

Pipeweld 91T-1

An all-positional rutile cored wire for pipe welding of steels with a minimum strength of 550 MPa, for use with M21 shielding gas.

Specifications

Classifications	SFA/AWS A5.29 : E91T1-G EN ISO 18276-A : T 55 4 Z P M21 2 H5
Approvals	CE : EN 13479 UKCA : EN 13479

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

Welding Current	DC+
Alloy Type	Low alloy

Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
As Welded	604 MPa (88 ksi)	670 MPa (97 ksi)	27 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
As Welded	-40 °C (-40 °F)	95 J (70 ft-lb)

Typical Weld Metal Analysis %

C	Mn	Si	Ni	Mo
0.05	1.25	0.37	0.93	0.12

Deposition Data

Diameter	Current	Voltage	Wire Feed Speed	TTW Dist.	Deposition Rate
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.)	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.)	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.)	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)