

REFERENCE GUIDES

load ratings of carbon steel threaded rod

NOMINAL ROD DIAMETER (in)	ROOT AREA OF COURSE THREAD (in ²)	MAXIMUM SAFE LOAD (LBS) ROD TEMPERATURE: 650 °F	MAXIMUM SAFE LOAD (LBS) ROD TEMPERATURE: 750 °F
1/4	0.027	240	210
3/8	0.068	610	540
1/2	0.126	1130	1010
5/8	0.202	1810	1610
3/4	0.302	2710	2420
7/8	0.419	3770	3360
1	0.552	4960	4420
1-1/8	0.693	6230	5560
1-1/4	0.889	8000	7140
1-1/2	1.293	11630	10370
1-3/4	1.744	15700	14000
2	2.292	20700	18460
2-1/4	3.021	27200	24260
2-1/2	3.716	33500	29880

maximum applied torques for c-clamps and beam clamps

THREAD SIZE	TORQUE (lb / ft)
1/4	40
3/8	60
1/2	125
5/8	250
3/4	400
7/8	665
Extracted from MSS-SP-69 (types 19 & 23)	

NOTE:

The ultimate load-carrying capacity of a clamp is rapidly reduced when the set screw is excessively tightened during installation. Proper installation practice is to set the screw finger tight, then turn the set screw one half to three quarters of a turn. Extra tightening will force the body of the clamp open, damaging the clamp and causing malalignment of the rod hole.