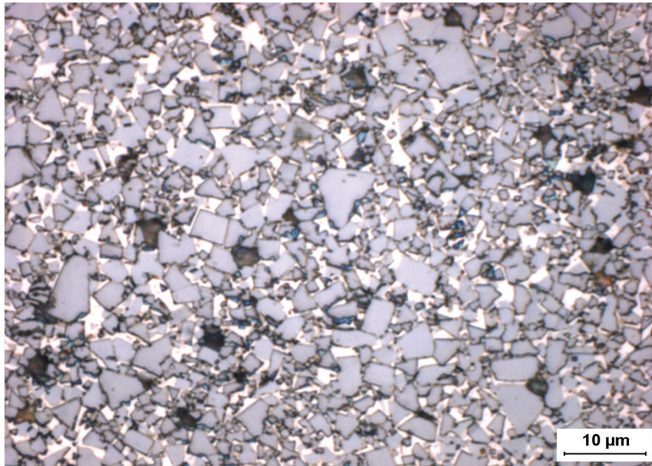


GC-411CT



Microstructure

Composition

Tungsten Carbide (4.5 micron)	86.0%
Cobalt	11.0%
Tantalum Carbide	2.0%
Other	1.0%

Physical Properties

Hardness, HRA (ASTM B294)	89.5 - 90.5
Density, g/cc (ASTM B311)	14.16 - 14.28
Average Transverse Rupture Strength, psi (ASTM B406)	490,000
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 relatively coarse carbide particle grain size coupled with medium binder content provides a wear resistant grade with moderate resistance to impact. The tantalum carbide addition ensures the highest resistance to galling. The corrosion-resistant additive exhibits high resistance to binder leaching during the EDM process as well as preventing latent, residual corrosion that may occur on the working surfaces of tools being stored for future use.

Typical Applications

- > Wire EDM Blocks
- > Heavy Stamping & Lamination Punches & Dies
- > Powder Metal Dies
- > Pierce Punches & Dies