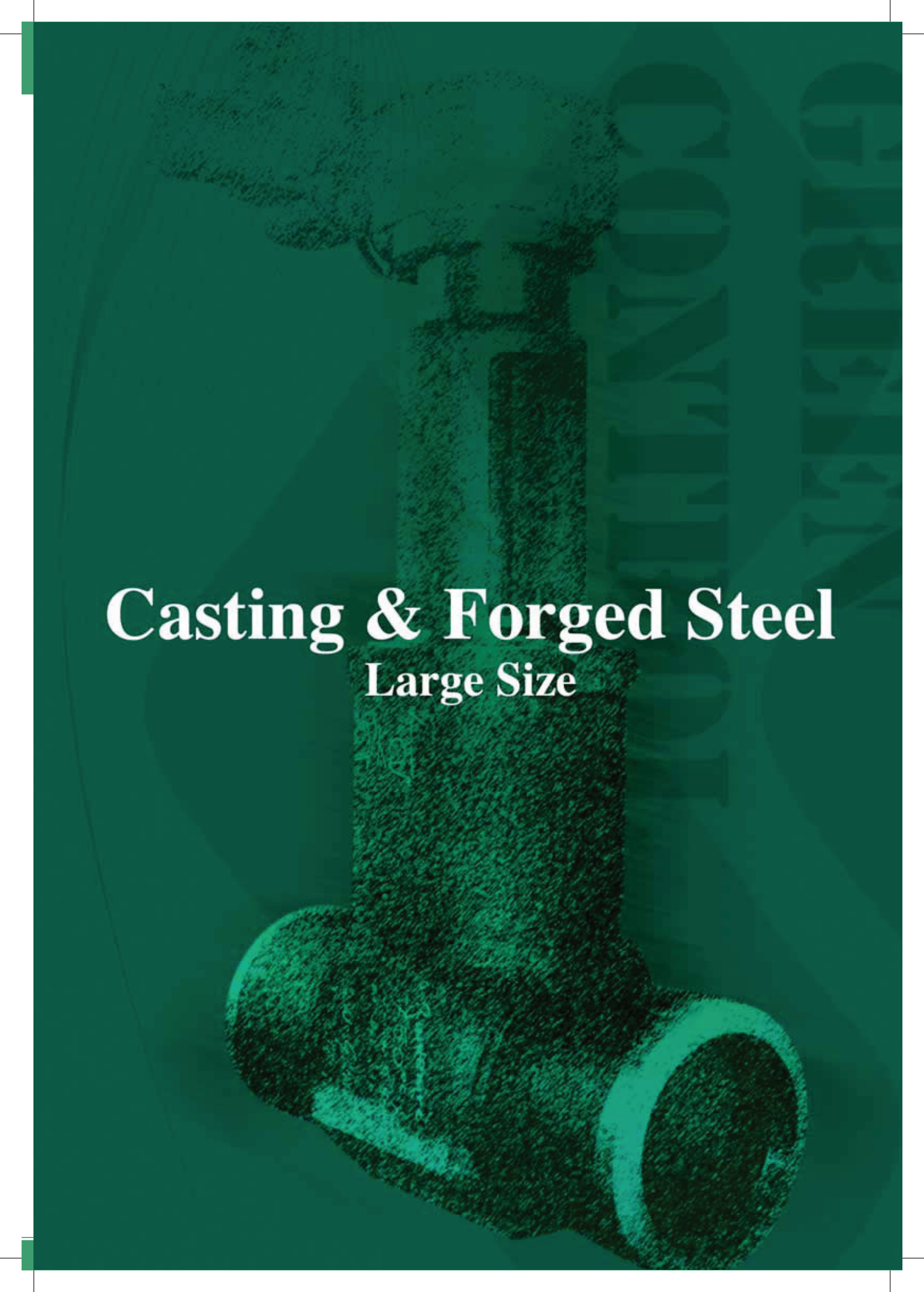
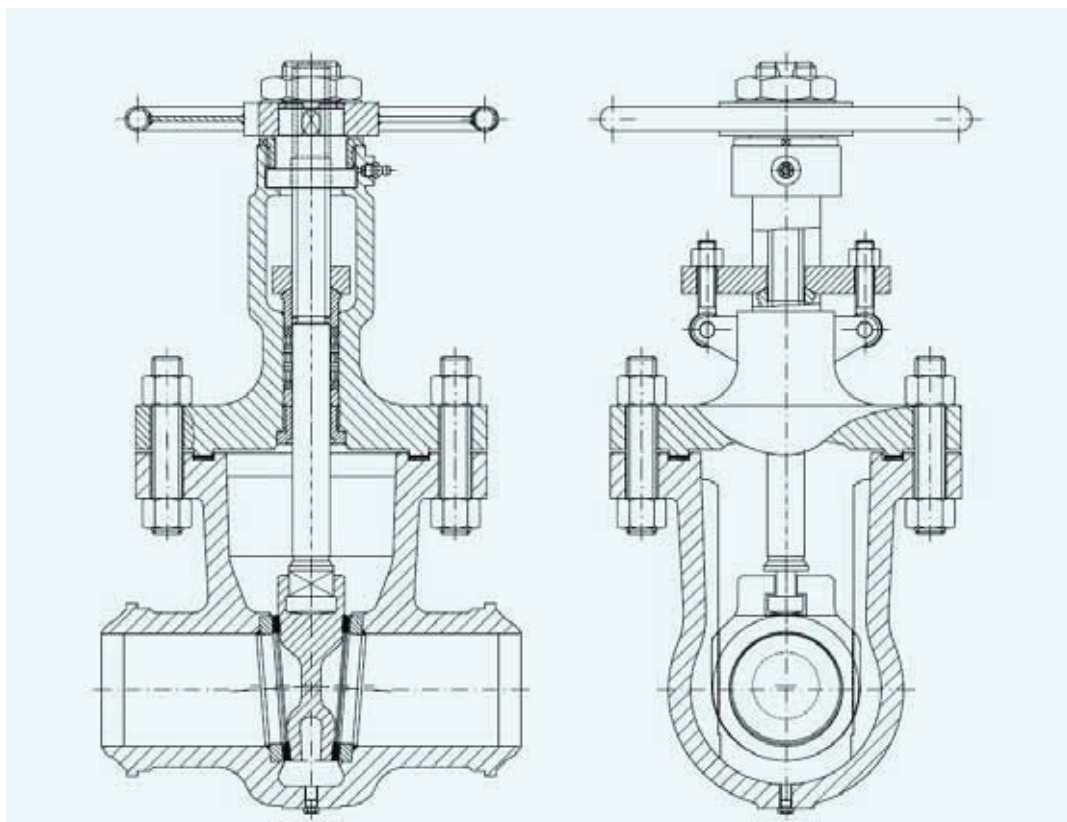




Casting & Forged Steel

Large Size

Bolted Bonnet Gate Valves



Body-Bonnet

The cast steel body is designed with a wall thickness according to ASME B16.34 and it has the same wall thickness of the bonnet. The body bonnet flange drilling is spot-faced to exactly meet stud-bolt nuts. The bonnet back seat bushing ensures packing replacement also when the valve is fully opened. The stem packing dimensions of the stuffing box are in compliance with API specifications.

Seat ring

Bottom seated type seat rings can be welded or screwed into the body. The seating surface is finished by lapping. They are forgings that have been treated to guarantee the best mechanical properties and required hardness. Hardness according to API specifications.

Flexible wedge

The standard disc is a flexible wedge. Slots are machined on both sides of the wedge to allow a correct travel in the body guides. Flexible wedge for the compensation of any possible distortion of the seat and deformation of the piping.

Stem

The machined forged stem has a T-shaped head as it is connected to the slot of the wedge. The spherical shape of the contact surface guarantees a greater strength: The stem dimensions are in compliance with API Std 600 Specifications. The heat treated stem guarantees excellent hardness as well as adequate mechanical properties.

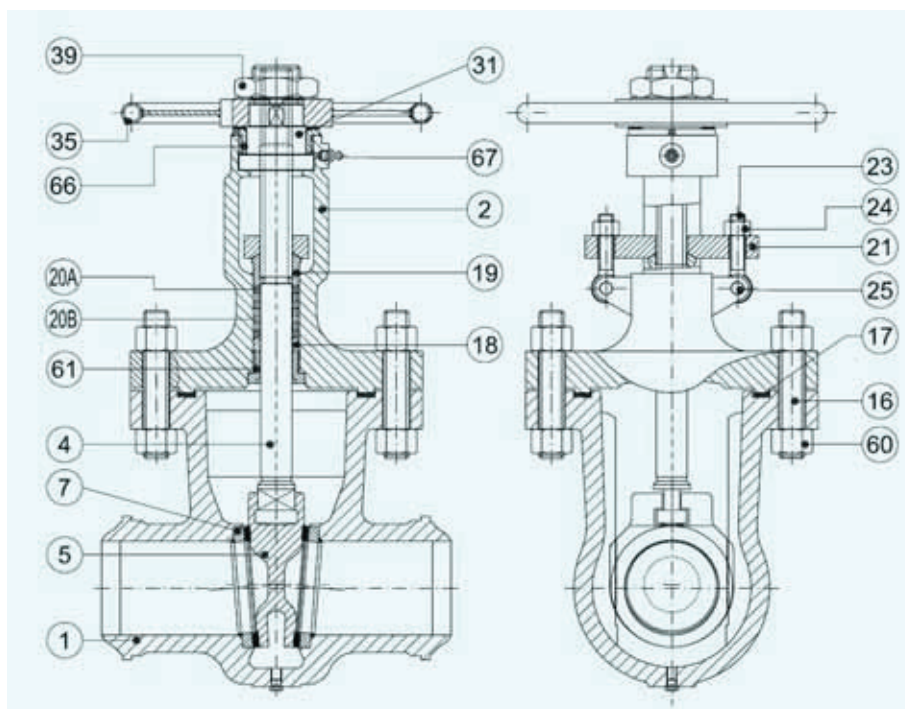
Bolting

Body bonnet bolting are manufactured in compliance with API Std. 600 Specifications.

Yoke sleeve

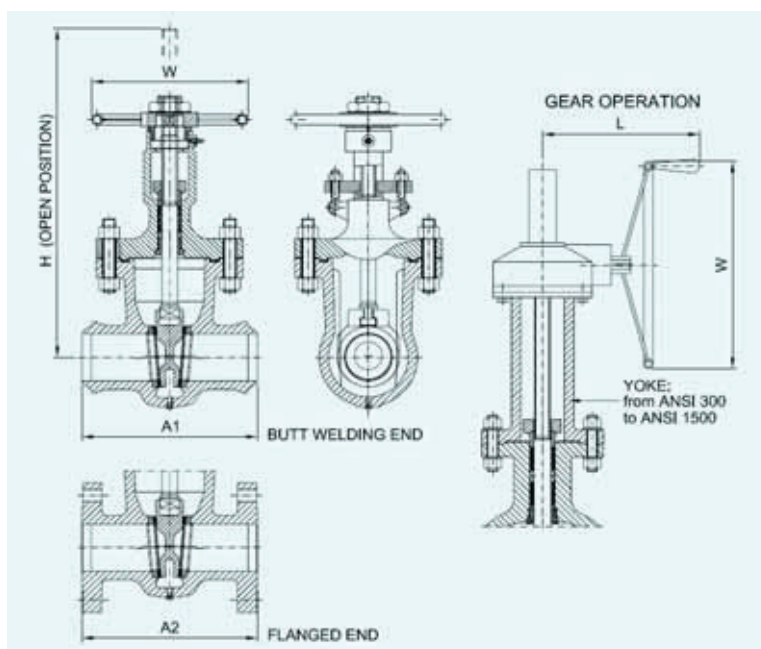
The standard material of the yoke Sleeve is Nodular NI-resist D2 with over 1150 °C dissolution point in compliance with API Std. specifications.

Bolted Bonnet Gate Valves



No.	COMPONENT	ASTM SPECIFICATION					
		CARBON STEEL	ALLOY STEEL			STAINLESS STEEL	
01	BODY	A216-WCB	A217-WC6	A217-WC9	A217-C12A	A351-CF8	A351-CF8M
02	BONNET	A216-WCB	A217-WC6	A217-WC9	A217-C12A	A351-CF8	A351-CF8M
04	STEM	A479-410				A276-304	A276-316
05	DISC	A216-WCB+STL	A217-WC6+STL	A217-WC9+STL	A217-C12A+STL	A351-CF8+STL	A351-CF8M+STL
07	SEAT RING	A105+STL	A182+F11+STL	A182+F22+STL	A182+F91+STL	A182-F304+STL	A182-F316+STL
16	BONNET BOLT	A193-B7	A193-B7	A193-B7	A217-C12A	A193-B8	A193-B8
17	GASKET	SS304+GRAPHITE					
18	PACKING WASHER	A479-410				A276-304	
19	GLAND	A479-410				A351-CF8	
20A	GLAND PACKING	BRAIDED GRAPHITE					
20B	GLAND PACKING	DE-FORMED GRAPHITE					
21	GLAND FLANGE	A283-D				A351-CF8	
23	GLAND BOLT	A307-B				A193-B8	
24	GLAND NUT	A194-2H				A194-8	
25	GLAND BOLT PIN	A479-410				A276-304	
31	SLEEVE	A439-D2C				A439-D2	
35	HANDWHEEL	A536					
39	HANDWHEEL NUT	A105					
60	BONNET NUT	A194-2H				A194-8	A194-8
61	BACKSEAT BUSH	A479-410				A479-304	A479-316
66	SLEEVE NUT	A105					
67	GREASE NIPPLE	STEEL					

Bolted Bonnet Gate Valves



Rating **ANSI 150**

VALVE SIZE		in	2	2,5	3	4	6	8	10	12	14	16	18	20	24	28	30	36
		mm	50	65	80	100	150	200	250	300	350	400	450	500	600	700	750	900
A2	in	7	7,5	8	9	10,5	11,5	13	14	15	16	17	18	20	24	24	24	28
	mm	178	190	203	229	267	292	330	356	381	406	432	457	508	610	610	610	711
A1	in	8,5	9,5	11,1	12	15,8	16,5	18	19,7	22,5	24	26	28	32	36	36	36	40
	mm	216	241	283	305	403	419	457	502	572	610	660	711	813	914	914	914	1016
H	in	15,4	16,4	18,1	22,8	30,6	38,4	46,4	54,6	60	68,7	79,1	91,7	109,6	127,4	134,5	161,8	
	mm	390	425	461	580	776	976	1178	1378	1523	1745	2010	2330	2784	3236	3417	4109	
W	in	7,9	7,9	7,9	9,8	11,8	14	17,7	17,7	19,7	19,7	19,7	24,8	34,8	27,9	27,9	31,4	
	mm	200	200	200	250	300	355	450	450	500	500	500	630	630	710	710	800	
L	in	-	-	-	-	-	-	-	-	9,5	9,5	9,5	11,1	11,1	10,9	10,9	12,2	
	mm	-	-	-	-	-	-	-	-	242	242	282	282	277	277	311	311	
WEIGHT	RF	lb	48,5	55	66	99	169	268	412	639	816	1177	1475	1786	3153	4558	4827	7856
		Kg	19	25	33	45	77	122	187	290	370	534	648	810	1430	2068	2789	3563
	BW	lb	44	46	62	93	161	231	348	421	750	1111	1385	1687	3336	4756	4981	8011
		Kg	16	19	26	38	64	105	158	191	389	470	532	770	1513	2157	2259	3633

Rating **ANSI 300**

VALVE SIZE		in	2	2,5	3	4	6	8	10	12	14	16	18	20	24	28	30	36
		mm	50	65	80	100	150	200	250	300	350	400	450	500	600	700	750	900
A1	in	8,5	9,5	11,1	12	15,8	16,5	18	19,5	30	33	36	39	45	53	55	68	
	mm	216	241	283	305	403	419	457	502	762	838	914	991	1143	1346	1397	1727	
A2	in	8,5	9,5	11,1	12	15,8	16,5	18	19,5	30	33	36	39	45	53	55	68	
	mm	216	241	283	305	403	419	457	502	762	838	914	991	1143	1346	1397	1727	
H	in	16,2	17,7	19	23,7	32	40,2	48,8	56,8	66,1	78,4	85,9	93,5	112,6	130	148,5	169,8	
	mm	412	450	483	601	813	1020	1239	1443	1679	1993	2181	2376	2860	3302	3772	4312	
W	in	7,9	7,9	8,8	9,8	14	15,7	17,7	19,7	19,7	19,7	24,8	24,8	27,9	31,4	35,4	35,4	
	mm	200	200	224	250	355	400	450	500	500	500	630	630	710	800	900	900	
L	in	-	-	-	-	-	-	-	-	9,5	9,5	11,3	11,3	11,7	12,2	14,3	21,8	
	mm	-	-	-	-	-	-	-	-	242	242	288	288	297	311	364	554	
WEIGHT	RF	lb	64	88	106	163	298	458,5	721	1094	1530	2170	2880	3409	5204	8070	9592	15104
		Kg	29	40	48	74	135	208	327	496	694	884	1306	1546	2360	3660	4350	6850
	BW	lb	53	77	82	141	213	368	512	862	1420	1510	2008	2703	4212	6170	7629	11003
		Kg	24	35	37	64	97	167	232	391	644	685	911	1226	1910	2799	3460	4990

Forged Bolted Cover Gate Valves

Rating **ANSI 600**

VALVE SIZE		in	2	2,5	3	4	6	8	10	12	14	16	18	20	24	28	30	36
		mm	50	65	80	100	150	200	250	300	350	400	450	500	600	700	750	900
A1		in	11,5	13	14	17	22	26	31	33	35	39	43	47	55	61	65	82
		mm	292	330	356	432	556	660	787	838	889	991	1092	1194	1397	1594	1651	2083
A2		in	11,5	13	14	17	22	26	31	33	35	39	43	47	55	61	65	82
		mm	292	330	356	432	556	660	787	838	889	991	1092	1194	1397	1594	1651	2083
H		in	18,5	19,5	22,1	26,7	37,2	43,7	52,1	65,9	72,1	82,9	98	104,8	116,9	140,2	152,8	179,5
		mm	471	495	561	667	944	1110	1325	1678	1832	2106	2489	2662	2970	3562	3880	4560
W		in	8,8	8,8	9,8	11,8	17,7	19,7	24,8	22	22	27,9	27,9	31,5	35,4	35,4	35,4	35,4
		mm	224	224	250	300	450	500	630	560	560	560	710	710	800	900	900	900
L		in	-	-	-	-	-	-	-	16,3	16,3	18,4	18,4	20,7	26,4	20,2	20,2	20,2
		mm	-	-	-	-	-	-	-	-	414	414	468	468	526	670	521	512
WEIGHT	RF	lb	95	132	154	295,5	628	988	1499	2355	2836	4059	5700	6853	10337	13340	15313	21476
		Kg	43	60	70	134	285	488	680	1068	1286	1841	2585	3108	4688	6050	6945	9740
	BW	lb	62	99	132	229	452	690	1180	2145	2571	3332	4741	5640	5895	1099	12590	17949
		Kg	28	45	60	104	205	33	535	973	1166	1511	2150	2558	3898	4980	5710	8140

Rating **ANSI 900**

VALVE SIZE		in	2	2,5	3	4	6	8	10	12	14	16	18	20	24
		mm	50	65	80	100	150	200	250	300	350	400	450	500	600
A1		in	14,5	16,5	15	18	24	29	33	38	40,5	44,5	48	52	61
		mm	368	419	381	457	610	737	838	965	1029	1130	1219	1321	1549
A2		in	14,5	16,5	15	18	24	29	33	38	40,5	44,5	48	52	61
		mm	368	419	381	457	610	737	838	965	1029	1130	1219	1321	1549
H		in	21,2	26,4	26,4	30,8	42,4	55,5	67,7	77,4	74,9	80,7	88,8	110,2	12,4
		mm	539	670	672	782	1076	1411	1720	1965	1902	2051	2256	2800	3150
W		in	11,8	11,8	14	15,7	19,7	24,8	24,8	27,9	27,9	31,4	35,4	35,4	35,4
		mm	300	300	355	400	500	630	630	710	710	800	900	900	900
L		in	-	-	-	-	9,5	9,5	9,5	9,5	10,9	12,6	14,3	14,3	16,3
		mm	-	-	-	-	242	242	242	242	277	321	364	364	415
WEIGHT	RF	lb	181	342	364	384	999	1720	2752	3400	4898	6615	8533	10716	16096
		Kg	82	111	165	174	453	780	1248	1542	2220	3000	3870	4860	7300
	BW	lb	117	187	238	295	789	1378	2267	2844	4167	5656	7276	8730	13495
		Kg	53	85	108	134	358	625	1028	1290	1890	2565	3300	4050	6120

Rating **ANSI 1500**

VALVE SIZE		in	2	2,5	3	4	6	8	10	12	14	16	18	20	24
		mm	50	65	80	100	150	200	250	300	350	400	450	500	600
A1		in	14,5	16,5	18,5	21,5	27,5	32,8	39	44,5	49,5	54,5	60,5	65,5	76,5
		mm	368	419	470	546	705	832	991	1130	1257	1384	1536	1664	1943
A2		in	14,5	16,5	18,5	21,5	27,5	32,8	39	44,5	49,5	54,5	60,5	65,5	76,5
		mm	368	419	470	546	705	832	991	1130	1257	1384	1536	1664	1943
H		in	21,2	26,4	29,1	30,8	47,1	60,8	66,5	82,3	85,1	97,9	108,7	122,1	146,5
		mm	539	670	738	783	1196	1546	1688	2090	2162	2486	2762	3102	3721
W		in	11,8	11,8	15,7	19,7	13,8	27,9	27,9	31,4	35,4	35,4	35,4	39,4	39,4
		mm	300	300	400	500	630	710	710	800	900	900	900	1000	1000
L		in	-	-	-	-	9,5	10,9	10,9	12,6	14,3	16,3	16,3	17,3	19,5
		mm	-	-	-	-	242	277	277	321	364	415	415	438	495
WEIGHT	RF	lb	181	342	401	573	1360	3175	4412	8414	9074	15325	19845	24542	38575
		Kg	82	155	182	260	617	1440	2001	3816	4115	6950	9000	11130	16270
	BW	lb	130	207	269	353	975	2646	3541	7080	7056	13230	17069	21080	30363
		Kg	59	94	122	160	442	1200	1606	3211	3200	6000	7740	9560	13770