Elgatig 183CR

GTAW - TIG

Low-alloyed

Date:	2008-03-19
Revision:	11

Description:

Elgatig 183CR is a 1.25% Cr/0.5% Mo alloyed wire intended for TIG welding creep resisting steels of similar composition, used in power generation plant operating at temperatures up to 570°C, e.g. DIN 13 CrMo 44, GS-17 CrMo 55, BS 3604 Grades 620 and 621 etc. Also suitable for use in the chemical and petrochemical industries where resistance to hydrogen attack, corrosion from sulphur bearing crude oil and stress corrosion cracking in sour environments is required. Preheat and interpass temperature of 150-200°C is recommended. Post-weld heat treat at 690°C.

Welding current:

DC-

Wire composition, wt.%

	C	Si	Mn	P	S	Cr	Mo
Min	0,08	0,50	0,80			1,10	0,45
Typical	0,11	0,65	1,00	0,006	0,006	1,20	0,50
Max	0,12	0,70	1,20	0,020	0,020	1,30	0,60

Shielding gas:

I1, Argon, 7-10 l/min

Stamping

F CrMo1

Chemical composition, wt.%

	C	Si	Mn	Cr	Mo
Min					
Typical	0,09	0,50	0,80	1,10	0,50
Max					

Mechanical properties

	Specified	Typical	PWHT Typical
Yield strength, Re:	≥ 355 MPa		520 MPa
Tensile Strength, Rm:	≥ 510 MPa		620 MPa
Elongation, A5	≥ 20%		22%
Impact energy, CV:	20°C • >47 J		20°C • 80 J

Classification:

EN ISO 21952	W CrMo1Si
AWS A5.28	ER80 S-G

Approvals:

TÜV

CE

Product data:

Diam.mm	Length mm	Product code
1,6	1000	9715-1016
2,0	1000	9715-1020
2,4	1000	9715-1024

Note

PWHT: 660-700°C, 1h