# Postalloy® 233HD Data Sheet



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### 233HD with RCT™ Reactive Core Technology\*\*

Postalloy® 233HD is a chromium carbide tubular hardface electrode with the addition of niobium. The addition of this alloy improves the abrasion resistance of the weld deposit. It's tubular structure permits higher travel speeds and much higher percentages of carbide forming elements contained in the core than with ordinary flux-coated electrodes. Due to its unique tubular design, Postalloy® 233HD offers very smooth operational characteristics and is over 90% efficient.

Weld deposit chemistry consist of chromium and niobium carbides combined in such a way as to produce extremely good abrasion resistance coupled with mild to moderate impact resistance. Deposits take on a high polish to resist sliding particle abrasion and will maintain good hot hardness up to 1000°F (538°C).

- \* Excellent AC or DC operation
- \* High metal recovery no slag to chip
- \* Low amperage and high deposition rates up to 3 times faster than ordinary electrodes
- \* Moisture resistant coating, even under severe weather or high humidity.

#### **Specifications**

#### **Product Type**

Flux-coated Tubular Electrode

\*\*RCT<sup>TM</sup> Reactive Core Technology improves weldability and optimizes wear properties. Learn more.

#### **Weld Deposit Properties**

Hardness: 58-62Rc

Deposit Thickness: 2-3 passes

Relief checks readily to prevent stress build-up.: Cannot be flame-cut

#### **Applications**

Mining and construction screw conveyors

Clamshell and dragline buckets Bucket lips and teeth

Shredder & Fibrizer hammers

Dozer end bits Chutes, liner plates

Scraper and grader blades

## Postalloy® 233HD Welding Parameters

Current: AC or DC Reverse Polarity

Diameter Amps

 Diameter
 Amps

 1/4" (6.0mm)
 80 - 130

 3/8" (9mm)
 150-180

#### Welding Procedure

Remove old hardfacing and any fatigued base metal. Postalloy® 250 gouging electrode is useful for this purpose. Preheat from 200-400°F (93-204°C) is recommended for steels with a carbon content of .25 to .45. Steels with a higher carbon level should be preheated from 400-700°F (204-371°C). Do not preheat austenitic manganese steel. The 1/4" (6mm) diameter can be used for vertical and flat position welding. The 3/8" (9.5mm) should be used for flat only. Use a minimum arc length equal to about the diameter of the electrode. Hold the electrode at 90° to the work surface for proper application. Do not apply more than two layers. On manganese or hardened steel, an intermediate or cushion layer of Postalloy® 207 is recommended.



# Postalloy® 233HDData Sheet Continued

Page 2 Hardface Technologies

# **Packaging Options**

DiameterStandard Packaging3/8" (9mm)Resealable Plastic Box1/4" (6.0mm)Resealable Plastic Box

