

Anti-Wear Continuous Open Arc Wire

TeroMatec® OA 3952



WIRE

- Ideal choice for field work or on-site applications
- No need for costly gas cylinders, regulators or flow meters
- Excellent wear protective coating
- Slag-free deposits save weld clean-up time
- Relatively thick, wide overlays possible in a single pass



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, columbium hyper-eutectic iron-based alloy depositing complex carboborides for wear-protective coating of carbon steels, low or high alloy steels and 14% Mn steels. Excellent resistance to severe abrasion and erosion up to 1200°F (649°C) service temperatures. Single pass provides optimum, intrinsic properties. Ready formation of stress relieving cracks to minimize distortion. Slag free deposits save weld cleaning time. Deposits are smooth, flat, grindable and rust resistant.

Ideal choice for field work or on site applications. No need for costly gas cylinders, regulators or flow meters. Core deoxidizers tolerate air currents or draught effects. Relatively thick, wide overlays possible in single pass. No enforced stop - starts increase welding duty cycles.

APPLICATIONS:

For wear-preventive protective coating of a wide range of steel components subject to severe abrasion or erosion by mineral particles, sand, rocks, gravel etc. processed in the Quarry, Earthmoving, Dredging, Sand/ Gravel, Coal/ Coke and Cement industries: Wear plates, pneumatic conveyor systems, mixer blades, pump impellers, mold screws, coal screens, excavator bucket teeth, conveyor chutes, sand pumps, concrete mixers, asphalt handling etc.

TECHNICAL DATA:

Hardness (HRC): 60-65

PROCEDURE FOR USE:

Preparation:

Remove any previous weld deposits or cracked metal with ChamferTrode.

Preheating:

Preheating depends on the steel's Carbon Equivalent, and the workpiece size, thickness and geometry. Eutectic recommends:

CE < 0.2 : preheat not essential

CE 0.2 - 0.4 : preheat 210°-390°F (approx. 100-200°C)

CE 0.4 - 0.8 : preheat 390°-660°F (approx. 200-350°C)

Note that 12-14% Mn steels should never be preheated and the workpiece temperature during welding should be kept below 480°F (250°C) to avoid embrittlement.

Intermediate layer:

On 12-14% Mn steels, deposit intermediate layers with TeroMatec 3205 or with the manual electrode EutecTrode 40. On hardenable and air-hardening steels, deposit intermediate layers with Xuper 6868 XHD. To build up missing sections on low-alloy steels, TeroMatec 2020 is recommended.

Welding parameters:

Welding current: = (+) DCEP

Procedure A

For thick sections and high deposition rates.

Ø Inches (mm)	Current Characteristics
1/16" (1.6)	220A/27V
7/64" (2.8)	300A/30V

Procedure B

For thin sections, minimum dilution and low heat input.

Ø Inches (mm)	Current Characteristics
1/16" (1.6)	140A/22V
7/64" (2.8)	220A/27V

WELDING TECHNIQUE:

After striking, maintain the wire stick-out around 1.5" (40mm) with an arc length approx. 0.25" (7mm). Longer wire stick-out will further increase deposition rates. For optimum deposit quality, use drag stringer bead or moderate weaving techniques to minimize overheating risks. Stop welding by rapidly lifting the wire away from the work piece.

YOUR RESOURCE FOR PROTECTION, REPAIR AND JOINING SOLUTIONS



Eutectic Corporation
N94 W14355 Garwin Mace Drive
Menomonee Falls, WI 53051 USA
P 800-558-8524 • F 262-255-5542

Eutectic Canada
428, rue Aime Vincent
Vaudreuil-Dorion, Quebec J7V 5V5
Phone: (800) 361-9439
Fax: (514) 695-8793

Eutectic Mexico
KM 36.5 Autopista
Mexico-Quertaro
54730 Cautitlan-Izcalli
Estado de Mexico, Mexico
Phone: 011 (52) 55-5872-1111
e-mail: eutectic.mexico@eutectic.com.mx

www.eutectic-na.com