

Dual Shield II 91-K2

FCAW wire for mild steel and 620 MPa class high tensile strength steel. Dual Shield II 91-K2 is an all-positional wire developed to meet hydrogen levels of less than 5ml/100g of weld metal. This wire produces exceptional mechanical properties and low temperature impact toughness. It is intended for use on EH47, EQ51 and others steel types with a minimum yield of 500 Mpa.

Specifications

Classifications	SFA/AWS A5.29 : E91T1-K2C SFA/AWS A5.36 : E91T1-C1A8-K2 JIS Z 3313 : T626T1-1CA-N3M1
Approvals	ABS : 5YQ500SA, H5 BV : SA5Y50, H5 CCS : 5Y50, S, H5 DNV : V Y50MS(H5)

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

Welding Current	DC+
Alloy Type	C Mn Ni
Shielding Gas	C1 (EN ISO 14175)

Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
C1 Shielding Gas			
As Welded	580 MPa	640 MPa	28 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
C1 Shielding Gas		
As Welded	-40 °C	90 J
As Welded	-60 °C	65 J
As Welded	-30 °C	120 J

Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Cr	Mo
0.035	1.33	0.33	0.008	0.011	1.58	0.030	0.002