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