

TENSILE STRENGTH (WORKING LOAD) CHART FOR SAE BOLTS

BOLT SAFE WORKING LOADS (LBS)

SAFE TENSILE LOAD AT 6,000 PSI LOAD

SAFE SHEAR STRENGTH

BOLT DIA (IN)	SHEAR AT THREAD ROOT	SHEAR (FULL BOOT)	TENSILE (AT THREAD ROOT)
1/4"	200	370	160
5/16"	340	575	270
3/8"	510	830	410
7/16"	700	1130	560
1/2"	940	1470	760
9/16"			
5/8"	1510	2300	1210
3/4"	2260	3310	1810
7/8"	3140	4510	2520
1"	4130	5890	3300
1-1/8"	5200	7450	4160
1-1/4"	6670	9200	5350
1-3/8"	7900	11130	6340
1-1/2"	97010	13250	7700
1-5/8"	11360	15550	9090
1-3/4"	13080	18000	10470
1-7/8"	15370	20700	12300
2"	17250	23560	13800

BOLT TENSILE STRENGTH (BREAKING STRENGTH - LBS)

BOLT DIA (IN)	GRADE 2		GRADE 5		GRADE 8	
	COARSE	FINE	COARSE	FINE	COARSE	FINE
1/4"	2350	2700	3800	4350	4750	5450
5/16"	3900	4300	6300	6950	7850	8700
3/8"						
7/16"	7850	8800	12800	14400	15900	17800
1/2"	10500	11800	1700	19200	21300	2400
9/16"	13500	15000	21800	24400	27300	30400
5/8"	16700	18900	27100	30700	33900	38400
3/4"	24700	27600	40100	44800	50100	56000