

## 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)

### Tensile Properties

Testing Condition	Yield Strength	Tensile Strength	Elongation
<b>AWS C1</b>			
As Welded	470 MPa	575 MPa	29 %
<b>EN C1</b>			
As Welded	495 MPa	575 MPa	25 %
<b>EN M21</b>			
As Welded	545 MPa	600 MPa	26 %

### Charpy Testing

Testing Condition	Testing Temp	Impact Value
<b>AWS C1</b>		
As Welded	-20 °C	100 J
As Welded	-29 °C	80 J
<b>EN C1</b>		
As Welded	-20 °C	80 J
As Welded	20 °C	120 J
<b>EN M21</b>		
As Welded	-20 °C	100 J
As Welded	-30 °C	80 J
As Welded	20 °C	140 J

### 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

### Welding Parameters

#### Wire Diameter

0.9 mm  
 1.0 mm

MILD STEEL

MIG WIRES / TIG RODS (GMAW/GTAW)



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### Welding\_Parameters

Wire Diameter

1.2 mm