

Dual Shield 700X

Dual Shield 700X is a high deposition, deep penetration wire for joining of heavy structural steel components. Designed for flat and horizontal position welding using CO₂ shielding gas, this X Series wire provides high deposition rates, high efficiency and excellent performance. The bead contour, smooth ripple and slag chemistry allow easy slag removal even in narrow grooves.

Specifications	
Classifications	AWS A5.20 : E70T-1CH8/T-9CH8
Approvals	A.B.S.- 2SA,2YSA ASME SFA 5.20 AWS A5.20 : E70T-1CH8/T-9CH8 CERTIFIED BY C.W.B.- CSA W48 DNV III YMS L.R. - 3S,3YS
Industry	Heavy Equipment Large Components Mobile Equipment Agricultural Equipment

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

Tensile Properties			
Testing Condition	Yield Strength	Tensile Strength	Elongation
100% CO ₂			
As Welded	545 MPa	600 MPa	29 %

Charpy Testing		
Testing Condition	Testing Temp	Impact Value
100% CO ₂		
As Welded	-18 °C	66 J
As Welded	-29 °C	45 J

Typical Weld Metal Analysis %		
C	S	P
100% CO ₂		
0.035	0.015	0.011

Deposition Data						
Diameter	Amps	Volts	Wire Feed Speed	Efficiency (Per)	TTW Dist	Deposition Rate
100% CO ₂						
1.6 mm	205 A	25 V	406 cm/min	80 %	19 mm	2.2 kg/h
1.6 mm	187 A	24 V	356 cm/min	80 %	19 mm	1.9 kg/h
2.4 mm	350 A	28 V	508 cm/min	86.3 %	25.4 mm	7.7 kg/h
1.6 mm	149 A	23 V	254 cm/min	80 %	19 mm	1.3 kg/h
1.6 mm	223 A	25 V	457 cm/min	80 %	19 mm	2.5 kg/h
2.4 mm	290 A	27 V	381 cm/min	86.9 %	25.4 mm	5.8 kg/h
2.4 mm	475 A	32 V	762 cm/min	84.8 %	25.4 mm	11.3 kg/h
1.6 mm	289 A	26 V	660 cm/min	81 %	19 mm	3.8 kg/h
1.6 mm	273 A	26 V	610 cm/min	81 %	19 mm	3.5 kg/h
1.6 mm	240 A	25 V	508 cm/min	80 %	19 mm	2.9 kg/h
2.4 mm	410 A	29 V	635 cm/min	86 %	25.4 mm	9.6 kg/h
1.6 mm	257 A	26 V	559 cm/min	81 %	19 mm	3.2 kg/h
1.6 mm	168 A	24 V	305 cm/min	80 %	19 mm	1.6 kg/h

MILD STEEL

GAS-SHIELDED FLUX-CORED WIRES (FCAW/MCAW)



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Welding_Parameters				
Amps	Wire Diameter	TTW Dist	Volts	Wire Feed Speed
100% CO2				
290-610 A	2.4 mm	25.4-38 mm	26-34 V	254-825.5 mm/min
180-460 A	1.6 mm	19-25.4 mm	25-34 V	343-1270 mm/min