ELGAMATIC 135

GMAW - MIG MAG

Low-alloyed

Date:	2022-05-18
Revision:	16

Description:
Elgamatic 135 is a copper coated wire for use with the MIG/MAG process, which deposits a 1.5% Ni / 0.3% Mo / 0.2% Cr weld metal. It is intended for welding the high tensile quenched and tempered steels such as Weldox 700, BSC RQT 701, N-A-XTRA 70 and USS T1. Elgamatic 135 is preferably welded with an Ar/20% CO2 shielding gas, the Ar mixture gives consistent fracture toughness at low temperature and high strength levels.

Welding current:
DC+

Wire composition, wt.%

	C	Si	Mn	P	S	Cr	Ni
Min	0,07	0,40	1,30			0,20	1,20
Typical	0,10	0,55	1,60	0,01	0,01	0,35	1,35
Max	0,12	0,70	1,80	0,015	0,018	0,40	1,60

	Mo	Cu	V
Min	0,20		0,05
Typical	0,25	0,10	0,10
Max	0,30	0,35	0,13

Shielding gas:
M21, 80% Ar + 20% CO2, 12 -18 l/min.

Mechanical properties

	Specified	Typical
Yield strength, Re:	≥690 MPa	725 MPa
Tensile Strength, Rm:	770-940 MPa	810 MPa
Elongation, A5	≥17%	20%
Impact energy, CV:	–40°C • >47 J	–40°C • 55 J

Classification:

EN 16834-A	G 69 4 M21 Mn3Ni1CrMo
AWS A5.28	ER100S-G
AWS A5.28	ER110S-G

Approvals:

DB	Kennblatt Nr 42.042.08
TÜV	
CE	

Note

Typical values are based on M21.

Product data

Diam.mm	Dip Current A	Dip Voltage V	Spray Current A	Spray Voltage V
0,8	50-90	16-18	120-160	22-26
1,0	80-150	17-20	180-230	24-30
1,2	110-118	18-22	240-300	26-33