



# PRODUCT DATA SHEET

## CELLULOSE COATED ELECTRODES

# PH31A



### SUMMARY

- > A thinly coated cellulose electrode
- > Intended for welding in all positions
- > An easy to ignite arc that is powerful and extremely stable

### IDENTIFICATION

**Coating** - White **Tip** - Brown **Imprint** - PH31A 6011 4311A

### CLASSIFICATION

- > AS/NZS 4855B E4311A
- > AWS A5.1 E6011

### DESCRIPTION AND APPLICATION

The Weldwell PH31A is formulated for a deeply penetrating arc with fast burn-off rate. It is used primarily for welding pipe, using the stove-pipe technique. PH31A has good mechanical and X-ray characteristics. A touch technique or a short arc are the main requisites, depending upon the welding conditions. The arc is easy to ignite, is powerful and extremely stable. It produces only a thin layer of slag which is easy to remove.

The PH31A type of electrode has been primarily developed for welding circumferential seams in pipe lines in the vertical down position; the welding time is considerably shorter than where upward welding is done conventionally.

### OPERATIONAL DATA

ELECTRODE SIZE (MM)	ELECTRODE LENGTH (MM)	WELD CURRENT RANGE * (A)
3.2	380	90 - 125
4.0	380	115 - 175

\*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** - DXVudO BF 3
- > **BV Grade** - 3
- > **ABS Grade** - 3

### TYPICAL ALL WELD METAL CHEMICAL ANALYSIS

C	Mn	Si
0.12	0.60	0.16

### TYPICAL ALL WELD METAL MECHANICAL ANALYSIS

Yield Strength	410 MPa
Tensile Strength	510 MPa
Elongation	31%
CVN Impact Values	89J @ -30°C

### PACKAGING DATA

ELECTRODE SIZE (MM)	PACKAGING		APPROX. NO. OF RODS PER KG	PART NO.
	KG PER PACKET	PACKETS PER CARTON		
3.2	5.0	3	166	PH31A32
4.0	5.0	3	107	PH31A40

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