

# WELDTECH WEL312

## Specification

AWS Specification: AWS A5.4 E312-16

## Description

- WEL312 is a lime-titania type electrode that gives 29% Cr - 9% Ni
- Excellent crack resistibility due to high ferrite structure of weld metal

## Application

- Welding of dissimilar metals, such as stainless steel to mild steel and low-alloy steel
- Welding of stainless clad steel
- Under-laying of hard surfacing

## Remarks

- Choose the lowest possible welding current to prevent cracking of plate
- It is necessary to preheat the plate at 200°C and over in the case of welding of special steel, such as high alloy tool steels

## Technical Data

### TYPICAL CHEMICAL COMPOSITION OF ALL WELD METAL DEPOSITS (%):

C	Si	Mn	P	S	Ni	Cr
0.09	0.67	1.62	0.025	0.007	9.93	28.75

### TYPICAL MECHANICAL PROPERTIES OF ALL WELD METAL DEPOSITS:

Tensile Strength N/mm <sup>2</sup> (KSI)	Elongation %
761 (110)	24

### SIZE AND RECOMMENDED CURRENT RANGE: AC, DC (+), DC (-)

ORDER CODE		WEL312-25	WEL312-32
DIAMETER x LENGTH (mm)		2.5 x 300	3.2 x 350
Current Amp	Flat	50 - 80	70 - 110
	Vertical & Overhead	45 - 75	65 - 105

**Welding Positions:** ALL POSITIONS

**Approvals:** CE