

DATA SHEET N. N30-001

DAIKOWM 82

MIG

Description / Alloy type: Solid wire for Nickel base alloy (i.e. alloy 600) and dissimilar joints between nickel alloys, ferritic and austenitic stainless steels.

Specifications: **AWS A5.14** **EN ISO 18274**
ERNiCr-3 Ni6082 (NiCr20Mn3Nb)

Approvals: TÜV (Mig & Tig), CE

Applications: Welding and cladding of a wide range of Nickel alloys, resistant to high temperature and corrosion between themselves and with austenitic and ferritic steels (i.e. 2CrMo and 316H).
Used where good toughness and heat changes resistance are required, ductility after PWHT or lengthy service at high temperatures.
Welding 3% and 5% Ni steels for plants and tanks for liquid gases and many other uses where welded joints needs to have high crack resistance.
Working temperature from -269°C to ~950°C.

Materials to be welded: Nickel Alloys such as Inconel 600, Nimonic 75, Inconel 800.
Nickel base alloys to themselves and to mild, low alloy and stainless steels. High temperature transition joints.
Cryogenic 3% e 5% Ni Steels.

Composition:
(weight %)

| | C | Mn | Si | S | P | Cr | Ni | Nb | Cu | Ti | Fe |
|-----|------|-----|-----|-------|------|----|------|-----|------|-----|----|
| Min | - | 2.5 | - | - | - | 18 | 67 | 2.0 | - | - | - |
| Max | 0.05 | 3.5 | 0.5 | 0.015 | 0.02 | 22 | Bal. | 3.0 | 0.50 | 0.7 | 3 |
| Typ | 0.02 | 3 | 0.1 | 0.005 | 0.01 | 20 | 73 | 2.5 | 0.01 | 0.4 | 1 |

Typical parameters:

| | MIG |
|------------|-------------|
| Shielding | Ar or Ar+He |
| Current | pulsed |
| Diameter | 1.2 mm |
| Parameters | 180A, 26V |

All-weld properties:

| As welded | Typical MIG |
|--------------------------|-------------|
| Tensile strength [MPa] | 660 |
| Yield strength [MPa] | 400 |
| Elongation 5d [%] | 35 |
| Impact Energy 20°C [J] | 150 |
| Impact Energy -196°C [J] | 60 |

Other products: SMAW covered electrodes (AWS A5.11 ENiCrFe-3)
FCAW wire (AWS A5.34 ENiCr3T0-4)
STRIP (AWS A5.14 EQNiCr-3)