

Calculations & Conversions

Calculations

$$W = (\text{OD} - t) * t * 10.69$$

$$t = \frac{\text{OD} - \sqrt{\text{OD}^2 - 0.372 * W}}{2}$$

Where:

- » W = Plain end weight (lbs/ft)
- » t = Wall thickness (inches)
- » OD = Outside diameter (inches)

Lengths, Sizes & Weights

OD in inches	=	Millimeters / 25.4
OD in millimeters	=	Inches * 25.4
Length in feet	=	Meters * 3.281
Length in meters	=	Feet / 3.281
Weight in metric tons	=	Net tons / 1.1023
Weight in net tons	=	Metric tons * 1.1023

Temperature

$$^{\circ}\text{C} = 5/9 (^{\circ}\text{F}-32)$$

Conversions

1 inch (in.)	=	25.4 millimeters (mm) exactly
1 square inch (sq.in.)	=	645.16 square millimeters (mm^2) exactly
1 foot (ft.)	=	0.3048 meters (m) exactly
1 pound (lb.)	=	0.454 kilograms (kg)
1 pound per foot (lbs./ft.)	=	1.4895 kilograms per meter (kg/m)
1 pound per square inch (psi)	=	0.006895 Megapascals (Mpa) for stress
1 foot-pound (ft-lb.)	=	1.355818 Joules (J) for impact energy 1.355818 Newton-meters (N.m) for torque
1 metric ton	=	2204.6 pounds
1 net ton	=	2000 pounds
1 short ton	=	2000 pounds
1 long ton	=	2240 pounds