NICROS S.R.L.
Head Office: Via Tiepolo, 26 – 31021 Mogliano Veneto (TV) ITALY – ph. +39 041 5970166
Operative Branch: Via Toscana, 3A-3B – 20056 Grezzago (MI) ITALY – ph. +39 02 9090477
nicros@daikowelding.com www.daikowelding.com

DATA SHEET N. 1011

DAIKO SF 82

MIG, TIG & SAW Wire

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)

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.
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:

	TIG	MIG	SAW
Shilding	Argon	Ar or Ar+He	Daikoflux
Current	DC-	pulsed	DC+
Diameter	2.4 mm	1.2 mm	1.6 mm
Parameters	100A, 12V	180A, 26V	300A, 26V

All-weld proprieties:

As welded	Typical **TIG**	Typical **MIG**
Tensile strength [MPa]	670	660
0.2% proof stress [MPa]	420	400
Elongation 5d [%]	40	35
Striction [%]	60	60
Impact Energy 20°C [J]	160	150
Impact Energy -196°C [J]	80	60

Complementary products: SMAW covered electrodes (AWS A5.11 ENiCrFe-3)
STRIP (AWS A5.14 EQNiCr-3)

DAIKO welding consumables G-TECH