

Oxford Alloy[®] 71T-1M

AWS E71T-1/1M • Mild Steel



Key Features

- ◆ Designed for all-position welding
- ◆ Produces fillet welds with little spatter. Cleaning time is reduced because the slag cover is complete and can be easily removed.
- ◆ Designed for welding mild and medium-carbon steels.

Conformances

AWS ASME SFA 5.20
E71T-1/1M
UNS W07601
ABS Approved

Chemical Composition - As required per AWS 5.20

C	Mn	Si	P	S	Cr	Ni
0.12 max	1.75 max	0.90 max	0.03 max	0.03 max	0.20 max	0.50 max
Mo	V	Al	Cu			
0.30 max	0.08 max	-	0.35 max			

Mechanical Properties - As required by AWS 5.20

	Tensile Strength MPa (ksi)	Yield Strength MPa (ksi)	Elongation %	Charpy V-Notch J (ft-lbf) @ -18 °C (0 °F)
AWS Requirements	(70-95)	(58) min	22 min	27 (20) min
Typical Results - As welded	520 (76)	500 (73)	28	65-120 (48-89)

Recommended Shielding Gas

100% CO₂
75% Argon / 25% CO₂

Typical Welding Parameters

Diameter		Process	Flat		Vertical-Up		Overhead	
in	(mm)		Volt	Amps	Volt	Amps	Volt	Amps
.035	(1.9)	FCAW	20-30	130-250	16-23	90-180	20-28	130-240
.045	(1.14)	FCAW	23-30	150-280	22-26	150-250	24-29	150-250
1/16	(1.6)	FCAW	25-34	180-400	21-27	180-300	24-30	180-310

Diameters & Packaging

Oxford Alloys USA			Oxford Alloys Asia Pacific		
Diameter (in)	Spool Dimension (in)	Spool Weight (lbs)	Diameter (mm)	Spool Dimension (mm)	Spool Weight (kgs)
.035	12	33 lb spool	0.9	300	15 kg spool
.045	12	33 lb spool	1.2	300	15 kg spool
1/16	12	33 lb spool	1.6	300	15 kg spool

Actual test results may vary. Refer test result disclaimer on page 160.