

AI-1616

Specifications

AWS/ASME A5.9 ER316L
EN ISO 14343-A G 19 12 3 L
EN ISO 14343-B SS316L

Description and Applications

AI-1616 is a Stainless consumable use in the sub arc process. It is resistant to intercrystalline corrosion and wet corrosion up to 400°C (752°F). Corrosion-resistance similar to matching low-carbon and stabilized austenitic 18/8 CrNiMo steels/cast steel grades. For joining and surfacing application with matching and similar non-stabilised austenitic CrNi(N) and CrNiMo(N) steels and cast steel grades.

Welding Flux

The following flux is recommended: **AI-16 Marathon 213**

Typical Weldmetal Analysis

C	Si	Mn	Cr	Mo	Ni
0.02	0.5	1.7	18.8	2.8	12.5

Mechanical Properties of Weldmetal

	As welded
Yield Strength 0.2%	380MPa
Yield Strength 1.0%	420 MPa
Tensile Strength	560MPa
Elongation (L ₀ =5d ₀)	35%
Impact values in J CVN	70

Welding Instructions

No preheating for welding of matching and similar non-stabilised and stabilised steels/cast steel grades. Generally, no post weld treatment required. If necessary, solution annealing at 1050°C (1922°F), pay attention as there is a tendency to embrittle.

Welding Parameters

Available in 15kg spools in 1.0mm and 1.2 diameters

Disclaimer

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