

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 – CVD

GA-5025 A high-speed CVD-coated grade for turning, light roughing and finishing of carbon and alloy steels, as well as selected stainless steels.

GA-5026 A high-speed grade developed for turning nickel- and cobalt-based super-alloys, stainless steels, and refractory metals. The advanced MT-CVD coating over a micro-grain substrate offers high wear resistance. GA-5026 has exceptional resistance to the notching and deformation common to machining high strength materials. Apply at high speeds and light feeds in turning and selected milling applications.

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.

COATED – PVD

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-920 PVD-coated grade for turning and milling high-strength materials such as high-temp alloys, titanium and stainless steel. G-920 is also an excellent grade for aluminum and refractory metals. This grade has the resistance to deformation and notching required for higher speeds than G-910.

G-925 Multi-layer PVD-coated grade specifically designed for machining abrasive and difficult-to-machine materials. Typical applications include high-temp alloys, titanium and other refractory metals, stainless steel, and many cast irons. G-925 exhibits excellent resistance to notching and deformation. Apply at moderate to high speeds and moderate feeds.

CARBIDE *continued*

COATED – PVD

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.

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.

CERAMIC

Greenleaf is the industry leader in the development and manufacture of ceramic and coated ceramic inserts in ANSI standard and special geometries. Some of the most prominent include:

WG-300[®] Patented, whisker-reinforced ceramic with excellent wear and shock resistance at high surface speeds. WG-300 is very effective at machining nickel and cobalt based super-alloys, and other hard materials at metal removal rates up to 10 times higher than carbide.

WG-600[™] The only commercially available second-generation coated ceramic-composite cutting tool using whisker reinforcement. Excels at finishing high-strength alloy materials.

HSN-100 The latest in engineered silicon-nitride cutting tools has superior toughness and high cutting speed capability. For the turning and milling of all classes of cast iron. HSN-100 is a good choice for ductile, malleable, nodular, and other difficult-to-machine irons.

HSN-200 The latest in coated silicon-nitride-based cutting tools offers outstanding toughness, long tool life, and excellent surface finish at high cutting speeds. HSN-200 is a great choice for the turning and milling of ductile, malleable, nodular, and other high alloy cast irons.

GEM-7 Al₂O₃ + TiC composite ceramic with a high degree of predictability in roll turning and hard alloy (up to 65 R/c) machining.

GEM-19 Cold pressed and sintered Al₂O₃ ceramic for economical roughing and finishing of cast iron grades application range on severe interruption or old machinery.