

STELLOY C-O

CLASSIFICATION

EN 14700: TNi2

AWS A 5.21/ASME II C SFA 5.21: ERCNiCrMo-5A

DIN 8555¹: MF 23-GF-200/350-CKNTZ

¹ Former classification replaced by EN 14700

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
- 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 destined in general to surface all parts undergoing mechanical stress combined with corrosion, thermal shocks and/or high temperatures

Examples

Hot shear blades, lime kiln burner parts, dies, swages, press tools as well as pump parts, hot-piercing punches, rolling and wire-drawing guides, valves and reservoirs...

TYPICAL ALL-WELD METAL ANALYSIS

C	Mn	Si	Cr	Mo	Fe	W	Ni
0.05	0.60	0.50	16.00	16.00	5.00	4.50	Bal.

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Hardness:

As welded: 200HB

Work hardened: 350HB

CONDITIONS OF USE

Current type

DC (+)

self shielded

Protection

OPERATING CONDITIONS

Diameter [mm]	Amperage [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

STANDARD DIAMETERS (mm)

2.4, 2.8 mm

Other diameters: please consult us

PACKAGING

Diameter	< 2.4 mm		> 2.4 mm	
	Spool : BS 300		Coil	Drum
Standard packaging [EN ISO 544]				
Weight	15 kg		25 kg	Up to 330 kg