



HARCOURT MATERIAL DATA SHEET

Tungsten Carbide

Description

Tungsten carbide is a high performance material formed from tungsten and carbon. Its most outstanding property is its hardness, which approaches that of a diamond. It is primarily used in the production of a wide variety of industrial tools and wear parts that are subject to a great deal of stress. Harcourt uses Tungsten Carbide Grade C2.

Applications: Bushings, cutting tools, and high wear parts.

Chemical Composition, %

	WC	Co
MIN	93.5	5.5
MAX	94.5	6.5

Physical Properties

Density: 0.54 lb/in

Grain Size: Fine

Modulus of Elasticity: 93,000 ksi

Maximum Useful Temp: 800°F

Mechanical Properties

Minimum Specified Properties

Ultimate Tensile Strength, ksi	220
Ultimate Compressive Strength, ksi	750
Transverse Rupture Strength, ksi	340
Rockwell Hardness A (Ra)	89=92

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