



Elgamatic 103

GMAW - MIG MAG
Un-alloyed

Date: 2020-09-18
Revision: 12

Description:

Elgamatic 103 is a copper coated, manganese-silicon double deoxidised wire of the G4Si1 type, for use with a CO₂ or Ar/CO₂ gas shield. The increased Mn content produces a higher weld metal strength level and better notch toughness compared to G3Si1 type wire. Elgamatic 103 is suitable for all general engineering and structural steels.

Welding current:

DC+

Wire composition, wt. %

	C	Si	Mn	P	S	Cu
Min	0,06	0,8	1,6			
Typical	0,09	0,9	1,7	0,015	0,010	0,05
Max	0,13	1,15	1,85	0,025	0,025	0,30

Shielding gas:

100% CO₂, 12-18 l/min

80% Ar + 20% CO₂ 12-18 l/min

Chemical composition, wt. % (80% Ar + 20% CO₂)

	C	Si	Mn
Min			
Typical	0,07	0,8	1,6
Max			

Mechanical properties (80% Ar + 20% CO₂)

	<u>Specified</u>	<u>Typical</u>
Yield strength, Re:	≥ 460 MPa	510 MPa
Tensile Strength, Rm:	530-680 MPa	610 MPa
Elongation, A5	≥ 22%	24%
Impact energy, CV:	-40°C • 47 J	-20°C • 90 J -40°C • 60 J

Classification:

EN ISO 14341-A

G 46 4 M21 4Si1

G 42 2 C1 4Si1

AWS A5.18

ER70S-6

Approvals:

TÜV

CE

Note

Also available in AUTOPAC, a twist-free pay-off pack. For more information about Part no, type of spool and winding, please study the price list.

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	110-180	18-22	240-300	26-33

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