



Suggested Torque Values

ASTM A490 (structural)

| Bolt Size | TPI | Tension (lbs) | | Tightening Torque Range (ft.lbs / min-max) | |
|-----------|-----|---------------|---------|--|---------------|
| | | Min | Max | Lubricated | Plain |
| 1/2 | 13 | 15,000 | 18,000 | 62 - 75 | 125 - 150 |
| 5/8 | 11 | 24,000 | 29,000 | 125 - 150 | 250 - 302 |
| 3/4 | 10 | 35,000 | 42,000 | 219 - 263 | 438 - 525 |
| 7/8 | 9 | 49,000 | 59,000 | 357 - 430 | 715 - 860 |
| 1 | 8 | 64,000 | 77,000 | 533 - 642 | 1,067 - 1,283 |
| 1 1/8 | 7 | 80,000 | 96,000 | 750 - 900 | 1,500 - 1,800 |
| 1 1/4 | 7 | 102,000 | 122,000 | 1,063 - 1,270 | 2,125 - 2,540 |
| 1 3/8 | 6 | 121,000 | 145,000 | 1,386 - 1,660 | 2,773 - 3,323 |
| 1 1/2 | 6 | 148,000 | 178,000 | 1,850 - 2,225 | 3,700 - 4,450 |

