Unit Conversions for the Shop

Length, area, volume, weight, pressure, torque, power and temperature. **Multiply** by the number shown.

LENGTH

inches	→ millimeters	× 25.4
inches	→ centimeters	× 2.54
feet	→ meters	× 0.3048
yards	→ meters	× 0.9144
miles	→ kilometers	× 1.60934
millimeters	→ inches	× 0.03937
meters	→ feet	× 3.28084
kilometers	→ miles	× 0.62137

AREA

square inches	→ square centimeters	× 6.4516
square feet	→ square meters	× 0.0929
square yards	→ square meters	× 0.83613
acres	→ square feet	× 43,560
acres	→ hectares	× 0.40469
square meters	→ square feet	× 10.76391

WEIGHT

ounces	→ grams	× 28.34952
pounds	→ kilograms	× 0.45359
kilograms	→ pounds	× 2.20462
short tons	→ pounds	× 2,000
metric tons	→ kilograms	× 1,000
short tons	→ metric tons	× 0.90718

TEMPERATURE

°F → °C	(°F − 32) × 5 ÷ 9
°C → °F	°C × 9 ÷ 5 + 32
Water freezes	32 °F = 0 °C
Room temperature	68 °F = 20 °C
Water boils (sea level)	212 °F = 100 °C

VOLUME

cubic inches	→ cubic centimeters	× 16.38706
cubic feet	→ cubic inches	× 1,728
cubic feet	→ US gallons	× 7.48052
cubic yards	→ cubic feet	× 27
cubic yards	→ cubic meters	× 0.76455
US gallons	→ liters	× 3.78541
US quarts	→ liters	× 0.94635
liters	→ US gallons	× 0.26417
US fluid ounces	→ milliliters	× 29.57353

PRESSURE

psi	→ kilopascals	× 6.89476
psi	→ bars	× 0.06895
bars	→ psi	× 14.50377
kilopascals	→ psi	× 0.14504

TORQUE

foot pounds	→ newton meters	× 1.35582
inch pounds	→ newton meters	× 0.11298
newton meters	→ foot pounds	× 0.73756
foot pounds	→ inch pounds	× 12

POWER AND SPEED

horsepower	→ watts	× 745.7
kilowatts	→ horsepower	× 1.34102
miles per hour	→ kilometers per hour	× 1.60934
feet per minute	→ meters per minute	× 0.3048

Multiply the amount you have by the number shown. Factors marked exact by law: 1 inch = 25.4 mm, 1 foot = 0.3048 m, 1 pound = 0.45359237 kg, 1 US gallon = 231 cubic inches.