



## BETANOX 312 PLUS

STAINLESS STEEL (Dissimilar Steel Welding)



A super high strength stainless Steel Electrode

**CLASSIFICATION : ISO 3581-A**

**EN ISO 3581-A**

E 29 9 R 13

E 29 9

### KEY FEATURES :

- Acid-Rutile based coating
- 30/10 type SS deposit
- Quiet and stable arc
- Low spatter, Smooth weld bead
- Easy slag detachability
- High ferrite two phase structure
- High strength weld
- Excellent resistance to cracking, fissuring
- Application should be limited to service temperature below 420°C
- Radiographic quality weld

### WELDING POSITION :



**AC (70 OCV)/DCEP**

### TYPICAL APPLICATIONS :

- Welding difficult to weld steels ex. high C hardenable tool, die and spring steels, 13% Mn steels, free cutting steels
- Dissimilar joints between stainless and high carbon steels and unknown steels
- Repair of worn out parts and underlay before hardfacing
- Suitable for problematic steels with higher strength such as pressing dies, trimming tools, armor plates
- High temperature steels, cast steels

**REDRYING CONDITION : 250-300°C for minimum 1 hr.**

### CHEMICAL COMPOSITION OF UNDILUTED WELD METAL, Wt % :

	<b>C</b>	<b>Cr</b>	<b>Ni</b>	<b>Mo</b>	<b>Mn</b>
Specification	0.15 max	28.0-32.0	8.0-10.5	0.75 max	0.5-2.5
	<b>Si</b>	<b>P</b>	<b>S</b>	<b>Cu</b>	
Specification	1 max	0.04 max	0.03 max	0.75 max	

### MECHANICAL PROPERTIES OF ALL WELD METAL :

	<b>Condition</b>	<b>UTS, MPa</b>	<b>EL%</b>
Specification	As Welded	660 min	22 min

### PARAMETERS - PACKING DATA :

<b>Ø x L, mm</b>	<b>Amperage, A</b>	<b>Wt./Carton, Kg</b>	<b>Cartons/Box</b>	<b>Net wt./Box, Kg</b>
2.0 x 300	50-75	2	5	10
2.5 x 350	80-100	2	5	10
3.15 x 350	100-140	2	5	10
4.0 x 350	150-180	2	5	10