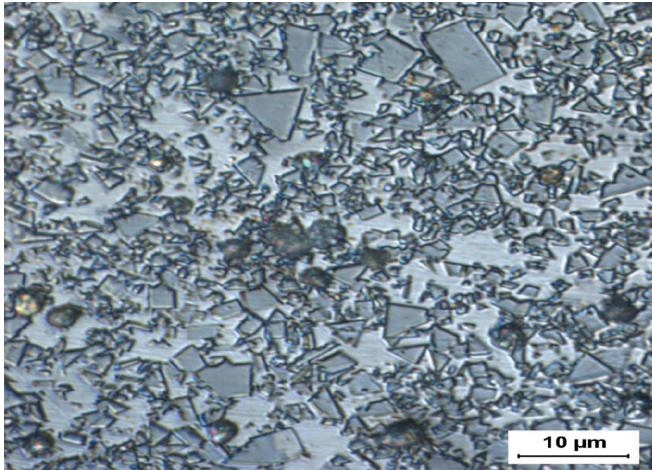


GC-425CT



Microstructure

Composition

Tungsten Carbide (3-, 4-, and 6-micron WC grains)	70.0%
Cobalt	25.0%
Tantalum Carbide	4.0%
Other	1.0%

Physical Properties

Hardness, HRA (ASTM B294)	84.3 - 85.7
Density, g/cc (ASTM B311)	12.87 - 13.11
Average Transverse Rupture Strength, psi (ASTM B406)	470,000
Typical Porosity (ASTM B276)	A02-B00-C00

PERFORMANCE CHARACTERISTICS

	LESS	MORE			
Wear Resistance	■	□	□	□	□
Impact Resistance	■	■	■	■	□
Galling Resistance	■	■	■	□	□
Corrosion Resistance	■	■	■	□	□

To ensure the highest metallurgical quality, General Carbide processes all grades in sinter-HIP furnaces.

Grade Attributes

The mixture of intermediate carbide grain sizes coupled with the higher binder content provides a grade that can withstand the heaviest impact and, at the same time, exhibits sufficient wear resistance and corrosion resistance. This grade also exhibits extremely high fracture toughness and relatively good machinability. The tantalum carbide additive ensures high anti-galling properties.

Typical Applications

- > Sizing Dies & Core Pins for Powder Metal Tooling
- > Die Inserts for Heavy Loaded Cold Heading Applications
- > General Metalforming Dies
- > Mandrels
- > Bushings