



Cromarod Duplex-140

SMAW - (Stick) - MMA
Stainless Steel

Date: 2007-10-19
Revision: 17

Description:

Cromarod Duplex-140 is a rutile flux coated high deposition electrode with 140% recovery. It complements the normal recovery electrode Cromarod Duplex and is primarily intended for welding medium to heavy sections of duplex type stainless steels, e.g. W. 1.4462, SAF 2205, Uranus 45N. It can also be used for the lower alloyed duplex types W. 1.4362, SAF 2304 and Uranus 35N. The electrode is easy to use and produces smooth weld beads, slightly concave profile fillets and easy-releasing slag. A heat input range of 0.5-2.5 KJ/mm is recommended to maintain a favourable austenite-ferrite phase balance.

Welding positions:



Coating type:

Rutile, high recovery 140%

Welding current:

DC +, AC 0CV > 39V

Ferrite content:

FN 35 (WRC-92)

Corrosion resistance

Very good resistance to pitting corrosion and stress corrosion cracking in chloride and H₂S environments. Good resistance to intergranular corrosion. Pitting resistance equivalent, PRE = 36. CPT 30°C (ASTM G48)

Scaling temperature:

Approx. 850 °C in air.

Redrying temperature:

350 °C, 2h

Chemical composition, wt.%

	C	Si	Mn	P	S	Cr	Ni
Min		0,6	0,5			21,0	7,5
Typical	0,02	0,9	0,7	0,02	0,02	23,7	9,8
Max	0,04	1,2	2,0	0,030	0,025	24,0	10,5

	Mo	Cu	V	Nb	N
Min	2,5				0,12
Typical	3,1				0,13
Max	4,0	0,5	0,1	0,1	0,20

Mechanical properties

	<u>Specified</u>	<u>Typical</u>
Yield strength, Rp0.2%:	≥ 480 MPa	640 MPa
Tensile Strength, Rm:	≥ 690 MPa	810 MPa
Elongation, A5	≥ 20%	24%
Impact energy, CV:		20 °C • 50 J -20 °C • 40 J -40 °C • 35J

Product 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.)
3,2	350	74513200	110-130	31	0,62	33	1,7	55
4,0	450	74514000	130-170	32	0,63	18	2,4	80
5,0	450	74515000	170-230	33	0,63	11	3,4	90

Classification:

EN 1600	E 22 9 3 N L R 53
AWS A5.4	~E 2209-17
ISO 3581-A	E 22 9 3 N L R 53

Approvals:

GL
LR
DNV
CE

Note

AWS: Deviation in Si and Cr

Core wire:

P ≤ 0.020%

S ≤ 0.015%

N ≤ 0.008%