

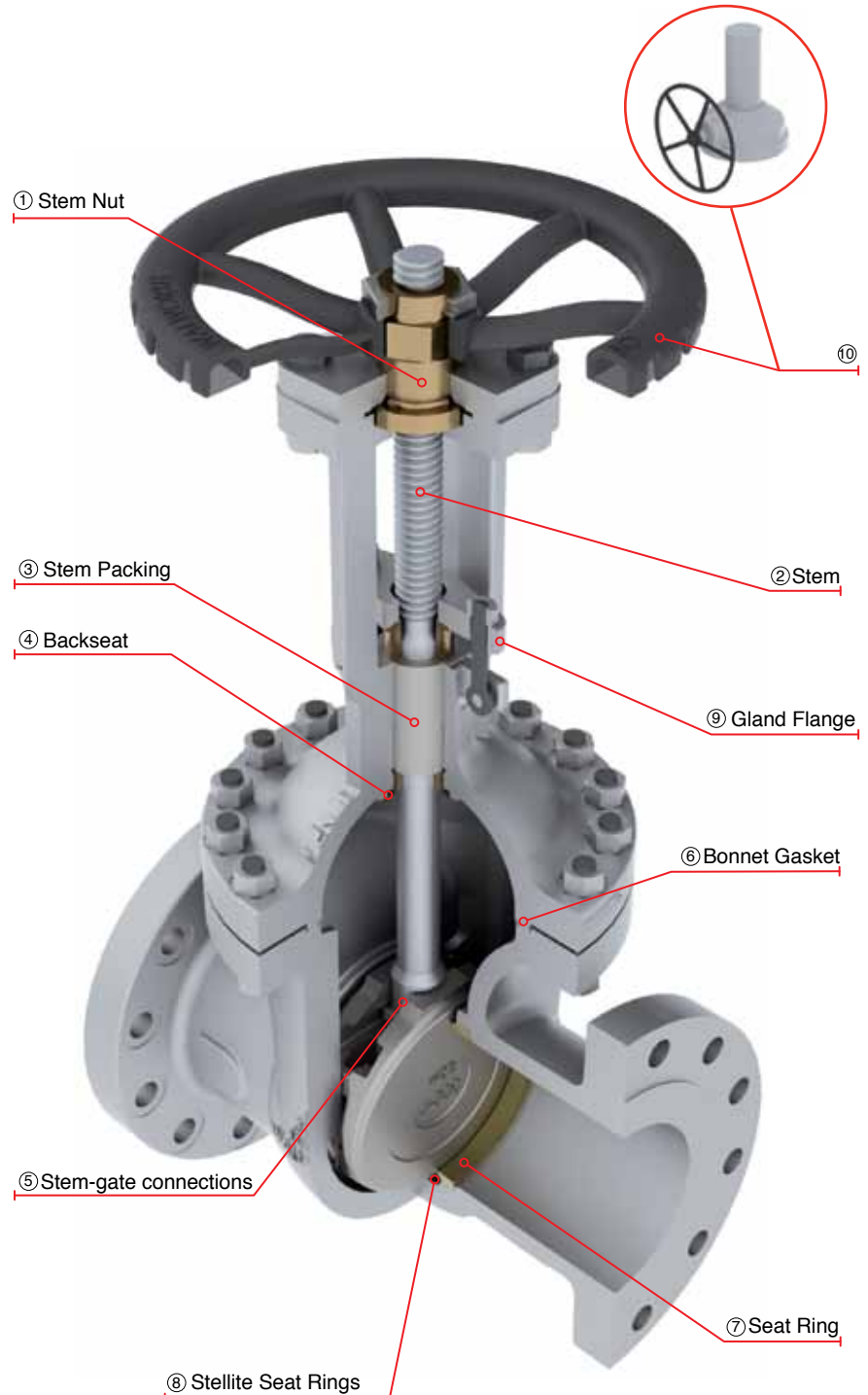
CAST STEEL GATE VALVES CLASS 300

CAST STEEL GATE VALVES HANDWHEEL OR GEAR OPERATED, WITH RISING STEM AND OUT SIDE SCREW AND YOKE (OS&Y)

DESIGN FEATURES

- Gate valves design in accordance with API-600, solid, flexible or parallel slide wedge/Disc.
- Gate valves option in accordance with API-603 only for stainless steel & nickel alloys.
- Flexible wedge as standard
- Solid wedge available upon request
- Gate valves for Cryogenic service with gas column in accordance with BS-6364 upon request.
- Flange dimensions in accordance with ASME B16.5 for valves up to 24" nominal diameter.
- Hand-wheel, impact Hand-wheel, Chain-wheel, Gear operation, Electric, Pneumatic or Hydraulic Actuation as per Customer requirements.
- By-Pass, Lantern rings, grease injectors, special connections, etc.
- Low fugitive emissions control.
- NACE Service either MR-01-75 or MR-01-03.
- Test in accordance with API-598.

- ① Stem Nut, replaceable in line to avoid shut down of pipe line process.
- ② Rising stem with precision ACME single or double thread for quick operation. Surface finish suitable to seal properly to obtain low fugitive emissions.
- ③ Stem Packing is designed for optimum control of fugitive emissions leakage to the atmosphere. The ultra-low emission leakage rate is assured by the polished finish stem sealing area, the reduced diametrical clearances and the stem straightness control special designed packing. Live load packing arrangement available upon request.
- ④ Backseat, either threaded or welded designed to relieve back pressure on the stem packing when fully seated. Replacing stem packing under pressure is not recommended. Hard faced backseat available for severe service as per customer requirements.
- ⑤ Stem-Gate connection designed so that under severe applied loads (stuck gate), the stem will fail outside of the stuffing box pressure boundary.
- ⑥ Body to Bonnet joint is designed to apply a uniform load to the gasket to assure a leak proof seal.
- ⑦ Seat rings are seal welded to provide a bubble tight joint.
- ⑧ Stellite Seat Rings provide increased resistance to wear, abrasion and erosion of the sealing surfaces.
- ⑨ Two pieces arrangement gland flange and stem packing bushing for self-alignment to avoid stem damage.
- ⑩ Gate valves supplied handwheel or gear operated.



CAST STEEL GATE VALVES, CLASS 300 (HANDWHEEL OPERATED)

Design Features

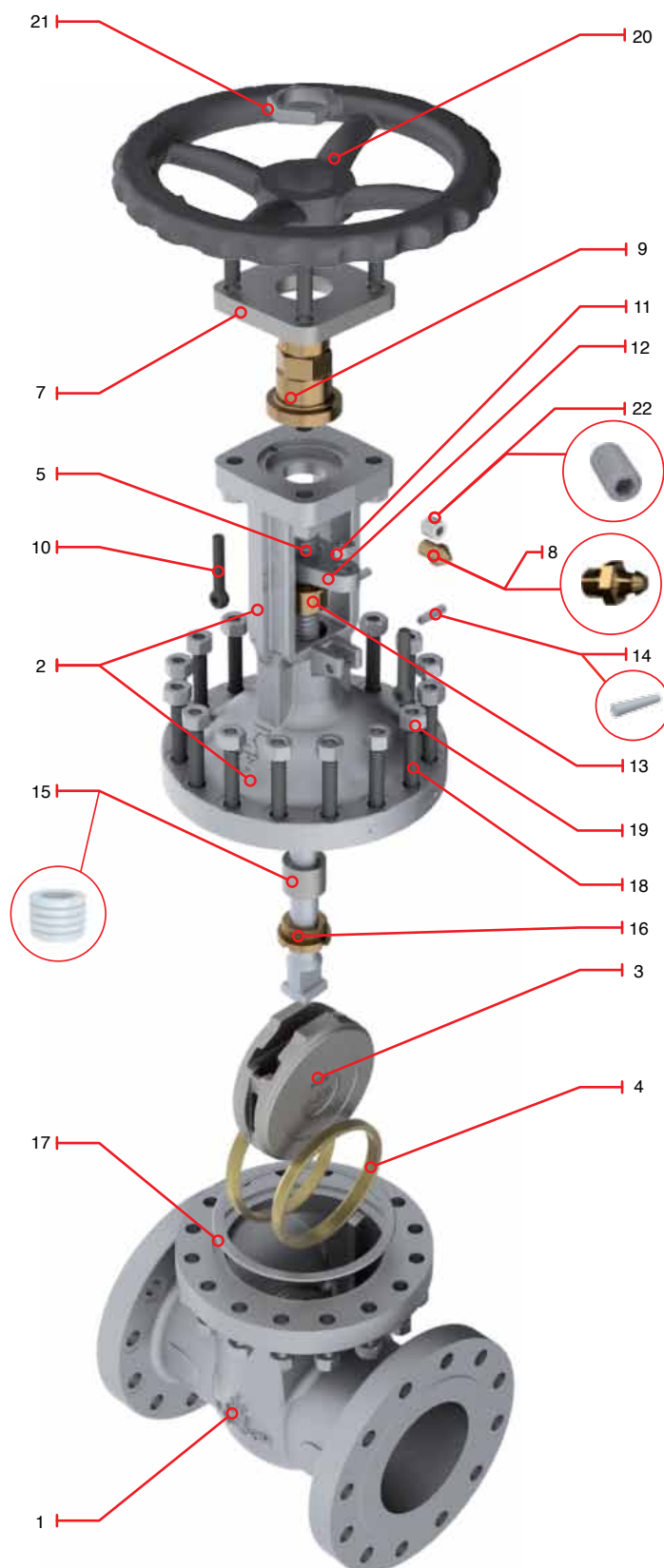
- Design in accordance with API-600
- Outside Screw & Yoke (OS & Y)
- Flexible wedge as standard
- Solid wedge available upon request
- From 2" to 24" Handwheel operated as Standard.
- Flange Dimensions as per ASME B16.5
- End to end dimensions as per ASME B16.10
- WE dimensions as per ASME B16.25
- Flange dimensions larger than 24" according to ASME B16.47 Series A as standard
- Flange dimensions as per ASME B16.47 Series B available upon request

Catalog Figure No.	ID Plant Figure No.	Type of Ends
5206RF	5206F	Flanged Raised Face
5206RTJ	5206RJ	Flanged Ring Type Joint
5206WE	5206WE	Buttweld

Regular Bill of Materials

No.	Description	STANDARD MATERIAL
1	Body	ASTM A 216 GR WCB
2	Yoke/Bonnet	ASTM A 216 GR WCB
3	Wedge	ASTM A 216 GR WCB + 13% Cr.
4	Seat Ring	ASTM A 515 GR 70
5	Stem	ASTM A 276 Type 410
*6	Stem Nut Retainer	ASTM A 108 GR 1020
7	Stem Retainer	Alloy Steel
8	Grease Fitting	Commercial Steel
9	Stem Nut	UNS C95600 or Ni-Resist
10	Eyebolt	Alloy Steel
11	Eyebolt Nut	ASTM A 307
12	Gland Flange	ASTM A 515 GR 70
13	Packing Bushing	ASTM A 108 GR 1020
14	Eyebolt Pin	Alloy Steel
15	Stem Packing	Graphite
16	Bonnet Bushing	ASTM A 276 Type 410
17	Bonnet Gasket	Spiral Stainless 304/Graphite
18	Bonnet Stud	ASTM A 193 GR B7
19	Bonnet Stud Nut	ASTM A 194 GR 2H
20	Handwheel	ASTM A 197
21	Handwheel Nut	ASTM A 108 GR 1020
22	Set Screw	Alloy Steel
*23	Identification Plate	Stainless Steel

*Not Shown



CAST STEEL GATE VALVES, CLASS 300

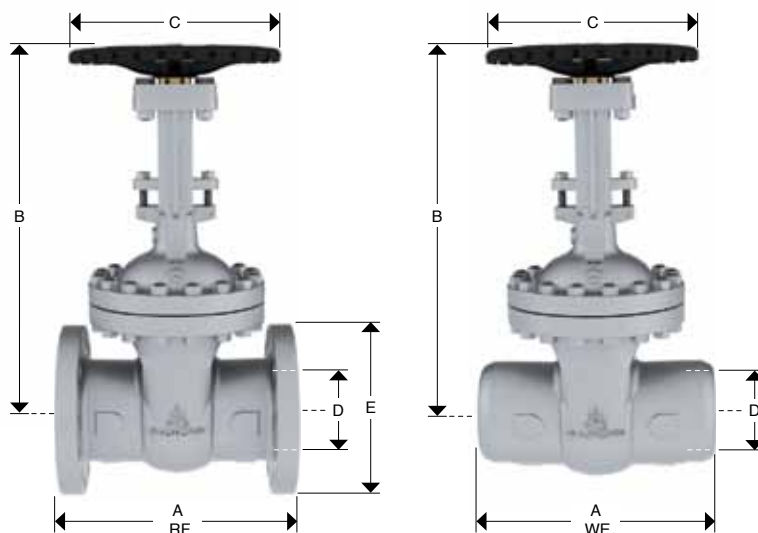
(HANDWHEEL OPERATED)



Design Features

- Design in accordance with API-600
- Flexible wedge as standard
- Solid wedge available upon request
- From 2" to 24" Handwheel operated as Standard.
- Flange dimensions as per ASME B16.5
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- WE dimensions as per ASME B16.25

Catalog Figure No.	ID Plant Figure No.	Type of Ends
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Dimensions and Weights

D Nominal Diameter	mm	51	64	76	102	127	152	203	254	305	356	406	457	508	610
	in	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24
A	mm	216	241	283	305	381	403	419	457	502	762	838	914	991	1143
(RF and WE)	in	8 1/2	9 1/2	11 1/8	12	15	15 7/8	16 1/2	18	19 3/4	30	33	36	39	45
B	mm	473	579	528	637	695	935	1083	1314	1594	1730	1924	2105	2334	2810
	in	18 5/8	22 13/16	20 25/32	25 1/16	27 3/8	36 13/16	42 5/8	51 3/4	62 3/4	68 1/8	75 3/4	82 7/8	91 7/8	110 5/8
C	mm	203	203	254	254	300	356	406	508	508	660	711	864	864	864
	in	8	8	10	10	11 13/16	14	16	20	20	26	28	34	34	34
E	mm	165	191	210	254	279	318	381	445	521	584	648	711	775	914
	in	6 1/2	7 1/2	8 1/4	10	11	12 1/2	15	17 1/2	20 1/2	23	25 1/2	28	30 1/2	36
Weight	Kg	25	39	43	70	92	137	222	322	470	760	1202	1633	2064	2268
5206RF	lb	55	86	95	154	202	301	488	708	1034	1672	2644	3593	4541	4990
Weight	Kg	20	38	33	51	78	129	194.6	299.9	407.3	669	1043	1383	1864	1950
5206WE	lb	44	83.6	72.6	112.2	172.04	283.8	428.12	659.78	896.06	1471.36	2294.6	3042.6	4100.8	4290