YAWATA 309L-16

For 22%Cr-12%Ni Stainless Steel and Dissimilar Metals

Classification

AWS A 5.4 : E309L-16
JIS Z 3221 : D309L-16
DIN 8556 : E 23 12 L 26

Applications

Welding of 22%Cr-12%Ni stainless steels for petroleum, chemical and textile industries, low carbon 18%Cr-8%Ni stainless clad steels, and parts of hardenable steel for which post heat treatment is impossible.

Characteristics

YAWATA 309L-16 is a lime-titania type stainless steel electrode. Low carbon 25%Cr-12%Ni deposited metal shows extremely high crack resistance due to its high ferrite content.

Typical Chemical Composition of Deposited Metal (%)

C	Si	Mn	P	S	Cr	Ni
0.03	0.65	1.10	0.020	0.013	23.2	13.2

Typical Mechanical Properties of Deposited Metal

Tensile Strength N/mm^2 (kgf/mm^2)	Elongation %
560 (57)	40

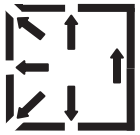
Sizes & Recommended Current Range (AC or DC +)

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	50～70	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. Excessively wide weaving may cause welding defects. Keep weaving width to less than 2.5 times electrodes diameter.

Welding Positions



All positions, except vertical down