

Dual Shield 88-C3

Dual Shield 88-C3 is a 1% nickel flux cored wire developed for low temperature impact toughness. It is an excellent choice for welding weathering grade steel, such as Cor-Ten® where W grade electrodes are not desirable. Dual Shield 88-C3 wire is recommended for welding high strength steels in the 70-80 ksi (483-552 MPa) tensile range. The weld metal analysis is similar to an E8018-C3 low hydrogen electrode.

Specifications

Classifications	SFA/AWS A5.29 : E80T1-Ni1C ASME SFA 5.29
Approvals	MIL : MIL-80T1-Ni1C QPL : 24403/1
Industry	Barges Bridge Construction Civil Construction General Cast Iron Repair and Fabrication Power Generation Railcars Ship/Barge Building

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

Alloy Type	Low Alloy 1.0% Ni
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Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
C1			
As Welded	517 MPa (75 ksi)	593 MPa (86 ksi)	28 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
C1		
As Welded	-29 °C (-20 °F)	49 J (36 ft-lb)

Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni
0.087	1.0	0.29	0.015	0.009	0.95

Deposition Data

Diameter	Current	Voltage	Wire Feed Speed	TTW Dist.	Deposition Rate
2.4 mm (3/32 in.)	375-550 A	30-34 V	3.68-7.06 m/min (145-278 in./min)	25.0 mm (1.0, in.)	5.01-9.66 kg/h (11.0-21.3 lbs/h)