



# YAWATA 307-16 *For Stainless Steel*

## Classification

AWS A 5.4 : E307-16  
 DIN 8556 : E 18 8 Mn 6 B 20

## Applications

For welding dissimilar metals and other steels that are difficult to weld, containing 18% Cr, 8% Ni and 6% Mn, such as high manganese alloy steel, armour steel and hardenable steels.

## Characteristics

YAWATA 307-16 is a basic coated, austenitic high-yielded electrode. The weld metal is tough with high tensile and elongation values, self-lifting slag, rust proof, wear resisting and crack-free.

## Typical Chemical Composition of Deposited Metal (%)

C	Si	Mn	P	S	Cr	Ni	Mo
0.08	0.75	5.54	0.024	0.010	18.2	9.0	0.53

## Typical Mechanical Properties of Deposited Metal

Tensile Strength N/mm <sup>2</sup> (kgf/mm <sup>2</sup> )	Yield Strength N/mm <sup>2</sup> (kgf/mm <sup>2</sup> )	Elongation %	Charpy 2V-notch at 20°C, J (kgf.m)
≥ 560 (≥ 57)	≥ 350 (≥ 36)	≥ 30	≥ 47 (≥ 4.8)

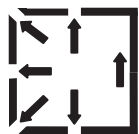
## Sizes & Recommended Current Range (AC or DC +)

Diameter/ Length (mm)	2.6/300	3.2/350	4.0/350	5.0/350
Welding Position	Current (A)			
All	50~80	70~100	100~140	150~210

## Guideline in Usage

1. Use dry electrodes only. Damp electrodes should be re-dried at 200~250°C for 60 minutes before use.
2. Use short arc and avoid a large molten weldpool.

## Welding Positions



*All positions, except vertical down*