



AUTOMIG Ni-1 / TIGFIL Ni-1

GMAW/GTAW
NICKEL ALLOYS



NICKEL SOLID WIRE FOR NICKEL AND NICKEL BASED ALLOYS

CLASSIFICATION :	EN ISO 18274	AWS A/SFA 5.14	APPROVALS :
	SNi 2061	ERNi-1	-

KEY FEATURES :

- A low carbon 96Ni/3Ti Nickel wire
- Almost pure Ni deposit
- Extremely strong and ductile weld metal
- Resistant to cracking and oxidation
- Low iron level ensure maximum corrosion resistance
- Radiographic weld quality

WELDING POSITION :			GMAW: DCEP GTAW: DCEN
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Shielding Gas	Gas Flow Rate, LPM	Stickout, mm
GMAW: Ar or Ar/He	15-22	10-20
GTAW: Ar	10-15	-

TYPICAL APPLICATIONS :

- Welding of wrought and cast form of commercially pure Ni (99.5%)
- Welding of Nickel 200 and 201
- Suitable for ASTM B160/161/162/163
- For dissimilar welding between Nickel 200/201 and various iron-base and nickel-base alloys
- Applications in Pumps and valves, Cryogenics, Chemical plants, Caustic handling equipments, Food processing equipments
- Overlay on carbon and low alloy steel
- Used for handling corrosive alkalis and halides

STORAGE / HANDLING :

Keep dry and follow handling instructions mentioned on the box

CHEMICAL COMPOSITION OF BARE SOLID WIRE, Wt% :

	C	Mn	Fe	S	P
Specification	0.15 max	1.0 max	1.0 max	0.015 max	0.03 max
	Si	Cu	Al	Ti	Ni
Specification	0.75 max	0.25 max	1.5 max	2.0-3.5	93.0 min

MECHANICAL PROPERTIES OF ALL WELD METAL :

	Condition	UTS, MPa	EL%
Typical	As Welded	380	30

Mechanical properties will vary with the type of shielding gas used.

PACKING DATA :

Automig Ni-1	Ø, mm		Kg/Spool	
		1.2		12.5
	1.6		12.5	
Tigfil Ni-1	Ø x L, mm	Primary Box, Kg	No. of Primary Boxes	Net Wt. of Carton, Kg
	2.0 x 1000	5	4	20
	2.4 x 1000	5	4	20
	3.2 x 1000	5	4	20

EQUIVALENT :

SMAW Electrode: **Nicalloy 1**

