PRODUCT SPECIFICATION

Lastifil 982

For inconel and nickel alloys

CLASSIFICATION

DIN 1736 : SG NiCr20Nb
AWS A5.14 : ER NiCr3

GENERAL DESCRIPTION

Solid welding wire for joining NiCrFe alloys (Inconel, Incoloy, Nimonic) and heatresistant steels.
Dissimilar joints between Ni alloys, stainless steel and steel, especially when stress relieving at 650 °C (1200 °F) is applied or where working temperatures above 300 °C (570 °F) could be met. (Where carbon diffusion could occurr).
Welding of problem steels and joining copper to steel.
Joining cryogenic steels (9% Ni).
Suitable for working temperatures from -196 °C (-320 °F) to + 1000 °C (+1830 °F) (but don't use nickel alloys in sulphurcontaining atmospheres).
Very good corrosion resistance (general corrosion, stress corrosion and intergranular corrosion).

APPLICATIONS

Welding of Inconel 600, 601, Incoloy 800, 800H, Nimonic 75, 80A, Wn° 2.4816, 2.4951, 1.4876, 1.4958, Ni-steels 1.5662, 1.5680, 1.5637 aso.
Joining difficult to weld steels and dissimilar metals.

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

C :	< 0.05	**Mn :**	2.50 - 3.50	**Si :**	< 0.50	**Cr :**	18.00 - 22.00	**Ni :**	> 67.00
Nb :	2.00 - 3.00	**Ti :**	< 0.75	**Fe :**	< 3.00	**S :**	< 0.015	**P :**	< 0.015

MECHANICAL PROPERTIES (Typical values, all weld metal)

Yield Strength N/mm²	Tensile Strength N/mm²	Elongation 5d (%)	Impact Strength Charpy V notch (ISO-V)
≥ 400 Mpa	≥ 660 MPa	≥ 45%	≥ 200 J (20°C) / ≥ 70 J (-196°C)

GENERAL INFORMATION

Welding positions		
Shielding gas	Argon + 2 to 3% CO2 (or argon + 1 to 3% O2 or argon + helium).	
Packing	15 kg spool (in a cardboard box)	
Polarity	DC+	
Diameter (mm)	1.0	1.2
Tips & tricks	Clean nickel alloys thoroughly, remove all traces of oil and grease. Preferably weld with a pulsed arc.	

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.