Technical data sheet 011121MBA	Cored welding wire # STELLOY 190-G	Welding Alloys

CLASSIFICATION

EN 14700: T ZCo3
ASME IIC SFA 5.21 / AWS A 5.21: ERCCoCr-G

DESCRIPTION

- Cobalt base tubular wire for gas shielded metal arc hardfacing
- Weld deposit presents a significant concentration of primary and complex carbides in a cobalt base matrix
- Exceptional resistance to abrasive wear on a wide temperature range, corrosion resistant to brackish water and excellent resistance to oxidation
- Machinability by grinding only

APPLICATIONS

STELLOY 190-G is used for hardfacing parts undergoing the single or combined effects of abrasion, temperatures ranging from RT to 1000°C and mild corrosive environments.

Examples
Screens, bearing journals, fan blades, pump bodies, abrasive oil & gas industry applications etc.

TYPICAL ALL-WELD METAL ANALYSIS

C	Mn	Si	Cr	W	Fe	Co
3.5	0.4	1.00	26	13	3	Bal.

Structure: chromium and tungsten carbides in an austenitic type matrix

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Hardness
As welded: 54 - 60 HRc
Density: 8.7 g/cm^3

OPERATING CONDITIONS

Current type	Shielding gas	Gas flow rate [l/min]
DC+ / Pulsed	EN ISO 14175: I1, M12, M13	10 - 20

TYPICAL WELDING PARAMETERS

Diameter [mm]	Current [A]		Voltage [V]		Stick-out [mm]	
	Range	Optimum	Range	Optimum	Range	Optimum
1.6	120 - 320	220	16 - 30	26	15 - 30	20

Recovery: 95 %

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