



## PRODUCT DATA SHEET

**NSS-312 / NSW-312**

**AWS E312-16**

### DESCRIPTION

NSS-312 is a lime-titania type electrode which gives 29%Cr-9%Ni. As the weld metal has high ferrite structure, its crack resistibility is excellent. It is used for welding of dissimilar metals and underlaying welding of hard surfacing.

### APPLICATIONS

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.

### INSTRUCTIONS FOR WELDING

1. Choose the welding current as low as possible to prevent cracking of plate.
2. 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.

### Typical Chemical Composition of Weld Metal (%):

C	Si	Mn	Cr	Ni	Mo
0.09	0.46	1.62	28.75	9.39	-

### Typical Mechanical Properties of Weld Metal:

Tensile Strength N/mm <sup>2</sup> (Ksi)	Elongation (%)
791 (110)	24

### Size and Recommended Current Range (AC or DC +):

Diameter (mm)	1.6	2.0	2.5	3.2	4.0	5.0	
Length (mm)	255	255	300	350	350	350	
Ampere	Flat	20-50	20-50	50-80	70-110	100-150	130-180
	V&OH	15-45	15-45	45-75	65-105	95-140	-

### Welding Positions:

FLAT, FILLET, VERTICAL UP, HORIZONTAL, OVERHEAD