



## EnDOtec® DO\*60

Cobalt based, gas shielded, metal cored alloy wire

### 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 ternary cobalt alloy containing, chromium and tungsten. This slag-free deposit is especially suited for protecting carbon steels, low and high alloy steels, stainless steels, manganese steels and nickel alloys.

Combines the best features of cobalt-based alloys i.e. excellent resistance to corrosion, erosion and cavitations, plus resistance to metal/metal friction at elevated temperature.

- Good crack resistance
- Slag free, machinable deposit
- High hot hardness retention
- Low heat input for low dilution
- Maximum weld metal recovery
- Excellent bead appearance, no spatter, high arc stability
- Exceptional all-positional weldability
- High deposition rate for reduced labour costs
- Great flexibility in operation: 110-325 A

### Technical data:

Hardness (HRC): .....40-45

### Shielding gases:

Recommended gas: .....100% Ar  
[DIN 32526 I1]

Flow rate (l/min): .....12-16.

### Applications:

Designed for protective coatings on:

- Valve seats, seals, shutters and cams
- Combustion chambers and exhaust valves
- Screw conveyors for chemical and food processing industries
- Plastic extrusion screws
- Wood-working tools
- Saw chains and slide-ways
- Hot shear blades
- Hot and cold forming rolls
- Pump components

### Complementary products:

**N 9060** - 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 ChamferTrode 03/04.

#### Preheating:

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

CE < 0.25: preheat not essential, 150°C recommended.

CE 0.25 - 0.45: preheat 100-200°C.

CE 0.45 - 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: = (+)

Transfer mode	Short arc	
	1.2	1.6
Diameter (mm)	1.2	1.6
Arc voltage (V)	17-24	15-21
Amperage (A)	80-250	120-270

### Welding technique:

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

### Machining:

Machine 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 5kg & 15kg and specially packed for optimum, storage protection.

# DIGITALWELD

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