

PRODUCT DATA SHEET

WCD 6435

SOLID MIG WIRES - LOW ALLOY STEEL

Austmig NiCrMo













SUMMARY

- > Copper Coated, Low Allloy Gas Metal Arc (MIG) Welding Wire
- > All Positional Welding of Medium and High Strength Steels
- Welded Strength 760 MPa Tensile Class

CLASSIFICATION

- > AS/NZS 16834-B G 78A 4U M21 G
- > AWS A5.28 ER110S-G

DESCRIPTION AND APPLICATION

Austmig NiCrMo is a copper coated, low alloy solid wire suitable for the all positional welding of high strength steels using Argon + CO₂ gas mixtures.

Austmig NiCrMo is ideal for the full strength welding of quenched and tempered structural steels, of the 760 MPa tensile class, such as USS-T1, CcMo Pipe, Welten 80, Weldox 700, X80, N-A-XTRA and Bisplate 80.

OPERATIONAL DATA

| WIRE SIZE (MM) | WELDING CURRENT RANGE (A) | ARC VOLTAGE RANGE *(V) |
|-------------------|---------------------------------|---------------------------|
| 0.9 | 70 - 230 | 15 - 26 |
| 1.2 | 120 - 350 | 18 - 32 |

Welding Current DC +

*Voltage is determined by arc current and electrode arc length. Welding currents and voltage shown are operational guides only. NOTE: Austmig NiCrMo is NOT to be used in weldments which are to be stress relieved.

TYPICAL ALL WELD METAL CHEMICAL ANALYSIS

| C | Mn | Si | Ni | Cr | Мо | V | |
|------|------|------|------|------|------|------|--|
| 0.08 | 1.60 | 0.60 | 1.50 | 0.30 | 0.30 | 0.10 | |

TYPICAL ALL WELD METAL MECHANICAL ANALYSIS

| Gas Type | Ar+18% CO ₂ |
|-------------------|------------------------|
| Yield Stress | 750 MPa |
| Tensile Strength | 800 MPa |
| Elongation | 19% |
| CVN Impact Values | 70J @ -40°C |

In as welded condition.

NOTE: The use of less oxidizing argon based gas mixtures (ie Ar/O $_2$, Ar/CO $_2$, Ar/CO $_2$ /O $_2$), will result in higher alloy recovery in the weld metal, leading to higher tensile properties.

PACKAGING DATA

| WIRE SIZE (MM) | PACK SIZE AND TYPE | PART NO. |
|-------------------|-----------------------|-------------|
| 0.9 | 15kg Spool | MNICRM009S |
| 1.2 | 15kg Spool | MNICRM012S |

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