Dual Shield II 71 HI

Dual Shield II 71-HI is an all-position flux cored wire designed for optimum performance when using 100% CO2 shielding gas, while producing diffusible hydrogen levels of <4 mL/100g over a wide range of welding parameters. This wire was designed to join low and medium carbon steels where higher impacts and toughness are required. Dual Shield II 71-HI has excellent welder appeal and performs well over steels with moderate rust and mill scale. The smooth metal transfer facilitates easy deposition of vertical – up stringer beads.

Specifications	
Classifications	SFA/AWS A5.20 : E71T-1C SFA/AWS A5.20 : E71T-9C-J JIS Z 3313 : T494T1-1CA-U KS D 7104 : YFL-C504R EN ISO 17632-A : T 42 4 P C1 1 H5
Approvals	ABS : 4YSA H5 (C1) BV : SA4YM H5 (C1) CCS : 4YSH5 (C1) CE : EN 13479 ClassNK : KSW54G(C)H5 CWB : E491T1-C1A4-CS1-H4 (E491T-9J-H4) DNV : IV YMS H5 (C1) KR : 4YSG H5 (C1) LR : 4YS H5 (C1) UKCA : EN 13479
Industry	Marine and Offshore Ship/Barge Building Bridge Construction Industrial and General Fabrication Mobile Equipment Pressure Vessels

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

Welding Current	DC+
Alloy Type	C Mn
Shielding Gas	C1 (EN ISO 14175)

Typical Tensile Properties			
Condition	**Yield Strength**	**Tensile Strength**	**Elongation**
100% CO2			
As Welded	520 MPa (75.4 ksi)	585 MPa (84.8 ksi)	31 %

Typical Charpy V-Notch Properties		
Condition	**Testing Temperature**	**Impact Value**
As Welded	-40 °C (-40 °F)	110 J (81 ft-lb)
As Welded	-30 °C (-22 °F)	120 J (88 ft-lb)

Typical Weld Metal Analysis %					
C	**Mn**	**Si**	**S**	**P**	**Ni**
0.03	1.25	0.33	0.005	0.012	0.35

Deposition Data					
Diameter	**Current**	**Voltage**	**Wire Feed Speed**	**TTW Dist.**	**Deposition Rate**
1.2 mm (0.045 in.)	135-265 A	24-29 V	4.32-13.97 m/min (170-550 in./min)	 (0.4, in.)	1.5-4.8 kg/h (3.3-10. lbs/h)
1.4 mm (0.052 in.)	125-350 A	24-30 V	3.3-15.24 m/min (130-600 in./min)	13.0 mm (0.5, in.)	1.3-6.7 kg/h (2.9-14. lbs/h)

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Deposition Data					
Diameter	**Current**	**Voltage**	**Wire Feed Speed**	**TTW Dist.**	**Deposition Rate**
1.6 mm (1/16 in.)	165-415 A	25-31 V	3.43-12.7 m/min (135-500 in./min)	16.0 mm (0.6, in.)	1.8-7.6 kg/h (4.0-16. lbs/h)