CF3 - G4Si1 (Copper Free)

Mild Steel **WIRE/GMAW**

Standards

EN/ISO-Standard - 14341-A
EN/ISO-Classification - G 42 3 C1 / G 46 4 M21 4Si1

AWS-Standard - A5.18
AWS-Classification - ER 70S-6

Features and Applications

- A non-copper coated solid wire suitable for single pass or multipass welding of unalloyed and low-alloyed carbon-manganese steels.
- Environmentally friendly when compared against traditional copper wires offering less fume and smoke in the working environment.
- The higher Si-Mn content increases the weld metal strength and leaves a good bead appearance.
- Designed for semi-automatic and full-automatic GMAW applications.
- Good mechanical properties at sub-zero temperatures down to -40ºC.
- Vacuum-sealed plastic bag packaging to prevent moisture absorption.
- Precision layer wound for superior wire feeding characteristics.
- Typically used on boilers, industrial machinery, bridges, shipbuilding, automotive, rail, structural and engineering fabrications.
- Green wire is produced using virgin raw materials sourced from specialised steel mills, which ensures consistent reliability and quality.
- **Test Certificates can be found online @wilkinsonstar247.com**

Typical Base Materials

S185, S235, S275, S355 - Grade A, B, D, AH32 to DH36 - L210, L240, L290, L360, L240NB, L290NB, L360NB, L360QB, L240MB, L290MB, L360MB, L415MB - X42, X46, X52, X60 - P235T1, P235T2, P275T1 - P275T2, P355N - P235GH, P265GH, P295GH, P355GH - S275, S355, S420, S275M, S275ML, S355M, S355ML, S420M, S420ML, S460, P460, S460ML*

* Illustrative, not exhaustive list

Welding Positions

EN ISO 6947 - PA, PB, PC, PD, PE, PF, PG

Shielding Gases

EN ISO 14175 - C1, M21

Polarity

DC (+)

Welding Parameters

Ø mm	0.80	1.00	1.20
Current (A)	60-200	80-300	120-380
Voltage (V)	18-24	18-32	18-34

Mechanical Properties (Typical) - C1

Tensile Strength (N/mm^2)	Yield Strength (N/mm^2)	Elongation (%)	Impact Strength (J)	Test Temperature
570	460	36	58	-30ºC

Mechanical Properties (Typical) - M21

Tensile Strength (N/mm^2)	Yield Strength (N/mm^2)	Elongation (%)	Impact Strength (J)	Test Temperature
590	490	28	88	-40ºC

Mechanical properties are approximate and may vary based on the heat, shielding gas, welding parameters and other factors.

Chemical Composition % (Typical)

C %	Si %	Mn %	P %	S %	Cu %	Cr %	Ni %	Mo %	Al %	V %	Zr+Ti %
0.08	0.95	1.70	<0.020	<0.020	0.010	<0.15	<0.15	<0.050	<0.020	<0.030	<0.15

Packaging Data

Part No.	Diameter Ø (mm)	Package Weight (Kg)	Package Type	Pallet Quantity
3010201314	0.80	15	BS300 PLW	72
3010201316	1.00	18	BS300 PLW	56
3010201318	1.20	18	BS300 PLW	56

Drums also available.