Pipeweld 70S-6

A copper coated solid wire especially designed for downhill circumferential GMAW on pipes in materials such as APi 5L (grade 52 up to grade 70). The main applications are pipelines, compressor stations and associated works in the oil and gas distribution industries with special requirements. To meet these requirements the electrode is a "clean" type of EN ISO 14341-A G4Si1 as regards chemical analysis.

Specifications	
Classifications	EN ISO 636-A : W 46 3 4Si1 EN ISO 14341-A : G 42 2 C1 4Si1 EN ISO 14341-A : G 46 3 M21 4Si1 EN ISO 636-A : W 4Si1 EN ISO 14341-A : G4Si1 SFA/AWS A5.18 : ER70S-6
Approvals	VdTÜV : 12430

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

Alloy Type	Carbon-manganese steel (Mn/Si-alloyed)

Typical Tensile Properties			
Condition	**Yield Strength**	**Tensile Strength**	**Elongation**
AWS C1			
As Welded	470 MPa (68 ksi)	575 MPa (83 ksi)	29 %
EN C1			
As Welded	495 MPa	575 MPa (83 ksi)	25 %
EN M21			
As Welded	545 MPa	600 MPa (87 ksi)	26 %

Typical Charpy V-Notch Properties		
Condition	**Testing Temperature**	**Impact Value**
AWS C1		
As Welded	-20 °C (-4 °F)	100 J (74 ft-lb)
As Welded	-29 °C (-20 °F)	80 J (59 ft-lb)
EN C1		
As Welded	-20 °C (-4 °F)	80 J (59 ft-lb)
As Welded	20 °C (68 °F)	120 J (89 ft-lb)
EN M21		
As Welded	-20 °C (-4 °F)	100 J (74 ft-lb)
As Welded	-30 °C (-22 °F)	80 J (59 ft-lb)
As Welded	20 °C (68 °F)	140 J (104 ft-lb)

Typical Wire Composition %		
C	**Mn**	**Si**
0.09	1.65	0.97

Typical Weld Metal Analysis %				
C	**Mn**	**Si**	**S**	**P**
0.07	1.25	0.82	0.009	0.009

Recommended Welding Parameters
Wire Diameter
0.9 mm (0.035 in.)
1.0 mm (0.040 in.)

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Recommended Welding Parameters
Wire Diameter
1.2 mm (0.047 in.)