



YAWATA 312-16 *For Stainless Steel and Dissimilar Metals*

Classification

AWS A 5.4 : E312-16
DIN 8556 : E 29 9 R 26

Applications

Welding of austenitic-manganese steel, welding spring steel, tool steel and armour steel. Joining non-alloy and high alloy steels. Also suitable as a buffer layers in hardenable steel.

Characteristics

YAWATA 312-16 is a rutile type austenitic-ferritic electrode with a 25~30% ferrite content. The weld metal is extremely crack resistant and lends itself admirably to the welding of dissimilar and difficult to weld steels. It can be used for the welding of high nickel alloys without becoming fully austenitic due to nickel pick-up.

Typical Chemical Composition of Deposited Metal (%)

C	Si	Mn	P	S	Cr	Ni
0.08	0.90	1.10	0.024	0.016	30.4	9.8

Typical Mechanical Properties of Deposited Metal

Tensile Strength N/mm ² (kgf/mm ²)	Yield Strength N/mm ² (kgf/mm ²)	Elongation %	Charpy 2V-notch at 20°C, J (kgf.m)
750 (76)	550 (56)	23	60 (6.1)

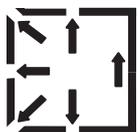
Sizes & Recommended Current Range (AC or DC +)

Diameter/ Length (mm)	2.6/300	3.2/350	4.0/350	5.0/350
Welding Position	Current (A)			
F	50~75	75~110	110~150	140~190
V, OH	50~70	70~100	100~140	-

Guideline in Usage

Use dry electrodes only. Damp electrodes should be re-dried at 200~250°C for 60 minutes before use.

Welding Positions



All positions, except vertical down