CF2 - G3Si1 (Copper Free)

Mild Steel WIRE/GMAW

Standards

EN/ISO-Standard - 14341-A **EN/ISO-Classification -** G 42 3 C1 / G 42 4 M21 3Si1 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.
- Advantages of a stable arc when working with increased welding speeds that achieves high quality welds with almost no spatter.
- Good mechanical properties at sub-zero temperatures down to -40°C.
- Vacuum-sealed plastic bag packaging to prevent moisture absorption.
- Fitted with alignment hole clip to ensure smooth feeding.
- Precision layer wound for superior wire feeding characteristics.
- Typically used on boilers, industrial machinery, bridges, shipbuilding, automotive, rail, structural and engineering fabrications etc.
- 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*

* Illustrative, not exhaustive list

Welding Positions

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

| Shielding Gases | Polarity | | |
|------------------------|----------|--|--|
| EN ISO 14175 - C1, M21 | DC (+) | | |



Welding Parameters

| Ømm | 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 | Yield Strength | Elongation | Impact | Test |
|------------------|----------------|------------|--------------|-------------|
| (N/mm²) | (N/mm²) | (%) | Strength (J) | Temperature |
| 540 | 440 | 30 | 70 | -30°C |

Mechanical Properties (Typical) - M21

| Tensile Strength | Yield Strength | Elongation | Impact | Test |
|------------------|----------------|------------|--------------|-------------|
| (N/mm²) | (N/mm²) | (%) | Strength (J) | Temperature |
| 580 | 460 | 26 | 90 | -40°C |

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

TDS.CF2.G3Si1.GMAW rev2

Chemical Composition % (Typical)

| С% | Si % | Mn % | P % | S % | Cu % | Cr % | Ni % | Mo % | AI % | ۷% | Zr+Ti % |
|------|------|------|------------|------------|-------|-------------|-------|-------------|--------|--------|---------|
| 0.07 | 0.85 | 1.45 | <0.025 | <0.025 | 0.010 | <0.15 | <0.15 | <0.15 | <0.020 | <0.030 | <0.15 |

Packaging Data

| Part No. | Diameter Ø (mm) | Package Weight (Kg) | Package Type | Pallet Quantity |
|------------|-----------------|---------------------|--------------|-----------------|
| 3010200837 | 0.80 | 15 | BS300 PLW | 72 |
| 3010200839 | 1.00 | 18 | BS300 PLW | 56 |
| 3010200841 | 1.20 | 18 | BS300 PLW | 56 |

Drums also available.

Liability: Whilst all reasonable efforts have been made to ensure the accuracy of the information contained, this information is subject to change without notice and can be only considered as suitable for general guidance.



