



# YAWATA 308L-16 For Low Carbon 18%Cr-8%Ni Stainless Steel

## Classification

AWS A 5.4 : E308L-16  
 JIS Z 3221 : ES308L-16  
 DIN 8556 : E 19 9 LR 26

## Approvals

ABS, TIS

## Applications

Welding of all Cr-Ni steels with low or medium C content, as well as titanium and niobium stabilized Cr-Ni steels of the 18%Cr-8%Ni type, e.g. material DIN No 1.4300, 1.4301, 1.4306, 1.4541, 1.4543, 1.4550, AISI 302, 304, 304L, 321, 347.

## Characteristics

YAWATA 308L-16 is a rutile high-alloy extra-low carbon electrode (ELC) for non-stabilized and stabilized Cr-Ni steels resistant to atmospheric corrosion of the 18%Cr-8%Ni type. Resistant to grain disintegration of operating temperatures up to 350°C. 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
0.03	0.70	1.10	0.025	0.011	18.9	9.9

## Typical Mechanical Properties of Deposited Metal

Tensile Strength N/mm <sup>2</sup> (kgf/mm <sup>2</sup> )	Elongation %	Creep-rupture Strength (as welded, 650°C x 1,000h) N/mm <sup>2</sup> (kgf/mm <sup>2</sup> )
560 (57)	51	120 (12)

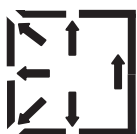
## Sizes & Recommended Current Range (AC or DC +)

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	45~65	70~90	100~130	-

## Guideline in Usage

1. Use dry electrodes only. Damp electrodes should be re-dried at 200~250°C 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*