Cromarod 312

SMAW - (Stick) - MMA
Stainless Steel

Date: 2020-04-01
Revision: 22

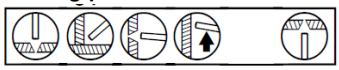
Description:

Cromarod 312 is a rutile flux coated electrode which deposits a 29%Cr / 9%Ni austenitic/ferritic stainless steel weld metal with a ferrite content of approximately FN 50. The weld metal exhibits excellent tolerance to dilution from dissimilar and difficult-to-weld materials without hot cracking.

Applications:

–Difficult-to-weld steels e.g. high carbon hardenable tool, die and spring steels, 13% Mn steels, free-cutting steels, high temperature steels (non-structural).
– Dissimilar joints between stainless and high carbon steels.
–Surfacing of metal-to-metal wear areas, hot working tools, furnace components.

Welding positions:



Coating type:
Rutile

Welding current:
DC+, AC OCV > 39V

Ferrite content:
FN 50 (WRC-92)

Corrosion resistance

Good resistance to sulphurous gases at high temperature. Good resistance to wet corrosion up to approximately 300 °C.

Scaling temperature:
Approx. 1100 °C in air.

Redrying temperature:

350 °C, 2h

Chemical composition, wt.%

	C	Si	Mn	P	S	Cr	Ni
Min			0,5			28,0	8,0
Typical	0,10	0,9	0,8	0,02	0,02	29,0	9,0
Max	0,15	1,0	2,0	0,035	0,025	31,0	10,5

	Mo	Cu	V	Nb
Min				
Typical	0,2			
Max	0,5	0,5	0,1	0,1

Mechanical properties

	Specified	Typical
Yield strength, Rp0.2%:	≥ 450 MPa	590 MPa
Tensile Strength, Rm:	≥ 660 MPa	760 MPa
Elongation, A5	≥ 22%	25%

Classification:

AWS A5.4	E 312-17
ISO 3581-A	E 29 9 R 32

Approvals:

CE

Note

All classifications: slight deviation in Si.
Core wire:
P ≤ 0.030%
S ≤ 0.030%
N ≤ 0.080%

Product data:

Diam.mm	Length mm	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	40-80	25	0,64	90	1,1	34
3,2	350	80-120	26	0,64	47	1,5	44
4,0	350	100-160	27	0,65	31	2,1	55