



SUPERINOX 312

STAINLESS STEEL (Dissimilar Steel Welding)



A versatile super high strength stainless steel Electrode for dissimilar joining and repair Welding

CLASSIFICATION : ISO 3581-A

AWS A/SFA 5.4

IS 5206

E 29 9 R 12

E 312-16

E 29.9 R26

KEY FEATURES :

- Rutile type medium heavy coating
- 30/10 type SS deposit
- High strength weld with excellent resistance to cracking, fissuring and oxidation
- Two phase structure with high ferrite
- Quiet and stable arc
- Low spatter, Smooth weld bead
- Easy slag detachability
- All position welding capability
- 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, high temperature steels, cast steels
- Repair of worn out parts and underlay before hardfacing
- Dissimilar joints between stainless and high carbon steels and unknown steels
- Suitable for problematic steels with higher strength such as pressing dies, trimming tools, armor plates

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

CHEMICAL COMPOSITION OF UNDILUTED WELD METAL, Wt % :

	C	Cr	Ni	Mo	Mn
	0.06	29.4	9.8	2.5	1.5
Specification	0.15 max	28.0-32.0	8.0-10.5	0.75 max	0.5-2.5
	Si	P	S	Cu	
	0.5	0.02	0.02	-	
Specification	1 max	0.04 max	0.03 max	0.75 max	

MECHANICAL PROPERTIES OF ALL WELD METAL :

	Condition	UTS, MPa	EL%
Typical	As Welded	760	29
Specification		660	22 min

PARAMETERS - PACKING DATA :

Ø x L, mm	Amperage, A	Wt./Carton, Kg	Cartons/Box	Net wt./Box, Kg
2.0 x 300	50-80	2	5	10
2.5 x 350	80-100	2	5	10
3.15 x 350	110-140	2	5	10
4.0 x 350	150-180	2	5	10