

ENiCrFe-3

NiWire Alloy 182 is used for welding of nickel-chromium-iron alloys to themselves and for dissimilar welding between nickel-chromium-iron alloys and steels.

Specification

AWS A5.11 ENiCrFe-3
ASME SFA5.11 Class ENiCrFe-3

All Weld Metal Composition

Composition limits. 0.10 max C; 5.0-10.0 Mn; 10.0 max Fe; 0.02 max P; 0.015 max S; 1.0 max Si; 0.50 max Cu; 60.0 min Ni; 1.0 max Ti; 13.0-17.0 Cr; 1.0-3.5 Nb; 0.30 max Ta.

Applications

Typical uses: NiWire Alloy 182 can be used for joining many dissimilar combinations of nickel base alloys to themselves or to stainless or mild steels. Excellent for welding Inconel® 600 to itself or to carbon steel and stainless steels; or Incoloy® 800 to nickel-copper Monel® 400 or nickel base alloy 200. NiWire Alloy 182 is also used for joining nickel base alloy 200 to stainless steel and nickel-copper Monel® 400 to carbon steel

All Weld Metal Mechanical Properties

Tensile Strength: 655 MPa
Yield Strength: 390 MPa
Elongation: 34%

Packaging

Dia. 3.2mm, 4.0mm, 5.0mm are available, 5kg per box, other diameters are available per request.

NOTE ON USAGE

1. Follow the recommended welding parameters and maintain short arc length
2. Dry the electrodes at 350 ~ 400°C for 60 minutes prior to use
3. Backstep is the welding method to prevent blowholes during the arc starting

Welding Parameters

Diameter (mm)	Length (mm)	AMP	
		F	V&OH
3.2	350	12-15	60-90
4.0	350	13-16	80-110
5.0	350	14-18	90-130

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