YAWATA 316L-16 *For Low Carbon 18%Cr-12%Ni-2%Mo Stainless Steel*

Classification

AWS A 5.4 : E316L-16
DIN 8556 : E19 12 2 LR 26

Applications

Welding of all chromium-nickel steel with low or medium C content, as well as titamium and niobium stabilized chromium-nickel steel of 18%Cr-12%Ni-2%Mo type, e.g. material DIN No. 1.4401, 1.4404, 1.4435, 1.4436, 1.4571, 1.4573, 1.4580, 1.4583, AISI 316, 316L, 318.

Characteristics

YAWATA 316L-16 is a rutile high-alloy extra-low carbon electrode (ELC) for non-stabilized and stabilized chromium-nickel steels resistant to atmospheric corrosion of the 18%Cr-12%Ni-2%Mo type. Resistant to grain disintegration of operating temperatures up to 350℃. Smooth running, good striking and restriking. Regular appearance. Finely rippled, smooth junction, easy slag removal.

Typical Chemical Composition of Deposited Metal (%)

C	Si	Mn	P	S	Cr	Ni	Mo
0.03	0.70	1.25	0.024	0.011	18.7	12.4	2.65

Typical Mechanical Properties of Deposited Metal

Tensile Strength N/mm^2 (kgf/mm^2)	Elongation %	Creep-rupture Strength (as welded, x1,000h), N/mm^2 (kgf/mm^2)
560 (57)	46	650℃ 140 (14) 732℃ 57 (5.8)

Typical Corrosion Resistance of Deposited Metal

Boiling 5% (weight) H_2SO_4	6.0 max ($g/m^2.h$)

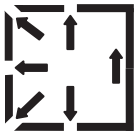
Sizes & Recommended Current Range (AC or DC +)

Diameter/ Length (mm)	2.0/250	2.6/300	3.2/350	4.0/350	5.0/350
Welding Position	Current (A)				
F	40～50	55～70	80～100	110～140	140～170
V, OH	35～45	45～60	70～90	100～130	-

Guideline in Usage

1. Use dry electrodes only. Damp electrodes should be re-dried at 200～250℃ for 60 minutes before use.
2. Dirt such as oil, grease and dust should be completely removed from groove.
3. Keep weaving width to less than 2.5 times electrode diameter.

Welding Positions



All positions, except vertical down