

ALUMINUM

MIG WIRES / TIG RODS (GMAW/GTAW)

ALMIGWELD 1100

Alloy 1100 is highly resistant to chemical attack and weathering. It is a relatively soft alloy that is very form able and is used extensively in thin gauge and foil products. It has good welding characteristics and it is also used as a filler alloy for welding purposes. A desirable characteristic of the alloy is the bright finishes obtained by anodizing.

Specifications	
Classifications	AMS 4102 : (Chemistry Only) ANSI/AWS A5.10 : (ER & R) ASTM B316 QQ-A-430
Approvals	CWB

Approvals are based on factory location. Please contact ESAB for more information.

Alloy Type	Aluminum
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Tensile Properties			
Testing Condition	Yield Strength	Tensile Strength	Elongation
As Welded	34 MPa (5 ksi)	90 MPa (13 ksi)	35 %
As Welded	103 MPa (15 ksi)	110 MPa (16 ksi)	2 %
As Welded	117 MPa (17 ksi)	124 MPa (18 ksi)	9 %
As Welded	138 MPa (20 ksi)	145 MPa (21 ksi)	6 %
As Welded	152 MPa (22 ksi)	165 MPa (24 ksi)	5 %

Typical Wire Composition %		
Cu	Si+Fe	Zn
0.07	0.55	0.01

Welding Parameters		
Amps	Wire Diameter	Volts
125-150 A	0.8 mm (0.030 in.)	20-24 V
100-130 A	0.8 mm (0.030 in.)	18-22 V
85-120 A	0.9 mm (0.035 in.)	20-23 V
125-150 A	0.9 mm (0.035 in.)	20-24 V
170-190 A	0.9 mm (0.035 in.)	21-26 V
140-260 A	1.2 mm (0.047 in.)	20-29 V
180-210 A	1.2 mm (0.047 in.)	22-26 V
125-150 A	1.2 mm (0.047 in.)	20-24 V
170-240 A	1.2 mm (0.047 in.)	24-28 V
140-300 A	1.2 mm (0.047 in.)	20-29 V
190-350 A	1.6 mm (1/16 in.)	25-30 V
240-300 A	1.6 mm (1/16 in.)	22-27 V
190-260 A	1.6 mm (1/16 in.)	21-26 V
280-320 A	1.6 mm (1/16 in.)	24-28 V
260-310 A	1.6 mm (1/16 in.)	22-27 V
290-340 A	1.6 mm (1/16 in.)	26-30 V
280-360 A	2.4 mm (3/32 in.)	26-30 V
300-400 A	2.4 mm (3/32 in.)	26-32 V