

Bostrand LW1

Bostrand LW1 is a general purpose mild steel copper coated MAG wire. De-oxidised with manganese and silicon, it produces quality welds with excellent radiographic and mechanical properties. Bostrand LW1 is ideal for welding most mild and carbon-manganese steels e.g. Lloyd's grade A to EH.

Specifications

Classifications	EN ISO 14341-A : G 38 3 C1 3Si1 EN ISO 14341-A : G 42 4 M21 3Si1 EN ISO 14341-A : G 3Si1 SFA/AWS A5.18 : ER70S-6
Approvals	CE : EN 13479 DNV-GL : III YMS LR : 3YS H15 (C1, M21) UKCA : EN 13479

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

Alloy Type	Carbon-manganese steel (Mn/Si-alloyed)
Shielding Gas	M20, M21, C1 (EN ISO 14175)

Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
EN C1			
As Welded	450 MPa	540 MPa	25 %
EN M21			
As Welded	480 MPa	560 MPa	26 %
Normalized 0.5 hour(s) 920 °C	320 MPa	455 MPa	32 %
Stress Relieved 15 hour(s) 620 °C	380 MPa	495 MPa	28 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
EN C1		
As Welded	20 °C	110 J
As Welded	-29 °C	98 J
EN M21		
Normalized	-20 °C	75 J
Stress Relieved	-20 °C	90 J
Normalized	20 °C	100 J
As Welded	-40 °C	116 J
Stress Relieved	20 °C	120 J
As Welded	20 °C	130 J

Typical Weld Metal Analysis %

C	Mn	Si	S	P
0.08	0.94	0.63	0.012	0.013

Deposition Data

Diameter	Current	Voltage	Wire Feed Speed	Deposition Rate
0.6 mm	30-100 A	15-20 V	5.5-13.0 m/min	0.7-1.7 kg/h
0.8 mm	60-200 A	18-24 V	3.2-10.0 m/min	0.8-2.3 kg/h
1.0 mm	80-300 A	18-32 V	2.7-15.0 m/min	1.0-5.5 kg/h

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Deposition Data				
Diameter	Current	Voltage	Wire Feed Speed	Deposition Rate
1.2 mm	120-380 A	18-35 V	2.5-15.0 m/min	1.3-8.0 kg/h
1.6 mm	225-550 A	28-38 V	2.3-10.0 m/min	2.1-9.4 kg/h