Cromamig Duplex

GMAW - MIG MAG

Stainless Steel

Date: 2007-10-08
Revision: 11

Description:
Cromamig Duplex deposits a 23% Cr / 9% Ni / 3% Mo / N austenitic/ferritic duplex stainless steel weld metal with a ferrite content of about FN 35.
It is intended for welding similar composition duplex stainless steels which offer an excellent combination of much higher strength and very good resistance to pitting and stress corrosion cracking, compared to standard austenitic stainless steels.

Welding current:
DC+

Wire composition, wt.%

	C	Si	Mn	P	S	Cr	Ni
Min		0,25	1,0			21,0	7,5
Typical	0,015	0,40	1,8	0,02	0,005	22,5	9,0
Max	0,03	0,90	2,0	0,030	0,020	23,5	10,0

	Mo	Cu	N
Min	2,5		0,12
Typical	3,0	0,10	0,18
Max	3,5	0,50	0,20

Shielding gas:
Acc. to EN 439:
M12, Ar + 2% CO2, 16-21 l/min
I3, Ar + <30% He

Ferrite content:
FN 35

Corrosion resistance
Very good resistance to pitting corrosion and stress corrosion cracking in chloride and H2S environments. Good resistance to intergranular corrosion. Pitting resistance equivalent, PRE = 35.

Chemical composition, wt.%

	C	Si	Mn	P	S	Cr	Ni
Min							
Typical	0,015	0,4	1,7	0,02	0,005	22,5	9,0
Max							

	Mo	N
Min		
Typical	3,0	0,15
Max		

Mechanical properties

	Specified	Typical
Yield strength, Rp0.2%:	≥ 450 MPa	620 MPa
Tensile Strength, Rm:	≥ 690 MPa	800 MPa
Elongation, A5	≥ 20%	30%
Impact energy, CV:		20°C • 120 J
		-60° • 65 J

Classification:

EN ISO 14343	G 22 9 3 LN
AWS A5.9	ER2209

Approvals:

TÜV	
DNV	
DB	Kennblatt Nr 43.042.11
CE	

Product data

Diam.mm	Product code	Dip Current A	Dip Voltage V	Spray Current A	Spray Voltage V
0,8	9816-2008	60-100	18-21	150-170	24-26
1,0	9816-2010	75-140	18-21	170-200	26-28
1,2	9816-2012	130-160	18-21	175-250	26-28