

GMAW**For Mild and High Tensile Steel****POWERMIG ES6**

CLASSIFICATION : AWS A5.18 ER70S-6

JIS Z3312 YGW12

WELDING POSITIONS :

**Approval**

Lloyds Register Of Shipping	Grade 3S 3YS
American Bureau Of Shipping	Grade 3SA 3YSA

DESCRIPTION AND APPLICATIONS

POWERMIG ES6 is a copper coated, low carbon steel GMAW wire, specially formulated for optimum performance under welding grade CO₂ and higher CO₂ mixed gases. Arc transfer characteristics are excellent with Argon based gas mixtures, particularly in spray and pulsed modes of transfer. The high quality copper coating of POWERMIG ES6 ensures smooth and stable feeding, good electrical contact and low tip wear.

POWERMIG ES6 is suitable for a wide range of welding applications on mild and medium strength steels. It is ideal for positional, single pass welding of sheet steel and steel pipes / tubes where the high silicon content promotes smooth even weld beads with excellent wedge wetting and contour.

WIRE ANALYSIS (Wt%)

C	Mn	Si	P	S	Fe
0.10	1.45	0.88	0.012	0.014	Bal

TYPICAL ALL WELD METAL MECHANICAL PROPERTIES*

SHIELDING GAS USED	YIELD STRESS	TENSILE STRENGTH	ELONGATION	CVN IMPACT VALUES
CO ₂	460 N/mm ²	560 N/mm ²	28%	80J @ -20 °C
Ar + 18% CO ₂	480 N/mm ²	580 N/mm ²	26%	70J @ -20 °C

* in "as welded" condition.

SIZES AND RECOMMENDED CURRENT RANGE (DC<+>)

DIAMETER ø	0.8mm	1.0mm	1.2mm	1.6mm
WELDING CURRENT RANGE (amps)	60 - 180	100 - 290	120 - 350	160 - 390
ARC VOLTAGE RANGE (volts)	14 - 22	16 - 29	18 - 32	18 - 34

#POWERMIG ES6 is available in a multitude of spool types and sizes including 1kg, 5kg, 15kg and 20kg plastic spools. Also available in Pail Pack 250kg for size 0.8mm, 0.9mm, 1.0mm and 1.2mm.