Coreweld 110

Coreweld 110 is a metal cored electrode designed for single and multipass welding of high strength low alloy steels, such as T-1, HY-80, and HY-100. The arc is smoothwith virtually no spatter. Coreweld 110 is recommended for welding quenched and tempered high strength steels. Because of the metallic core, the wire offers both thehigh deposition rates of a flux cored electrode and the high efficiencies of a solid wire.

Specifications	
Classifications	SFA/AWS A5.28 : E110C-GH4 EN ISO 17632-B : E71T1-C1A4-CS1-H8
Approvals	CWB : E76C-G-H4 CWB : E76C-G-H8
Industry	Bridge Construction Ship/Barge Building

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

Typical Tensile Properties			
Condition	**Yield Strength**	**Tensile Strength**	**Elongation**
M21			
As Welded	770 MPa (112 ksi)	835 MPa (121 ksi)	18 %

Typical Charpy V-Notch Properties		
Condition	**Testing Temperature**	**Impact Value**
M21		
As Welded	-51 °C (-60 °F)	41 J (30 ft-lb)
As Welded	-18 °C (0 °F)	47 J (35 ft-lb)

Typical Weld Metal Analysis %						
C	**Mn**	**Si**	**S**	**P**	**Ni**	**Mo**
0.07	1.6	0.35	0.02	0.01	2.3	0.5

Deposition Data					
Diameter	**Current**	**Voltage**	**Wire Feed Speed**	**TTW Dist.**	**Deposition Rate**
1.2 mm (0.045 in.)	230-390 A	25-32 V	7.6-16.5 m/min (299-650 in./min)	9.5 mm (0.4 in.)	3.5-7.5 kg/h (7.7-16. lbs/h)
1.2 mm (0.045 in.)	260-360 A	28-33 V	8.9-14.0 m/min (350-551 in./min)		4.1-6.3 kg/h (9.0-13. lbs/h)
1.4 mm (0.052 in.)	240-420 A	25-32 V	6.4-14.0 m/min (252-551 in./min)	9.5 mm (0.4 in.)	3.5-7.5 kg/h (7.7-16. lbs/h)
1.4 mm (0.052 in.)	240-410 A	27-36 V	6.4-13.3 m/min (252-524 in./min)		3.5-7.1 kg/h (7.7-15. lbs/h)
1.6 mm (1/16 in.)	290-430 A	26-29 V	5.1-8.9 m/min (201-350 in./min)	9.5 mm (0.4 in.)	4.0-7.2 kg/h (8.8-15. lbs/h)
1.6 mm (1/16 in.)	290-510 A	27-36 V	5.1-12.1 m/min (201-476 in./min)		4.0-9.4 kg/h (8.8-20. lbs/h)

Recommended Welding Parameters				
Current	**Wire Diameter**	**TTW Dist.**	**Voltage**	**Wire Feed Speed**
75% Ar - 25% CO2				

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Recommended Welding Parameters				
Current	**Wire Diameter**	**TTW Dist.**	**Voltage**	**Wire Feed Speed**
300-500 A	1.6 mm (1/16 in.)	9.5-19 mm (3/8-3/4 in.)	26-34 V	460-846 cm/min (181-333 in./min)
200-400 A	1.4 mm (.052 in.)	9.5-19 mm (3/8-3/4 in.)	26-32 V	665.5-833 cm/min (262-328 in./min)
150-350 A	1.2 mm (.045 in.)	9.5-19 mm (3/8-3/4 in.)	24-32 V	838-1453 cm/min (330-572 in./min)