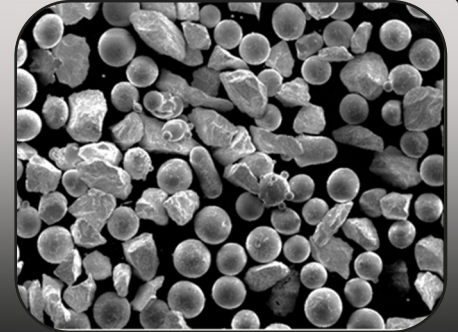


## Product Data Sheet

# WP 60F-40 / 60F-50

## Plasma Transferred Arc Powder Blend



### Product Overview

C&M Technologies 60F series of premium PTA materials is a blended material that consists of 60 wt.% Fused Tungsten Carbide ( $W_2C/WC$ ) and 40 wt.% of an Atomized Self-Fluxing Nickel-base Alloy. Fused Tungsten Carbide is distinguished by a very homogenous, fine acicular eutectic arrangement. The benefits of Fused Tungsten Carbide are increased impact resistance vs. Macro-Crystalline (WC).

Overlays containing WP 60F at optimized parameters, can be distinguished by a homogenous carbide distribution throughout the entire weld thickness. This uniform distribution improves impact performance under most conditions. Although WP 60F generally has a narrow window of process parameter settings, excellent wear & impact resistant overlays are achievable for a range of customer applications.

### Material Properties

Composition: CF 60%\*  
 Ni-Alloy 40%\*

Grain Sizes: -250, +45 $\mu$ m\*

Production Method: Blend

\*Grain size and blend weight % can tailored to specific requirements

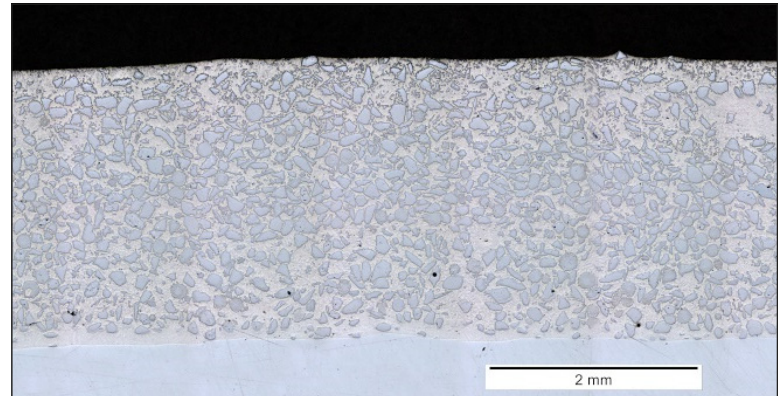
### Typical Overlay Properties

Micro Hardness (HV 0.1) :  
 CF ~1900  
 Macro Hardness (HRc) :  
 Ni-Alloy 40 - 50<sup>1</sup>  
 Porosity (%) : < 1  
 Deposit Efficiency (%) : >90%<sup>2</sup>

**Note**<sup>1</sup>: Hardness varies depending on matrix material selected

**Note**<sup>2</sup>: Deposit efficiency is influenced by process parameters

### Typical Microstructure



WP 60F-50

### Packaging Info

<u>Description</u>	<u>Packaging Sizes</u>
WP 60F-40	5kg/Bottle or 25kg/Pail
WP 60F-50	5kg/Bottle or 25kg/Pail

Please contact us with all questions and inquiries.

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