

Dual Shield 8000-B2

Dual Shield 8000-B2 is an all-position flux cored electrode which contains 1.25% Cr - 0.5% Mo. The analysis is very similar to Dual Shield 88 CM, except 8000-B2 is for out-of-position welding. The weld metal analysis is similar to an E8018-B2 low Hydrogen electrode. Dual Shield 8000-B2 wire is used for the welding of such steel as 0.5% Cr - 0.5% Mo, 1% Cr-0.5% Mo, and 1.25% Cr - 0.5% Mo. This wire is designed for single or multiple pass welding. Shielding gases of 100% CO₂ and 75% Ar - Remainder CO₂ may be used.

Specifications

Classifications

AWS A5.36 : E81T1-M21PZ-B2
 ASME SFA 5.36
 ASME SFA 5.29
 AWS A5.36 : E81T1-C1PZ-B2
 AWS A5.29 : E81T1-B2C/E81T1-B2M

Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
100% CO₂			
Stress Relieved 1 hour(s) 690 °C	593 MPa	680 MPa	22 %
75% Ar - 25% CO₂			
Stress Relieved 8 hour(s) 690 °C	558 MPa	648 MPa	24 %

Typical Weld Metal Analysis %

C	Mn	Si	S	P	Cr	Mo
75% Ar - 25% CO₂						
0.06	0.70	0.60	0.008	0.009	1.30	0.50

Deposition Data

Diameter	Current	Voltage	Wire Feed Speed	Efficiency (%)	Deposition Rate
75% Ar - 25% CO₂					
1.6 mm	410 A	33 V	889 cm/min	88 %	6.35 kg/h
1.6 mm	365 A	33 V	762 cm/min	86 %	5.58 kg/h
1.2 mm	290 A	33 V	1270 cm/min	87 %	4.85 kg/h
1.4 mm	155 A	25 V	381 cm/min	87 %	2 kg/h
1.6 mm	300 A	30 V	35 cm/min	87 %	4.63 kg/h
1.2 mm	150 A	28 V	508 cm/min	86 %	1.91 kg/h
1.2 mm	250 A	30 V	1016 cm/min	87 %	3.86 kg/h
1.2 mm	330 A	34 V	1524 cm/min	87 %	5.76 kg/h
1.4 mm	360 A	36 V	1143 cm/min	85 %	6.03 kg/h
1.6 mm	450 A	33 V	1016 cm/min	87 %	7.3 kg/h
1.4 mm	430 A	37 V	1524 cm/min	87 %	7.98 kg/h
1.4 mm	245 A	28 V	635 cm/min	86 %	3.31 kg/h
1.4 mm	310 A	33 V	889 cm/min	85 %	4.63 kg/h
1.6 mm	190 A	27 V	38 cm/min	87 %	2.77 kg/h
1.2 mm	210 A	29 V	762 cm/min	86 %	86 kg/h
1.6 mm	500 A	39 V	1270 cm/min	87 %	9.11 kg/h