



EnDOTec® DO*80

Cobalt base gas shielded, continuous electrode

Description:

Exclusive, gas shielded, metal cored alloy wire, ideal for maintenance and repair applications or batch manufacturing where highest integrity welding, efficiency and productivity are required.

A high cobalt alloy containing, chromium, nickel, molybdenum and manganese. This deposit gives work hardenable slag-free protective coatings suitable for carbon steels, low-to-high alloy steels, stainless and manganese steels and nickel alloys.

EnDOTec DO*80 Features:

- Exceptional increase of hardness under impact
- Excellent resistance to heat and corrosion
- Excellent resistance to metal/metal friction
- Superior crack resistance for both coatings and repair
- Ductile deposit, machinable by cutting tools
- Low heat input for low dilution
- Maximum weld metal recovery
- Excellent bead appearance, no spatter, high arc stability
- Great flexibility in operation: 100-400 A.
- Exceptional all-positional weld ability
- High deposition rate for reduced labour costs

Technical data:

Hardness as welded (HV₃₀): 300-350
Hardness after work hardening (HV₃₀): 500

Shielding gases:

Recommended gas: 100% Ar
[DIN 32526 I1]
Flow rate (l/min): 12-16

Applications:

- Designed for protective coating applications on:
- Hot cutting blades.
- Stripper points.
- Forging, hot forming tools.
- Thermal de-burring tools.
- Valve seats, seals and guides.
- Extrusion press plungers.
- Pump shafts and sleeves.

Complementary products:

N9080 - manual electrode

Procedure for use:

Welding Equipment:

EnDOTec continuous electrodes are compatible with most conventional, constant voltage power sources. Models with programmable, pulsed arc, metal transfer modes offer optimal performance. E+C recommends using wire drive systems fitted with 4 feed-rollers - smooth rollers for Ø 1.2 mm and knurled rollers for Ø 1.6 mm - as well as polyamide liners.

Preparation:

Remove old welding deposits and worn metal completely with ExoTrode.

Preheating:

Preheating depends on the steel's Carbon Equivalent, and the work-piece size, thickness and geometry. E+C recommends:

CE < 0.2: preheat not essential

CE 0.2 - 0.4: preheat 100-200°C

CE 0.4 - 0.8: preheat 200-350°C.

Note that 12-14% Mn steels should never be preheated and the work-piece temperature during welding should be kept below 250°C.

Welding parameters:

Welding current: = (+)

Diameters	1.6 mm	
Transfer mode	Short arc	Spray arc
Arc voltage (V)	15-19	28-30
Amperage (A)	100-320	280-350

Welding technique:

For multi-pass, down hand welding, push the electrode across the work-piece at a 90° angle without weaving, for optimum gas protection and lowest heat input.

Machining:

Machine the deposits using carbide-tipped cutting tools. Arc or plasma cutting equipment may also be used.

Packaging:

EnDOTec continuous electrodes are precision wound on recyclable, wire spools (DIN 8559, K300) to a standard weight of 15 kg & 5Kg.

DIGITALWELD

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