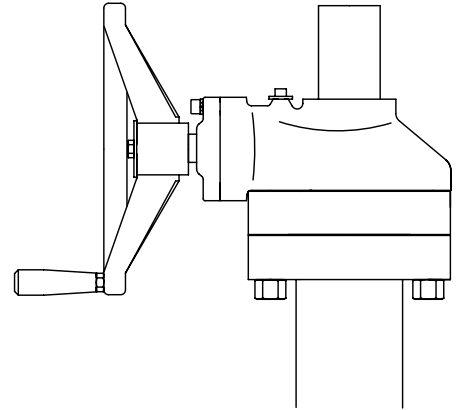
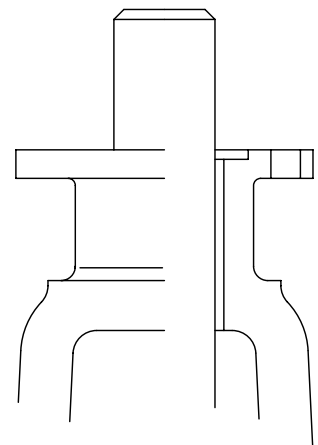


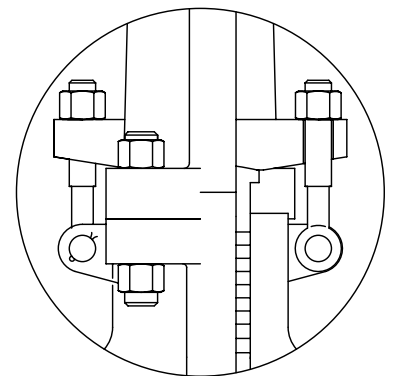
Gear Operated



Bare stem for actuation



2 Piece bonnet design



Description: Bolted bonnet gate valves
 Outside screw and yoke
 Rising stem with flexible wedge

Design Standards: API600
 BS1414
 ASME B16.34

Face to Face: ANSI B16.10

End Connection: Raised face
 Ring type joint
 ANSI B16.5
 ASME B16.47 series A or B
 BS4504 PN16, 25, 40, 64, etc
 BS10 table D, E, F, G, H, etc
 Undrilled
 Butt weld ANSI B16.25

Marking: MSS-SP-25



Bill of Materials and Parts for standard material configurations. (Other materials see page 20-21)					
Part Name	ASTM Specifications (Specs.-Grades/Types)				
	A216	A352	A217		A351
	WCB	LCC	WC6	C5	CF8M
Body	A216-WCB	A352-LCC	A217-WC6	A217-C5	A351-CF8M
Seat Ring	A105, LF2, 316, 304				
Seat Ring Surface	13 Cr, HF(STELLITE), 316, 304, Monel				
Gate	A216-WCB	A352-LCC	A217-WC6	A217-C5	A351-CF8M
Gate Sealing Surface	13Cr, HF(STELLITE), 316, 304, Monel				
Stem	13Cr, 316, 304, 17-4PH, Monel				
Bonnet Gasket	Soft Iron, Spiral Wound				
Bonnet	A216-WCB	A352-LCC	A217-WC6	A217-C5	A351-CF8M
Bolting	A194-2H/A193-B7	A194-4/A320L7	A194-2H/A193-B7	A194-2H/A193-B7	A194-8/A193-B8
Backseat Bushing	13Cr, 316, 304, Monel				
Stem Packing	Braided Graphite and Die Formed Graphite Ring, PTFE				
Gland	13Cr, 316, 304, Monel				
Gland Flange	A216-WCB	A352-LCC	A217-WC6	A217-C5	A351-CF8M
Grease Nipple	Carbon Steel				316
Stem Nut	ASTM A439 GR D2C				
Retaining Nut	Carbon Steel				316
Handwheel	Malleable Iron				
Handwheel Nut	Carbon Steel				316

Compliance to NACE MR-01-75 available on all materials

API 600 Gate Valves **Class 150**

Dimensions and Weights										*Gear Operated	
Nom Size	Face to Face RF		Face to Face RTJ		Face to Face BW		Height*		Handwheel Diameter [†]	Weight [†]	
	in	mm	in	mm	in	mm	in	mm			
2	7.00	178	7.52	191	8.50	216	16.10	409	200	18	
2½	7.50	190	8.00	203	9.50	241	17.40	442	200	28	
3	8.00	203	8.50	216	11.10	283	20.00	508	250	34	
4	9.00	229	9.50	241	12.00	305	23.20	590	250	52	
5	10.00	254	10.50	267	15.00	381	26.50	673	250	71	
6	10.50	267	11.00	279	15.80	403	30.20	767	300	88	
8	11.50	292	12.00	305	16.50	419	37.80	960	350	144	
10	13.00	330	13.50	343	18.00	457	45.60	1158	400	197	
12	14.00	356	14.50	368	19.80	502	54.30	1378	450	298	
14	15.00	381	15.50	394	22.50	572	60.75	1543	500	406	
16	16.00	406	16.50	419	24.00	610	68.40	1738	600	524	
18	17.00	432	17.50	445	26.00	660	77.10	1959	600	720	
20	18.00	457	18.50	470	28.00	711	87.20	2214	680	1117	
24	20.00	508	20.50	521	32.00	813	102.30	2599	760	1466	
26*	22.00	559	22.50	572	34.00	863	121.50	3086	GO	1699	
28*	24.00	610	24.50	622	36.00	914	131.00	3327	GO	1931	
30*	24.00	610	24.50	622	36.00	914	142.00	3606	GO	2380	
32*	26.00	660	26.50	673	38.00	965	146.00	3708	GO	2490	
36*	28.00	711	28.50	724	40.00	1016	154.50	3924	GO	3600	
42*	32.00	813	32.50	826	45.00	1143	179.00	4546	GO	4710	
48*	42.00	1066	42.50	1079	54.00	1371	204.00	5181	GO	6500	

API 600 Gate Valves **Class 300**

Dimensions and Weights										*Gear Operated	
Nom Size	Face to Face RF		Face to Face RTJ		Face to Face BW		Height*		Handwheel Diameter [†]	Weight [†]	
	in	mm	in	mm	in	mm	in	mm			
2	8.50	216	9.12	232	8.50	216	16.70	424	200	24	
2½	9.50	241	10.12	257	9.50	241	18.10	460	200	44	
3	11.13	283	11.80	298	11.13	283	21.00	535	250	52	
4	12.00	305	12.60	321	2.00	305	24.20	615	250	76	
5	15.00	381	15.60	397	15.00	381	26.10	662	350	94	
6	15.86	403	16.50	419	15.86	403	31.30	795	350	146	
8	16.50	419	17.10	435	16.50	419	39.90	1012	400	218	
10	18.00	457	18.60	473	18.00	457	48.50	1231	450	352	
12	19.75	502	20.40	518	19.75	502	57.00	1450	500	472	
14	30.00	762	30.60	778	30.00	762	64.80	1645	600	694	
16	33.00	838	33.60	854	33.00	838	72.50	1841	600	1080	
18	36.00	914	36.60	930	36.00	914	76.50	1943	680	1235	
20	39.00	991	39.80	1010	39.00	991	84.80	2154	965	1655	
24	45.00	1143	45.90	1165	45.00	1143	100.50	2553	915	2320	
26*	49.00	1244	49.80	1266	49.00	1244	108.30	2750	GO	3100	
28*	53.00	1346	53.90	1368	53.00	1346	122.05	3100	GO	3893	
30*	55.00	1397	56.00	1422	55.00	1397	130.71	3320	GO	4930	
32*	60.00	1524	61.90	1546	60.00	1524	140.20	3560	GO	5230	
36*	68.00	1727	69.00	1752	68.00	1727	153.94	3910	GO	6885	

API 600 Gate Valves **Class 600**

Dimensions and Weights										*Gear Operated	
Nom Size	Face to Face RF		Face to Face RTJ		Face to Face BW		Height*		Handwheel Diameter [†]	Weight [†]	
	in	mm	in	mm	in	mm	in	mm			
2	11.50	292	11.63	295	11.50	292	18.00	458	250	46	
2½	13.00	320	13.13	333	13.00	320	20.00	508	250	55	
3	14.00	356	14.13	359	14.00	356	22.60	570	250	72	
4	17.00	432	17.13	435	17.00	432	49.50	1257	600	754	
6	22.00	559	21.13	562	22.00	559	34.33	872	500	253	
8	26.00	660	26.13	664	26.00	660	43.35	1101	560	413	
10	31.00	787	31.13	791	31.00	787	50.35	1279	640	623	
12	33.00	838	33.13	841	33.00	838	57.80	1468	680	981	
14	35.00	889	35.13	892	35.00	889	63.90	1623	760	1316	
16	39.00	991	39.13	994	39.00	991	71.50	1816	760	1672	
18*	42.90	1092	43.13	1095	42.90	1092	89.00	2260	GO	2070	
20*	47.00	1194	47.25	1200	47.00	1194	106.50	2705	GO	2405	
24*	55.00	1397	55.38	1407	55.00	1397	110.60	2810	GO	4550	
26*	57.00	1447	57.48	1460	57.00	1447	115.00	2921	GO	5260	
28*	61.00	1549	61.50	1562	61.00	1549	123.50	3136	GO	5960	
30*	65.00	1651	65.50	1664	65.00	1651	131.00	3327	GO	6700	
32*	70.00	1778	70.50	1791	70.00	1778	141.00	3581	GO	8312	
36*	82.00	2082	82.47	2095	82.00	2082	158.00	4013	GO	10125	

API 600 Gate Valves **Class 900**

Dimensions and Weights										*Gear Operated
Nom Size	Face to Face RF		Face to Face RTJ		Face to Face BW		Height*		Handwheel Diameter†	Weight†
	in	mm	in	mm	in	mm	in	mm	mm	Kgs
2	14.50	368	14.63	371	14.50	368	14.50	620	300	95
2½	16.50	419	16.63	422	16.50	419	27.80	705	350	108
3	15.00	381	15.13	384	15.00	381	27.40	695	350	125
4	18.00	457	18.13	460	18.00	457	32.50	825	400	192
6	24.00	610	24.13	613	24.00	610	42.00	1065	500	378
8	29.00	737	29.13	740	29.00	737	52.00	1320	600	635
10	33.00	838	33.13	841	33.00	838	60.60	1540	750	900
12	38.00	965	38.13	968	38.00	965	72.50	1840	850	1550
14*	40.50	1029	40.88	1038	40.50	1029	79.70	2025	GO	2170
16*	44.50	1130	44.88	1140	44.50	1130	85.40	2170	GO	3070
18*	48.00	1219	48.50	1232	48.00	1219	87.87	2232	GO	3930
20*	52.00	1320	52.52	1334	52.00	1320	95.87	2435	GO	5120
24*	61.00	1549	61.54	1563	61.00	1549	112.80	2865	GO	7800

API 600 Gate Valves **Class 1500**

Dimensions and Weights										*Gear Operated
Nom Size	Face to Face RF		Face to Face RTJ		Face to Face BW		Height*		Handwheel Diameter†	Weight†
	in	mm	in	mm	in	mm	in	mm	mm	Kgs
2	14.50	368	11.63	371	14.50	368	22.00	559	250	82
2½	16.50	419	16.63	422	16.50	419	26.50	673	400	127
3	18.50	470	18.63	473	18.50	470	28.00	711	400	168
4	21.50	546	21.63	549	21.50	546	33.00	838	500	277
6	27.80	705	28.00	711	27.80	705	55.00	1397	600	640
8*	32.80	832	33.13	841	32.80	832	71.80	1822	GO	1180
10*	39.00	991	39.38	1000	39.00	991	80.80	2051	GO	2118
12*	44.50	1130	45.13	1146	44.50	1130	84.00	2134	GO	3244
14*	49.50	1257	50.25	1276	49.50	1257	89.30	2267	GO	3693
16*	54.50	1384	55.38	1407	54.50	1384	95.30	2420	GO	4890

API 600 Gate Valves **Class 2500**

Dimensions and Weights										*Gear Operated
Nom Size	Face to Face RF		Face to Face RTJ		Face to Face BW		Height*		Handwheel Diameter†	Weight†
	in	mm	in	mm	in	mm	in	mm	mm	Kgs
2	17.75	451	17.88	454	17.75	451	27.60	700	350	135
2½	20.00	508	20.25	514	20.00	508	29.50	750	450	210
3	22.75	578	23.00	584	22.75	578	34.60	887	560	271
4	26.50	673	26.88	683	26.50	673	42.50	1079	720	506
6*	36.00	914	36.50	927	36.00	914	53.90	1370	GO	1571
8*	40.25	1022	40.88	1038	40.25	1022	60.50	1530	GO	2401
10*	50.00	1270	50.88	1292	50.00	1270	80.50	2045	GO	4520

* Height dimension is from Centreline of valve to top of handwheel in open position.

† These weights and dimensions are for guidance only.