



# Cromarod 317L

SMAW - (Stick) - MMA  
Stainless Steel

Date: 2006-10-13  
Revision: 13

## Description:

Cromarod 317L is a rutile flux coated electrode intended for welding the 19%Cr / 13%Ni / 3,5%Mo, type 317L, austenitic stainless steels. The higher Mo content provides better resistance to both acid corrosion and pitting corrosion, compared to grade 316L material. The electrode is also recommended for welding 316L and 316LN grades when it is necessary to ensure an enhanced Mo level in the weld metal. Cromarod 317L operates with a low spatter arc to produce a smooth weld bead surface, self-releasing slag and mitre profile fillets.

## Welding positions:



## Coating type:

Rutile

## Welding current:

DC +, AC 0CV > 39V

## Ferrite content:

FN 4 (WRC-92)

## Corrosion resistance

Good resistance to general and intergranular corrosion in most inorganic and organic acids e.g. sulphuric and sulphurous acids. Very good resistance to crevice and pitting corrosion in chloride containing solutions.

## Scaling temperature:

Approx. 850 °C in air.

## Redrying temperature:

350 °C, 2h

## Chemical composition, wt.%

	C	Si	Mn	P	S	Cr	Ni
Min			0,5			18,0	12,0
Typical	0,02	0,7	0,8	0,02	0,02	18,4	13,5
Max	0,030	0,9	2,5	0,030	0,030	20,0	14,0

	Mo	Cu	V	Nb	N
Min	3,0				
Typical	3,7				
Max	4,0	0,5	0,1	0,1	0,20

## Mechanical properties

	Specified	Typical
Yield strength, Rp0.2%:	≥ 350 MPa	490 MPa
Tensile Strength, Rm:	≥ 550 MPa	610 MPa
Elongation, A5	≥ 30%	36%
Impact energy, CV:		-20 °C • 50 J

## 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.)
2,50	300	74312500	40-80	24	0,64	84	1,0	36
3,25	350	74313200	80-120	25	0,67	42	1,5	52
4,00	350	74314000	100-160	26	0,67	28	2,0	57

## Classification:

EN 1600	~ E 19 13 4 N L R 12
AWS A5.4	E 317L-17
ISO 3581-A	~ E 19 13 4 N L R 12

## Approvals:

## Note

EN/ISO: Slight deviation in Mn.

Core wire:  
P ≤ 0.020%  
S ≤ 0.015%  
N ≤ 0.080%