



# T&T MATERIALS, INC.

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Service Disabled Veteran Owned Small Business (SDVOSB)

## POUNDS PER CUBIC INCH

Aluminum		Copper Alloys		Nickel Alloys	
Alloy	lb/cu in	Alloy	lb/cu in	Alloy	lb/cu in
Nom.	0.100	CDA 110	0.323	Nickel	0.322
1100	0.098	CDA 230	0.316	Monel	0.319
2011	0.102	CDA 360	0.308	Inconel	0.307
2024	0.101	CDA 464	0.304	<b>Misc Metals</b>	
3003	0.099	<b>Stainless Steel</b>		Carbon Steel	0.280
5052	0.097	Alloy	lb/cu in	Lead	0.410
6061	0.098	300 Series	0.290	Magnesium	0.064
6063	0.097	400 Series	0.280	Tin	0.264
7075	0.101	17-4	0.280	Titanium	0.162

## FORMULAE FOR WEIGHT

Sheets	Length x Width x t x w	=lbs per piece
Circles	.785 x D <sup>2</sup> x t x w	=lbs per piece
Rings	.785 x (D + d) x (D - d) x t x w	=lbs per piece
Round Rods	D <sup>2</sup> x 9.42 x w	=lbs per foot
Square Bars	D <sup>2</sup> x 12 x w	=lbs per foot
Rectangular Bars	Thickness x Width x 12 x w	=lbs per foot
Hexagonal Rods	D <sup>2</sup> x 10.39 x w	=lbs per foot

D = Outside diameter (or dimension) in inches    d = Inside diameter in inches    t = Thickness in inches    w = Pounds per cubic inch

Round Tubing	37.7 x w x t x (D-t)	=lbs per foot
Square Tubing	48.0 x w x t x (D-t)	=lbs per foot

D = Outside diameter (or dimension) in inches    t = Wall thickness in inches    w = Pounds per cubic inch

## LINEAR MEASURE CONVERSION

1 Inch = 25.4 Millimeters	1 Millimeter = 0.03937 Inches
1 Inch = 2.54 Centimeters	1 Centimeter = .3937 Inches
1 Foot = 30.48 Centimeters	1 Meter = 39.37 Inches
1 Yard = .9144 Meters	1 Meter = 1.0936 Yards

## WEIGHT CONVERSION

1 Pound = .4536 Kilograms		1 Kilogram = 2.2049 Pounds	
1 Short Ton	2,000 Pounds	907.18 Kilograms	
1 Long Ton	2,240 Pounds	1,016 Kilograms	
1 Metric Ton	2,205 Pounds	1,000 Kilograms	

## STRENGTH CONVERSION

To Convert From	To	Multiply by
pound/sq. inch (psi)	ksi (1000psi)	0.001
ksi	megapascal (Mpa)	6.895
pound/sq. inch (psi)	megapascal (Mpa)	0.006895
Newton/sq. millimeter (N/mm <sup>2</sup> )	megapascal (Mpa)	1
pound/sq. inch (psi)	Newton/square millimeter (N/mm <sup>2</sup> )	0.006895
ksi	Newton/square millimeter (N/mm <sup>2</sup> )	6.895
ksi	kilogram/square millimeter	0.704

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