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 CO2 as the shielding gas.

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

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

Alloy Type:	Carbon-manganese steel (Mn/Si-alloyed)

Typical Tensile Properties

Condition	Yield Strength	Tensile Strength	Elongation
EN 80Ar/20CO2 (M21)			
As welded	470 MPa	560 MPa	26 %

Typical Charpy V-Notch Properties

Condition	Testing Temperature	Impact Value
EN 80Ar/20CO2 (M21)		
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 m/min	0,8-2,6 kg/h
1.0 mm	80-250 A	18-30 V	2,7-13 m/min	1-4,8 kg/h
1.2 mm	120-330 A	18-34 V	2,3-13 m/min	1,3-6,9 kg/h