

Dual Shield 710X

Dual Shield 710X is an all-position flux cored wire for general purpose welding. It provides outstanding operator appeal with an easily controlled arc, improved operation at both lower and higher current levels, minimal spatter and easily removed slag. Dual Shield 710X can be used with 100% CO₂, recommended in applications where weld joint restraint is high. Applications include rail car, barges, civil construction, light equipment and general fabrication.

Specifications

Classifications	SFA/AWS A5.20 : E71T-1C-DH8/T-9C-DH8
Approvals	ABS : 3YSA CWB : E491T1-M21A3-CS1-H16 CWB : E491T1-C1A3-CS1-H16, E491T1-M21A3-CS1-H16 DNV-GL LR : 3YS (M21) LR : 3YS H15 (C1) Seismic Certified : "D"
Industry	Civil Construction Light Equipment Barges Industrial and General Fabrication Ship/Barge Building Railcars

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

Welding Current	DC+
Diffusible Hydrogen	< 8 ml/100g
Alloy Type	C Mn steel

Tensile Properties

Testing Condition	Yield Strength	Tensile Strength	Elongation
C1			
As Welded	520 MPa	625 MPa	28 %

Charpy Testing

Testing Condition	Testing Temp	Impact Value
C1		
As Welded	-18 °C	77 J
As Welded	-29 °C	66 J

Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni
0.03	1.4	0.5	0.009	0.007	0.4

Deposition Data

Diameter	Amps	Volts	Wire Feed Speed	TTW Dist	Deposition Rate
1.2 mm	135-265 A	24-29 V	4.32-13.97 m/min	-	1.5-4.8 kg/h
1.4 mm	125-350 A	24-30 V	3.3-15.24 m/min	-	1.3-6.7 kg/h
1.6 mm	165-415 A	25-31 V	3.43-12.7 m/min	-	1.8-7.6 kg/h

Welding Parameters

Amps	Wire Diameter	TTW Dist	Volts	Wire Feed Speed
100% CO₂				
245-345 A	1.6 mm	19-25.4 mm	27-30 V	673-1016 cm/min
250-340 A	1.6 mm	19-25.4 mm	27-30 V	610-813 cm/min

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Welding_Parameters

Amps	Wire Diameter	TTW Dist	Volts	Wire Feed Speed
250-350 A	1.4 mm	19-25.4 mm	29-31 V	1016-1524 cm/min
130-200 A	1.2 mm	9.5-12.7 mm	22-26 V	356-610 cm/min
165-270 A	1.6 mm	15.8-19 mm	25-28 V	343-673 cm/min
165-225 A	1.2 mm	12.7-19 mm	24-27 V	240-305 cm/min
215-290 A	1.4 mm	15.8-19 mm	25-29 V	711-1016 cm/min
135-250 A	1.4 mm	12.7-15.8 mm	24-28 V	317.5-686 cm/min
135-205 A	1.2 mm	9.5-12.7 mm	23-26 V	432-737 cm/min
225-295 A	1.4 mm	15.8-19 mm	27-30 V	686-940 cm/min
185-285 A	1.6 mm	15.8-19 mm	24-28 V	356-610 cm/min
180-265 A	1.2 mm	19-25.4 mm	26-30 V	889-1397 cm/min
245-355 A	1.4 mm	19-25.4 mm	245-355 V	940-1372 cm/min
185-265 A	1.2 mm	19-25.4 mm	27-29 V	775-1194 cm/min
290-415 A	1.6 mm	25.4-31.75 mm	28-32 V	1016-1270 cm/min
285-400 A	1.6 mm	25.4-31.75 mm	28-32 V	813-1168 cm/min
175-230 A	1.2 mm	12.7-19 mm	25-27 V	737-889 cm/min
125-235 A	1.4 mm	12.7-15.8 mm	23-26 V	330-711 cm/min
75% Ar - 25% CO2				
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