

Spoolarc 83

Spoolarc 83 contains 0.5% Mo to provide higher deposit strength in both the as welded and stress relieved conditions. It contains high levels of Manganese and Silicon to provide good wetting and good rust and scale tolerance. Spoolarc 83 is also used for all-position welding of high tensile pipe and tubing commonly found in earthmoving and construction equipment. It is available in forms suitable for MIG and TIG welding.

Classifications:	AWS A5.28:ER80S-D2/ER90S-D2
Approvals:	MIL-E-23765/2 80S-3, CWB CSA W48, CWB CAN/CSA-ISO14341, B-G 55A 3 G4M31 (ER80S-D2)
Industry or Segmentation:	Industrial and General Fabrication, Mobile Equipment, Automotive, Ship/Barge Building

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

Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
100% CO₂			
As Welded	530 MPa (77 ksi)	635 MPa (92 ksi)	23 %
98% Ar - 2% O₂			
As Welded	655 MPa (95 ksi)	750 MPa (110 ksi)	22 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
100% CO₂		
As Welded	-29 °C (-20 °F)	60 J (44 ft-lb)
98% Ar - 2% O₂		
As Welded	-29 °C (-20 °F)	118 J (87 ft-lb)

Wire Composition %

C	Mn	Si	S	P	Ni	Mo	Cu
0.08	1.69	0.63	0.011	0.01	0.09	0.4	0.17