



Cromatig 82

GTAW - TIG
Stainless Steel

Date: 2008-01-22
Revision: 8

Description:

Cromatig 82 is intended for welding Inconel 600, Incoloy 800 and similar composition nickel base alloys particularly where these are used for high temperature service. Highly suitable for a wide range of dissimilar joint combinations between nickel base alloys, Monels, mild and low alloy steels and austenitic stainless steels. Can be used to clad carbon steels with an Inconel type surface. Suitable for welding 5% and 9% nickel steels for cryogenic applications.

Welding current:

DC-

Wire composition, wt.%

	C	Si	Mn	P	S	Cr	Ni
Min			2,5			18,0	67,0
Typical	0,01	0,10	3,0	0,005	0,005	20,0	73,0
Max	0,05	0,50	3,5	0,020	0,015	22,0	

	Cu	Ti	Fe	Co	Nb ²
Min					2,0
Typical	0,10	0,3	0,5		2,5
Max	0,50	0,70	3,0	0,12	3,0

Shielding gas:

Acc to EN 439:

I1, Ar 99.99%, 6-12 l/min

Stamping

Elga, AWS, Wst, EN, Batch

Corrosion resistance

Very good resistance to general and intergranular corrosion. Very good resistance to stress corrosion cracking.

Scaling temperature:

The weld metal is resistant to oxidation

– in air up to 1150°C

– in sulphur dioxide up to 800°C

– in hydrogen sulphide up to 550°C

Chemical composition, wt.%

	C	Si	Mn	P	S	Cr	Ni
Min							
Typical	0,10	0,10	3,0	0,005	0,005	20,0	73,0
Max							

	Cu	Ti	Nb	Fe
Min				
Typical	0,10	0,15	2,5	0,5
Max				

Mechanical properties

	<u>Specified</u>	<u>Typical</u>
Yield strength, Rp0.2%:		420 MPa
Tensile Strength, Rm:	550 MPa	670 MPa
Elongation, A5		40%
Impact energy, CV:		20°C • 160 J –196°C • 100 J

Classification:

EN ISO 18274

S Ni 6082 (NiCr20Mn3Nb)

AWS A5.14

ERNiCr-3

Approvals:

Product data

Diam.mm	Length mm	Product code
1,6	1000	9818-1016
2,0	1000	9818-1020
2,4	1000	9818-1024

Note

Ta max 0.30