

Pipeweld 101T-1

An all-positional rutile cored wire for pipe welding of steels with a minimum strength of 610 MPa, for use with M21 shielding gas.

Specifications

Classifications	SFA/AWS A5.29 : E101T1-G EN ISO 18276-A : T 62 4 Mn1Ni P M21 2 H5
Welding Current	DC+
Alloy Type	Low alloy

Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
M21 Shielding gas			
As Welded	654 MPa (95 ksi)	709 MPa (103 ksi)	25 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
M21 Shielding gas		
As Welded	-40 °C (-40 °F)	70 J (52 ft-lb)

Typical Weld Metal Analysis %

C	Mn	Si	Ni	Mo
M21 Shielding gas				
0.06	1.54	0.40	0.97	0.15

Deposition Data

Diameter	Current	Voltage	Wire Feed Speed	TTW Dist.	Deposition Rate
1.2 mm (.045 in.)	135-205 A	23-26 V	381-660 cm/min (150-260 in./min)	9.5-12.7 mm (3/8-1/2 in.)	
1.2 mm (.045 in.)	205-230 A	25-27 V	660-965 cm/min (260-380 in./min)	12.7-19 mm (1/2-3/4 in.)	
1.2 mm (.045 in.)	230-265 A	26-30 V	965-1321 cm/min (380-520 in./min)	19-25.4 mm (3/4-1 in.)	
1.2 mm (.045 in.)	100-300 A	21-32 V	3.2-14.5 m/min (1.3-5.7 in./min)		1.3-5.8 kg/h (2.9-12.8 lbs/h)