

Technical data sheet

011121MBA

Cored welding wire STELLOY 21-TIG



CLASSIFICATION

EN 14700: T Co1
ASME IIC SFA 5.21 / AWS A 5.21: ERCCoCr-E

DESCRIPTION

- Cobalt base cored wire for gas tungsten arc welding (GTAW)
- Co-Cr-Ni-Mo alloy deposit
- Excellent metal-to-metal wear resistance combined with good corrosion resistance

APPLICATIONS

- STELLOY 21-TIG is used for hardsurfacing parts subjected to a combination of impact, abrasion, compression, corrosion and high temperatures up to 900°C
- The toughness of the deposit allows excellent resistance to thermal cycles and shocks
- Less crack sensitive than other cobalt base alloys, STELLOY 21-TIG is used for building up large-scale sections
- Used for integral seats and guides of large water and high-pressure valve bodies, drop forging dies, pump shafts and sleeves, hot punches etc.

TYPICAL ALL-WELD METAL ANALYSIS

C	Mn	Si	Cr	Ni	Mo	Fe	Co
0.25	1.00	1.00	28.5	3.00	5.50	4.00	Bal.

Structure: carbides in an austenitic matrix

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Hardness: as welded: 33 HRc
Work-hardened: 47 HRc

OPERATING CONDITIONS

Diameter [mm]	Current [A]		Voltage [V]		Stick out [mm]	
	Range	Optimum	Range	Optimum	Range	Optimum
1.2	100 - 250	200	15 - 20	16	10-15	10

WELDING POSITIONS

Flat, half up, half down, all positions

PACKAGING

Diameter	1.2 mm – 1.6 mm
Spool type	EN ISO 544: BS300
Weight	15 kg

Other packaging: please consult us