



# Stainless Steel Electrodes

## ALPHA 312

### Characteristics:

**Alpha 312** is unique high alloy electrode for joining similar and dissimilar Steel of known or unknown compositions for High strength and superior crack resistance properties. The electrode is for joining as well as built up on any part of high alloy steel, dissimilar steel of un-known composition, spring steel, die steel for high strength wear resistant overlays on steel requiring best Mechanical properties.

### Applications :

Alpha 312 is ideally suited for repair welding of Axles, gears, pinions, cam shaft, dies, spring steel parts, parts subject to heat, corrosion and impact, joining broken shaft, build up of Bearing areas of shafts, key-way repair etc.

### Weld metal Composition

Element	Percent
C	0.15 Max
Si	0.90 Max
Mn	1.0-2.0
Cr	28-32
Ni	8.0-10.5
Mo	0.75 Max
S	0.03 Max.
P	0.03 Max.

### Typical Mechanical Properties of all weld Metal

Ultimate Tensile Strength N/mm <sup>2</sup>	Elongation % (L=5d)
740-840	35

### Classifications:

AWS /A5.4	E-312 16
IS: 5206	E 29.9 R 26

### Current Range & Packing Data :

Size MM DxL	Current Range (Amps) AC or DC (+)	Pieces per Packet	Pieces per Carton
2.50x350	40-80	100	600
3.15x350	70-120	60	360
4.00x350	90-140	40	240
5.00x350	130-180	30	180

**Instructions:** a) Keep electrodes dry. b) Do not use excessive current. c) Hold short arc.  
d) Use good fit-up on joints. e) Adopt proper sequence. f) Remove the slag with a stainless steel wire brush.

## Contact us:-ALPHA ARC PVT. LTD.

H.O:- B-21, DSIIDC Complex, Kirti Nagar, New Delhi- 15  
Works: B -5, Sec- A-5/6, Tronica City, Loni, Ghaziabad (U.P.) 201102  
Phone No.011-41041441,Email-alphaarcpvtltd@gmail.com  
Website: www.alphaarcelectrodes.com

