



Knives, Anvils, Cutters & Slitters

Precision Cutting Tools Optimized with Superhard Materials

At Crafts Technology we are experienced in developing cutting tools from superhard materials that can reduce your equipment downtime and deliver a competitive advantage. Many of the world's largest manufacturers of production applications trust Crafts Technology because of our unique ability to provide innovative solutions to severe wear and corrosion problems.

We understand the technology, the materials, and most importantly, the process to identify and implement a superhard material solution that will reduce equipment downtime. With our materials science expertise, we are able to design cutting tools that achieve service lives ranging from 10 to 100 times greater than the industry standard.

Expert Material Selection – We work with you to select the most appropriate grades of tungsten carbide and advanced ceramic materials to meet your exact requirements.

Application Engineering – Our extensive experience with knife edges and surface finishes means products are engineered for top performance.

Precision Fabrication – Our flexible, in-house manufacturing can accommodate varying quantities without compromising our rigid quality standards.

Technical Support – We offer one of the most comprehensive support systems in the industry covering design and engineering assistance, failure analysis, educational seminars, technical papers, and continuous Improvement efforts.



Refurbishing – Value Stream Engineering

Tooling life can be dramatically increased through the refurbishing of precision components and sub-assemblies.

We can develop a custom refurbishing system for your application that delivers significant cost savings with no negative effect on performance.

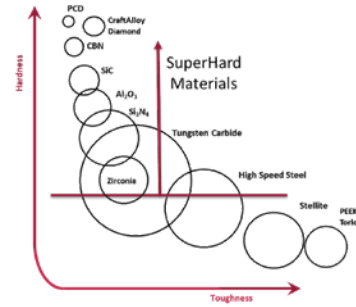
Our system provides an analysis of every stage of the value stream from Just-In-Time inventory management to packaging and ergonomics of tooling returns and replacements.

DISCOVER THE POSSIBILITIES.

Our engineering team is ready to discuss your application and offer solutions.

800-323-6802
engineering@craftstech.net





SuperHard Material Properties Guide

| Material Family | High Speed Steel | Tungsten Carbide | | | | | | Zirconia Ceramic | | | Silicon Nitride | Alumina Ceramic | | Silicon Carbide | Diamond | | |
|--|------------------|------------------|------|-------|--------|--------|---------|------------------|--------|--------|-----------------|-----------------|-----|-----------------|---------|------------|-----|
| | Material Grade | M Series | C6-F | C6-SM | C10-SM | C15-SM | N10C-SM | N9.6C0UF | MG-PSZ | 3Y-TZP | 8Y-FSZ | SSN | ZTA | 99.9% Al2O3 | SSC | CraftAlloy | PCD |
| Wear Life | - | = | = | = | = | = | = | = | = | = | + | + | + | + | + | + | + |
| Toughness | + | + | + | + | + | + | + | + | + | + | = | = | = | - | = | = | - |
| Corrosion Resistance | - | = | = | = | = | + | + | + | + | + | + | + | + | + | + | + | + |
| Heat Transfer +: Conductive - : Insulator | = | = | = | = | = | = | = | - | - | - | = | - | - | + | = | = | = |
| Electrical Conductivity +: Conductive - : Insulator | + | + | + | + | + | + | + | - | - | - | - | - | - | = | + | + | + |
| Thermal Stability +: Conductive - : Insulator | - | - | - | - | - | - | - | = | = | = | + | + | + | + | + | - | - |
| Raw Material Cost +: Conductive - : Insulator | + | + | + | + | + | + | + | = | = | = | - | = | = | - | - | - | - |
| Manufacturing Cost +: Conductive - : Insulator | + | + | + | + | + | + | + | - | - | - | - | - | - | - | - | - | - |
| Mass (Density) +: Conductive - : Insulator | = | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

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