

STELLOY 1-G

CLASSIFICATION

EN 14700: T Co3

ASME IIC SFA 5.21 / AWS A 5.21: ERCCoCr-C

DESCRIPTION

- Cobalt base tubular wire for gas shielded metal arc hardsurfacing
- Exceptional resistance to metal-to-metal wear in corrosive media at high temperatures, where shocks are low to moderate

APPLICATIONS

Stelloy 1-G is used for hardsurfacing parts undergoing the single or combined effects of heavy metal-to-metal wear or abrasion, temperatures ranging from RT to 800°C and corrosive environments.

Examples

Steam valves, wire guides, rubber and plastic mixers, extrusion screws, conveyors...

TYPICAL ALL-WELD METAL ANALYSIS

C	Mn	Si	Cr	W	Fe	Co
2.30	1.00	1.00	29.0	12.0	4.00	Bal.

Structure: chromium and tungsten carbides in an austenitic type matrix

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Hardness:

As welded: 53 HRc

High temperature hardness:

20°C	200°C	400°C	600°C	800°C
560 HB	540HB	480 HB	400 HB	220 HB

High deposition rates and low dilution are facilitated by pulsed current

High heat inputs favour lower hardness

CONDITIONS OF USE

Current type	Shielding gas	Gas flow rate
DC+ or pulsed	EN 439 / ISO 14175:	10 - 20 l/min

Current type**Shielding gas****Gas flow rate**I1 (argon), M13 (Ar+1à 2 % O₂)**OPERATING CONDITIONS**

Diameter [mm]	Amperage [A]		Voltage [V]		Stick-out [mm]	
	Range	Optimum	Range	Optimum	Range	Optimum
1.2	100 - 250	200	15 - 30	28	15 - 30	10 - 20
1.6	140 - 350	250	15 - 30	28	15 - 30	10 - 20

Recovery: 95 %

WELDING POSITIONS

Flat, half up, half down

STANDARD DIAMETERS (mm)

1.2, 1.6, 2.0, 2.4 mm

Other diameters: please consult us

PACKAGING

Diameter	2.4 mm		2.4 mm
Standard packaging [EN ISO 544]	Spool : BS 300	Coil : B 450	Drum
Weight	15 kg	25 kg	Up to 330 kg