

AUSTFIL EXCEL



WCD 7020

New Enhanced Formula for Consistently Great Results!

SUMMARY

- Rutile type flux-cored wire designed for all positional welding
- Formulated for 100% CO₂ and 75-80% Ar + 25-20% CO₂ shielding gases
- Excellent operator appeal and usability with stable arc, low spatter, smooth bead appearance and easy slag removal

CLASSIFICATION

- AS/NZS ISO 17632-B: T493T1-1 M A-U-H10, T493T1-1 C A-U-H5
- AWS A5.20: E71T-1M, E71T-1C
- E71T-9M, E71T-9C

DESCRIPTION AND APPLICATION

An all positional rutile micro alloyed type flux-cored welding wire specifically formulated for optimum performance using both CO₂ and Ar/CO₂ shielding gas mixtures.

The exceptionally smooth arc performance produces a superb weld for single or multipass welding with low spatter losses in all positions and applications (except vertical down). Austfil Excel is recommended for the welding of mild, carbon and carbon-manganese steels where good impact properties are required.

This high deposition flux-cored wire has been specially formulated to operate in a wider, more forgiving parameter range. It is suitable for general & heavy fabrication, structural steel fabrication, truck bodies, shipbuilding, earth moving equipment, storage tanks & bridge construction.

OPERATIONAL DATA

| Wire size (MM) | Welding Current Range (A) | Arc Voltage Range *(V) |
|----------------|---------------------------|------------------------|
| 1.2 | 160 - 300 | 22 - 30 |
| 1.6 | 180 - 400 | 23 - 35 |

Recommended electrical stick out is 15-25mm.

Welding Current DC +

*Voltage is determined by arc current and wire arc length. Welding currents and voltage shown are operational guides only

SHIPPING APPROVAL

LR 100% CO₂ 3YS H5, 80/20 3YS H10 (Pending)

TYPICAL ALL WELD METAL CHEMICAL ANALYSIS

100% CO₂

| C | Mn | Si | S | P | Ni |
|------|------|------|------|------|------|
| 0.04 | 1.35 | 0.45 | 0.01 | 0.01 | 0.01 |

75%Ar+25%CO₂

| C | Mn | Si | S | P | Ni |
|------|------|------|------|------|------|
| 0.04 | 1.45 | 0.50 | 0.01 | 0.01 | 0.01 |

TYPICAL ALL WELD METAL MECHANICAL ANALYSIS

| Gas Type | Ar+25% CO ₂ | 100% CO ₂ |
|-------------------|------------------------|----------------------|
| Yield Strength | 530 MPa | 580 MPa |
| Tensile Strength | 610 MPa | 550 MPa |
| Elongation | 30.5% | 32.8% |
| CVN Impact Values | 80J @ -30°C | 65J @ -30°C |

PACKAGING DATA

| Wire size (MM) | Pack size and type | Pallet size (KG) | Part No. |
|----------------|--------------------|------------------|----------|
| 1.2 | 15kg spool | 1080 | AE71CM12 |
| 1.6 | 15kg spool | 1080 | AE71CM16 |



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OPERATIONAL DATA

| Wire size (MM) | Weld position | Amps | Volts | Wire feed speed (M/MIN) | Depositor rate (KG/HR) | Contact tip to work distance (MM) |
|----------------|-------------------|------|-------|-------------------------|------------------------|-----------------------------------|
| 1.2 | All Positions | 160 | 24 | 6.6 | 2.54 | 16 |
| | | 185 | 25 | 7.9 | 3.12 | 16 |
| | | 200 | 26 | 7.7 | 3.48 | 16 |
| | | 240 | 27 | 9.7 | 4.40 | 19 |
| | Flat & Horizontal | 280 | 32 | 12.7 | 5.70 | 19 |
| | | 320 | 34 | 15.0 | 7.14 | 19 |
| 1.6 | All Positions | 180 | 24 | 4.1 | 2.11 | 25 |
| | | 245 | 25 | 4.8 | 3.0 | 25 |
| | | 275 | 26 | 5.7 | 3.5 | 25 |
| | Flat & Horizontal | 300 | 30 | 6.0 | 4.56 | 25 |
| | | 360 | 31 | 8.4 | 6.18 | 25 |
| | | 420 | 33 | 10.9 | 7.91 | 25 |

- Maintaining a proper welding procedure - including pre-heat and interpass temperatures - may be critical depending on the type and thickness of steel being welded.
- See above: This information was determined by welding using 100% CO₂ shielding gas with a flow rate between 17/24 l/min, When using 75% Ar/25% CO₂ shielding gas, reduce voltage by 1 volt.
- All positions include: Flat, Horizontal, Vertical Up, and Overhead.

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