

Introduction

WC-10Ni is carbide, tungsten-based powder that can resist fretting, abrasion, hammer and sliding wear. It is spheroidal, agglomerated and sintered powders for thermal spray. It contains a uniform distribution of 90% tungsten carbide with medium sized carbide grains as a hard phase and 10% nickel as a binder metal. The corrosion-resistant and tougher perform is better than WC-Co powder, but the hardness is lower than WC-Co powder. When compared with WC 12Ni powder, it has higher hardness but lower toughness. The coatings can be used at temperatures up to 500 °C (930 °F).

Equivalent: Metco 3300

Chemical Composition

W	C	Ni	Fe
Bal.	5.2-6.0%	8.5-11.5%	<0.2%

Applications

- Gate valves
- Ball valves
- Oil field equipment
- Parts used in submerged seawater conditions

Physical Properties

Morphology	Spherical
Working Temperature	< 500°C(930°F)
Apparent Density	4.6-5.4 g/cm ³

Packaging

Bottle	5kg/bottle 4 bottles/box
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