



Cromamig 309LSi

GMAW - MIG MAG

Stainless Steel

Date:	2008-01-22
Revision:	9

Description:

Cromamig 309LSi deposits a 23% Cr / 13% Ni austenitic stainless steel weld metal with a ferrite content of about FN 11. The high alloy level and high ferrite content enables the weld metal to tolerate dilution from carbon and low alloy steels without hot cracking. The higher silicon content gives better arc stability and weld metal flow which improves bead appearance, particularly when dip transfer welding.

APPLICATIONS:

- Buffer layers on mild and low alloy steels prior to overlaying with MIG/TIG 308L.
- Joining of clad steels and dissimilar joints between stainless and mild or low alloy steels.
- Welding of similar composition, 309L type, stainless steels.
- Joining of ferritic-martensitic stainless steels.

Welding current:

DC+

Wire composition, wt.%

	C	Si	Mn	P	S	Cr	Ni
Min		0,65	1,0			22,0	11,0
Typical	0,02	0,8	1,8	0,015	0,01	23,5	13,5
Max	0,030	1,00	2,5	0,03	0,020	25,0	14,0

	Mo	Cu	N
Min			
Typical	0,10	0,10	0,06
Max	0,30	0,30	

Shielding gas:

Acc to EN 439:

M12, Ar + 2% CO₂, 16-21 l/min

M13, Ar + 1-3% O₂, 16-21 l/min

Ferrite content:

FN 11

Chemical composition, wt.%

	C	Si	Mn	P	S	Cr	Ni
Min							
Typical	0,02	0,7	1,6	0,015	0,01	23,0	13,0
Max							

	Mo
Min	
Typical	0,1
Max	

Mechanical properties

	<u>Specified</u>	<u>Typical</u>
Yield strength, Rp0.2%:	≥ 350 MPa	450 MPa
Tensile Strength, Rm:	≥ 520 MPa	650 MPa
Elongation, A5	≥ 30%	35%
Impact energy, CV:		20°C • 130 J -120°C • 60 J

Classification:

EN ISO 14343

AWS A5.9

G 23 12 LSi

ER309LSi

Approvals:

TüV

Product data

Diam.mm	Product code	Dip Current A	Dip Voltage V	Spray Current A	Spray Voltage V
0,8	9805-2008	60-100	18-21	150-170	24-26
1,0	9805-2010	75-140	18-21	170-200	26-28
1,2	9805-2012	130-160	18-21	175-250	26-28