STELLOY 21-E

CLASSIFICATION

EN 14700: E Co1

ASME IIC SFA 5.13 / AWS A 5.13: ECoCr-E

DIN 8555: E20-UM-350-CKTZ

DESCRIPTION

- Cobalt base coated electrode for hardsurfacing
- Co-Cr-Ni-Mo alloy deposit
- Excellent metal-to-metal wear resistance combined with good corrosion resistance

APPLICATIONS

- Stelloy 21-E is used for hardsurfacing parts subject 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-E 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
0.3	0.50	0.80	28.0	2.50	5.00	2.00	Bal.

Structure: carbides in an austenitic matrix

TYPICAL ALL-WELD METAL MECHANICAL PROPERTIES

Hardness as welded	Work-hardened
33 HRc	47 HRc

OPERATING CONDITIONS

Electrode ØxL [mm]	2.5x350	3.2x350	4.0x450
Current [A]	75	100	140

Redrying, if necessary, 1h/250°C. Guide electrode almost vertically with a short arc. On materials sensitive to cracks a buffer-layer with Tetra 307-E is recommended.

= + 70 V

WELDING POSITIONS
1G/PA, 2F/PB, 2G/PC

PACKAGING			
Electrode ØxL [mm]	2.5x350	3.2x350	4.0x450
Weight/box [kg]	4	5	6