



Data for Use with Machine Bolts and Cold Rolled Steel Stud Bolts

Load in Pounds on Bolts and Stud Bolts when Torque Loads are Applied

Nominal Diameter of Bolt (Inches)	Number of Threads (Per Inch)	Diameter at Root of Thread (Inches)	Area at Root of Thread (Square Inch)	Stress					
				7,500 PSI		15,000 PSI		30,000 PSI	
				Torque Ft. Lbs.	Compression, Lbs.	Torque Ft. Lbs.	Compression, Lbs.	Torque Ft. Lbs.	Compression, Lbs.
1/4	20	185	27	1	203	2	405	4	810
5/16	18	240	45	2	338	4	675	8	1350
3/8	16	294	68	3	510	6	1020	12	2040
7/16	14	345	93	5	698	10	1395	20	2790
1/2	13	400	126	8	945	15	1890	30	3780
9/16	12	454	162	12	1215	23	2430	45	4860
5/8	11	507	202	15	1515	30	3030	60	6060
3/4	10	620	302	25	2265	50	4530	100	9060
7/8	9	731	419	40	3143	80	6285	160	12570
1	8	838	551	62	4133	123	8265	245	16530
1-1/8	7	939	693	98	5190	195	10380	390	20760
1-1/4	7	1064	890	137	6675	273	13350	545	26700
1-3/8	6	1158	1054	183	7905	365	15810	730	31620
1-1/2	6	1238	1294	219	9705	437	19410	875	38820
1-5/8	5-1/2	1389	1515	300	11363	600	22725	1200	45450
1-3/4	5	1490	1744	390	13080	775	26160	1550	52320
1-7/8	5	1615	2049	525	15368	1050	30735	2100	61470
2	4-1/2	1711	2300	563	17250	1125	34500	2250	69000