

ESAB MW1

ESAB MW1 is a copper coated, Mn-Si alloyed solid wire for GMAW of non alloyed steels, used in general construction, automotives, ship building and pressure vessel fabrication. The wire has a carefully controlled wire chemistry and a unique surface technology providing superior weld metal quality at high wire feed speeds and at high welding currents.

Specifications

Classifications	EN ISO 14341-A : G 42 3 C1 3Si1 EN ISO 14341-A : G 42 3 M21 3Si1 EN ISO 14341-A : G 3Si1 SFA/AWS A5.18 : ER70S-6
Approvals	CE : EN 13479 DNV : III MS/IIIT IBR : ER70S6 IRS : 2M, 1T LR : 1T, 3S RDSO : Class I

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

Alloy Type	Mn-Si alloyed
Shielding Gas	M21, C1 (EN ISO 14175)

Typical Tensile Properties

Condition	Conditional Statement	Yield Strength	Tensile Strength	Elongation
M21 Shielding gas				
As Welded	As welded	450 MPa	560 MPa	23 %
C1 Shielding gas				
As Welded	As welded	430 MPa	530 MPa	26 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
M21 Shielding gas		
As Welded	-30 °C	80 J
C1 Shielding gas		
As Welded	-30 °C	70 J

Typical Wire Composition %

C	Mn	Si	S	P	Ni	Cr	Mo	V	Al
0.07	1.50	0.85	0.010	0.015	0.05	0.05	0.01	0.01	0.01

Typical Wire Composition %

Cu	Ti+Zr
0.10	0.05

Deposition Data

Diameter	Current	Voltage
0.8 mm	60-200 A	17-24 V
1.2 mm	120-330 A	18-30 V
1.6 mm	225-440 A	28-36 V
2.0 mm	300-550 A	32-41 V