

# AUSTFIL EXCEL



WCD 7020

# New & Improved for Optimum Positional Welding

## SUMMARY

- Rutile type flux-cored wire designed for all positional welding
- Formulated for 100% CO<sub>2</sub> and 75-80% Ar + 25-20% CO<sub>2</sub> 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 CO<sub>2</sub> and Ar/CO<sub>2</sub> 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% CO<sub>2</sub> 3YS H5, 80/20 3YS H10

## TYPICAL ALL WELD METAL CHEMICAL ANALYSIS

### 100% CO<sub>2</sub>

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

### 75%Ar+25%CO<sub>2</sub>

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 <sub>2</sub>	100% CO <sub>2</sub>
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



### OPERATIONAL DATA

Wire size (MM)	Weld position	Amps	Volts	Wire feed speed (M/MIN)	Deposition 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% CO<sub>2</sub> shielding gas with a flow rate between 17/24 l/min, When using 75% Ar/25% CO<sub>2</sub> shielding gas, reduce voltage by 1 volt.
- All positions include: Flat, Horizontal, Vertical Up, and Overhead.

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