

PRODUCT DATA SHEET

LOW HYDROGEN CONTROLLED ELECTRODES



PH77



SUMMARY

- > A low hydrogen controlled electrode
- > Suitable for all positions (except vertical down)
- > Exceptionally smooth welding
- > For low alloy, high tensile steels and steels to LT40 specification

IDENTIFICATION

Coating - Light Grey **Tip** - Black
Imprint - PH77 7018-1 4918-1A

CLASSIFICATION

- > AS/NZS 4855B E4918-1AU H5
- > AWS A5.1 E7018-1 H8

DESCRIPTION AND APPLICATION

The Weldwell PH77 is a low-hydrogen electrode containing iron-powder in the coating. PH77 is designed to weld in all positions except vertical down. The welding arc of PH77 is very quiet and with very little spatter and the weld metal deposits exceptionally smoothly with excellent wash to the weld sides which practically eliminates undercutting. The slag is easy to control and is easy to remove after welding.

Compared to the general types of low-hydrogen electrodes the PH77 performs nearly like a rutile electrode with low-hydrogen results. This Weldwell PH77 electrode is for welding unalloyed, microalloyed and low-alloy steels up to medium tensile strength. This electrode is used where the highest standards are required, such as high ductility and X-ray qualities. It is excellent for thick plates and highly restrained work pieces, etc.

Suitable for welding Penstocks, turbines, Class 1 pressure vessels, heavy girders, tanks, earthmoving plant, repair and maintenance, etc.

OPERATIONAL DATA

ELECTRODE SIZE (MM)	ELECTRODE LENGTH (MM)	WELD CURRENT RANGE * (A)
2.5	305	60 - 105
3.2	380	90 - 145
4.0	380	140 - 200

*Recommended for DC +/- or AC (minimum 70 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 H5
- > **BV Grade** - 3Y HH
- > **ABS Grade** - 3Y

TYPICAL ALL WELD METAL CHEMICAL ANALYSIS

C	Mn	Si
0.04	1.47	0.32

TYPICAL ALL WELD METAL MECHANICAL ANALYSIS

Yield Stress	483 MPa
Tensile Strength	563 MPa
Elongation	29%
CVN Impact Values	123 J @ -50°C

PACKAGING DATA

ELECTRODE SIZE (MM)	PACKAGING		APPROX. NO. OF RODS PER KG	PART NO.
	KG PER PACKET	PACKETS PER CARTON		
2.5	2.2	5	107	PH7725
3.2	5.0	3	126	PH7732
4.0	5.0	3	87	PH7740

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