

## Welding Wires For Mild and Low Alloyed Steels

### Classification

AWS : ER 70S-6  
**A5.18**  
 DIN 8559 : SG 2  
 EN 440 : G3 Si 1

### Description and Applications

SG 2 is a copper coated mild steel solid wire electrode suited for universal application in tank, truck bodies farm equipment, structural and carbon steel fabrication. Also due to its high current carrying capacity it is recommended for light gauge and heavy weldments in general shop fabrication where moderately scaled and rusty plates are frequently welded. It provides largely spatter free metal transfer and excellent weldability with powerful desoxidizers for Argon rich Ar/Co2 mixtures and even for CO2.

### Typical Chemical Analysis (%)

C	Mn	Si	P	S	Cu	Mo
0.07-0.10	1.4-1.6	0.7-1.0	max 0.025	max 0.025	max 0.30	-

### Typical Mechanical Properties (%)

Yield Strength (N/mm <sup>2</sup> )	Tensile Strength (N/mm <sup>2</sup> )	Impact Value (ISO-V) (J)	Elongation (%)
450	550	80 J (-20°C)	28

### Current Range and Polarity

Ø(mm)	Ø(in)	Amperage	Volt
0.80	0.030	60-180	18-24
1.00	0.040	80-290	18-30
1.20	0.052	120-380	18-35
1.60	1/16	220-480	28-40

### Welding Positions

