



## BETANOX 309Cb PLUS

STAINLESS STEEL (Dissimilar Steel Welding)



A Nb stabilized 23/12 type stainless steel Electrode for dissimilar steel joining

**CLASSIFICATION : ISO 3581-A**

**AWS A/SFA 5.4**

**IS 5206**

E 23 12 Nb R 13

E 309Nb-17

E 23.12 Nb R36

### KEY FEATURES :

- Acid-Rutile based coating
- 23/12/Nb stabilized SS deposit
- Resistant to cracking
- Low dilution on mild and low alloy steels due to higher alloy content
- Resist intergranular corrosion
- Superior strength and oxidation resistance upto 1100°C
- Easy slag removal
- Radiographic quality weld deposit

### WELDING POSITION :



**AC (70 OCV) /DCEP**

### TYPICAL APPLICATIONS :

- Welding of AISI 309, 309 Nb type steels
- Dissimilar joints between 347 type and low alloy or carbon steels
- Buffer layer on low alloy and carbon steels before deposition of 18/8 type stabilized weld metal
- Joining corrosion resistant clad 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>
	0.04	23.4	12.7	0.2	1.0
Specification	0.12 max	22.0-25.0	12.0-14.0	0.75 max	0.5-2.5
	<b>Si</b>	<b>P</b>	<b>S</b>	<b>Cu</b>	<b>Nb plus Ta</b>
	0.5	0.02	0.02	0.2	0.8
Specification	1 max	0.04 max	0.03 max	0.75 max	0.70-1.00

### MECHANICAL PROPERTIES OF ALL WELD METAL :

	<b>Condition</b>	<b>UTS, MPa</b>	<b>EL%</b>
Typical	As Welded	620	35
Specification		550	30 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>
2.5 x 350	50-75	2	5	10
3.15 x 350	80-100	2	5	10
4.0 x 350	110-140	2	5	10