

## Spoolarc 82

Spoolarc 82 is a premium quality, general purpose MIG wire subjected to stringent quality control procedures required for certification to Military, Lloyds, and ABS specifications. Spoolarc 82 is recommended for pressure vessel and pipe fabrication, HVAC duct work, and general carbon steel structural welding.

Specifications	
Classifications	AWS A5.18 : ER70S-3 H4
Approvals	ABS : AWS A5.18: ER70S-3 H4 CWB CSA W48 : CAN/CSA-ISO14341,B-G 49A 2C G3 (ER49S-3) MIL-E-23765/1 MIL-70S-3
Industry	Automotive Industrial and General Fabrication Pipeline Mobile Equipment

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

Typical Tensile Properties			
Condition	Yield Strength	Tensile Strength	Elongation
<b>100% CO<sub>2</sub></b>			
As Welded	415 MPa ( 60 ksi )	505 MPa ( 73 ksi )	28 %
<b>75% Ar - 25% CO<sub>2</sub></b>			
As Welded	489.5 MPa ( 71 ksi )	586 MPa ( 85 ksi )	21 %
<b>90% Ar - 10% CO<sub>2</sub></b>			
As Welded	496 MPa ( 72 ksi )	586 MPa ( 85 ksi )	22 %
<b>98% Ar - 2% O<sub>2</sub></b>			
As Welded	425 MPa ( 62 ksi )	525 MPa ( 76 ksi )	28 %

Typical Charpy V-Notch Properties		
Condition	Testing Temperature	Impact Value
<b>100% CO<sub>2</sub></b>		
As Welded	-29 °C ( -20 °F )	102 J ( 75 ft-lb )
<b>75% Ar - 25% CO<sub>2</sub></b>		
As Welded	-40 °C ( -40 °F )	81 J ( 60 ft-lb )
As Welded	-29 °C ( -20 °F )	99 J ( 73 ft-lb )
As Welded	-45 °C ( -50 °F )	79 J ( 58 ft-lb )
<b>90% Ar - 10% CO<sub>2</sub></b>		
As Welded	-45 °C ( -50 °F )	88 J ( 65 ft-lb )
As Welded	-40 °C ( -40 °F )	114 J ( 84 ft-lb )
As Welded	-29 °C ( -20 °F )	130 J ( 96 ft-lb )
<b>98% Ar - 2% O<sub>2</sub></b>		
As Welded	-29 °C ( -20 °F )	112 J ( 83 ft-lb )

Typical Wire Composition %									
C	Mn	Si	S	P	Ni	Cr	Mo	V	Cu
0.09	1.18	0.58	0.007	0.011	0.02	0.03	0.01	0.004	0.16