



Coreshield 6

Coreshield 6 is a high productivity, high deposition gasless flux cored wire. This self-shielded wire is ideal for single or multiple pass weld applications in addition to providing high deposition rates, low spatter, and good penetration. Because of its stiffer weld puddle, Coreshield 6 offers exceptional multi-pass weld stacking characteristics, produces excellent bead appearance and X-ray quality weld deposits. Coreshield 6 is run DCEP (electrode positive).

Classifications	3/32 in. (2.4 mm) - AWS A5.20 : E70T-6 3/32 in. (2.4 mm) - AWS A5.36 : E70T6-A2-CS3 5/64 in. (2.0 mm) - AWS A5.20 : E70T-6-D H8 5/64 in. (2.0 mm) - AWS A5.36 : E70T6-A2-CS3-D H8 ASME SFA 5.36 ASME SFA 5.20
Approvals	Seismic Certified "D"
Industry	Bridge Construction Civil Construction Ship/Barge Building

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

Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
As Welded	465 MPa (67 ksi)	590 MPa (85 ksi)	26 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
As Welded	-29 °C (-20 °F)	42 J (31 ft-lb)

Typical Weld Metal Analysis %

C	Mn	Si	S	P	Ni	Al
0.08	1.26	0.13	0.005	0.013	0.40	0.60

Deposition Data

Diameter	Current	Voltage	Wire Feed Speed	Deposition Rate	Deposition Efficiency %
2.4 mm (3/32 in.)	265 A	22 V	254 cm/min (100 in./min)	2.9 kg/h (6.1 lb/h)	78.7 %
2.4 mm (3/32 in.)	365 A	23 V	381 cm/min (150 in./min)	4.2 kg/h (9.3 lb/h)	79.8 %
2.4 mm (3/32 in.)	415 A	23 V	508 cm/min (200 in./min)	5.6 kg/h (12.5 lb/h)	80.9 %
2.4 mm (3/32 in.)	530 A	26 V	762 cm/min (300 in./min)	8.5 kg/h (19.0 lb/h)	81.8 %
2.4 mm (3/32 in.)	615 A	29 V	1016 cm/min (400 in./min)	11.6 kg/h (25.8 lb/h)	81.8 %
2.0 mm (5/64 in.)	275 A	23 V	381 cm/min (150 in./min)	2.8 kg/h (6.2 lb/h)	78.1 %
2.0 mm (5/64 in.)	300 A	23 V	457 cm/min (180 in./min)	3.4 kg/h (7.4 lb/h)	78.8 %
2.0 mm (5/64 in.)	325 A	23.5 V	508 cm/min (200 in./min)	3.8 kg/h (8.3 lb/h)	79.6 %
2.0 mm (5/64 in.)	350 A	24 V	610 cm/min (240 in./min)	4.5 kg/h (10.0 lb/h)	80.1 %
2.0 mm (5/64 in.)	380 A	24.5 V	711 cm/min (280 in./min)	5.3 kg/h (11.7 lb/h)	80.1 %
2.0 mm (5/64 in.)	390 A	25 V	762 cm/min (300 in./min)	5.7 kg/h (12.5 lb/h)	80.3 %

Recommended Welding Parameters

Wire Diameter	Current	Voltage	TTW Dist.	Wire Feed Speed
2.0 mm (5/64 in.)	275-390 A	23-25 V	25.4 mm (1 in.)	381-762 cm/min (150-300 in./min)
2.4 mm (3/32 in.)	265-615 A	22-27 V	38 mm (1.5 in.)	254-1016 cm/min (100-400 in./min)