



Cromatig 385

GTAW - TIG
Stainless Steel

Date: 2008-01-22
Revision: 10

Description:

Cromatig 385 is intended for welding the 20% Cr / 25% Ni / 4.5% Mo / Cu fully austenitic stainless steels, used for their very high resistance to corrosion in severe, non-oxidising environments e.g. sulphuric acid. The low carbon, high alloy content of the weld metal gives excellent resistance to intergranular corrosion and stress corrosion cracking, combined with superior resistance to crevice and pitting corrosion compared to standard 304 L and 316 L materials.

Welding current:

DC-

Wire composition, wt.%

	C	Si	Mn	P	S	Cr	Ni
Min		0,20	1,5			19,0	24,0
Typical	0,015	0,40	1,6	0,010	0,01	19,5	25,0
Max	0,025	0,5	2,0	0,020	0,015	20,0	26,0

	Mo	Cu	N
Min	4,2	1,2	
Typical	4,5	1,5	0,10
Max	5,2	2,0	0,15

Shielding gas:

Acc. to EN 439:

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

Corrosion resistance

Very good resistance to general and intergranular corrosion in non-oxidising acid environments e.g. sulphuric (up to 90%), phosphoric and organic acids. Good resistance to stress corrosion cracking and crevice and pitting corrosion in chloride bearing environments.

Scaling temperature:

Approx. 1000°C in air.

Chemical composition, wt.%

	C	Si	Mn	P	S	Cr	Ni
Min							
Typical	0,015	0,40	2,0	0,02	0,005	20,0	24,5
Max							

	Mo	Cu	N
Min			
Typical	4,5	1,5	0,056
Max			

Mechanical properties

Specified

Typical

Yield strength, Rp0.2%: ≥ 320 MPa

400 MPa

Tensile Strength, Rm: ≥ 520 MPa

600 MPa

Elongation, A5 ≥ 30%

35%

Impact energy, CV:

20°C • 130 J

−196°C • 60 J

Classification:

EN ISO 14343

W 20 25 5 Cu L

AWS A5.9

~ER385

Approvals:

Product data

Diam.mm	Length mm	Product code
1,6	1000	9814-1016
2,0	1000	9814-1020
2,4	1000	9814-1024

Note

AWS: Slight deviation in Cr