



# Elgamatic 135

GMAW - MIG MAG

Low-alloyed

Date: 2007-10-08  
Revision: 13

## 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 can be welded with either an Ar/20% CO<sub>2</sub> or CO<sub>2</sub> gas shield, but the Ar mixture gives better fracture toughness at low temperature and higher strength levels.

## Welding current:

DC+

## Wire composition, wt.%

	C	Si	Mn	P	S	Cr	Ni
Min	0,07	0,4	1,3			0,2	1,2
Typical	0,10	0,55	1,60	0,01	0,01	0,35	1,35
Max	0,12	0,7	1,8	0,015	0,018	0,4	1,6

	Mo	Cu	V
Min	0,20		0,05
Typical	0,30	0,10	0,10
Max	0,55	0,35	0,13

## Shielding gas:

C1, CO<sub>2</sub>, 7-12 l/min.

M21, 80% Ar + 20% CO<sub>2</sub>, 7-12 l/min.

## Chemical composition, wt.%

	C	Si	Mn	P	S	Cr	Ni
Min							
Typical	0,09	0,38	1,33	0,009	0,012	0,38	1,32
Max							

	Mo	Cu	V
Min			
Typical	0,18	0,09	0,09
Max			

## Mechanical properties

	<u>Specified</u>	<u>Typical</u>
Yield strength, Re:	≥690 N/mm <sup>2</sup>	725 N/mm <sup>2</sup>
Tensile Strength, Rm:	≥760 N/mm <sup>2</sup>	810 N/mm <sup>2</sup>
Elongation, A5	≥18%	20%
Impact energy, CV:	-40°C • >47 J	-40°C • 55 J

## Classification:

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

## Approvals:

DB Kennblatt Nr 42.042.08  
TÜV  
CE

## Note

Typical values are based on M21.

## Product data

Diam.mm	Product code	Dip Current A	Dip Voltage V	Spray Current A	Spray Voltage V
0,8	9537-2008	50-90	16-18	120-160	22-26
1,0	9537-2010	80-150	17-20	180-230	24-30
1,2	9537-2012	110-118	18-22	240-300	26-33