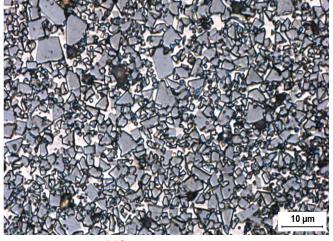


GENERALCARBIDE®

 $\mathbf{R} \in \mathbf{D} \in \mathbf{F} \mid \mathbf{N} \mid \mathbf{N} \in \mathbf{G} \quad \mathbf{P} \circ \mathbf{O} \mid \mathbf{S} \mid \mathbf{S} \mid \mathbf{B} \mid \mathbf{L} \in \mathbf{M}$

GRADE DATA SHEET

GC-613CT



Microstructure

Composition						
Tungsten Carbide (6.0 micron)	83.0%					
Cobalt	13.0%					
Tantalum Carbide	3.0%					
Other	1.0%					

Physical Properties				
Hardness, HRA (ASTM B294)	87.9 - 88.9			
Density, g/cc (ASTM B311)	14.00 - 14.12			
Average Transverse Rupture Strength, psi (ASTM B406)	465,000			
Typical Porosity (ASTM B276)	A02-B00-C00			

PERFORMANCE CHARACTERISTICS							
	LESS	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 coarse grain structure coupled with medium binder content provides this grade with good wear resistance and the capability to withstand moderate impact loads. A tantalum carbide addition adds a measure of lubricity and resistance to galling in all wear areas. The presence of a corrosion-resistant additive provides adequate resistance to environmental corrosive attack (leaching) of the binder metal.

Typical Applications

- > Powder Metal Dies (Wire EDM)
- > High Impact Punches
- > WEDM Blocks



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