

Dual Shield II 4130 SR

Dual Shield II 4130 SR is an all position flux cored wire for welding low alloy, high strength steels such as 4130. Ideal for offshore oil and gas topsides and platforms requiring high corrosion resistance with stress relieved high strength and low temperature impact toughness properties. Excellent welder appeal and mechanical properties after PWHT. Meets ANSI/NACE MR0175/ISO 15156-1. Typical Diffusible Hydrogen: <4 ml/100g of deposited metal.

Specifications

Classifications

AWS A5.29/A5.29M, ASME SFA 5.29 : E101T1-GM
AWS A5.36/A5.36M : E101T1-M21AP5-G-H4

Tensile Properties

Testing Condition	Yield Strength	Tensile Strength	Elongation
Stress Relieved 2 hour(s) 620 °C	648 MPa	731 MPa	26 %

Charpy Testing

Testing Condition	Testing Temp	Impact Value
Stress Relieved	-46 °C	43 J
Stress Relieved	-46 °C	69 J

Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Cr	Mo
0.05	2.0	0.3	0.006	0.011	0.90	0.03	0.43

Deposition Data

Diameter	Amps	Volts	Wire Feed Speed	TTW Dist
1.2 mm	150-170 A	23-24 V	4,32 m/min	19 mm
1.2 mm	180-220 A	24-26 V	7,19 m/min	16 mm
1.2 mm	230-280 A	26-28 V	10,16 m/min	16 mm

Welding Parameters

Amps	Wire Diameter	TTW Dist	Volts	Wire Feed Speed
150-170 A	1.2 mm	19 mm	23-24 V	432 cm/min
180-220 A	1.2 mm	16 mm	24-26 V	719 cm/min
230-280 A	1.2 mm	16 mm	26-28 V	1016 cm/min