

Dual Shield 7100SR

Dual Shield 7100SR is an all-position gas shielded flux cored wire with an unique balanced formulation to produce superior mechanical properties and excellent operator appeal. The flux cored wire is designed for both as-welded and post-weld heat treatment applications. The wire is formulated to provide excellent impact toughness down to -46°C and has extremely low weld metal diffusible hydrogen levels of less than 4.0 ml/100g. Excellent wet-in action of a weld puddle produces flatter to a slight convex weld bead profile for easy slag detachment.

Specifications

Classifications	SFA/AWS A5.20 : E71T-1C/9C/12C-J
Approvals	ABS : 4YSA H5 BV : SA4YM H5 CCS : 4YSH5 ClassNK : KSW54G(C)H5 DNV-GL : IV YMS(H5) KR : 4YSG (C) H5 LR : 4YS H5

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

Welding Current	DC+
Alloy Type	C-Mn-Ni

Typical Tensile Properties

Condition	Conditional Statement	Yield Strength	Tensile Strength	Elongation
C1 shielding gas				
Stress Relieved	PWHT	435 MPa	520 MPa	31 %
As Welded	As welded	451 MPa	541 MPa	31 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
C1 shielding gas		
Stress Relieved	-46 °C	75 J
Stress Relieved	-40 °C	85 J
As Welded	-30 °C	152 J
As Welded	-46 °C	88 J
As Welded	-40 °C	123 J
Stress Relieved	-30 °C	128 J

Typical Weld Metal Analysis %

C	Mn	Si	Ni
C1 shielding gas			
0.047	1.40	0.55	0.44

Deposition Data

Diameter	Current	Voltage
1.6 mm	160-460 A	24-36 V
1.2 mm	140-330 A	22-34 V

Recommended Welding Parameters

Wire Diameter
1.2 mm