



# PRODUCT DATA SHEET

WCD 7078AA

## HYDROGEN CONTROLLED ELECTRODES

### AUSTARC 18TC VAC PACK



#### SUMMARY

- > Basic Twin-Coated (TC) Iron Powder Electrode
- > Very Low Hydrogen H4 Status
- > Suitable for all Positional Welding Except Vertical Down and Moisture Resistance Coating
- > Excellent Low Temperature Fracture Toughness
- > Easy to Strike and Re-Strike
- > Smooth Performance on Low OCV AC Welding Machines

#### IDENTIFICATION

**Coating** - Light Grey **Tip** - Blue **Imprint** - WIA 4918-1H4R

#### CLASSIFICATION

- > AS/NZS 4855-B - E49 18-1 A U H5
- > AWS A5.1: E7018-1H4R

#### DESCRIPTION AND APPLICATION

Austarc 18TCH4R is an iron powder hydrogen controlled electrode used primarily on C-Mn and low alloy structural steels. The unique twin-coat design for 18 type low hydrogen electrode offers excellent AC arc stability and superb DC+ arc transfer, excellent re-strike, reduced spatter level and extraordinary ease of use for out-of-position welding. This newly formulated electrode also meet the moisture resistance coating requirement and is available in vacuum packaging to provide factory fresh condition upon delivery.

Typical applications include oil and gas, pipe welding, structural steel construction, off-shore where Ni-alloying is prohibited, mining equipment, heavy girders and earth moving plant repair and maintenance.

#### OPERATIONAL DATA

ELECTRODE SIZE (MM)	ELECTRODE LENGTH (MM)	WELDING CURRENT RANGE *(A)
2.5	300	60 - 90
3.2	380	90 - 135
4.0	380	140 - 190

\*Please note, the recommended welding polarity for Austarc 18TCH4R is DC + or AC (Min. 50 OCV).

#### SHIPPING APPROVAL

LR 4Y BV 4YH5

#### TYPICAL ALL WELD METAL CHEMICAL ANALYSIS

C	Mn	Si	P	S	Fe
0.05	1.40	0.40	0.014	0.006	Bal

#### TYPICAL ALL WELD METAL MECHANICAL ANALYSIS

Yield Strength	406 MPa
Tensile Strength	540 MPa
Elongation	30%
CVN Impact Values	90J @ -50°C

#### PACKAGING DATA

ELECTRODE SIZE (MM)	PACKAGING (KG)		APPROX. NO. OF RODS PER KG	PART NO.
	PACKET	CARTON		
2.5	2.0	8	45	18TCH4VP25
3.2	2.0	8	26	18TCH4VP32
4.0	2.0	8	17	18TCH4VP40

#### MATERIALS TO BE WELDED

	CODE	TYPE
Structural Steel	AS 1163	C250, C350, C450
	AS 1397	G250, G300, G350, G450
	AS 1450	C/H200, C/H250, C/H350, C/H450
	AS 1450	250, 300, 350, 400
	C/H200, C/H250,	200, 250, 300, 350, 400, 450, A1006, XK1016, WR350
	AS/NZS 3679.1	250, 300, 350, 400
Pressure Equipment Steel	AS/NZS 3678.1	200, 250, 300, 350, 400, 450, A1006, XK1016, WR350
	AS/NZS3679.2	200, 250, 300, 350, 400, 450, A1006, XK1016, WR350
AS 1548	7-430, 7-460, 5-590, 7-490	
Fine Grain Steel	AS/NZS 1594	HAI, HA3, HA4N, HA200, HA250, HA300, HA1006, HA1010, HA1016, HA350, HA400
Cast Steel	AS/NZS 1594	HAI, HA3, HA4N, HA200, HA250, HA300, HA1006, HA1010, HA1016, HA350, HA400
Pipe Material	API 5LX	X42, X46, X52, X60

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