

## Weld G3Si1

A copper coated, G3Si1 solid wire for GMAW of all general structural and engineering unalloyed and low-alloyed carbon-manganese steels. The electrode may be welded with either a gas mixture or with pure CO<sub>2</sub> as the shielding gas.

### Specifications

<b>Classifications</b>	EN ISO 14341-A : G 38 2 C1 3Si1 EN ISO 14341-A : G 42 3 M21 3Si1 EN ISO 14341-A : G 3Si1 SFA/AWS A5.18 : ER70S-6
<b>Approvals</b>	CE : EN 13479 DB : 42.039.39 NAKS/HAKC : 1.2MM VdTÜV : 13038

<b>Alloy Type</b>	Carbon-manganese steel (Mn/Si-alloyed)
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### Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
<b>EN 80Ar/20CO<sub>2</sub> (M21)</b>			
As Welded	470 MPa	560 MPa	26 %

### Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
<b>EN 80Ar/20CO<sub>2</sub> (M21)</b>		
As Welded	-30 °C	70 J

### Typical Wire Composition %

C	Mn	Si
0.078	1.46	0.85

### Deposition Data

Diameter	Current	Voltage	Wire Feed Speed	Deposition Rate
0.8 mm	60-180 A	18-22 V	3.2-11.0 m/min	0.8-2.6 kg/h
1.0 mm	80-250 A	18-30 V	2.7-13.0 m/min	1.0-4.8 kg/h
1.2 mm	120-330 A	18-34 V	2.3-13.0 m/min	1.3-6.9 kg/h

### Recommended Welding Parameters

	Current	Voltage