

# Postalloy® CP63070 and CP63070-M Data Sheet

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## High Hardness Tungsten Carbide Overlay Outstanding Abrasive

Wear Resistance Postalloy® CP63070-M is a nickel base self-fluxing powder alloy combined with a very special high carbon tungsten carbide grade to produce the highest amount of abrasion resistance possible. The matrix that encapsulates the carbides has a hardness of 55–60 RC.

The Tungsten Carbide in CP63070 has a very high hardness with a very dense, uniform crystalline structure. The residual stresses are far lower than conventional tungsten carbide, providing better toughness and impact resistance.

The particles have almost no micro defects, enhancing the wettability characteristics.

The low fusing temperature of this alloy combined with cobalt-free carbides help to reduce solution alloying and melting of the carbides.

The tungsten carbide used in this product goes through an oxidation reduction process that reduces the oxidation potential of this alloy. This helps to reduce unwanted over-spray and gives the operator more control of the puddle.

Postalloy® CP63070-M uses the same nickel base self-fluxing powder alloy, but with a more economical, less abrasion resistance and less impact resistant tungsten carbide. Designed for less abrasive wear environments or when maximum abrasion resistance is not required.

## Specifications

### Product Type

Powder: Nickel Base Self-Fluxing Powder with Tungsten Carbide

Coverage

Postalloy CP63070 may be applied to carbon steels, stainless steels, cast irons, monel nickel alloys and cobalt alloys.

Coverage: .040" per square inch at .075" thick

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### Weld Deposit Properties

Hardness (1 Layer):

58-62Rc

Hardness Tungsten Carbide: 2000-2300 HV

Average Hardness Matrix:

55-60Rc

## Applications

Tillage tools  
Drill bits  
Stabilizers  
Auger points  
Cane knives

Mixer blades and  
paddles  
Coveyor screws  
Fan blades  
Pump screws

### Standard

### Packaging

5 lb (2.3 kg) Bottle

