

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

EN 14700: T Ni2

DESCRIPTION

- Nickel-based super-alloy flux-cored wire of the NiCrMoW type
- Particularly resistant to corrosion under oxidising and reducing atmospheres
- Weld metal is designed to withstand impact, compression, abrasion, oxidation, corrosion and heat up to 1100°C
- Resistant to stress corrosion cracking in environments containing hydrogen sulphide
- Excellent thermal shock resistance
- Can be machined without previous heat treatment

APPLICATIONS

STELLOY C-O is suitable for welding of joints in steel clad with a nickel-chromium-molybdenum alloy and for the joining of nickel-chromium-molybdenum alloys to steel or to other nickel base alloys.

Base materials : UNS N 10002 (ASTM B 334, B 336, B 366)

STELLOY C-O is also designed for surfacing of all parts undergoing mechanical stress, impacts and thermal shock in corrosive high-temperature environments. It is suitable for use as a buffer layer before surfacing with STELLOY NI520-G.

Examples

Hot shearing blades, lime kiln burner parts, dies, swages, press tools, hot-piercing punches, rolling and wire-drawing guides, pumps and valves for the chemical and petrochemical industries.

TYPICAL ALL-WELD METAL ANALYSIS

C	Mn	Si	Cr	Mo	Fe	W	Ni
0.05	0.6	0.5	16	16	5	4.5	Bal.

TYPICAL WELD DEPOSIT PROPERTIES

Hardness – as welded: 200 HB

Hardness – work-hardened: 350 HB

CONDITIONS OF USE

Current type	Protection
DC+	Self-shielded

OPERATING CONDITIONS

Diameter [mm]	Current [A]		Voltage [V]		Stick-out [mm]	
	Range	Optimum	Range	Optimum	Range	Optimum
2.4	250 - 450	350	26 - 35	28	25 - 40	30
2.8	250 - 450	400	28 - 35	30	25 - 40	35

Recovery: 90 %

WELDING POSITIONS

Flat, half up, half down

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.