



Conversion factors

Conversion of international standards

SI Units for use in the welding industry				
To convert <i>to</i> metric, <i>multiply</i> by the factor in remarks;				
To convert <i>from</i> metric, <i>divide</i> by the factor				
Quantity	Unit	Symbol	Other units/symbols	Remarks / factor
Length	Meter	m	Inch (in)	0.0254
			Foot (ft)	0.3048
			Yard (yd)	0.9144
Area	Square meter	m ²	Inch ² (in ²)	0.0064516
			Foot ² (ft ²)	0.09290304
			Yard ² (yd ²)	0.8361274
Volume	Cubic meter	m ³	Inch ³ (in ³)	0.001638706
			Foot ³ (ft ³)	0.02831685
Frequency	Hertz	Hz	-	-
Mass	Kilogram	kg	Pounds (lbs)	0.4535924
Density	Kilogram per cubic meter	Kg/m ³	-	-
Force	Newton	N	kgf	0.980665
			lbf	0.4448222
Mechanical load	Pascal,	Pa	Newton per square meter	1
	Mega Pascal	MPa	Newton per square millimetre (N/mm ²)	1
		MPa	Ton f/in ²	0,064749
Impact strength	Joule	J	1 ksi = 1.000 psi	6,89476
			-	1J = 1NM
			-	1J = 0,7377562 fl lbf
Temperature	Kelvin	K	Degree Celsius (°C)	tK=tC + 273.15
			Degree Fahrenheit (°F)	tK=(tF+ 459.67)/1.8
	Celsius	C	Degree Fahrenheit (°F)	tF=(tCx1.8)+32
	Fahrenheit	F	Degree Celsius (°C)	tC=(tF-32)/1.8
Electric current	Ampere	A	-	-
Electric potential	Voltage	V	-	-
Current density	Ampere per meter	A/m ²	-	-

Conversion international sizes								
mm	SWG	inch	mm	SWG	inch	mm	SWG	inch
1,2	-	3/64	3,0	10	1/8	8,0	-	5/16
1,5	16	1/16	4,0	8	5/32	10,0	-	3/8
2,0	14	5/64	5,0	6	3/16	13,0	-	1/2
2,5	12	3/32	6,0	4	1/4	25,4	-	1/1