

# STAINLESS STEEL GATE VALVES

## DESIGN FEATURE

### STEM NUT

The standard material of the Stem Nut is aluminum bronze (B 283). When the media is not suitable for aluminum alloy, the material is A 439-D2 instead.

### BOLTING

The body-bonnet bolts are manufactured in accordance with API Standard. The boltings also strictly conform with ASME B 1.1 CLASS 2A&2B as well as ASME B 18.2.2.

### BONNET

The bonnet is integrated with back seat design and is the same material and wall thickness as the body. The body-bonnet flange drilling is spot-faced to exactly meet stud bolt nuts. The stem packing dimensions of the stuffing box are in accordance with API Standard.

### STEM

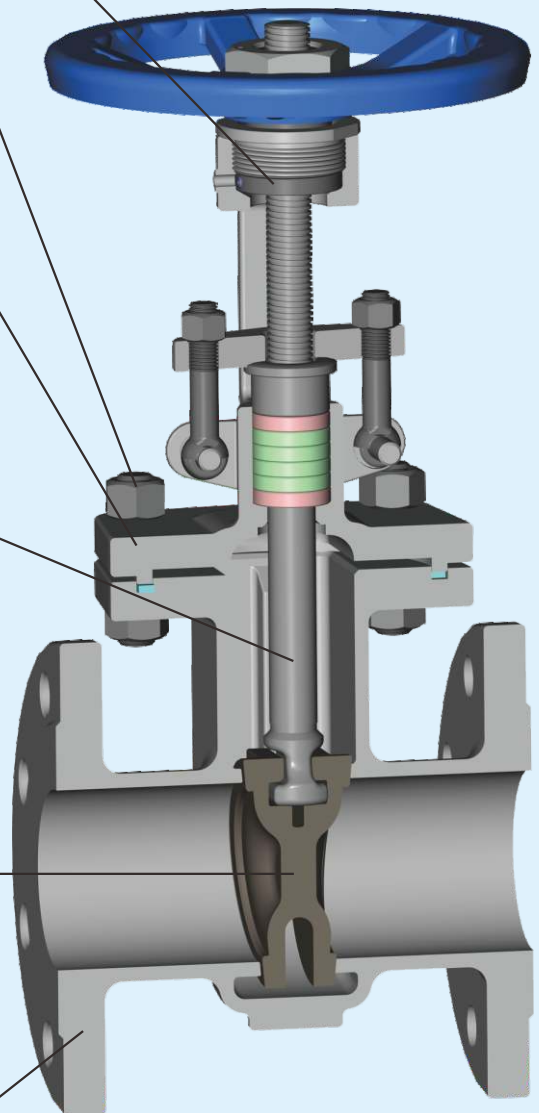
The machined forged stem comes with a T-shape head, which connects the slot of the wedge. The spherically shaped contacting surface of the head gives greater strength and durability. The stem dimensions are in accordance with API Standard. The heat treated stem achieves adequate mechanical properties as well as excellent surface hardness. Further, opening/shutting friction is minimized by accurate machining and lapping.

### FLEXIBLE WEDGE

One-piece flexible wedge design. Slots are machined on both sides of the wedge to allow it to travel correctly in the integrally cast body guides. The wedge seating surfaces have been accurately machined, ground and lapped to a mirror finish to prevent leakage and eliminate galling.

### BODY

The body is designed to insure a wall thickness which is greater at any point than the minimum specified by API Standard. The standard body-bonnet joint is male-female and the flange is round for all valves. Accurate machining insures perfect coaxiality of the valve ends and seat ring in addition to exact perpendicularity of the body-bonnet flanges. Inlet and outlet port dimensions conform with ASME B 16.5 and B16.34.



# STAINLESS STEEL GATE VALVES



## DESIGN FEATURES:

- Outside Screw and Yoke
- Bolted Bonnet
- Flexible Wedge, Fully Guided
- Integrated Seats and Back Seat
- Rising Stem and Non-Rising Handwheel

## APPLICABLE STANDARDS:

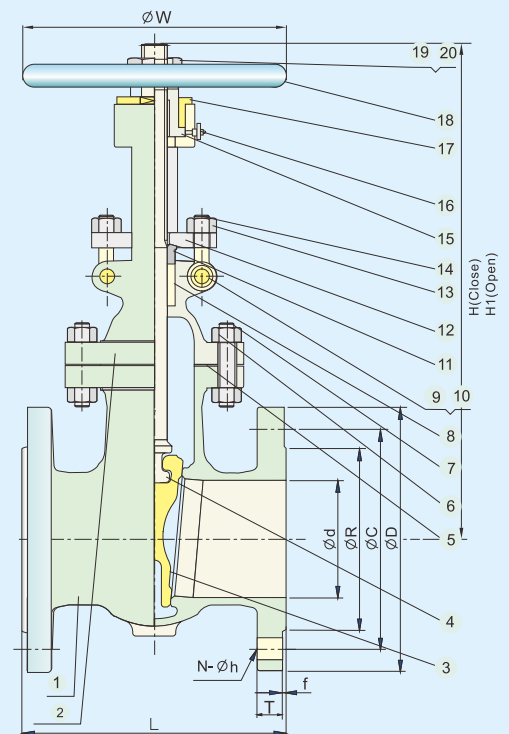
- Design: API603, ASME B 16.34
- Face to Face: ASME B 16.10
- Flanged Ends: ASME B 16.5
- Inspection and Test: API 598, API 6D

## TEST PRESSURE TO API 598

PSIG

CLASS	SHELL TEST(WATER)	SEATS TEST(WATER)	SEATS TEST(AIR)
150#	425(30Bar)	304(22Bar)	80(6Bar)

NO.	NAME OF PART	MATERIALS	
1	Body	A351-CF8	A351-CF8M
2	Bonnet	A351-CF8	A351-CF8M
3	Wedge	A351-CF8	A351-CF8M
4	Stem	A182-F304	A182-F316
5	Bonnet Gasket	PTFE /304(316)SPIRAL WOUND+GRAFOIL FILLER	
6	Bonnet Bolt Nut	A194-8	
7	Bonnet Bolt	A193-B8	
8	Gland Packing	PTFE YARN /GRAFOIL	
9	Eye Bolt Pin	A276-304	
10	Split Pin	A276-304	
11	Gland	A351-CF8	A351-CF8M
12	Gland Flange	A351-CF8	
13	Eye Bolt Nut	A194-8	
14	Eye Bolt	A193-B8	
15	Stem Nut	B283/A439-D2	
16	Grease Nipple	304	
17	Retainer Nut	A276-410	
18	Handwheel	A536 60-40-18	
19	Wheel Nut	Steel	
20	Set Screw	304	



## CLASS 150# DIMENSIONAL TABLE

## KG-150

SIZE	d	L	D	C	R	T	f	N - h	H(close)	H1(open)	W
1/2"	15	108.0	90	60.3	35.0	8.0	2	4 - 16.0	215	235	130
3/4"	20	117.0	100	69.9	43.0	8.9	2	4 - 16.0	220	250	130
1"	25	127.0	110	79.4	51.0	9.6	2	4 - 16.0	220	252	130
1-1/4"	32	140.0	115	88.9	63.5	11.2	2	4 - 16.0	232	273	130
1-1/2"	40	165.0	125	98.4	73.0	12.7	2	4 - 16.0	262	308	178
2"	50	178.0	150	120.7	92.0	14.3	2	4 - 19.0	284	344	178
2-1/2"	64	190.5	180	139.7	105.0	15.9	2	4 - 19.0	317	390	178
3"	76	203.0	190	152.4	127.0	17.5	2	4 - 19.0	357	442	203
4"	100	229.0	230	190.5	157.2	22.3	2	8 - 19.0	416	527	229
5"	125	254.0	255	215.9	186.0	22.3	2	8 - 22.4	488	624	254
6"	150	267.0	280	241.3	216.0	23.9	2	8 - 22.4	553	714	254
8"	200	292.0	345	298.5	270.0	27.0	2	8 - 22.4	725	932	356