



ELGAMATIC NEO 103

Solid wire Gas Metal
Arc Solid Wires

Classifications

EN ISO 14341-A G 46 5 M21 4Si1 G 42 3 C1 4Si1
AWS A5.18 ER70S-6

ELGAMATIC NEO 103 is a premium bronze-coated, manganese-silicon, G4Si1 type mild steel wire engineered for superior welding performance with CO₂ or Ar/CO₂ shielding gases. Its advanced bronze coating ensures exceptional arc stability, smooth bead appearance, and consistent quality, even under demanding conditions.

Designed for high-speed robotic and mechanized welding, ELGAMATIC NEO 103 delivers unmatched reliability at very high amperages, making it the ideal choice for automated production lines.

Thanks to its precisely controlled metallurgy, it offers higher strength and impact properties than G3Si1 wire type.

Applications: Perfect for structural steel fabrication, transportation, heavy equipment manufacturing, agricultural machinery, and earth-moving applications—where productivity and quality matter most.

Shielding Gas

M21, 80% Ar + 20% CO₂, 12-18 l/min
C1, 100% CO₂, 12-18 l/min

Welding Current

DC+

Weld metal chemistry %

	%C	%Si	%Mn	%P	%S	%Cr	%Ni	%Mo	%Cu
Min	0,06	0,80	1,60						
Typical	0,07	0,9	1,65	0,02	0,02	0,01	0,01	0,01	
Max	0,10	1,05	1,85	0,025	0,025	0,15	0,15	0,15	0,35

Notes :

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.

Mechanical properties

Welding Conditions : As Welded (M21)

Values	Min.	Typ.		T °C	Min.	Typ.	
Yield Strength, Re	460	490	MPa	Impact energy, CV (Joules)	-50	47	72
Tensile Strength, Rm	530	530	MPa				
Elongation A5	22	26	%				

CE	TÜV	DB	LR	DNV	BV	ABS	RINA	UKCA
x	X	X		X				

Available diameters : 1.0 - 1.2mm

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