

ALUMINUM

MIG WIRES / TIG RODS (GMAW/GTAW)

ALTIGWELD 4047

Alloy 4047 was originally developed as a brazing alloy to take advantage of its low melting point and narrow freezing range. In addition, it has a higher silicon content than 4043, which provides for increased fluidity and reduced shrinkage. The alloy produces bright and almost smut free welds. Hot cracking is significantly reduced when 4047 is used as filler alloy. The alloy may be used in applications of sustained elevated temperatures.

Specifications	
Classifications	AMS 4185 : (Chemistry Only) ANSI/AWS A5.10 : (ER & R)
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
2014-T6			
Base Alloy	414 MPa (60 ksi)	483 MPa (70 ksi)	13 %
Base Alloy 6063-T4			
As Welded	69 MPa (10 ksi)	138 MPa (20 ksi)	12 %
6061-T4			
Base Alloy	145 MPa (21 ksi)	241 MPa (35 ksi)	22 %
Base Alloy 6061-T4			
As Welded	124 MPa (18 ksi)	186 MPa (27 ksi)	8 %
6061-T6			
Base Alloy	276 MPa (40 ksi)	310 MPa (45 ksi)	12 %
Base Alloy 6061-T6			
As Welded	124 MPa (18 ksi)	186 MPa (27 ksi)	8 %
PWHT	276 MPa (40 ksi)	303 MPa (44 ksi)	5 %
Base Alloy 2014-T6			
As Welded	193 MPa (28 ksi)	234 MPa (34 ksi)	4 %
6063-T4			
Base Alloy	152 MPa (22 ksi)	172 MPa (25 ksi)	22 %

Typical Wire Composition %				
Mn	Si	Cu	Zn	Fe
0.01	11.5	0.01	0.01	0.18