



# PRODUCT DATA SHEET

WCD 7030

## HYDROGEN CONTROLLED ELECTRODES

### AUSTARC 77



#### SUMMARY

- > Basic Coated Iron Powder Electrode
- > Low Hydrogen Status
- > Suitable for All Positional Welding Except Vertical Down
- > Excellent Low Temperature Fracture Toughness
- > Easy to Strike and Re-Strike
- > Excellent Low Temperature Fracture Toughness

#### IDENTIFICATION

**Coating** - Light Grey **Tip** - Black **Imprint** - WIA 4918-1A

#### CLASSIFICATION

- > AS/NZS 4855-B - E49 18-1 A U H5
- > AWS A5.1: E7018-1

#### DESCRIPTION AND APPLICATION

The Austarc is a smooth running basic type of low hydrogen iron powder electrode used for all positional welding except vertical down. The arc is very quiet with little spatter and the welds are exceptionally smooth with excellent wash in at the toes of the weld, thus giving minimum undercut. This electrode is used where the highest restrained work pieces are fabricated for mining equipment, pressure vessels, heavy girders, earth moving plant, repair and maintenance etc.

For the highest weld quality with low hydrogen levels, Austarc 77 electrodes should be baked at 400 °C for one hour to obtain <5mL/100g weld metal. After baking, the electrodes should be used from a hot box set at 100 -150 °C.

#### OPERATIONAL DATA

ELECTRODE SIZE (MM)	ELECTRODE LENGTH (MM)	WELDING CURRENT RANGE *(A)	ARC VOLTAGE RANGE **(V)
2.5	305	60 - 105	20
3.2	380	90 - 145	22
4.0	380	140 - 200	24
5.0	455	180 - 300	26

\*Recommended for DC +/- or AC (minimum 70 OCV) operation.  
 \*\*Voltage is determined by arc current and electrode arc length.  
 Arc voltage shown is typical and is only to be used as a guide.

#### SHIPPING APPROVAL

LR 4Ym H5    DNV 3Y H5

#### TYPICAL ALL WELD METAL CHEMICAL ANALYSIS

C	Mn	Si	S	P	Fe
0.05	1.28	0.30	0.011	0.022	Bal

#### TYPICAL ALL WELD METAL MECHANICAL ANALYSIS

Yield Strength	455 MPa
Tensile Strength	534 MPa
Elongation	30%
CVN Impact Values	123J @ -50 °C

#### PACKAGING DATA

ELECTRODE SIZE (MM)	PACKAGING (KG)		APPROX. NO. OF RODS PER KG	PART NO.
	PACKET	CARTON		
2.5	2.2	11	45	7725
3.2	5.0	15	26	7732
4.0	5.0	15	17	7740
5.0	5.0	15	9	7750

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