



# Cromacore DW 309MoLP

FCAW - Flux cored arc welding  
Stainless Steel

Date: 2011-03-02  
Revision: 8

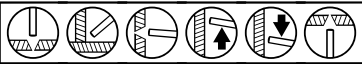
## Description:

Cromacore DW 309MoLP is a fully positional rutile flux cored wire which deposits a 23% Cr/13% Ni/2.5% Mo stainless steel weld metal with a ferrite content of approximately FN 22. The high alloy content and high ferrite level enable the weld metal to tolerate dilution from dissimilar and difficult-to-weld steels without cracking. The wire operates with a very stable, spatter free arc to produce a bright, smooth weld bead surface and self-releasing slag. Ideal for high productivity welding in the vertical position.

## Applications:

Dissimilar joints between stainless and mild, low alloy or medium carbon steels.  
Buffer layers on mild and low alloy steels prior to overlaying with Cromacore DW 316L/LP.  
Interface runs on 316L clad steels.  
Joining of medium carbon hardenable steels eg. armour plate.

## Welding positions:



## Welding current:

DC+

## Deposition efficiency:

87%

## Shielding gas:

M21, 80% Ar + 20% CO<sub>2</sub>, 22-25 l/min  
C1, 100% CO<sub>2</sub>, 22-25 l/min

## Stick-out:

15-25 mm

## Ferrite content:

FN 22

## Chemical composition, wt.%

	C	Si	Mn	P	S	Cr	Ni
Min			0.5			22.0	12.0
Typical	0.02	0.7	1.3	0.024	0.009	23.0	12.9
Max	0.04	1.0	2.5	0.030	0.025	25.0	14.0

	Mo	Cu	V	Nb
Min	2.0			
Typical	2.4	0.11	0.1	0.08
Max	3.0	0.5	0.2	0.1

## Mechanical properties

	Specified	Typical
Yield strength, Rp0.2%:		540 MPa
Tensile Strength, Rm:	≥ 550 MPa	710 MPa
Elongation, A5	≥ 25%	30%
Impact energy, CV:		-20°C • 48 J

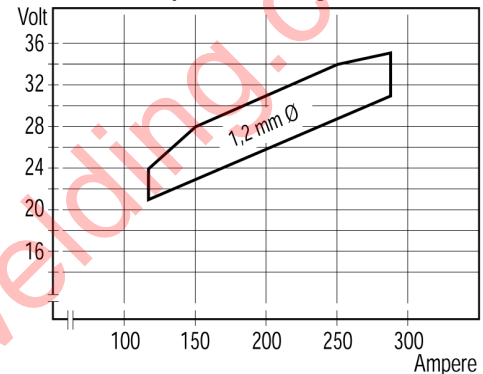
## Classification:

AWS A5.22 E 309LMoT1-4/-1  
ISO 17633-A T 23 12 2 L P M/C 1  
Werkstoff no. 1.4459

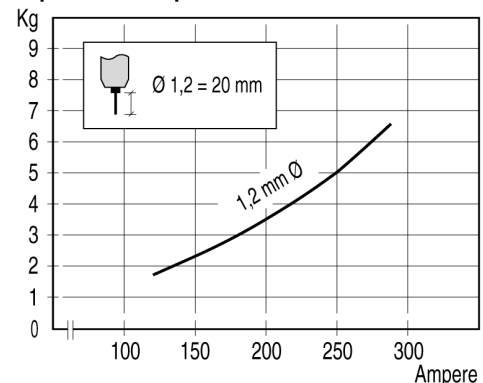
## Approvals:

DNV 309MoL  
LR SS/CMn S

## Recommended parameter range:



## Deposition rate per hour:



## Product data:

Diam.mm	Product code	Spool weight
1,2	95851012	15 kg BS300
1,2	95851112	5 kg BS200

## Note

Strip:  
S ≤ 0.03%  
P ≤ 0.04%  
N ≤ 0.06%