



PRODUCT DATA SHEET

SOLID MIG WIRES - MILD STEEL

WCD 6402

Austmig ES6



SUMMARY

- > Electrostatically Copper Coated Gas Metal Arc (MIG) Wire
- > All Positional Welding of Mild and Medium Strength Steels
- > Precision Layer Wound, Very Low Diffusible Hydrogen
- > Suitable for all Transfer Modes
- > Designed for use with Argon/CO₂ and CO₂ Shielding Gases

CLASSIFICATION

- > AS/NZS 14341-B - G 49A 3U C/M S6
- > AWS A5.18 ER70S-6

DESCRIPTION AND APPLICATION

Austmig ES6 is a copper coated, low carbon steel GMAW wire, formulated for optimum performance under Argon/CO₂ mixed gases and welding grade CO₂. Arc transfer characteristics are excellent with Argon based gas mixtures, particularly in spray and pulsed transfer modes. Austmig ES6 is an electrostatically copper coated wire providing excellent wire feeding and electrical conductivity and reducing contact tip wear. The higher manganese and silicon content of Austmig ES6 provides effective weld metal deoxidation for resistance to porosity.

Austmig ES6 is suitable for a wide range of welding applications on mild and medium strength steels providing consistently very low "H5" weld metal diffusible hydrogen levels when used with suitable shielding gases.

OPERATIONAL DATA

WIRE SIZE (MM)	WELDING CURRENT RANGE (A)	ARC VOLTAGE RANGE *(V)
0.8	60 - 180	14 - 22
0.9	70 - 230	15 - 26
1.0	100 - 290	16 - 29
1.2	120 - 350	18 - 32
1.6	160 - 390	18 - 34

Welding Current DC +

*Voltage is determined by arc current and electrode arc length.

Welding currents and voltage shown are operational guides only.

SHIPPING APPROVAL

LR 3S, 3YS

TYPICAL ALL WELD METAL CHEMICAL ANALYSIS

C	Mn	Si	S	P	Fe
0.1	1.45	0.88	0.02	0.022	Bal

TYPICAL ALL WELD METAL MECHANICAL ANALYSIS

Gas Type	CO ₂	Ar+18% CO ₂
Yield Stress	462 MPa	450 MPa
Tensile Strength	570 MPa	560 MPa
Elongation	27%	27%
CVN Impact Values	96J @ -30°C	86J @ -30°C

PACKAGING DATA

WIRE SIZE (MM)	PACK SIZE AND TYPE	PART NO.
0.8	5kg Spool	ES608M5KG
0.9	5kg Spool	ES609M5KG
	15kg Spool	ES609S
1.0	15kg Spool	ES610S
1.2	15kg Spool	ES612S
1.6	15kg Spool	ES616S

The information contained or otherwise referenced herein is presented only as "typical" without guarantee or warranty, and Welding Industries of Australia expressly disclaims any liability incurred from any reliance thereon. Typical data is obtained when welded and tested in accordance with the AWS and or AS/NZS specification. Other tests and procedures may produce different results. No data is to be construed as a recommendation for any welding condition or technique by Welding Industries of Australia.

Issue CA - March 2021



welding.com.au 1300 300 884

Trusted by the best