

# TORQUE SPECIFICATIONS



ACTUAL TORQUE VALUES TO BE DETERMINED BY USER!

ANSI 150 FLANGES				
WORKING PRESSURE 285 PSI				
HYDRO TEST PRESSURE 455 PSI				
Pipe Size	Bolt Size	# of Bolts	Min. to Max (lubricated)	
1"	1/2"	4	40	50
1-1/2"	1/2"	4	40	50
1-1/2"	1/2"	4	40	50
2"	5/8"	4	80	90
2-1/2"	5/8"	4	80	90
3"	5/8"	4	110	120
3-1/2"	5/8"	8	80	90
4"	5/8"	8	100	110
5"	3/4"	8	120	130
6"	3/4"	8	130	150
8"	3/4"	8	130	150
10"	7/8"	12	215	230
12"	7/8"	12	220	230
14"	1"	12	320	340
16"	1"	16	320	340
18"	1-1/8"	16	450	470
20"	1-1/8"	20	450	470
22"	1-1/8"	20	460	480
24"	1-1/4"	20	650	670
26"	1-1/4"	24	650	670
28"	1-1/4"	28	650	670
30"	1-1/4"	28	650	670
32"	1-1/2"	28	1000	1075
34"	1-1/2"	32	1000	1075
36"	1-1/2"	32	1100	1180
38"	1-1/2"	32	1100	1180
40"	1-1/2"	36	1100	1180
42"	1-1/2"	36	1150	1200

ANSI 300 FLANGES				
WORKING PRESSURE 740 PSI				
HYDRO TEST PRESSURE 1135 PSI				
Pipe Size	Bolt Size	# of Bolts	Min. to Max (lubricated)	
1"	5/8"	4	80	90
1-1/2"	5/8"	4	80	90
1-1/2"	3/4"	4	110	120
2"	5/8"	8	110	120
2-1/2"	3/4"	8	150	170
3"	3/4"	8	150	170
3-1/2"	3/4"	8	150	170
4"	3/4"	8	180	200
5"	3/4"	8	180	200
6"	3/4"	12	170	190
8"	7/8"	12	265	275
10"	1"	16	320	350
12"	1-1/8"	16	450	470
14"	1-1/8"	20	450	470
16"	1-1/4"	20	650	670
18"	1-1/4"	24	650	670
20"	1-1/4"	24	650	670
22"	1-1/2"	24	1125	1150
24"	1-1/2"	24	1200	1250
26"	1-5/8"	28	1400	1450
28"	1-5/8"	28	1500	1550
30"	1-3/4"	28	1700	1775
32"	1-7/8"	28	2000	2075
34"	1-7/8"	28	2250	2325
36"	2"	32	2300	2380
38"	2"	32	2300	2380
40"	2"	32	2400	2480
42"	2"	32	2400	2480

ANSI 400 FLANGES				
WORKING PRESSURE 990 PSI				
HYDRO TEST PRESSURE 1510 PSI				
Pipe Size	Bolt Size	# of Bolts	Min. to Max (lubricated)	
1"	5/8"	4	80	90
1-1/2"	5/8"	4	110	120
1-1/2"	3/4"	4	110	120
2"	5/8"	8	110	120
2-1/2"	3/4"	8	150	170
3"	3/4"	8	150	170
3-1/2"	7/8"	8	180	200
4"	7/8"	8	180	200
5"	7/8"	8	215	230
6"	7/8"	12	215	230
8"	1"	12	320	350
10"	1-1/8"	16	450	470
12"	1-1/4"	16	650	670
14"	1-1/4"	20	650	670
16"	1-3/8"	20	820	840
18"	1-3/8"	24	820	840
20"	1-1/2"	24	1100	1125
22"	1-5/8"	24	1425	1450
24"	1-3/4"	24	1775	1795
26"	1-3/4"	28	1750	1770
28"	1-7/8"	28	2200	2230
30"	2"	28	2300	2330
32"	2"	28	2300	2330
34"	2"	28	2350	2370
36"	2"	32	2350	2370
38"	2-1/2"	32	4800	4830
40"	2-1/2"	32	5200	5230
42"	2-1/2"	32	5500	5530

ANSI 600 FLANGES				
WORKING PRESSURE 1480 PSI				
HYDRO TEST PRESSURE 2245 PSI				
Pipe Size	Bolt Size	# of Bolts	Min. to Max (lubricated)	
1"	5/8"	4	80	90
1-1/4"	5/8"	4	110	120
1-1/2"	3/4"	4	110	120
2"	5/8"	8	110	120
2-1/2"	3/4"	8	150	170
3"	3/4"	8	150	170
3-1/2"	7/8"	8	200	220
4"	7/8"	8	225	240
5"	1"	8	350	370
6"	1"	12	320	330
8"	1-1/8"	12	450	470
10"	1-1/4"	16	650	670
12"	1-1/4"	20	675	690
14"	1-3/8"	20	820	840
16"	1-1/2"	20	1125	1145
18"	1-5/8"	20	1430	1450
20"	1-5/8"	24	1400	1430
22"	1-3/4"	24	1775	1800
24"	1-7/8"	24	2230	2250
26"	1-7/8"	28	2200	2230
28"	2"	28	2300	2330
30"	2"	28	2360	2380
32"	2-1/4"	28	3900	3930
34"	2-1/4"	28	3950	3975
36"	2-1/2"	28	5500	5530
38"	2-1/4"	28	7000	7030
40"	2-1/4"	32	7200	7230
42"	2-1/2"	28	7400	7430

# TORQUE SPECIFICATIONS



**ACTUAL TORQUE VALUES TO BE DETERMINED BY USER!**

ANSI 900 FLANGES WORKING PRESSURE 2220 PSI HYDRO TEST PRESSURE 3355 PSI				
Pipe Size	Bolt Size	# of Bolts	Min. to Max (lubricated)	
1"	7/8"	4	110	120
1-1/4"	7/8"	4	170	190
1-1/2"	1"	4	240	260
2"	7/8"	8	170	190
2-1/2"	1"	8	240	260
3"	7/8"	8	215	235
3-1/2"	N/A	N/A	N/A	N/A
4"	1-1/8"	8	450	470
5"	1-1/4"	8	650	670
6"	1-1/8"	12	455	475
8"	1-3/8"	12	820	840
10"	1-3/8"	16	850	870
12"	1-3/8"	20	870	890
14"	1-1/2"	20	1125	1155
16"	1-5/8"	20	1430	1450
18"	1-7/8"	20	2230	2250
20"	2"	20	2300	2340
22"	N/A	N/A	N/A	N/A
24"	2-1/2"	20	5500	5550
26"	2-3/4"	20	7400	7450
28"	3"	20	8400	8450
30"	3"	20	9500	9550
32"	3-1/4"	20	10500	10550
34"	3-1/2"	20	12400	12450
36"	3-1/2"	24	13800	13850
38"	N/A	N/A	N/A	N/A
40"	N/A	N/A	N/A	N/A
42"	N/A	N/A	N/A	N/A

ANSI 1500 FLANGES WORKING PRESSURE 3705 PSI HYDRO TEST PRESSURE 5585 PSI				
Pipe Size	Bolt Size	# of Bolts	Min. to Max (lubricated)	
1"	7/8"	4	110	120
1-1/4"	7/8"	4	170	190
1-1/2"	1"	4	240	260
2"	7/8"	8	170	190
2-1/2"	1"	8	240	260
3"	1-1/8"	8	370	390
3-1/2"	N/A	N/A	N/A	N/A
4"	1-1/4"	8	650	680
5"	1-1/2"	8	1000	1050
6"	1-3/8"	12	820	850
8"	1-5/8"	12	1400	1450
10"	1-7/8"	12	2100	2150
12"	2"	16	3200	3250
14"	2-1/4"	16	3400	3450
16"	2-1/2"	16	4300	4350
18"	2-3/4"	16	6200	6250
20"	3"	16	7800	7850
22"	N/A	N/A	N/A	N/A
24"	3-1/2"	16	13000	13100
26"	N/A	N/A	N/A	N/A
28"	N/A	N/A	N/A	N/A
30"	N/A	N/A	N/A	N/A
32"	N/A	N/A	N/A	N/A
34"	N/A	N/A	N/A	N/A
36"	N/A	N/A	N/A	N/A
38"	N/A	N/A	N/A	N/A
40"	N/A	N/A	N/A	N/A
42"	N/A	N/A	N/A	N/A

ANSI 2500 FLANGES WORKING PRESSURE 6170 PSI HYDRO TEST PRESSURE 9280 PSI				
Pipe Size	Bolt Size	# of Bolts	Min. to Max (lubricated)	
1"	7/8"	4	170	190
1-1/4"	1"	4	300	320
1-1/2"	1-1/8"	4	400	420
2"	1"	8	300	320
2-1/2"	1-1/8"	8	400	430
3"	1-1/4"	8	600	640
3-1/2"	N/A	N/A	N/A	N/A
4"	1-1/4"	8	650	680
5"	1-3/4"	8	1500	1550
6"	2"	8	2300	1350
8"	2"	12	2400	2450
10"	2-1/2"	12	4900	4950
12"	2-3/4"	12	7900	7950
14"	N/A	N/A	N/A	N/A
16"	N/A	N/A	N/A	N/A
18"	N/A	N/A	N/A	N/A
20"	N/A	N/A	N/A	N/A
22"	N/A	N/A	N/A	N/A
24"	N/A	N/A	N/A	N/A
26"	N/A	N/A	N/A	N/A
28"	N/A	N/A	N/A	N/A
30"	N/A	N/A	N/A	N/A
32"	N/A	N/A	N/A	N/A
34"	N/A	N/A	N/A	N/A
36"	N/A	N/A	N/A	N/A
38"	N/A	N/A	N/A	N/A
40"	N/A	N/A	N/A	N/A
42"	N/A	N/A	N/A	N/A

**IMPORTANT NOTES:**

- 1) Step-Ko Products assumes no liability nor takes responsibility for any of these torque values.
- 2) These values are theoretical, and intended for use as a **Guideline Only**.
- 3) The values listed are based on the best conditions, new weld neck flanges, perfect flange alignment, well lubricated stud bolts/nuts with a .2 friction factor and installed using the Step-Ko Products Bolt Torque Sequence.