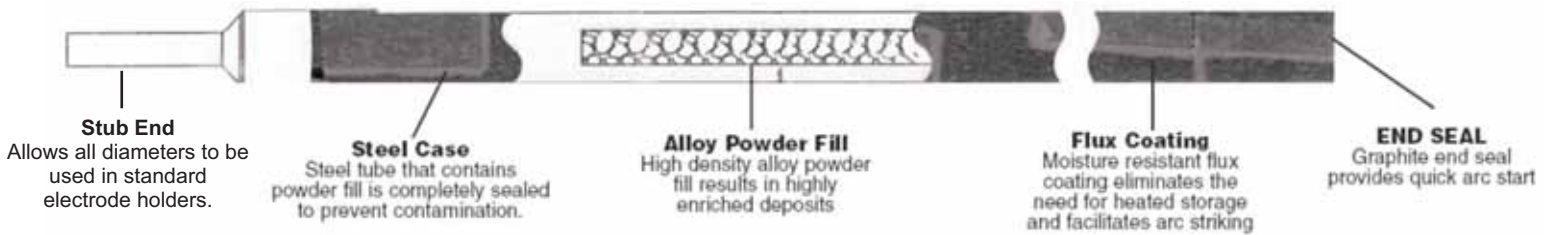


# Postalloy Tubular Hardfacing Electrodes





**Postalloy Tubular Hardfacing Electrodes** are a unique concept in hardfacing technology. As a tubular electrode, they are filled with the highest percentage of carbide forming alloys, much more (20%+) than any other Tubular Flux-Cored Wire. This gives much better wear resistance and overall product performance. They were engineered to provide extended life to parts subject to wear due to abrasion, impact and erosion

**Postalloy Tubular Hardfacing Electrodes** are available in the following diameters: 1/4" (6mm), 3/8" (8mm) and 1/2" (12mm). They are designed for use in standard electrode holders. The 1/4" (6mm) diameter electrode may be used as low as 80 amps and can be used in vertical down and overhead hardfacing applications. The 1/2" (12mm) diameter electrode may be used up to 350 amps for covering large areas at high deposition rates.

**Postalloy Tubular Electrodes Offer:**

- High Deposition Rates - Up to 3 times faster than ordinary electrodes
- Ease of Use - Can be used with AC or DC welding equipment
- High Metal Recovery - There is no slag to remove making it over 90% efficient. Ordinary electrodes waste up to 40%.
- Low Amperage
  - Reduces distortion
  - Reduces dilution - to improve the performance of the first layer
  - Minimizes the risk of burn-through
  - Allows hardfacing on a thin edge
  - Reduces power consumption

1/4" (6mm)  
80 to 130 amps

3/8" (8mm)  
140 to 190 amps

1/2" (12mm)  
190 to 350 amps

- Moisture Resistant Coating - even under severe weather or high humidity
- De-Slagging - between layers is not necessary

**HIGH ABRASION/MILD to MODERATE IMPACT      Postalloy 210HD & 215HD**

These alloys are formulated with a high percentage of Chromium Carbides producing an overlay that is highly resistant to abrasion with mild or moderate impact. Postalloy 210HD has more impact resistance than 215HD. Weld deposits are smooth and take on a high polish to resist sliding particle abrasion. Hot hardness up to 1000°F (538°C). They can be applied to carbon and alloy steels, manganese steel, as well as cast iron.

Average Hardness.....210HD - 55Rc  
215HD - 60Rc

Sizes : 1/4 (6mm)  
3/8 (8mm)  
1/2 (12mm)

Deposit Thickness.....210HD - 3 Passes  
215HD - 2 Passes

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

Applications Include:

**Postalloy 210HD**  
Swing hammers, fixed hammers, blow bars, shovel buckets, bucket teeth, dragline buckets, bucket lips, brick pan tires & pathways, crusher rolls (rock & shale)

**Postalloy 215HD**  
Dredge bucket lips, crusher jaws, crusher mantles & liners, manganese steel swing hammers, quarry screen plates, grizzly bars & feeder spouts, shovel buckets.

## RESISTS HIGH ABRASION/MILD IMPACT

## Postalloy 217HD

Postalloy 217HD is a mixture of Chromium Carbide, Niobium Carbide and Molybdenum Carbide. It is designed for applications that require more abrasion resistance than Postalloy 215HD at a slight sacrifice to impact resistance. The Carbide concentration is denser and slightly harder than Postalloy 215HD providing a better, more abrasion-resistant surface.

Average Hardness .....	62Rc	Sizes :	1/4 (6mm)
Deposit Thickness.....	2 Passes		3/8 (8mm)
Relief checks readily to prevent stress build-up			
Cannot be flame cut			

Applications: Swing hammers, brick & clay mill augers, screens & chutes in coal mining, siliceous coal grinding equipment, bucket lips & teeth of open mining wheel excavators & shovels, ground nut oil expeller screws, dredging teeth and cutters, clamshell and dragline buckets.

## RESISTS SEVERE ABRASION, EROSION & MILD IMPACT

## Postalloy 218HD

Postalloy 218HD produces a multi-carbide weld deposit that resists many types of wear. The weld deposit is a tightly packed, dense, inter-connected network of Chromium Carbides, Vanadium Carbides, Molybdenum Carbides, Niobium Carbides and Tungsten Carbides. Weld deposits offer exceptional wear resistance to general abrasion, high stress grinding, low stress scratching and erosion. Impact resistance is limited. This alloy may also be used at elevated temperatures up 1500°F (816°C).

Average Hardness as Deposited...	65Rc	Sizes :	1/4 (6mm)
Deposit Thickness.....	2 Passes		3/8 (8mm)
Relief checks readily to prevent stress build-up			
Cannot be flame cut			

Applications: Boiler fan blades, blast furnace deflecting plates, sinter plant hot crusher parts, hot sinter screens, and exhaust fan blades in sinter and pelletizing plants, coke crusher segments and pusher shoes, tong bits, slag ladles and ash fans.

## TUNGSTEN CARBIDE ALLOYS

### EXTREME ABRASION

### LOW CHROMIUM

### Postalloy 220HD

**When used properly, this product meets Hexavalent Chromium Standards**

Postalloy 220HD is used for applications that have extreme abrasion with very little impact or compressive loading. Temperature limit on this alloy is 900°F (488°C). This alloy is especially good where abrasive media is hard and sharp. It contains over 50% Tungsten Carbide and 10% Chromium Carbide. Chromium Carbide lowers the coefficient of friction and hardens the matrix, thereby protecting the Tungsten Carbide particles from premature wear.

Average Matrix Hardness .....	68 Rc	Sizes :	1/4 (6mm)
Deposit Thickness.....	2 Passes		3/8 (8mm)
Relief checks readily to prevent stress build-up			
Cannot be flame cut			

Applications Include: Pan scrapers, coal & cement fans, dry cement pump screws, suction dredge blades, shredder knives, pilot blades, mixer paddles and blades, churn drills, ditcher teeth, fly ash conveyors, debarking hammers, sand slinger cups and impeller tips.

### EXTREME ABRASION

### CHROMIUM FREE

### Postalloy 221HD

**This product contains no Chromium**

Postalloy 221HD is used for applications that have extreme abrasion with very little impact or compressive loading. Temperature limit on this alloy 900°F (488°C). This alloy is especially good where the abrasive media is hard and sharp. It is outstanding for applications that have extreme abrasion. It contains over 60% Tungsten Carbide. This alloy is slightly less brittle than 220HD.

Average Matrix Hardness .....	68 Rc	Sizes :	1/4 (6mm)
Deposit Thickness.....	2 Passes		3/8 (8mm)
Relief checks readily to prevent stress build-up			
Cannot be flame cut			

Applications Include: Pan scrapers, coal & cement fans, dry cement pump screws, suction dredge blades, shredder knives, pilot blades, mixer paddles and blades, churn drills, ditcher teeth, fly ash conveyors, debarking hammers, sand slinger cups and impeller tips.

# ***Wear Resistant Solutions for All Industries***



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