Cromamig 309MoL

GMAW - MIG MAG

Stainless Steel

Date: 2008-01-22
Revision: 6

Description:
Cromamig 309MoL deposits a 23% Cr / 12% Ni / 2.5% Mo austenitic stainless steel weld metal. The high alloy content and ferrite level enable the weld metal to tolerate dilution from dissimilar and difficult-to-weld materials without hot cracking.
APPLICATIONS:
– Buffer layers on mild and low alloy steels prior to overlaying with Cromarod 316L.
– Joining of 316L clad steels and dissimilar joints between stainless and mild or medium carbon steels.
– Joining of medium carbon hardenable steels.

Welding current:
DC+

Wire composition, wt.%

	C	Si	Mn	P	S	Cr	Ni
Min		0,30	1,0			21,0	11,0
Typical	0,015	0,50	1,5	0,02	0,003	22,0	14,5
Max	0,03	1,00	2,5	0,03	0,020	25,0	15,5

	Mo	Cu	N
Min	2,0		
Typical	2,6	0,15	0,07
Max	3,5	0,30	

Shielding gas:
Acc. to EN 439-94:
M12, Ar+2% CO2
M13, Ar+1-3% O2

Ferrite content:
FN 12

Corrosion resistance
The corrosion resistance after surfacing carbon steels with two layers of Cromamig 309 MoL is about the same as for 316L material.

Chemical composition, wt.%

Mechanical properties

	Specified	Typical
Yield strength, Rp0.2%:	≥ 350 MPa	470 MPa
Tensile Strength, Rm:	≥ 550 MPa	680 MPa
Elongation, A5	≥ 25%	30%
Impact energy, CV:		20°C • 80 J

Classification:

EN ISO 14343	G 23 12 2
AWS A5.9	~ER309MoL

Approvals:

Note

AWS: Slight deviation in Cr

Product data

Diam.mm	Product code	Dip Current A	Dip Voltage V	Spray Current A	Spray Voltage V
0,8	9826-2008				
1,0	9826-2010				
1,2	9826-2012				