



CROMAROD® 82

SMAW - (Stick) - MMA
Stainless Steel

Date: 2022-05-24
Revision: 21

Description:

CROMAROD 82 is a basic flux coated nickel-base electrode intended for welding Inconel 600 and similar composition alloys. The deposit tolerates high dilution levels and is very resistant to hot cracking. It is not susceptible to sigma phase embrittlement or carbon migration and is therefore ideal for service at elevated temperatures.

CROMAROD 82 is highly suitable for a wide range of dissimilar joint combinations between nickel-base alloys, Monels, mild and low alloy steels and austenitic stainless steels. It can also be used to clad carbon steels with an Inconel type surface. The weld metal exhibits very good fracture toughness at temperatures down to -196 °C and is suitable for welding 5% and 9% nickel steels for cryogenic applications.

Welding positions:



Coating type:

Basic

Welding current:

DC+

Ferrite content:

FN 0 (WRC-92)

Corrosion resistance

Very good resistance to general and intergranular corrosion. Very good resistance to stress corrosion cracking.

High temperature properties:

The weld metal is resistant to oxidation – in air up to 1100 °C

Redrying temperature:

350 °C, 2h

Chemical composition, wt. %

	C	Si	Mn	P	S	Cr	Ni
Min			5,0			13,0	60,0
Typical	0,03	0,3	7,0	0,005	0,005	16,0	bal.
Max	0,05	1,0	9,5	0,015	0,010	17,0	

	Cu	Nb	Fe
Min		1,0	
Typical		2,2	5,0
Max	0,5	2,5	10,0

Mechanical properties

	Specified	Typical
Yield strength, Rp0.2%:	≥ 360 MPa	405 MPa
Tensile Strength, Rm:	≥ 550 MPa	642 MPa
Elongation, A5	≥ 30%	44%
Impact energy, CV:	20 °C • ≥ 100 J	-20 °C • 110 J -196 °C • 94 J

Product data:

Diam.mm	Length mm	Current A	Voltage V
2,5	300	45-70	25-27
3,2	350	70-110	25-27

Classification:

EN ISO 14172
AWS A5.11

E Ni 6182 (NiCr15Fe6Mn)
E NiCrFe-3

Approvals:

CE
TÜV

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