

TeroMatec OA 4666

Self-Shielded, Continuous Electrode For Semi-Automatic And Robotic

DESCRIPTION

Special, self-shielded, flux cored alloy wire specifically developed for outdoor maintenance and repair welding of thick, heavy components where faster weld deposition rates over traditional coated electrodes, are required. Worn or new critical parts may be cost effectively TeroCote protected either manually or fully automatically to extend their useful service life and increase productivity and profitability. High chromium, niobium Hypereutectic cast iron alloy depositing complex carbides for wear-protective coating of carbon steels, low or high alloy steels and 14% Mn steels.

- Excellent resistance to severe abrasion erosion with moderate impact up to 450°C
- Ready formation of stress relieving cracks
- Few slag residues to clean
- Deposits are grindable and rust resistant
- Cannot be cut using oxy-fuel processes
- Ideal choice for field work or on site applications
- No need for costly gas cylinders, regulators or flow meters
- Relatively thick, wide overlays possible in single pass
- No enforced stop-starts increase welding duty cycles
- Superior electrode efficiency due to low flux to metal ratio
- No stub end losses promotes material cost savings
- Variable electrode stick out capability improves control over heat input, dilution, deposition rate, visibility and access in tight spaces.

APPLICATIONS

For wear-preventive protective coating of a wide range of steel components subject to abrasion by mineral particles, sand, rocks, gravel etc. processed in the Quarry, Cement, Earthmoving, Dredging and Drilling industries:

crusher jaws and hammers, mixer blades, pump impellers, mould screws, wear plates, coal screens, excavator bucket teeth, conveyor chutes, sand pumps etc.

PROCEDURE FOR USE

Preparation: Remove old welding deposits and worn metal completely with ExoTrobe Preheating depends on the steel's Carbon Equivalent, and the workpiece size, thickness and geometry. Castolin Eutectic recommends.

CE < 0.2 : preheat not essential

CE 0.4 - 0.2 : preheat 200-100.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.

Cooling after welding: After welding similar base metals, the workpiece should be left to cool very slowly, away from draughts. It is

recommended to cover the parts with vermiculite for protection.

Intermediate layer: On 12-14% Mn steels, deposit intermediate layers with TeroMatec 3205 or with the manual electrode EutecTrobe 6450. On hardenable and air-hardening steels, deposit intermediate layers with TeroMatec 3302 or XHD646.

Welding technique: After striking, maintain the wire stick-out around 40 mm with an arc length approx. 7 mm. Longer wire stick-out will further increase deposition rates. For optimum deposit quality, use drag stringer bead or moderate weaving techniques to minimise heat input & overheating risks

Machining: Weld deposits are machinable with standard cutting tools. Soluble oil lubrication improves machining efficiency.

TECHNICAL DATA:

Typical hardness: 65 HRC

Current polarity: DC (+)

Electrode(mm)	Voltage (V)	Current (A)
2.8	26-36	200-440