

DATA SHEET N. N10-001

DAIKOWM 625

GMAW

Description / Alloy type: Solid wire for Nickel base 625 alloy

Specifications: **AWS A5.14** **ASME 2C** SFA-5.14 **EN ISO 18274 (num. / chem.)**
ERNiCrMo-3 ERNiCrMo-3 Ni 6625 / NiCr22Mo9Nb

Approvals: TÜV

Applications: It is designed to match the composition and properties of 625. This alloy is used for the high temperature strength and structural stability and is also used for its resistance to general corrosion, pitting, crevice and stress corrosion cracking in severe chloride media.

Useful proprieties from -269°C to above 1000°C are achieved.

It is used for welding of alloy 625, alloy 825, alloy 25-6MO, and a range of high alloy austenitic and super austenitic stainless steels. It is also used for surfacing of steel, for welding 9% Ni steels, and for welding various corrosion-resistant alloys such as alloy 20. Applications include furnace equipment, petrochemical and power generation plants and also overlays on pumps, valves and shafts in offshore and marine environments where high pitting resistance (PRE = 50) is essential. Widely used in oil & gas production and process.

Materials to be welded: **Matching Alloy 625**
ASTM: UNS N06625; A494 CW-6MC (cast);
DIN: 2.4856;
Proprietary Alloy: Inconel™ 625; Nicrofer™ 6020hMo e 6022hMo.

Other alloys

High Nickel Alloys: Inconel 601, Incoloy 800H Incoloy 825;

Superaustenitics: UNS S31254, 254SMO; 904L.

Cryogenic: 9% Ni steels.

Composition:
(weight %)

	C	Mn	Fe	S	P	Si	Cu	Ni	Al	Ti	Cr	Nb	Mo
Min	-	-	-	-	-	-	-	58	-	-	20	3.15	8
Max	0.010	0.5	5	0.015	0.020	0.50	0.5	Bal.	0.4	0.4	23	4.15	10
Typ	0.005	0.05	0.3	0.001	0.003	0.10	0.1	65	0.10	0.2	22	3.6	9

Typical parameters:

	MIG
Shielding	Ar or Ar-He
Current	pulsed
Diameter	1.2 mm
Parameters	160A, 28V

All-weld properties:

As welded	Typical MIG
Tensile strength [MPa]	720
0.2% proof stress [MPa]	430
Elongation [%]	50
Impact Energy -196°C [J]	60

Other products: GTAW rods, SAW wire, SMAW electrodes, FCAW wire and STRIP.

Rev. 01/2023

SEDI OPERATIVE

MILANO – Via Toscana, 3A-B – 20056 Grezzago (MI) – Tel. +39 02 9090477

TREVISO – Via Aquileia, 15 – 31048 Olmi di San Biagio di Callalta (TV) – Tel. +39 0422796367

