

TeroMatec OA 4601

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, hypereutectic cast iron alloy for wear-preventive protective coatings on low or high alloy steels and 14% manganese steels.

- Excellent resistance to grinding abrasion with compression and medium impact
- 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

APPLICATIONS

For wear preventive protection of parts in the quarry, cement, sand and gravel, dredging, foundry industries : pump impellers, dredge cutters, rolls, crusher pinions and grinders, cement conveyor screws, hydro-pulpers, bucket shovel teeth and edges, dragline parts, chutes, mixer arms, scraper blades, screws, etc.

PROCEDURE FOR USE

Preparation: Remove old welding deposits and worn metal completely with ExoTrode

Preheating

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 0.8- 0.4 : preheat 350-200.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, the workpiece should be left to cool very slowly, away from draughts. It is recommended to cover the parts with vermiculite for protection.

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: 60 HRC

Current polarity: DC (+)

Electrode(mm)	Voltage (V)	Current (A)
2.8	26-36	170-350