

The International System of Units (SI) is used in many applications. Shown in the tables below are the conversion factors used to convert U. S. Customary units to SI units, and the metric (SI) prefixes for the multiplication factors of units.

Table 16 – SI Conversion Factors

Property	To Convert from U. S. Customary Units	To SI Units	Multiply by
Force	pound-force (lbf)	Newton (N)	4.45
	kip (1000 lbf)	Newton (N)	4450
Linear Dimension	inch (in)	millimeter (mm)	25.4
Tensile Strength	pounds per square inch (psi)	Pascal (Pa)	6890
	pounds per square inch (psi)	kiloPascal (kPa)	6.89
	pounds per square inch (psi)	megaPascal (MPa)	0.00689
Mass	pound mass	kilogram (kg)	0.454
Angle, plane	degree	radian	0.0175
Flow Rate	cubic feet per hour (cfh)	liter per minute (l/min)	0.472
Heat Input	Joules per inch (J/in)	Joules per meter (J/m)	39.4
Travel Speed, wire	inches per minute (in/min)	millimeters per second (mm/s)	0.423
Temperature	degrees Fahrenheit (°F)	degrees Celsius (°C)	use the formula: °C = (°F – 32)/1.8

Table 17 – SI Prefixes

Exponential Expression	Multiplication Factor	Prefix	Symbol
10 ⁹	1 000 000 000	giga	G
10 ⁶	1 000 000	mega	M
10 ³	1 000	kilo	k
10 ⁻³	0.001	milli	m
10 ⁻⁶	0.000 001	micro	μ
10 ⁻⁹	0.000 000 001	nano	n