

**Technical data sheet**

011121MBA

Cored welding wire  
**STELLOY 6HC-G**

**CLASSIFICATION**

EN 14700: T Co2  
ASME IIC SFA 5.21 / AWS A 5.21: ERCCoCr-A

**DESCRIPTION**

- Cobalt base tubular wire for gas shielded metal arc hardfacing
- Exceptional resistance to metal-to-metal wear in corrosive media at high temperatures, to erosion and to thermal shocks
- Designed for single layer MIG applications requiring 40 - 42 HRc hardness with 10% dilution

**APPLICATIONS**

STELLOY 6HC-G is used for hardfacing parts undergoing the single or combined effects of metal-to-metal wear, abrasion, temperatures ranging from ambient to 800°C, impact and corrosive environments.

**Examples**

Used in small valves and valve gates, chainsaw bars, extrusion dies etc.

**TYPICAL ALL-WELD METAL ANALYSIS**

C	Mn	Si	Cr	W	Fe	Co
1.2	1.0	1.2	28.3	4.5	4.0	Bal.

Structure: chromium and tungsten carbides in an austenitic type matrix

**TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES****Hardness:**

Three-layer deposit on mild steel: 44 HRc

**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.