

## PRODUCT DATA SHEET

### LOW HYDROGEN CONTROLLED ELECTRODES

# PH16TC



#### SUMMARY

- > A low hydrogen controlled electrode
- > Suitable for all positions (except vertical down)
- > For carbon steel/high tensile steels
- > Very fluid slag action
- > Easy slag removal
- > Exceptional arc stability
- > X-ray quality

#### IDENTIFICATION

**Coating** - Light Grey **Tip** - Bronze

**Imprint** - PH16TC 7016 4916A

#### CLASSIFICATION

- > AS/NZS 4855B-E4916AU H10
- > AWS A5.1 E7016 H8

#### DESCRIPTION AND APPLICATION

The Weldwell PH16TC is a smooth running, basic flux low hydrogen electrode, developed for all-positional (except vertical down) welding, using AC or DC power sources. The electrode gives exceptional stability and weldability for its class and produces high quality weld deposits with reliable notch toughness to 40 °C. The PH16TC is manufactured using a unique twin coating extrusion process, which produces electrodes with two concentric flux coatings. Arc stabilising elements are concentrated in the inner coating of the electrode for significantly improved arc stability on low open circuit AC welding machines.

The PH16TC is the ideal low hydrogen electrode for welding unalloyed and low alloy medium strength steels used in a multitude of critical and non-critical applications. This electrode is particularly suitable for welding heavy wall joints subject to high degrees of restraint and for structural applications where notch toughness down to -40 °C is a prerequisite. PH16TC is often used in maintenance situations as a buffer or build-up layer on agricultural and earth moving equipment prior to hard surfacing.

#### OPERATIONAL DATA

ELECTRODE SIZE (MM)	ELECTRODE LENGTH (MM)	WELD CURRENT RANGE * (A)
2.5	305	60 - 90
3.2	380	90 - 135
4.0	380	140 - 190

\*Recommended for DC +/- or AC (minimum 45 OCV).  
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

- > **Lloyd's Grading** - DXVuO BF 4Y H10

#### TYPICAL ALL WELD METAL CHEMICAL ANALYSIS

C	Mn	Si
0.05	1.18	0.52

#### TYPICAL ALL WELD METAL MECHANICAL ANALYSIS

Yield Stress	426 MPa
Tensile Strength	518 MPa
Elongation	33%
CVN Impact Values	118J @ -40 °C

#### PACKAGING DATA

ELECTRODE SIZE (MM)	PACKAGING		APPROX. NO. OF RODS PER KG	PART NO.
	KG PER PACKET	PACKETS PER CARTON		
2.5	2.5	5	147	PH16TC25
3.2	5.0	3	148	PH16TC32
4.0	5.0	3	90	PH16TC40

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