108-1/2</td>
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<td>83-1/4</td>
<td>83-1/4</td>
<td>83-1/4</td>
<td>83-1/4</td>
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<tr>
<td>NO. OF TURNS TO FULL OPEN</td>
<td>228</td>
<td>228</td>
<td>228</td>
<td>228</td>
<td>228</td>
<td>228</td>
</tr>
<tr>
<td>GEAR RATIO</td>
<td>3 to 1</td>
<td>3 to 1</td>
<td>3 to 1</td>
<td>3 to 1</td>
<td>3 to 1</td>
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</tbody>
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*NOTE:* It is recommended that valves be installed with stems vertical when used in raw sewage or sludge applications or in water with excessive sediment. Flanged end connections not recommended for buried service.

*NOTE:* 2” bypass valves are available on 30”– 36” gate valves; 4” bypass valves are available on 42”– 54” gate valves.

**ENGINEERING FEATURES**

- **100% COATED WEDGE**
  - 100% coated wedge ensures bubble-tight seal every time up to 250 PSI. With twin seal design.

- **STAINLESS STEEL HARDWARE**
  - Stainless steel nuts and bolts provide long-life corrosion protection.

- **BRONZE STEM**
  - Long, trouble-free life with high strength, non-corrosive bronze stem and stem nut.

- **THRUST BEARINGS**
  - Derlin thrust bearings above and below the thrust collar reduce friction and minimize operating torques.

- **REPLACEABLE O-RINGS**
  - Two O-ring seals are replaceable with the valve fully open and subjected to full-rated working pressure.

- **EPOXY COATING**
  - Corrosion resistant fusion-bonded epoxy coating, conforming to AWWA C550 and NSF 61 Certified, protects both inside and outside of valve.

- **BRONZE SCRAPER**
  - Bronze scraper affixed to resilient wedge wing is designed for long life performance.

- **NO FLAT GASKETS**
  - O-ring seals at stuffing box and bonnet to body flanges ensures the best possible seal. There are no flat gaskets.

- **ACCEPT TAPPING CUTTER**
  - Valves accept full-size tapping cutter (24”– 48”).

- **100% COATED WEDGE**
  - 100% coated wedge ensures bubble-tight seal every time up to 250 PSI. With twin seal design.

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