

**GMAW****For Mild and High Tensile Steel****POWERMIG ES4**

CLASSIFICATION : AWS A5.18 ER70S-4

JIS Z3312 YGW12

WELDING POSITIONS :

**DESCRIPTION AND APPLICATIONS**

POWERMIG ES4 is a solid copper coated wire for butt or fillet MAG welding of mild steel and 50kgf/mm<sup>2</sup> grade high tensile steel. Stable wire feeding is due to special wire surface treatment. The high quality copper coating ensures low friction, stable feeding, improved electrical contact and low tip wear. Suitable for welding of mild steel and 50kgf/mm<sup>2</sup> grade high tensile steel for thin plate with pure CO<sub>2</sub> shielding gas.

**TYPICAL WIRE ANALYSIS (Wt%)**

C	Mn	Si	P	S	Fe
0.09	1.19	0.77	0.008	0.007	Bal

**TYPICAL ALL WELD METAL MECHANICAL PROPERTIES\***

SHIELDING GAS USED	YIELD STRESS	TENSILE STRENGTH	ELONGATION	CVN IMPACT VALUES
CO <sub>2</sub>	435 N/mm <sup>2</sup>	550 N/mm <sup>2</sup>	28%	75J @ -20 °C
Ar + 18% CO <sub>2</sub>	460 N/mm <sup>2</sup>	570 N/mm <sup>2</sup>	24%	70J @ -20 °C

\* in "as welded" condition.

**SIZES AND RECOMMENDED CURRENT RANGE (DC<+>)**

DIAMETER $\varnothing$	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	15 - 26	18 - 32	18 - 34

#POWERMIG ES4 is available in a multitude of spool types and sizes including plastic spools. 1kg, 5kg, 15kg and 20kg plastic spools. Also available in Pail Pack 250kg for size 0.8mm, 0.9mm, 1.0mm and 1.2mm.