



Cromacore DW 309MoLP

FCAW - Flux cored arc welding
Stainless Steel

Date: 2007-05-25
Revision: 7

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.

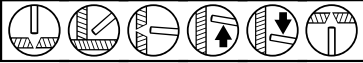
Applications:

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:

80% Ar + 20% CO₂, 22-25 l/min

100% CO₂, 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:		0°C • 29 J

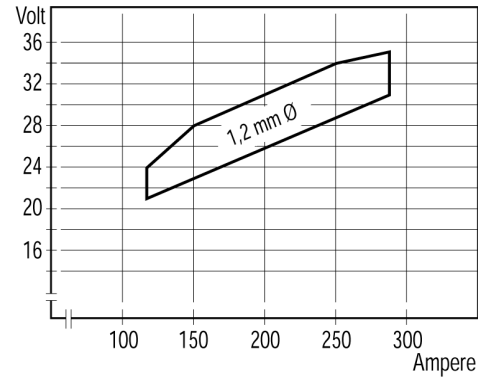
Classification:

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

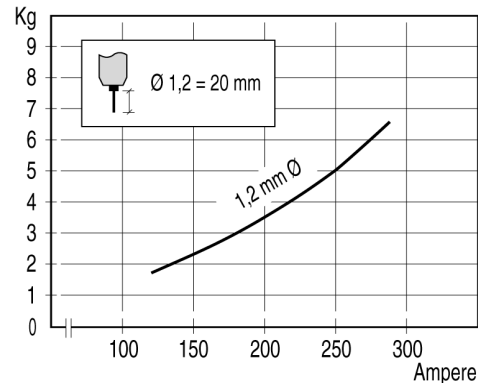
Approvals:

DNV 309MoL
LR SS/CMn S
BV 309MoL

Recommended parameter range:



Deposition rate per hour:



Product data

Diam.mm	Product code	Delivery form
1,2	95852012	12,5 kg PSP
1,2	95851012	15 kg WBS
1,2	95851112	5 kg WBS

Note

Strip:
S ≤ 0.03%
P ≤ 0.04%
N ≤ 0.06%