

TORQUE CONVERSION FORMULAE AND FACTORS

Accepted formulae relating torque and tension, based on many tests are...-

FOR METRIC SIZES

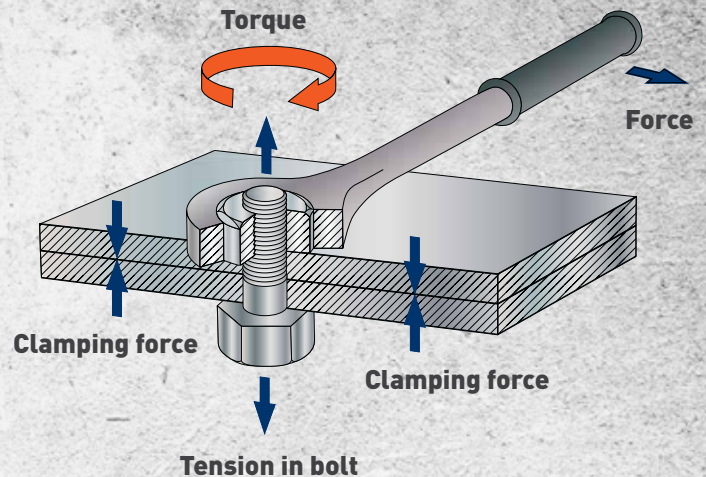
$$M = \frac{P \times D}{5000}$$

M = torque Nm
P = bolt tension N
D = bolt diameter (mm)

FOR IMPERIAL SIZES

$$M = \frac{P \times D}{60}$$

M = torque lbf.ft
P = bolt tension lbf
D = bolt diameter (ins)



| Units to be converted | S.I. Units | | Imperial Units | | | Metric Units | |
|-----------------------|------------|-------|----------------|--------|--------|--------------|--------|
| | cNm | Nm | ozf.in | lbf.in | lbf.ft | kgf.cm | kgf.m |
| 1 cNm = | 1 | 0,01 | 1,416 | 0,088 | 0,007 | 0,102 | 0,001 |
| 1 Nm = | 100 | 1 | 141,6 | 8,851 | 0,738 | 10,2 | 0,102 |
| 1 ozf.in = | 0,706 | 0,007 | 1 | 0,0625 | 0,005 | 0,072 | 0,0007 |
| 1 lbf.in = | 11,3 | 0,113 | 16 | 1 | 0,03 | 1,152 | 0,0115 |
| 1 lbf.ft = | 135,6 | 1,35 | 192 | 12 | 1 | 13,83 | 0,138 |
| 1 kgf.cm = | 9,807 | 0,098 | 13,89 | 0,868 | 0,072 | 1 | 0,01 |
| 1 kgf.m = | 980,7 | 9,807 | 1389 | 86,8 | 7,233 | 100 | 1 |