

Technical Data Sheet

STELLOY C CO-G



Nickel based alloy -> Metal cored wire for Gas Metal Arc Welding (GMAW)

1 GENERAL INFORMATION

EN 14700: T Ni2

- Superalloy deposit, NiCrMoW type hardened with cobalt
- The weld deposit withstands impact, compression, friction, oxidation, corrosion and temperatures up to 1100°C
- Particularly resistant to corrosion under oxidising and reducing atmospheres
- Resistant to stress corrosion cracking in environments containing hydrogen sulphide
- Excellent thermal shock resistance
- Can be machined without prior heat treatment
- Enhanced version of STELLOY C-G with cobalt addition to improve resistance at high temperatures
- Suitable for surfacing parts subjected to oxidation, corrosion and mechanical stresses at high temperatures



Extrusion mandrels and dies, hot shearing blades, forging dies, etc.

Abrasion	████	████	████	████	████
Impact	████	████	████	████	████
Metal-metal	████	████	████	████	████
Corrosion	████	████	████	████	████
Temperature	████	████	████	████	████

2 ALL WELD METAL PROPERTIES

CHEMICAL ANALYSIS [%]

C	Mn	Si	Cr	Ni	Mo	Fe	Co	W
0.02	1.2	0.6	15.5	Bal.	16.0	2.0	2.3	4.4

HARDNESS

200-240 HB (as welded, three-layers)
330-370 HB (work hardened, three-layers)

3 RECOMMENDED WELDING PARAMETERS

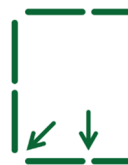
Diameter [mm]	Welding Position	Polarity	Current [A]	Voltage [V]	Stick-out [mm]
1.6	PA / 1G or 1F	DC+	200 - 300	26 - 30	20 ± 5
2.0	PA / 1G or 1F	DC+	250 - 350	26 - 30	20 ± 5
2.4	PA / 1G or 1F	DC+	300 - 400	26 - 30	20 ± 5

WELDING PROTECTION

Shielding gas (EN ISO 14175)

- I1 (100% Ar)

WELDING POSITION



4 PACKAGING OPTIONS

Diameter [mm]	1.6 - 2.4	2.4	2.4
Standard packaging (EN ISO 544)	BS 300 spool	B 450 coil	Drum
Weight [kg]	15	25	Up to 330

Other packaging requirements: 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.