Safe Hard 600

Seamless Gas Shielded, Continuous Electrode For Semi-Automatic And Robotic Welding

DESCRIPTION

Seamless, gas shielded, metal cored alloy wire, ideal for batch manufacturing or maintenance and repair applications where highest integrity welding, efficiency and productivity are re-quired.

Medium alloy steel with high C content, chrome and nickel free, with very fine carbides in small grain size matrix for wear protective coatings. The deposit offers excellent resistance to wear caused by a right balance of impact and abrasion. It keeps the mechanical properties up to 600ºC.

Product Details

- Martensitic–austenitic micro structure
- Low heat input for low dilution.
- Maximized weld metal recovery.
- Exceptional weldability.
- Regular bead profile.
- Versatile usage over wide parameter range.
- Faster deposition rate for reduced labour costs.
- Weldability in all positions

APPLICATIONS

Designed specifically to provide protective coating against wear caused by impact, adhesion (metal-metal friction) and abrasion in industries such as:

Mines and quarries

Drill heads, breaker plates, crusher drums, conveyor and drag-line buckets.Civil engineering

Gravel pumps, rails, crusher hammers, bucket ripper teeth, vehicle tracks, soil compactors. Urban and industrial waste disposal

Grilles and frames of rotary sleeves, crushers, hydraulic compactors.

PROCEDURE FOR USE

Welding Equipment : EnDOtec continuous electrodes are compatible with most conventional, constant voltage power sources. Models with programmable, pulsed arc, worn metal completely with ExoTrode 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 Intermediate layer preheated and the workpiece temperature during welding should be kept below 2500C.

On12-14% Mn steels, deposit an intermediate layer with EnDOtec DO*02 or with the manual electrode EutecTrode 646XHD.

Welding parameters: Welding current: = (+)

Welding technique: For single or multipass downhand coating applications. Push the electrode at an angle of 80-70.to ensure optimal fusion. When required, additional passes 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.

TECHNICAL

Typical hardness: 600HB

Shielding gases

General recommended: 82% Ar, 15-25% CO2

[EN ISO 14175 -M21]

Flow rate L/min: 14-18 CrVIcontent : 0 mg/m3

Current polarity: /DC (+)

Electrode(mm)	Voltage (V)	Current (A)
1.2mm	11-34	40-300
1.6mm	15-38	60-420

Note: For optimum result use the lowest amperage practical