Product Technical Information

Superfine Tungsten Carbide/Cobalt Infralloy™ S7412-PG Plasma Grade Thermal Spray Powder

[U.S. Patent Nos. 6,277,774 6,576,036] 7,238,219

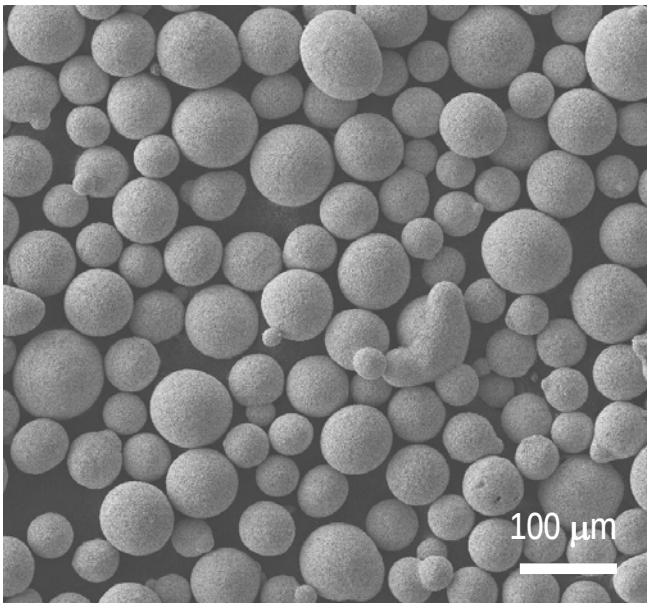
Thermal Spray Grade Morphology

Tungsten carbide cobalt is a ceramic-metal (cermet) composite material used as a wear resistant coating. The alloyed form gives superior hardness. Infralloy™ powder is made from WC nanoparticles alloyed with a cobalt binding matrix phase.

Infralloy™ S7412-PG powder is available as agglomerated particles with dimension 30 < Φ < 105 μm with high flowability for plasma grade thermal spray applications.

Morphology

SEM micrograph typical of Infralloy™ S7412-PG feedstock powder showing spherical geometry with high flowability.



Infralloy™ S7412-PG Powder

WC: Co wt ratio	88: 12
Alloy content	< 1 %
Particle size μm	0.1 - 0.5
Agglomerated size (μm)	-75 to +30 -
Coating hardness (VHN)	850 -1100

1 micron=10^{-6} meter 1 nanometer=10^{-9} meter

Suggested Applications

Inframat® Infralloy™ S7412-PG powder is used for DC arc plasma sprayed coated and is a superior coating material providing wear-, erosion-, and corrosion-resistant surfaces where excellent to exceptional fracture toughness is required.

Contact Information

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