



EnDOtec® DO*30

Chromium carbide, 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.

The slag free deposit offers exceptional resistance to fine-particle abrasion and erosion under moderate impact, thanks to a structural matrix which is tough and reinforced by extra-hard phases.

- Alloy characteristics including
- Hardness fully obtained in just one pass
- 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: 100-400 A

Technical data:

Mechanical characteristics

Hardness as welded (HRC): 63-68

Shielding gases:

Recommended gas: 97, 5 % Ar, 2,5 % CO₂
[DIN 32526 M12]

Alternative gases: 99 % Ar., 1 % O₂
[DIN 32526 M11]
100% Ar
[DIN 32526 I1]
82 % Ar., 18% CO₂
[DIN 32526 M21]

Flow rate (l/min): 12-16

Applications:

Designed for protective coating of parts most subject to wear in activities such as:

- Public works
- Brick and tile
- Quarries
- Dredging

It is especially suitable in mining/ cement making for:

- Press screw heads, segments
- Humidifier paddles and segments
- Mixer blades and scrapers
- Drag chains, rotary excavator buckets

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 workpiece 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 workpiece temperature during welding should be kept below 250°C.

Welding parameters:

Welding current: = (+)

Diameters	1,2 mm		1,6 mm	
Transfer mode	Short arc	Spray arc	Short arc	Spray arc
Arc voltage (V)	21-32	30-39	21-29	32-34
Amperage (A)	80-300	160-300	100-350	260-370

Welding technique:

For single pass, down hand coating applications. Push or pull the electrode at an angle of 70-80° to ensure optimal fusion. If required, a maximum second pass should only be executed while the weld is still hot.

Machining:

The deposit is machinable by grinding. 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 and specially packed for optimum, storage protection.

DIGITALWELD

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