



Cromarod 625

SMAW - (Stick) - MMA
Stainless Steel

Date: 2014-02-19
Revision: 19

Description:

Cromarod 625 is a basic flux coated nickel-base electrode intended for welding Inconel 625 and similar composition alloys which are primarily used for their excellent corrosion and oxidation resistance. They exhibit an exceptionally high resistance to pitting corrosion and chloride induced stress corrosion cracking. The electrode is very suitable for a wide range of dissimilar joint combinations between nickel-base alloys, mild and low alloy steels and stainless steels, especially where high temperature service conditions prevail. It can also be used to clad carbon steels with a high strength, highly corrosion resistant surface. Cromarod 625 weld metal gives good fracture toughness at temperatures down to -196 °C and is suitable for welding 5% and 9% nickel steels for cryogenic applications.

Welding positions:

1 2 3 4 T 6

Coating type:

Basic

Welding current:

DC +

Ferrite content:

FN 0 (WRC-92)

Corrosion resistance

Very good resistance to general and intergranular corrosion. Maximum resistance (practically immune) to pitting corrosion, crevice corrosion and stress corrosion cracking in chloride bearing environments.

High temperature properties:

Non-scaling in air up to 1150 °C. Very high tensile strength and yield strength up to approx. 850 °C (Rp 0.2% ~400 MPa).

Redrying temperature:

350 °C, 2h

Chemical composition, wt.%

	C	Si	Mn	P	S	Cr	Ni
Min		0,3	0,5			21,0	58,0
Typical	0,03	0,4	0,6	0,005	0,005	22,0	bal.
Max	0,05	0,7	1,0	0,015	0,010	23,0	

	Mo	Cu	Nb	Fe
Min	8,0		3,15	
Typical	9,0		3,4	2,0
Max	10,0	0,3	4,0	2,0

Mechanical properties

	Specified	Typical
Yield strength, Rp0.2%:	≥ 450 MPa	530 MPa
Tensile Strength, Rm:	≥ 720 MPa	770 MPa
Elongation, A5	≥ 30%	36%
Impact energy, CV:	20°C • ≥ 50 J	20°C • 60 J -196 °C • 43 J

Classification:

EN ISO 14172 E Ni 6625
AWS A5.11 E NiCrMo-3

Approvals:

CE

Note

Core wire:
P ≤ 0.010%
S ≤ 0.005%

Produkt data:

Diam.mm	Length mm	Product code	Current A	Voltage V	Kg weld metal/ kg electrodes	No. of electrodes/ kg weld metal	Kg weld metal/ hour arc time	Burn-off time/ electrode (sec.)
2,5	300	74562500	45-70	25	0,67	80	0,9	47
3,2	350	74563200	60-100	26	0,71	57	1,6	57
4,0	350	74564000	85-130	27	0,71	26	1,7	70

5,0	450	74565000	130-190	28	0,70	13	2,6	100
-----	-----	----------	---------	----	------	----	-----	-----