

Lastek 982

Tig rod for nickel alloys and dissimilar joints

CLASSIFICATION

DIN 1736 : SG NiCr20Nb

AWS A5.14 : ER NiCr3

GENERAL DESCRIPTION

High nickel TIG rod for welding Inconel®, Incoloy®, Nimonic® and astelloy® alloys.

The weld deposit has a high strength and is resistant to oxides at temperatures up to 1200 °C.

Lastek 982 can also be used at temperatures below zero.

The expansion coefficient is between that of ferritic and austenitic steels.

This is of great importance for the crack-free welding of dissimilar metals which are subject to cyclic temperature changes.

APPLICATIONS

Welding of Inconel® 600, 601, Incoloy® 800, 800HT.

Welding of Inconel® to Incoloy® alloys, to Monel® alloys, to stainless steel or carbon steel.

Joining of and applying buffer layers to curable steels, hardened or non-hardened, or other problem steels.

Chemical and petrochemical industry, shipping, food industry, pharmaceutical industry, transport of chemicals, etc ...

CHEMICAL COMPOSITION (%) (Typical values, all weld metal)

C : < 0.05	Mn : 2.50 - 3.50	Cr : 18.00 - 22.00	Ni : > 67.00	Nb : 2.00 - 3.00
Ti : < 0.75	Fe : < 3.00			

MECHANICAL PROPERTIES (Typical values, all weld metal)

Yield Strength N/mm ²	Tensile Strength N/mm ²	Elongation 5d (%)	Impact Strength Charpy V notch (ISO-V)
≥ 380 MPa	≥ 600 MPa	≥ 30%	≥ 100 J (-196°C) / ≥ 120 J (20°C)

GENERAL INFORMATION

Welding positions	NA
Shielding gas	Argon
Packing	5 kg in a cardboard box
Polarity	DC, with the torch on the negative pole.
Diameter (mm)	1.0 - 3.2
Lenght (mm)	1000

Tips & tricks	Thoroughly clean nickel alloys and remove all traces of grease and oil. Use the biggest possible gas nozzle on the TIG torch, taking into account the work to be done. Ensure the least possible dilution in difficult to weld steels. Use pure argon as purge gas for the penetration weld of pipes and tubing.
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The information in this document is based on intensive tests and is accurate to the best of our knowledge. Do note that these values are only typical values for tests in accordance to prescribed standards. The suitability of the product should always be confirmed by qualification tests before use in any application. The information can be changed without previous notice.