

## CARBIDE

*Greenleaf offers a comprehensive line of carbide inserts in grades ranging from sub-micron C-1 through C-8 classifications. An industry pioneer in coated carbide, Greenleaf offers a variety of uncoated, CVD-coated and PVD-coated grades. Carbide inserts are available in ANSI standard geometries with multi-purpose chip-breakers for heavy roughing through finishing.*

### COATED

**GA-5023** A high-speed performance grade for turning and milling cast iron. GA-5023 features an advanced MT-CVD coating specifically developed for abrasive wear resistance. Application ranges from roughing to finishing on most cast iron materials including gray iron, ductile, nodular and other alloyed irons. The high wear and shock resistance of GA-5023 allows machining at high speeds and a variety of feeds.

**GA-5035** A high-performance CVD-coated grade for turning all types of steels, and selected stainless steels. GA-5035 can be used in rough, semi-finish, and finish turning situations requiring resistance to heat deformation, thermal shock, and abrasion. GA-5035 should be applied at high speeds and a range of feeds.

**GA-5036** A high-performance CVD-coated grade for milling steels at high speed. GA-5036 should be used when milling forged and cast steels and selected ductile irons. GA-5036 has a unique combination of toughness and heat resistance making it suitable for heavy- and light-duty milling at high cutting speeds.

**GA-5040** A tough CVD-coated grade for low-speed, high-feed milling of carbon and alloy steels, and cast irons. Other applications for GA-5040 include milling and interrupted turning of stainless steel and selected high-temp alloys. This multi-layer CVD-coated grade excels in severe machining applications requiring resistance to mechanical shock.

**G-915** Multi-layer PVD-coated grade, excellent for milling and turning high-temp alloys, stainless steel, and low carbon steels. The multi-layer PVD coating adds heat and abrasion resistance to the tough, shock-resistant substrate. G-915 should be run at moderate speeds and moderate to high feeds in milling and interrupted turning applications.

**G-935** Multi-layer PVD-coated grade for steel milling and turning applications requiring additional resistance to mechanical and thermal shock. The multi-layered PVD coating increases the speed capability and wear resistance in tough milling and interrupted turning applications.

**G-955** Multi-layer PVD-coated grade especially designed to handle high productivity milling of rough steel forgings, primarily tool steels. Additionally, G-955 provides excellent tool life in semi-finishing and finishing operations where toughness and abrasion resistance is needed

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### UNCOATED

**G-20M** A sub-micron C-2 carbide grade suited for use in turning and milling titanium and nickel-based super-alloys. G-20M has the strength and edge wear characteristics to resist notching when turning high-strength materials.

**G-50** Heavy roughing grade for steel and steel castings under difficult conditions, and ferritic stainless steels in most applications. G-50 is tough enough to enable the use of positive rakes for turning.

**G-74** Roughing or finishing grade for steel and steel castings. G-74 has higher shock resistance than G-70, and should be applied at high speeds and moderate to heavy feeds. Well suited for turning of steel rolls.