

TNI 422

TIG Welding Wire - Nickel Alloys

Standards	
AWS/ASME SFA - 5.14	ERNiCr-3
EN ISO 18274 - A	SNi 6082
TS EN ISO 18274 - A	SNi 6082
DIN M. No.	2.4806

Materials	
DIN	Material
X 10 Ni Cr Al Ti 32 20	1.4876
X 5 Ni Cr Al Ti 31 20	1.4958
Ni Cr 15 Fe	2.4816

Properties and Applications

Ni-Cr-Fe alloyed GTA (TIG) welding rod, depositing Ni-20Cr3Mn2,5Nb weld metal. Especially used for welding of highly creep resistant, heat and corrosion resistant Ni-Cr alloys, like Incoloy 800, 5-9% Ni containing steels, cryogenic stainless steels down to -196°C. Also suitable for joining dissimilar materials as stainless steels to low alloyed steels, stainless steels to nickel alloys, buffering of difficult to weld steels cladding on steels and repair welds of them. Weld metal deposit is insensitive to cracks, has very good resistance to acids, salts and alkaline solutions, molten salt (e.g. cyanide) in oxidizing and carburization atmospheres. In sulphurous atmospheres the weld metal can be used up to 500°C. Generally used for welding on LPG and LNG processing and storing plants, oven parts, burners, heat treatment equipment, cement works, moulds, transport and storage tanks of liquid gases in chemical, petrochemical industries, glassworks, civil engineering, repairing and maintenance workshops. Stick Electrode : ENI 422MIG/MAG Welding Wire: MNI 422



Typical Chemical Features of the Welding Wire

Type of Analysis	C	Si	Mn	Cr	Ni	Nb	Ti	Fe
Welding Wire	0.03	0.10	3.00	20.00	72.50	2.40	0.30	1.30

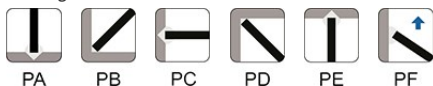
Typical Mechanical Values of Weld Metal

Test Condition	Protection Gas	Yield Strength (N/mm ²)	Tensile Strength (N/mm ²)	Elongation A5 (%)	Charpy V-Notch Properties (J)
As welded	I1	500	700	40	20°C → 170 -196°C → 160

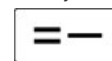
* Chemical composition and mechanical properties are valid when using shielding gas .

Application Information

Welding Positions



Polarity:



Protection Gas:

I1

Welding Parameters & Efficiency

Diameter x Length (mm)
1.60x1000
2.40x1000

Packaging Information

Product Code	Diameter x Length (mm)	Quantity per Box	Box Gross Weight (kg)	Boxes per Outer Box	Outer Box Gross Weight (kg)	Packaging Type
26102GBKM2	1.60x1000	5 kg	5.30	4	21.40	Cardboard Tube
26102IBKM2	2.40x1000	5 kg	5.30	4	21.40	Cardboard Tube

Storage & Re-Drying Information

Shouldn't be exposed to high statical load and impact.
It should be stored in a dry room (relative humidity < 50%, room temperature > 20°C) on wooden pallets.