



Manufacturers of Custom Welding Lines for Resale  
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**SELECTRODE**  
**1122**  
**Inconel 82 Electrode**

**INTERNATIONAL CLASSIFICATIONS**

**AWS/ASME A 5.11 E NiCrFe-3**

**EN/ISO 14172: E-Ni6082 NiCr20Mn3Nb**

**DIN 1736: EL-NiCr15FeMn**

**NFA 81-347: EF 20.70 NiCrMnFe B 20 BH**

**FEATURES & APPLICATIONS**

For dissimilar welds on nickel base alloys to themselves, to alloyed steels or to stainless steels.

A Niobium bearing, all position Inconel electrode for joining high temperature and cryogenic steels and nickels

- Excellent out of position.
- Phenomenal physical properties.
- Extremely easy slag removal.
- Performs unusually well on AC current.
- Also available in TIG form as product code 6082.

**ALL WELD METAL ANALYSIS (TYPICAL WEIGHT %)**

**Microstructure:** In the as welded condition this nickel base weld metal consists of austenite with a few carbides.

**Flux Color:** Grey -Tan

C	Mn	Si	S	P	Cr	Nb	Fe	Co	Cu	Ta	Ti	Ni
.04	6.0	.40	.005	.01	16.5	2.0	6.0	.12	.1	1.3	.1	bal

**TYPICAL MECHANICAL PROPERTIES**

<b>Undiluted Weld Metal</b>	<b>Maximum Value Up to:</b>
Tensile Strength	100,000 PSI (700 MPa)
Yield Strength	60,000 PSI (420 MPa)
Elongation	43 %

## WELDING CURRENT & INSTRUCTIONS

**Recommended Current:** DC Positive (+), AC

Diameter (mm)	3/32 (2.5)	1/8 (3.25)	5/32 (4.0)
Minimum Amperage	50	70	90
Maximum Amperage	70	95	120

**Welding Techniques:** Weld at minimum amperage to maintain low heat input.

**Welding Positions:** Flat, Horizontal, Vertical up, Overhead

### Deposition Rates:

Diameter (mm)	Length (mm)	Weldmetal/ Electrode	Electrodes per lb (kg) of Weldmetal	Arc Time of Deposition min/lb (kg)	Amperage Settings	Recovery Rate
3/32 (2.5)	12" (300)	.37 oz. (10.5g)	43 (95)	37 (82)	60	105%
1/8 (3.25)	14" (350)	.76 oz (22g)	21 (47)	24 (53)	90	105%
5/32 (4.0)	14" (350)	1.14 oz (32g)	14 (31)	17 (38)	105	105%

## APPROXIMATE ELECTRODE PACKAGING & DIMENSIONS

Diameter (mm)	3/32 (2.5)	1/8 (3.25)	5/32 (4.0)
Length (mm)	12" (300)	14" (350)	14" (350)

Electrodes / lb	24	13	9
Electrodes / kg	53	28	19