



# Cromarod 310

SMAW - (Stick) - MMA  
Stainless Steel

Date: 2009-02-27  
Revision: 19

### Description:

Cromarod 310 is a rutile coated electrode primarily intended for welding the 25%Cr / 20%Ni, type 310, fully austenitic stainless steels, used for corrosion and oxidation resistance at elevated temperatures. Cromarod 310 can also be used to join difficult-to-weld steels such as armour plate and ferritic stainless steels, as well as dissimilar steels. Although the weld metal is fully austenitic the composition has been carefully balanced to give good resistance to hot cracking.

### Welding positions:



### Coating type:

Rutile

### Welding current:

DC +, AC 0CV > 39V

### Ferrite content:

FN 0 (WRC-92)

### Corrosion resistance

Cromarod 310 is designed for high temperature oxidation applications and its resistance to wet corrosion is limited.

### Scaling temperature:

Approx. 1150 °C in air. Reducing combustion gas, free of sulphur 1080 °C, maximum 2g S/m<sup>3</sup> 1040 °C.

### Redrying temperature:

350 °C, 2h

### Chemical composition, wt.%

	C	Si	Mn	P	S	Cr	Ni
Min	0,06	0,5	2,0			25,0	20,0
Typical	0,10	0,65	2,3	0,02	0,02	26,0	21,0
Max	0,20	0,75	2,5	0,030	0,025	27,0	22,0

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

### Mechanical properties

	<u>Specified</u>	<u>Typical</u>
Yield strength, Rp0.2%:	≥ 350 MPa	410 MPa
Tensile Strength, Rm:	≥ 560 MPa	600 MPa
Elongation, A5	≥ 30%	35%
Impact energy, CV:		-60 °C • 60 J

### Classification:

EN 1600	E 25 20 R 12
AWS A5.4	E 310-17
ISO 3581-A	E 25 20 R 12

### Approvals:

CE

### Note

Core wire:  
P ≤ 0.030%  
S ≤ 0.030%  
N ≤ 0.080%

### 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	74362500	50-70	23	0,67	79	0,7	58
3,2	350	74363200	70-110	23	0,67	40	1,1	74
4,0	350	74364000	110-155	25	0,67	27	1,5	78