

Dual Shield 7100 Ultra

Like many other Dual Shield products, Dual Shield 7100 Ultra operates in a wider parameter range and generates less welding fumes than many similar welding wires. The low spatter levels and easy slag removal minimizes post weld cleanup. Dual Shield 7100 Ultra can be used with either 100% CO₂ or 75% Ar/25% CO₂. This versatility in gas selection provides the fabricator greater flexibility in choosing both wire and gas. Applications include railcar and earth moving equipment, as well as general structural steel fabrication.

Classifications:	AWS A5.20:E71T-1C-DH8, AWS A5.20:E71T-9C-DH8, AWS A5.20:E71T-1M-DH8, AWS A5.20:E71T-9M-DH8, AWS A5.36:E71T1-C1A2-CS1-DH8, AWS A5.36:E71T1-M21-CS1-DH8, ASME SFA 5.20, ASME SFA 5.36
Approvals:	ABS , BV , LR , DNV-GL , CWB CSA W48; E491T-9-H8
Industry or Segmentation:	Civil Construction, Mobile Equipment, Ship/Barge Building, Industrial and General Fabrication, Bridge Construction, Railcars, Automotive, Process

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

Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
100% CO₂			
As Welded	515 MPa (75 ksi)	585 MPa (85 ksi)	26 %
75% Ar - 25% CO₂			
As Welded	540 MPa (78 ksi)	605 MPa (88 ksi)	26 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
100% CO₂		
As Welded	-18 °C (0 °F)	58 J (43 ft-lb)
As Welded	-29 °C (-20 °F)	34 J (25 ft-lb)
75% Ar - 25% CO₂		
As Welded	-18 °C (0 °F)	57 J (42 ft-lb)
As Welded	-29 °C (-20 °F)	47 J (35 ft-lb)

Typical Weld Metal Analysis %

C	Mn	Si	S	P
100% CO₂				
0.02	1.3	0.5	0.013	0.010
75% Ar - 25% CO₂				
0.03	1.6	0.6	0.012	0.010