CROMAROD® 316LP



SMAW - (Stick) - MMA Stainless Steel

Description:

CROMAROD 316LP is an all <u>positional</u> rutile 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 <u>butt welds</u> in general fabrication of molybdenum alloyed stainless steels in all material thicknesses.

Welding positions:



Coating type: Rutile

Welding current: DC+

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.%

	С	Si	Mn	Р	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

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

Mechanical properties

	Specified	<u>Typical</u>
Yield strength, Rp0.2%:	≥ 320 MPa	480 MPa
Tensile Strength, Rm:	≥ 510 MPa	580 MPa
Elongation, A5	≥ 30%	32%
Impact energy, CV:		20 °C • 60 J
		-120 °C • 35 J

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.)
2,0	300	20-45	21	0,67	145	0,7	40
2,5	300	40-85	23	0,68	91	0,9	45
3,2	350	40-100	23	0,73	44	1,4	53

*The information contained or otherwise referenced herein is presented only as "typical" without guarantee or warranty, and ITW Welding AB expressly disclaims any liability incurred from any reliance thereon. Typical data are those obtained when welded and tested in accordance with the corresponding EN ISO specification. Other tests and procedures may produce different results. No data is to be construed as a recommendation for any welding condition or technique not controlled by ITW Welding AB.

ITW Welding AB reserves the right to change specifications or approvals without prior notice.

Classification:

AWS A5.4

ISO 3581-A

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E 316L-17

E 19 12 3 L R 11

Approvals: CE DNV LR TÜV

Note

 $\begin{array}{l} \text{Core wire:} \\ P \leq 0.020\% \\ S \leq 0.015\% \\ N \leq 0.080\% \end{array}$