



PRODUCT DATA SHEET

WCD 7030

HYDROGEN CONTROLLED ARC WELDING ELECTRODES

AUSTARC 77



- ▶ Basic Coated Iron Powder Electrode
- ▶ Low Hydrogen Status
- ▶ Suitable For All Positional Welding Except Vertical Down
- ▶ Excellent Low Temperature Fracture Toughness

Identification

Coating - Light Grey

Tip - Black

Imprint - PH 7018-1 4918-1A

Classifications

AS/NZS 1553.1 E4818 Grade 5 H5 (Superseded)

AWS A5.1 E7018-1 H8

AS/NZS 4855 ISO 2560B E4918-1 AU H5*

*New classification replaces AS/NZS 1553.1

Description & Applications

The Austarc 77 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 * (amps)	ARC VOLTAGE RANGE (volts)**
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 or AC (minimum 70 OCV) or DC+/- operation.

** Voltage is determined by arc current and electrode arc length. Arc voltage shown are typical and are only to be used as a guide.

Shipping Approvals

LRS 3S, 4YM, H5

ABS 3H5, 3YH5

Typical All Weld Metal Chemical Analysis

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

Typical All Weld Metal Mechanical Properties

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

In as welded condition.

Packaging Data

ELECTRODE SIZE (mm)	PACKAGING (KG)		APPROX NO OF RODS PER KG	PART NUMBER
	Packet	Carton		
2.5	2.2	11	43	7725
3.2	5	15	26	7732
4.0	5	15	17	7740
5.0	5	15	9	7750

Storage Information

Products should be stored in dry conditions in original sealed undamaged packaging as supplied. The integrity of consumable products can be adversely affected by time and storage conditions and that the detail shown in the batch certificate is true at the time of packaging and is only valid for a LIMITED time. After that time the product may need to be reconditioned or checked to ensure it is suitable for the purpose it is intended to be used for.*

*NOTE: Refer to Welding Technology Institute of Australia (WTIA), technical 3. care and conditioning of arc welding consumables.

Issue AB

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