



# Cromarod 316LP

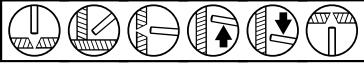
SMAW - (Stick) - MMA  
Stainless Steel

Date: 2003-02-25  
Revision: 17

## Description:

Cromarod 316LP is a fully-positional rutile flux coated electrode designed specially for welding thin walled (down to 1.5 mm) pipelines found in the chemical process and papermaking industries, where it offers considerably higher productivity than manual TIG. With its exceptionally good arc stability, weld pool control and restriking characteristics it is highly suitable for the most demanding vertical and overhead welding applications in fixed pipework and is ideal for cramped and difficult site conditions. Cromarod 316LP is also recommended for root runs and multipass welds in general fabrication of molybdenum alloyed stainless steels in all material thicknesses.

## 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 the more severe environments e.g. dilute hot acids. Good resistance to chloride pitting corrosion.

## 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			17,0	11,0
Typical	0,02	0,7	0,8	0,02	0,02	18,3	12,2
Max	0,030	0,90	2,0	0,030	0,025	20,0	13,0

	Mo	Cu	V	Nb
Min	2,5			
Typical	2,7			
Max	3,0	0,5	0,1	0,1

## Mechanical properties

	<u>Specified</u>	<u>Typical</u>
Yield strength, Rp0.2%:	≥ 350 N/mm <sup>2</sup>	480 N/mm <sup>2</sup>
Tensile Strength, Rm:	≥ 510 N/mm <sup>2</sup>	580 N/mm <sup>2</sup>
Elongation, A5	≥ 30%	32%
Impact energy, CV:	20°C • ≥ 50 J	20°C • 60 J -120°C • 35 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.)
1,60	250	74431625	18-35	20	0,68	267	0,5	25
2,00	300	74432000	20-45	21	0,67	145	0,7	40
2,00	250	74432025	20-45	21	0,67	178	0,6	37
2,50	300	74432500	40-85	23	0,68	91	0,9	45
3,25	350	74433200	40-100	23	0,73	44	1,4	53
4,00	350	74434000	100-160	25	0,71	29	1,6	69

## Classification:

EN 1600-97	E 19 12 3 L R 11
AWS A5.4-92	E 316L-17
BS 2926-84	19.12.3 L R
DIN 8556-86	E 19.12.3 L R 13
NF A81-343-79	EZ 19.12.3 L R 13

## Approvals:

DNV  
SVK  
TÜV  
INSPECTA  
UDT  
CL

## Note

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