

# **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 H8

# **DESCRIPTION AND APPLICATION**

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  $^{\circ}$ 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  $^{\circ}$ 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

\*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.

**////**Miller



#### **SHIPPING APPROVAL**

**LR** 4Ym H5 **DNV** 3Y H5

#### **TYPICAL ALL WELD METAL CHEMICAL ANALYSIS**

С	Mn	Si	Р	S	Fe
0.06	1.40	0.36	0.015	0.006	Bal

### **TYPICAL ALL WELD METAL MECHANICAL ANALYSIS**

Yield Stress	455 MPa
Tensile Strength	534 MPa
Elongation	30%
<b>CVN Impact Values</b>	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	48	7725
3.2	5.0	15	25	7732
4.0	5.0	15	17	7740

The information contained or otherwise referenced herein is presented only as "typical" without guarantee or warranty, and Welding Industries of Australia expressly disclaims any liability incurred from any reliance thereon. Typical data is obtained when welded and tested in accordance with the AWS and or AS/NZS specification. Other tests and procedures may produce different results. No data is to be construed as a recommendation for any welding condition or technique by Welding Industries of Australia.

Issue CA - November 2021

