

# G50 (HEAVY DUTY)

Mild Steel WIRE/GMAW

## Standards

EN/ISO-Standard - 14341-A

AWS-Standard - A5.18

EN/ISO-Classification - G 50 5 M21 4Si1 / G 46 3 C1 4Si1

AWS-Classification - ER 70S-6

## Features and Applications

- Copper coated solid wire suitable for general structural and engineering applications of unalloyed and low-alloyed carbon-manganese steels.
- Additional 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 -50°C.
- Test certificates supplied as 3.1 which is actual weld chemistry + mechanicals according EN 10204:2004.
- Wire produced according to ISO 14344:2010 - Class S3 lot of bare solid electrodes and rods or consumable inserts is the quantity of one size produced in one production schedule from one heat.
- 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 (+)

## Mechanical Properties (Typical) - M21

Tensile Strength (N/mm <sup>2</sup> )	Yield Strength (N/mm <sup>2</sup> )	Elongation (%)	Impact Strength (J)	Test Temperature
620	520	28	80	-50°C

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 % <sup>a</sup>	Cr %	Ni %	Mo %	Al %	V %	Zr+Ti %
0.08	0.85	1.70	<0.025	<0.025	<0.35	<0.15	<0.15	<0.15	<0.02	<0.03	<0.15

<sup>a</sup> (includes copper coating)

## Packaging Data

Part No.	Diameter Ø (mm)	Package Weight (Kg)	Package Type	Pallet Quantity
3010301530	1.20	15	BS300 PLW	72
3010301531	1.40	15	BS300 PLW	72
3010301538	1.20	250	Drum	4
3010301539	1.40	250	Drum	4

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.



Exclusive Partnership

