

Key Facts

- Higher levels of silicon and manganese for reduced weld metal surface tension, resulting in a flatter weld bead profile
- Used for joining mild & medium strength steels with a Tensile Strength up to 500MPa, such as AS1397 Grades: 250, 350 and 450
- Copper coated, precision layer wound (PLW) gas metal arc welding wire for use with high and low welding currents

Description

Bossweld is mild steel MIG welding wire containing higher silicon and manganese additions designed to improve welding. The higher Silicon content helps to reduce the molten metal surface tension, resulting in flatter weld bead profile with less spatter.

The precisely measured and applied copper coating (applied after final size wire drawing) improves power transfer at the contact-tip ensuring excellent arc starts and stability every time. Bossweld delivers consistent smooth feed ability, which produces a uniform welding arc that minimizes weld spatter and results in excellent bead appearance, high operator appeal and high productivity.

Classifications, Approvals & Conformances

A5.18 ER 70S-6
RINA: Grade 3S, 3YS, ABS: Grade 3YSA, DNV: Grade III YMS, LRS: Grade 3YS-H15

Welding Positions

All positional, including vertical-down.



Recommended Shielding Gas

Argon +18-25%CO₂ & Carbon Dioxide CO₂
AS 4882-2003: SG-AC-18 or SG-AC-25
ISO-14175-97: M21, M21(1) or M24
AS 4882-2003: SG-C ISO-14175-97: C1

Applications

Low hydrogen, copper coated, low carbon steel MIG wire for use with CO₂ & Argon mixed gases. Suitable for welding of mild & medium strength steels. Ideal for positional welding of sheet metal as the high silicon content promotes smooth even beads. Applications: tube sections, general steel repairs, construction, manufacturing & structural steel, automotive repairs, repairs and maintenance.

Typical All Weld Metal Analysis

C- Carbon	Mn- Manganese	Si - Silicon	P - Phosphorus
0.076%	1.51%	0.89%	0.013%
S - Sulphur	Cu - Copper	Fe - Iron	
0.017%	0.17%	Remainder	

Typical All Weld Metal Mechanical Properties

Yield Strength:	470 MPa
Tensile Strength:	560 MPa
Elongation (5xD):	26%
Typical Diffusible Hydrogen Content:	≤ 3ml/100g of DWM
Impact Strength Charpy-V	150J @ +20°C 90J @ -20°C 60J @ -40°C

Packaging & Ordering Information

Size	Weight	Part Number
0.6mm	15kg	200006N
0.8mm	15kg	200008N
0.9mm	15kg	200009N
1.0mm	15kg	200010N
1.2mm	15kg	200012N