

Technical data sheet <small>011121MBA</small>	Cored welding wire STELLOY 25-G	 Welding Alloys
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CLASSIFICATION

EN 14700: T ZCo

DESCRIPTION

- Cobalt base tubular wire for gas shielded metal arc hardfacing
- The Co-Cr-W-Ni alloy deposit benefits from stable hardness at high temperatures

APPLICATIONS

- STELLOY 25-G is used for hardfacing parts undergoing metal-to-metal wear at temperatures up to 800°C
- The toughness of the deposit allows excellent resistance to thermal cycles and shocks
- Very resistant to creep, this alloy is used for extrusion dies, nozzles, pump shafts etc

TYPICAL ALL-WELD METAL ANALYSIS

C	Mn	Si	Cr	Ni	W	Fe	Co
0.15	1.50	1.00	20.0	10.0	14.0	4.00	Bal.

Structure: austenitic matrix with dispersed carbides or intermetallic component precipitates

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Hardness:

As welded: 210 HB

At high temperatures

+20°C	400°C	600°C	800°C
210 HB	145 HB	130 HB	120 HB

CONDITIONS OF USE

Current type	Shielding gas	Gas flow rate [l/min]
DC+ / pulsed	EN ISO 14175 : I1 (argon)	10 - 20

OPERATING CONDITIONS

Diameter [mm]	Current [A]		Voltage [V]		Stick-out [mm]	
	Range	Optimum	Range	Optimum	Range	Optimum
1.2	100 - 250	200	16 - 29	28	15 - 30	25
1.6	140 - 350	250	16 - 30	28	15 - 30	25

Recovery: 98 %

WELDING POSITIONS

Flat, half up, half down, all positions

PACKAGING

Diameter	≤ 2.4 mm	≥ 2.4 mm	
Standard packaging	EN ISO 544: BS 300 spool	B 450 coil	Drum
Weight	15 kg	25 kg	Up to 330 kg

Other packaging and other diameters: please consult us

Welding products and techniques evolve constantly. All descriptions, illustrations and properties given in this data sheet are subject to change without notice and can only be considered as suitable for general guidance. This document is intended to help the user make the correct choice of product. It is his responsibility to assess its suitability for his intended application.