



PRODUCT DATA SHEET

WCD 7074

HYDROGEN CONTROLLED ELECTRODES

Austarc 18TC



SUMMARY

- > Basic Twin-Coated (TC) Iron Powder Electrode
- > Very Low Hydrogen H5 Status
- > Suitable for All Positional Welding Except Vertical Down
- > 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 4918-1A

CLASSIFICATION

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

DESCRIPTION AND APPLICATION

Austarc 18TC 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.

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 18TC 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
0.06	1.55	0.54	0.010	0.020	Bal

TYPICAL ALL WELD METAL MECHANICAL ANALYSIS

Yield Stress	530 MPa
Tensile Strength	602 MPa
Elongation	24%
CVN Impact Values	87J @ -50°C

PACKAGING DATA

ELECTRODE SIZE (MM)	PACKAGING (KG)		APPROX. NO. OF RODS PER KG	PART NO.
	PACKET	CARTON		
2.5	2.2	11	52	18TC25
3.2	5.0	15	26	18TC32
4.0	5.0	15	17	18TC40

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 1548	7-430, 7-460, 5-590, 7-490
	AS/NZS 3678.1 AS/NZS3679.2	200, 250, 300, 350, 400, 450, A1006, XK1016, WR350
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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