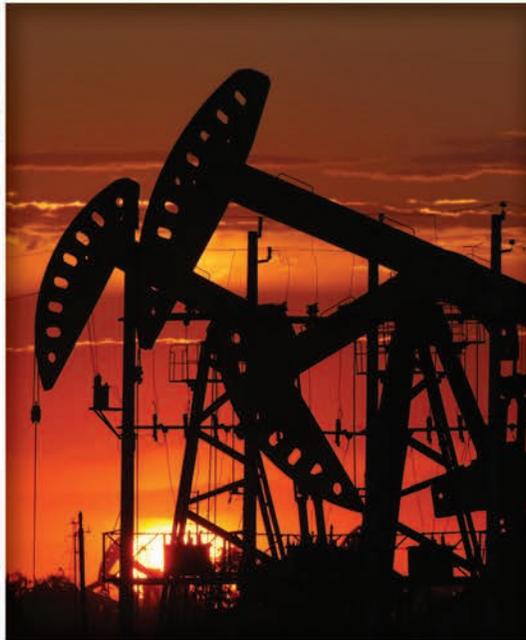




Greenleaf®

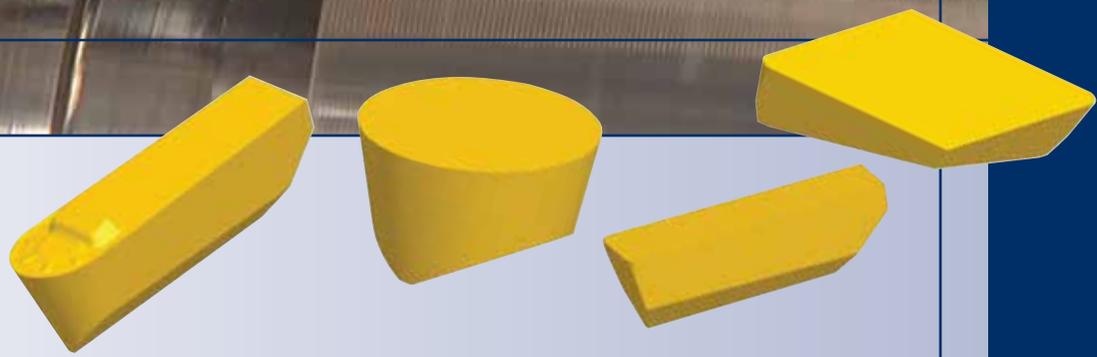
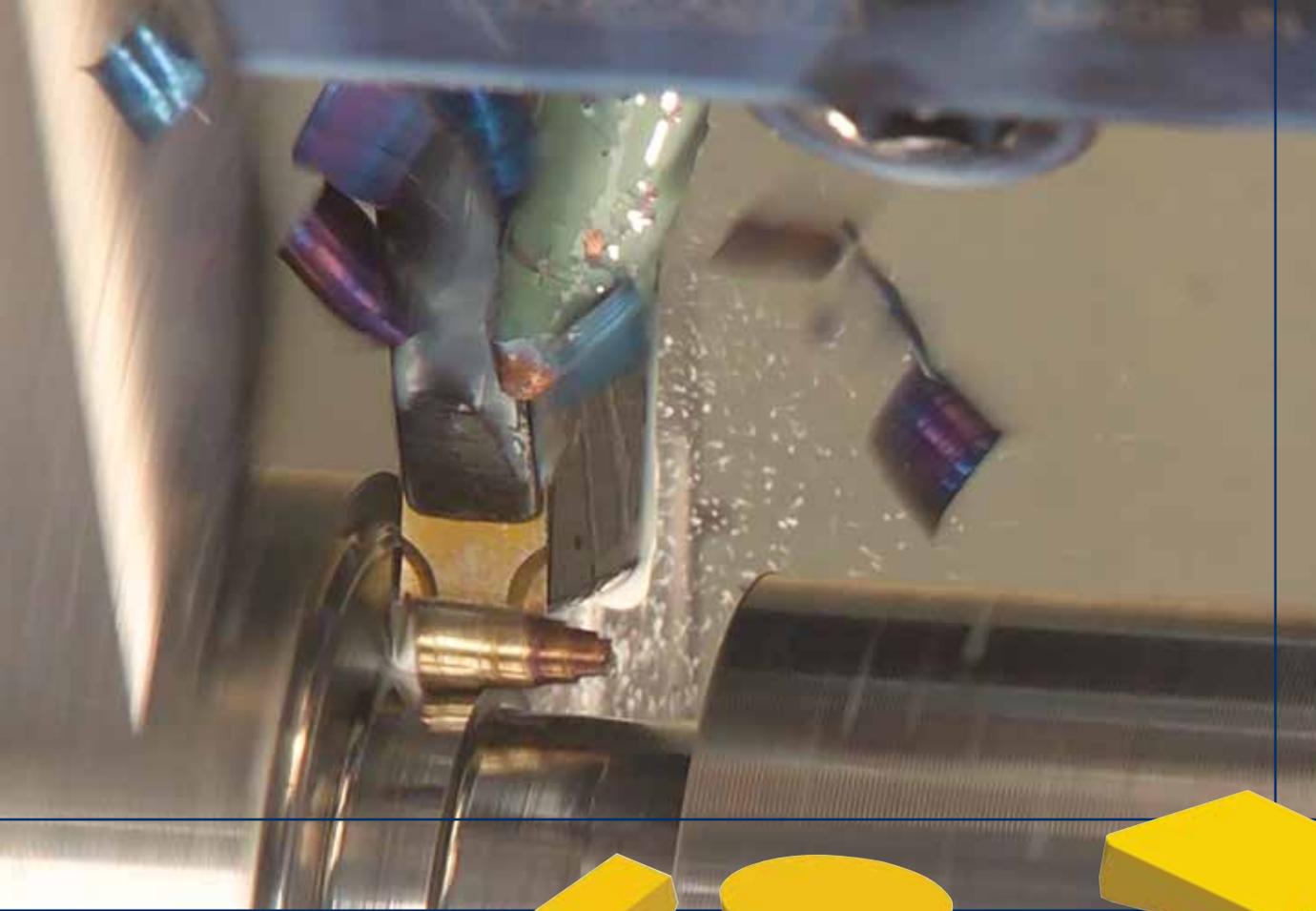
metalcutting tools and systems



INTRODUCTION	
MILLING	
TURNING AND BORING	
HEAVY TURNING	
GROOVING, PROFILING AND CUT-OFF	
API RING-GROOVE MACHINING	
INDEXABLE DRILLING	
TUBE SCARFING	
SPECIAL ENGINEERING	
APPLICATION and TECHNICAL INFORMATION	

2016

GROOVING, PROFILING, CUT-OFF



Grooving, Profiling and.....GP 02-03
Cut-Off Inserts

 Grade DescriptionsGP 04
 Insert Grade ReferenceGP 05
 Pictorial Index.....GP 07
 Inserts.....GP 08-20

Toolholders and BarsGP 21-46

Support Blades.....GP 47-62





Greenleaf Sales

Phone: 814-763-2915 • 800-458-1850 • Fax: 814-763-4423
sales@greenleafcorporation.com • www.greenleafglobalsupport.com

Grooving, Profiling and Cut-Off Inserts

Greenleaf offers one of the most comprehensive lines of grooving, profiling and cut-off inserts in the industry. Every application on the shop floor can use this unique tooling system that accommodates both ceramic and carbide inserts.

Our advanced MT-CVD coated and PVD-coated grades have the strength and wear resistance needed for higher cutting speeds and longer tool life.

Greenleaf is the industry leader in the development and manufacture of ceramic and coated ceramic inserts including WG-600®, the only commercially available, second generation, coated ceramic-composite cutting tool using whisker reinforcement. WG-600 is one of seven prominent advanced-ceramic grades that continue to increase productivity in industry.



*Greenleaf Corporation is continually upgrading its products.
For the most current information, please visit our web site at:*

www.greenleafglobalsupport.com

Greenleaf Sales
Phone: 814-763-2915 • 800-458-1850 • Fax: 814-763-4423
sales@greenleafcorporation.com • www.greenleafglobalsupport.com

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, MT-CVD coated and PVD-coated grades. Carbide inserts are available in ANSI standard geometries with multi-purpose chipbreakers for heavy roughing through finishing.

COATED – MT-CVD

GA5025 A high-speed MT-CVD coated grade for turning, light roughing and finishing of carbon and alloy steels, as well as selected stainless steels.

GA5026 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. GA5026 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.

GA5035 A high-performance MT-CVD coated grade for turning all types of steels, and selected stainless steels. GA5035 can be used in rough, semi-finish, and finish turning situations requiring resistance to heat deformation, thermal shock, and abrasion. GA5035 should be applied at high speeds and a range of feeds.

GA5125 New high-performance MT-CVD coated carbide milling grade especially suited for manganese steel. GA5125 is also applicable on chrome-moly steel, tool steel and similar high alloy steels. GA5125 provides excellent resistance to abrasion, crater wear, thermal shock, deformation and edge build-up. GA5125 should be applied at high speeds with moderate feed rates.

COATED – PVD

G-915 Multi-layer PVD-coated grade, excellent for cut off, 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.

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[®] 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[®] Coated whisker-reinforced ceramic offering longer tool life and better performance over uncoated ceramics due to outstanding thermal properties and shock-resistance at high cutting speeds. Application areas include rough and finish turning, as well as high-performance milling of high-strength alloys, hardened steels and select stainless steels.

U.S. Patent No. 6,447,896 B1.

WG-700[™] New whisker-reinforced Al₂O₃ ceramic substrate featuring improved toughness and a unique high-speed coating. WG-700 is ideal for machining nickel- and cobalt-based super alloys and other difficult-to-machine materials. WG-700 exhibits high metal-removal rates with exceptional tool life. *U.S. Patent No. 6,447,896 B1*

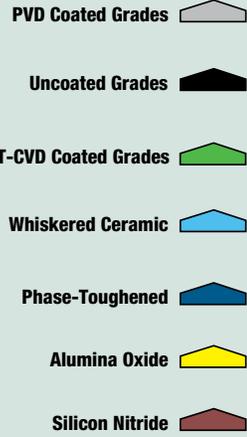
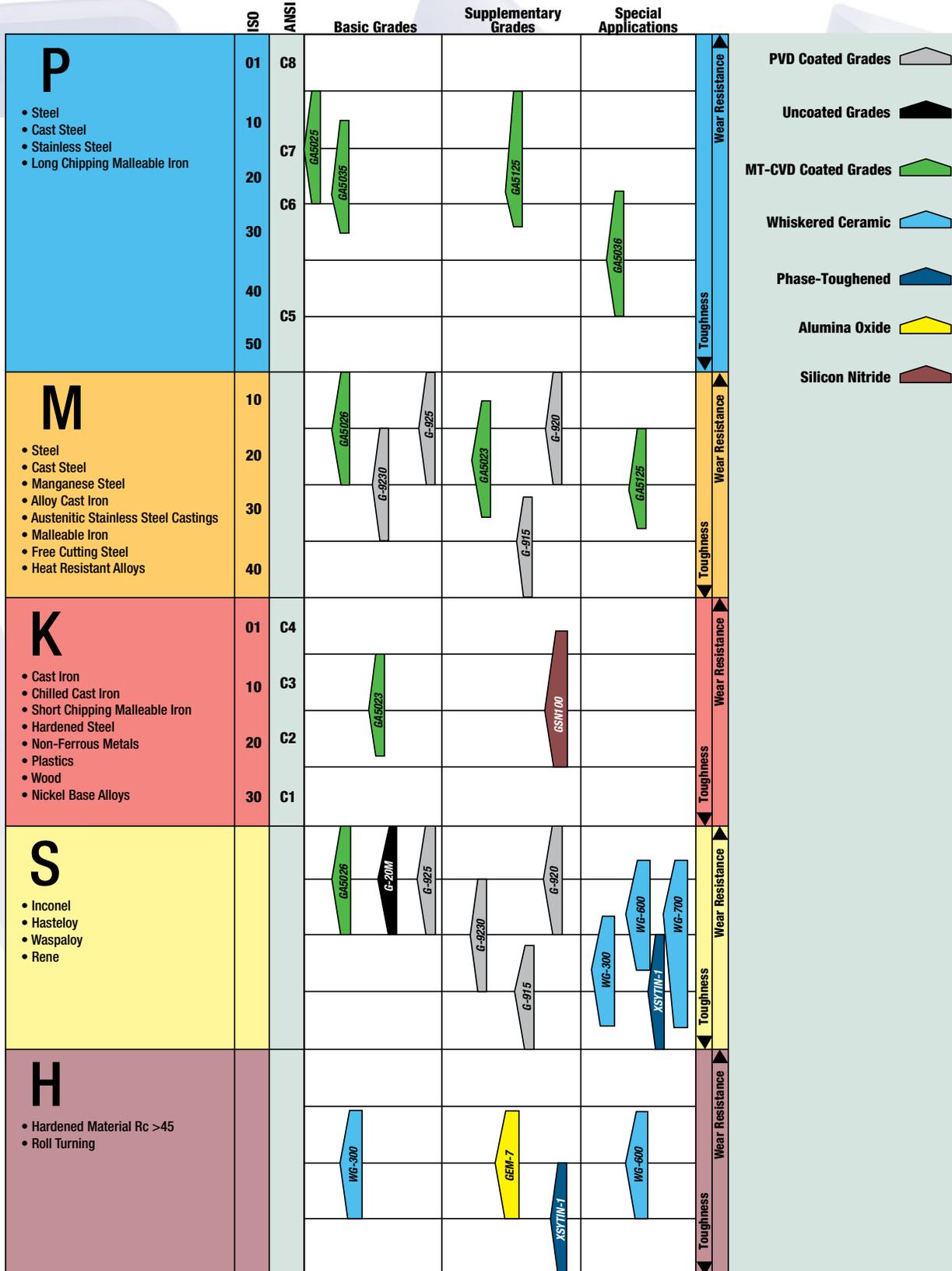
XSYTIN[™]-1 New phase-toughened ceramic capable of extreme feed rates. XSYTIN[™]-1 excels at machining a wide variety of materials including steels, cast and ductile irons, high-temperature alloys and other challenging metals. XSYTIN[™]-1 is ideal for use in interrupted cuts, scale, abrasive casting materials and milling.

GSN100[™] New engineered blend of silicon nitride and proprietary toughening agents that redefines productivity in the machining of cast iron. GSN100 delivers outstanding tool life at high cutting speeds in turning, grooving and milling applications.

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.

Insert Grade Reference for Grooving, Profiling and Cut Off

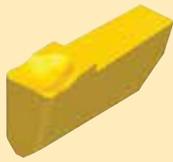




Greenleaf Sales

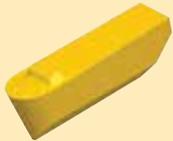
Phone: 814-763-2915 • 800-458-1850 • Fax: 814-763-4423
sales@greenleafcorporation.com • www.greenleafglobalsupport.com

Greenleaf Cut-Off System



COS
page: GP 08

Single-Ended Groovers



Full Nose
page: GP 09



Flat Nose
page: GP 09



WG-Style Full Nose
page: GP 10



WG-Style Flat Nose
page: GP 11



WGC Full Nose
page: GP 12



WGC Flat Nose
page: GP 13

V-Bottom Round Inserts



RCGN
Positive: Carbide
page: GP 14



RCGN
Positive: Ceramic
page: GP 14



RPGN
Positive: Carbide
page: GP 15



RPGN
Positive: Ceramic
page: GP 15

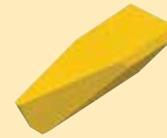


RCGR/RPGR
Positive Chipform
V-Bottom
page: GP 16



RCGT/RPGT
Positive Chipform
V-Bottom
page: GP 17

35° and 55° V-Bottom Diamond Inserts



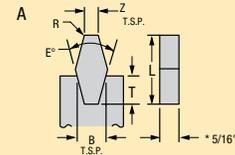
VPG
35°
page: GP 18



VCGN
35°
page: GP 18



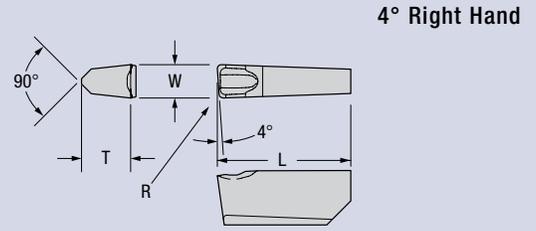
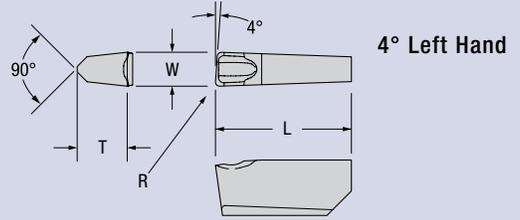
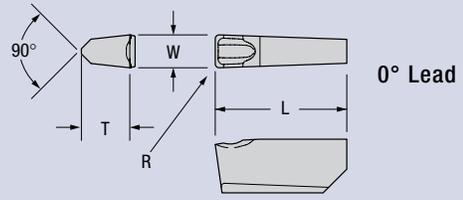
DPGN
55°
page: GP 19



Pulley and Poly Groove Inserts
page: GP 20

Greenleaf Cut-Off System

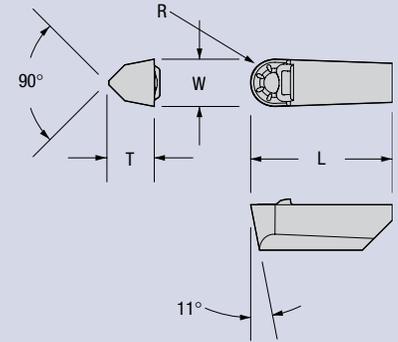
Shape: Groove/Turn	Part Number		G-915	Dimensions (inches)			
	ANSI	ISO		W	L	T	R
	COS-4094-0	• COS-4094-0	G-915	0.094	0.500	0.187	0.010
	COS-4125-0	• COS-4125-0		0.125	0.500	0.187	0.010
	COS-4187-0	• COS-4187-0		0.187	0.500	0.187	0.010
	COS-4094-4L	• COS-4094-4L	G-915	0.094	0.500	0.187	0.010
	COS-4125-4L	• COS-4125-4L		0.125	0.500	0.187	0.010
	COS-4187-4L	• COS-4187-4L		0.187	0.500	0.187	0.010
	COS-4094-4R	• COS-4094-4R	G-915	0.094	0.500	0.187	0.010
	COS-4125-4R	• COS-4125-4R		0.125	0.500	0.187	0.010
	COS-4187-4R	• COS-4187-4R		0.187	0.500	0.187	0.010
Carbide Coatings <input type="checkbox"/> PVD Coated			G-915				



See pages GP 31, GP 34 and GP 39 for toolholders.

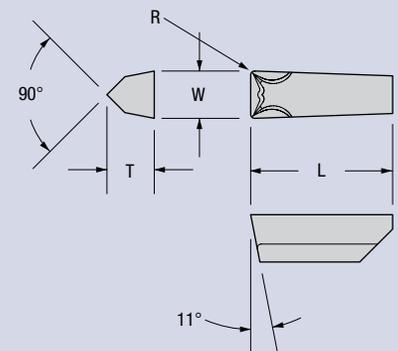
Full Nose Grooving Inserts

Shape: Groove/Turn	Part Number						Part Number	Dimensions (inches)			
	ANSI	GA5026	GA5035	G-935	G-925	G-915	ISO	W	L	T	R
	GTS-4125	●	●	●	●	●	GTS-4125	0.125	0.500	0.187	Full
	GTS-4187	●	●	●	●	●	GTS-4187	0.187	0.500	0.187	Full
	GTS-6250	●	●	○	●	●	GTS-6250	0.250	0.750	0.250	Full
Carbide Coatings											
	MT-CVD Coated	GA5026	GA5035	G-935	G-925	G-915					
	PVD Coated										
	Uncoated										



Flat Nose Grooving Inserts

Shape: Groove/Turn	Part Number					Part Number	Dimensions (inches)			
	ANSI	GA5026	GA5035	G-935	G-915	ISO	W	L	T	R
	GTS-4125-1	●	●	●	●	GTS-4125-1	0.125	0.500	0.187	0.015
	GTS-4125-2	●	●	●	●	GTS-4125-2	0.125	0.500	0.187	0.031
	GTS-4187-1	●	●	●	●	GTS-4187-1	0.187	0.500	0.187	0.015
	GTS-4187-2	●	●	●	●	GTS-4187-2	0.187	0.500	0.187	0.031
	GTS-6250-1	●	●	●	●	GTS-6250-1	0.250	0.750	0.250	0.015
	GTS-6250-2	●	●	●	●	GTS-6250-2	0.250	0.750	0.250	0.031
Carbide Coatings										
	MT-CVD Coated	GA5026	GA5035	G-935	G-915					
	PVD Coated									
	Uncoated									

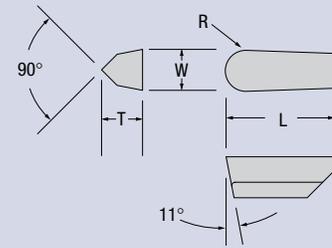


Stocked or Available Upon Request
 Stocked Standard

Greenleaf Sales
 Phone: 814-763-2915 • 800-458-1850 • Fax: 814-763-4423
 sales@greenleafcorporation.com • www.greenleafglobalsupport.com



WG-Style, Full Nose Grooving Inserts

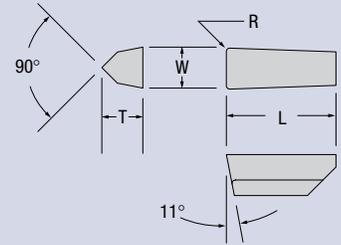


Shape: Groover	Part Number ISO	Whisker					Phase Toughened	SiN	Al ₂ O ₃	Part Number ANSI	Dimensions (millimeters)			
		WG-300	WG-600	WG-700	XSYTIN-1	GSM100					GEM-19	W	L	T
	WG-4094	●	○	●	○	○	○	WG-4094	0.094	0.500	0.187	Full		
	WG-4125	●	●	●	○	○	○	WG-4125	0.125	0.500	0.187	Full		
	WG-4156	●	●	●	○	○	○	WG-4156	0.156	0.500	0.187	Full		
	WG-4187	●	●	●	○	○	○	WG-4187	0.187	0.500	0.187	Full		
	WG-6218	●	●	●	○	○	○	WG-6218	0.218	0.750	0.250	Full		
	WG-6250	●	●	●	○	○	○	WG-6250	0.250	0.750	0.250	Full		
	WG-6281	●	○	○	○	○	○	WG-6281	0.281	0.750	0.250	Full		
	WG-8312	●	○	○	○	○	○	WG-8312	0.312	1.000	0.337	Full		
	WG-8344	○	○	○	○	○	○	WG-8344	0.344	1.000	0.337	Full		
WG-8375	●	○	○	○	○	○	WG-8375	0.375	1.000	0.337	Full			

Ceramic Classification					WG-300	WG-600	WG-700	XSYTIN-1	GSM100	GEM-19
					●	○	●	○	○	○
Whisker Ceramic	Phase Toughened	Silicon Nitride	Alumina TiC	Al ₂ O ₃	Whisker					
					Phase Toughened			SiN		Al ₂ O ₃

Page GP 04 – grade description

WG-Style, Flat Nose Grooving Inserts



Shape: Groover	Part Number ISO	Whisker						Part Number ANSI	Dimensions (millimeters)			
		WG-300	WG-600	WG-700	Phase Toughened XSYTIN-1	SiAlN ₄ GSNT100	Al ₂ O ₃ GEM-19		W	L	T	R
	WG-4094-1	●	○	●	○	○	○	WG-4094-1	0.094	0.500	0.187	0.015
	WG-4094-2	○	○	○	○	○	○	WG-4094-2	0.094	0.500	0.187	0.031
	WG-4125-1	○	○	●	○	○	○	WG-4125-1	0.125	0.500	0.187	0.015
	WG-4125-2	●	○	●	○	○	○	WG-4125-2	0.125	0.500	0.187	0.031
	WG-4156-1	●	○	●	○	○	○	WG-4156-1	0.156	0.500	0.187	0.015
	WG-4156-2	●	○	●	○	○	○	WG-4156-2	0.156	0.500	0.187	0.031
	WG-4156-3	●	○	●	○	○	○	WG-4156-3	0.156	0.500	0.187	0.046
	WG-4187-1	●	○	●	○	○	○	WG-4187-1	0.187	0.500	0.187	0.015
	WG-4187-2	●	○	●	○	○	○	WG-4187-2	0.187	0.500	0.187	0.031
	WG-6218-1	●	○	●	○	○	○	WG-6218-1	0.218	0.750	0.250	0.015
	WG-6218-2	●	○	●	○	○	○	WG-6218-2	0.218	0.750	0.250	0.031
	WG-6250-1	●	●	●	○	○	○	WG-6250-1	0.250	0.750	0.250	0.015
	WG-6250-2	●	●	●	○	○	○	WG-6250-2	0.250	0.750	0.250	0.031
	WG-6250-3	●	●	●	○	○	○	WG-6250-3	0.250	0.750	0.250	0.046
	WG-6250-4	●	○	●	○	○	○	WG-6250-4	0.250	0.750	0.250	0.062
	WG-6281-1	●	○	○	○	○	○	WG-6281-1	0.281	0.750	0.250	0.015
	WG-6281-2	○	○	○	○	○	○	WG-6281-2	0.281	0.750	0.250	0.031
	WG-6281-3	○	○	○	○	○	○	WG-6281-3	0.281	0.750	0.250	0.046
	WG-8312-1	●	○	●	○	○	○	WG-8312-1	0.312	1.000	0.337	0.015
	WG-8312-2	●	○	●	○	○	○	WG-8312-2	0.312	1.000	0.337	0.031
	WG-8312-3	●	○	●	○	○	○	WG-8312-3	0.312	1.000	0.337	0.046
	WG-8312-4	○	○	○	○	○	○	WG-8312-4	0.312	1.000	0.337	0.062
	WG-8344-1	○	○	○	○	○	○	WG-8344-1	0.344	1.000	0.337	0.015
	WG-8344-2	○	○	○	○	○	○	WG-8344-2	0.344	1.000	0.337	0.031
	WG-8344-3	○	○	○	○	○	○	WG-8344-3	0.344	1.000	0.337	0.046
	WG-8344-4	○	○	○	○	○	○	WG-8344-4	0.344	1.000	0.337	0.062
	WG-8375-1	○	○	○	○	○	○	WG-8375-1	0.375	1.000	0.337	0.015
	WG-8375-2	●	○	●	○	○	○	WG-8375-2	0.375	1.000	0.337	0.031
	WG-8375-3	○	○	○	○	○	○	WG-8375-3	0.375	1.000	0.337	0.046
	WG-8375-4	●	○	○	○	○	○	WG-8375-4	0.375	1.000	0.337	0.062



Ceramic Classification

Whisker Ceramic
 Phase Toughened
 Silicon Nitride
 Alumina TiC
 Al₂O₃

WG-300	WG-600	WG-700	XSYTIN-1	GSNT100	GEM-19
Whisker			Phase Toughened	SiAlN ₄	Al ₂ O ₃

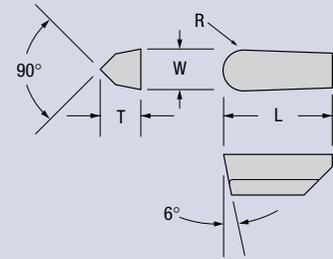
Page GP 04 – grade description

Stocked or Available Upon Request

 Stocked Standard



WGC Full Nose Grooving Inserts



Shape: Groover	Part Number ISO	Whisker					Phase Toughened	SiN _x	Al ₂ O ₃ -TiC	Al ₂ O ₃	Part Number ANSI	Dimensions (millimeters)			
		WG-300	WG-600	WG-700	XSYTIN-1	GSN100						GEM-7	GEM-19	W	L
	WGC-4094	○	○	○	○	○	○	○	○	WGC-4094	0.094	0.500	0.187	Full	
	WGC-4125	○	○	○	○	○	○	○	○	WGC-4125	0.125	0.500	0.187	Full	
	WGC-4156	○	○	○	○	○	○	○	○	WGC-4156	0.156	0.500	0.187	Full	
	WGC-4187	○	○	○	○	○	○	○	○	WGC-4187	0.187	0.500	0.187	Full	
	WGC-6218	○	○	○	○	○	○	○	○	WGC-6218	0.218	0.750	0.250	Full	
	WGC-6250	○	○	○	○	○	●	○	○	WGC-6250	0.250	0.750	0.250	Full	
	WGC-6281	○	○	○	○	○	○	○	○	WGC-6281	0.281	0.750	0.250	Full	
	WGC-8312	○	○	○	○	○	○	○	○	WGC-8312	0.312	1.000	0.337	Full	
	WGC-8344	○	○	○	○	○	○	○	○	WGC-8344	0.344	1.000	0.337	Full	
	WGC-8375	○	○	○	○	○	○	○	○	WGC-8375	0.375	1.000	0.337	Full	

Ceramic Classification					WG-300	WG-600	WG-700	XSYTIN-1	GSN100	GEM-7	GEM-19
					Whisker	Phase Toughened	SiN _x	Al ₂ O ₃ -TiC	Al ₂ O ₃		
Whisker Ceramic	Phase Toughened	Silicon Nitride	Alumina TiC	Al ₂ O ₃							

Page GP 04 – grade description

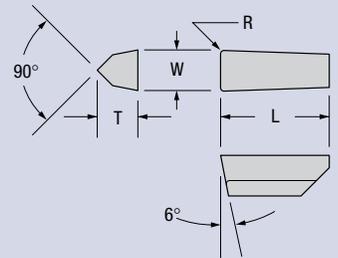
* WGC style inserts come standard with a "T1A" edge prep (.002"-.004" x 20° and .0005"-.001" hone).

Greenleaf Sales

Phone: 814-763-2915 • 800-458-1850 • Fax: 814-763-4423
 sales@greenleafcorporation.com • www.greenleafglobalsupport.com



WGC Flat Nose Grooving Inserts



Shape: Groover	Part Number ISO	Whisker				Phase Toughened		Al ₂ O ₃ -TiC		Part Number ANSI	Dimensions (millimeters)			
		WG-300	WG-600	WG-700	XSYTIN-1	GSN100	Si ₃ N ₄	GEM-7	GEM-19		W	L	T	R
	WGC-4094-1	○	○	○	○	○	○	○	○	WGC-4094-1	0.094	0.500	0.187	0.015
	WGC-4094-2	○	○	○	○	○	○	○	○	WGC-4094-2	0.094	0.500	0.187	0.031
	WGC-4125-1	○	○	○	○	○	○	●	○	WGC-4125-1	0.125	0.500	0.187	0.015
	WGC-4125-2	○	○	○	○	○	○	○	○	WGC-4125-2	0.125	0.500	0.187	0.031
	WGC-4156-1	○	○	○	○	○	○	○	○	WGC-4156-1	0.156	0.500	0.187	0.015
	WGC-4156-2	○	○	○	○	○	○	○	○	WGC-4156-2	0.156	0.500	0.187	0.031
	WGC-4187-1	○	○	○	○	○	○	○	○	WGC-4187-1	0.187	0.500	0.187	0.015
	WGC-4187-2	○	○	○	○	○	○	○	○	WGC-4187-2	0.187	0.500	0.187	0.031
	WGC-6218-1	○	○	○	○	○	○	○	○	WGC-6218-1	0.218	0.750	0.250	0.015
	WGC-6218-2	○	○	○	○	○	○	○	○	WGC-6218-2	0.218	0.750	0.250	0.031
	WGC-6250-1	○	○	○	○	○	○	○	○	WGC-6250-1	0.250	0.750	0.250	0.015
	WGC-6250-2	○	○	○	○	○	○	○	○	WGC-6250-2	0.250	0.750	0.250	0.031
	WGC-6250-3	○	○	○	○	○	○	○	○	WGC-6250-3	0.250	0.750	0.250	0.046
	WGC-6281-1	○	○	○	○	○	○	○	○	WGC-6281-1	0.281	0.750	0.250	0.015
	WGC-6281-2	○	○	○	○	○	○	○	○	WGC-6281-2	0.281	0.750	0.250	0.031
	WGC-6281-3	○	○	○	○	○	○	○	○	WGC-6281-3	0.281	0.750	0.250	0.046
	WGC-8312-1	○	○	○	○	○	○	○	○	WGC-8312-1	0.312	1.000	0.337	0.015
	WGC-8312-2	○	○	○	○	○	○	○	○	WGC-8312-2	0.312	1.000	0.337	0.031
	WGC-8312-3	○	○	○	○	○	○	○	○	WGC-8312-3	0.312	1.000	0.337	0.046
	WGC-8312-4	○	○	○	○	○	○	○	○	WGC-8312-4	0.312	1.000	0.337	0.062
	WGC-8344-1	○	○	○	○	○	○	○	○	WGC-8344-1	0.344	1.000	0.337	0.015
	WGC-8344-2	○	○	○	○	○	○	○	○	WGC-8344-2	0.344	1.000	0.337	0.031
	WGC-8344-3	○	○	○	○	○	○	○	○	WGC-8344-3	0.344	1.000	0.337	0.046
	WGC-8344-4	○	○	○	○	○	○	○	○	WGC-8344-4	0.344	1.000	0.337	0.062
	WGC-8375-1	○	○	○	○	○	○	○	○	WGC-8375-1	0.375	1.000	0.337	0.015
	WGC-8375-2	○	○	○	○	○	○	○	○	WGC-8375-2	0.375	1.000	0.337	0.031
	WGC-8375-3	○	○	○	○	○	○	○	○	WGC-8375-3	0.375	1.000	0.337	0.046
	WGC-8375-4	○	○	○	○	○	○	○	○	WGC-8375-4	0.375	1.000	0.337	0.062

Ceramic Classification					WG-300	WG-600	WG-700	XSYTIN-1	GSN100	GEM-7	GEM-19
					Whisker	Whisker	Whisker	Phase Toughened	Si ₃ N ₄	Al ₂ O ₃ -TiC	Al ₂ O ₃
Whisker Ceramic	Phase Toughened	Silicon Nitride	Alumina TiC	Al ₂ O ₃							

Page GP 04 – grade description

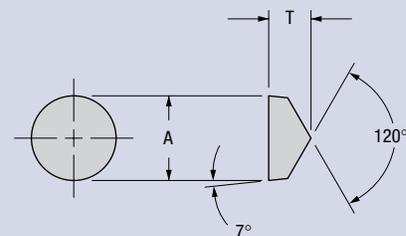
* WGC style inserts come standard with a "T1A" edge prep (.002"-.004" x 20° and .0005"-.001" hone).

Stocked or Available Upon Request Stocked Standard



Round: Positive V-Bottom Inserts (RCGN-V)

Carbide

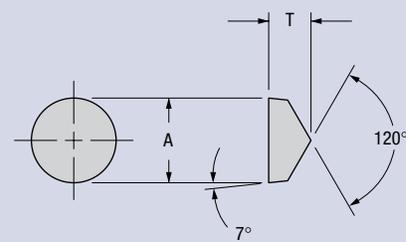


Shape: Round V-Bottom	Part Number	Material										Part Number	Dimensions (inches)					
		Steel			Stainless Steel			Cast Iron	High-Temp Alloys				A	T				
		P15	P25	P35	M15	M15	M20	M35	K15	S								
ANSI	GA5025	GA5035	GA5125	GA5036	GA5026	G-925	G-920	GA5023	G-915	GA5023	GA5026	G-925	G-920	G-915	G-20M	ISO		
RCGN-2V	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	RCGX-060400	0.250	0.187
RCGX-102	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	RCGX-060600	0.250	0.250
RCGN-3V	○	○	○	○	●	●	○	○	○	○	●	●	○	○	●	RCGX-090700	0.375	0.312
RCGN-4V	○	○	○	○	●	●	○	○	○	○	●	●	○	○	●	RCGX-120700	0.500	0.312

Carbide Coatings			
MT-CVD Coated	PVD Coated	Uncoated	
GA5025	GA5035	GA5125	
GA5036	GA5026	G-925	
G-920	G-920	GA5023	
G-915	G-915	GA5023	
GA5026	G-925	G-920	
G-920	G-915	G-20M	
P15	P25	P35	
M15	M15	M20	
M35	K15	S	
Steel	Stainless Steel	Cast Iron	High-Temp Alloys

Round: Positive V-Bottom Inserts (RCGN-V)

Ceramic



Shape: Round V-Bottom	Part Number	Edge Prep*	Material						Part Number	Edge Prep*	Dimensions (inches)			
			Whisker			Phase Toughened	SiN ₄	Al ₂ O ₃ -TiC			Al ₂ O ₃	A	T	
			WG-300	WG-600	WG-700	XSYTIN-1	GSN100	GEM-7			GEM-19			
ANSI	RCGN-2V	T1	●	●	●	○	○	○	○	○	RCGX-060400	T1	0.250	0.187
		T2A	●	○	○	○	○	○	○	○		T2A	0.250	0.187
	RCGN-3V	T1	●	●	●	●	●	○	○	○	RCGX-090700	T1	0.375	0.312
		T1A	○	○	○	○	○	○	○	○		T1A	0.375	0.312
		T2A	○	○	○	○	○	○	○	○		T2A	0.375	0.312
	RCGN-4V	T1	●	●	●	●	●	○	○	○	RCGX-120700	T1	0.500	0.312
		T1A	●	●	●	○	○	○	○	○		T1A	0.500	0.312
		T2	●	○	●	○	○	○	○	○		T2	0.500	0.312
		T2A	●	●	●	○	○	○	○	○		T2A	0.500	0.312

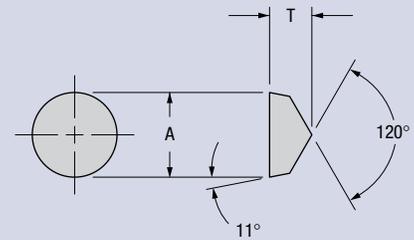
Ceramic Classification					Additional Edge Preps		
					WG-300	WG-600	WG-700
Whisker Ceramic	Phase Toughened	Silicon Nitride	Alumina TiC	Al ₂ O ₃	Whisker	Phase Toughened	SiN ₄
					Al ₂ O ₃ -TiC	GEM-7	Al ₂ O ₃ -TiC
					GEM-19		
Page GP 04 – grade description							

* If edge prep is not shown, call Greenleaf technical service for assistance.



Round: Positive V-Bottom Inserts (RPGN-V)

Carbide

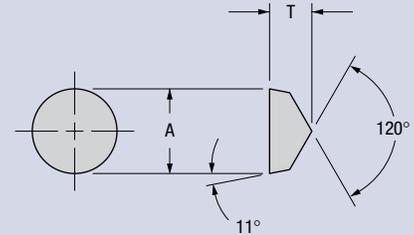


Shape: Round V-Bottom	Part Number	Steel			Stainless Steel				Cast Iron	High-Temp Alloys				Part Number	Dimensions (inches)				
		P15	P25	P35	M15	M15	M15	M20	M35	K15	S				A	T			
	ANSI	GA5025	GA5035	GA5125	GA5036	GA5026	G-925	G-920	GA5023	G-915	GA5023	GA5026	G-925	G-920	G-915	G-20M			
	RPGN-2V	●	○	○	○	●	●	○	○	○	○	●	●	○	○	●	RPGX-060400	0.250	0.187
	RPGN-3V	●	○	○	○	●	●	○	○	○	○	●	●	○	○	●	RPGX-090700	0.375	0.312
	RPGN-4V	○	○	○	○	●	●	○	○	○	○	●	●	○	○	●	RPGX-120700	0.500	0.312

Carbide Coatings			GA5025	GA5035	GA5125	GA5036	GA5026	G-925	G-920	GA5023	G-915	GA5023	GA5026	G-925	G-920	G-915	G-20M	
			P15	P25	P35	M15	M15	M15	M20	M35	K15	GA5023 <td>GA5026 <td>G-925 <td>G-920 <td>G-915 <td>G-20M</td> </td></td></td></td>	GA5026 <td>G-925 <td>G-920 <td>G-915 <td>G-20M</td> </td></td></td>	G-925 <td>G-920 <td>G-915 <td>G-20M</td> </td></td>	G-920 <td>G-915 <td>G-20M</td> </td>	G-915 <td>G-20M</td>	G-20M	
MT-CVD Coated	PVD Coated	Uncoated	Steel	Stainless Steel				Cast Iron	High-Temp Alloys									
			S															

Round: Positive V-Bottom Inserts (RPGN-V)

Ceramic



Shape: Round V-Bottom	Part Number	Edge Prep*	Whisker			Phase Toughened	SiAlN	Al ₂ O ₃ -TiC	Al ₂ O ₃	Part Number	Edge Prep*	Dimensions (inches)	
			WG-300	WG-600	WG-700	XSYTIN-1	GSN100	GEM-7	GEM-19			ISO	A
	ANSI		WG-300	WG-600	WG-700	XSYTIN-1	GSN100	GEM-7	GEM-19	ISO			
	RPGN-2V	T1	●	●	●	○	○	○	○	RPGX-060400	T1	0.250	0.187
		T2	○	○	○	○	○	○	○		T2	0.250	0.187
		T2A	●	●	●	○	○	○	○		T2A	0.250	0.187
	RPGN-3V	T1	●	●	●	○	○	○	○	RPGX-090700	T1	0.375	0.312
		T1A	○	○	○	○	○	○	○		T1A	0.375	0.312
	T2	○	○	○	○	○	○	○		T2	0.375	0.312	
RPGN-4V	T1	●	○	●	○	○	○	○	RPGX-120700	T1	0.500	0.312	
	T2	○	○	○	○	○	○	○		T2	0.500	0.312	

Ceramic Classification					WG-300	WG-600	WG-700	XSYTIN-1	GSN100	GEM-7	GEM-19
					Whisker	Whisker	Whisker	Phase Toughened	SiAlN	Al ₂ O ₃ -TiC	Al ₂ O ₃
Whisker Ceramic	Phase Toughened	Silicon Nitride	Alumina TiC	Al ₂ O ₃							

Additional Edge Preps		
	PRIMARY ANGLE	PRIMARY LAND
		HONE

Page GP 04 – grade description

* If edge prep is not shown, call Greenleaf technical service for assistance.

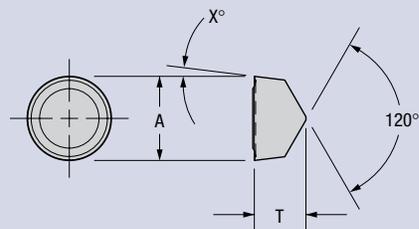
Not Recommended Stocked or Available Upon Request Stocked Standard

v-bottom round inserts - GROOVING, PROFILING and CUT-OFF



Round Inserts (RCGR-V/RPGR-V)

Positive Chipform V-Bottom Carbide



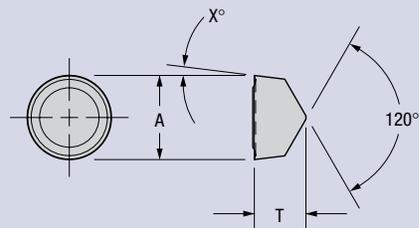
Shape: Round V-Bottom	Part Number ANSI	Steel					Stainless Steel					Cast Iron	High-Temp Alloys					Part Number ISO	Dimensions (Inches)				
		P15	P25	P25	P35	M15	M15	M15	M20	M35	K15	S					A		T	X			
		GA5025	GA5035	GA5125	GA5036	GA5026	G-925	G-920	GA5023	G-915	GA5023	GA5026	G-925	G-920	G-915	G-20M	○		○	○	○	○	○
	RCGR-2V-TF					○	○	○							○	○	○	○	●	RCGR-060400V-TF	0.250	0.187	7°
	RCGR-3V-TF					○	○	●							○	○	●	○	○	RCGR-090700V-TF	0.375	0.312	7°
	RCGR-4V-TF					○	○	○							○	○	○	○	○	RCGR-120700V-TF	0.500	0.312	7°
	RPGR-2V-TF					○	●	○							○	●	○	○	○	RPGX-060400V-TF	0.250	0.187	11°
	RPGR-3V-TF					●	●	●							●	●	●	○	○	RPGX-090700V-TF	0.375	0.312	11°
	RPGR-4V-TF					●	●	○							●	●	○	○	○	RPGX-120700V-TF	0.500	0.312	11°

Carbide Coatings

MT-CVD Coated
 PVD Coated
 Uncoated

Round Inserts

Positive Chipform V-Bottom Ceramic



Shape: Round V-Bottom	Part Number ANSI	Edge Prep *	Whisker					Phase Toughened	Si ₃ N ₄	Al ₂ O ₃ -TiC	Al ₂ O ₃	Part Number ISO	Edge Prep *	Dimensions (millimeters)		
			WG-300	WG-600	WG-700	XSYTIN-1	GEM-7							A	T	X
			WG-300	WG-600	WG-700	XSYTIN-1	GEM-7							GEM-19	○	○
	RCGR-2V-GF1	A	○	○	○	○					RCGR-060400V-GF1	A	0.250	0.187	7°	
	RCGR-3V-GF1	A	○	○	○	○					RCGR-090700V-GF1	A	0.375	0.312	7°	
	RCGR-4V-GF1	A	○	●	○	○					RCGR-120700V-GF1	A	0.500	0.312	7°	
	RPGR-2V-GF1	A	○	○	○	○					RPGR-060400V-GF1	A	0.250	0.187	11°	
	RPGR-3V-GF1	A	○	○	○	○					RPGR-090700V-GF1	A	0.375	0.312	11°	

Ceramic Classification

Whisker Ceramic
 Phase Toughened
 Silicon Nitride
 Alumina TiC
 Al₂O₃

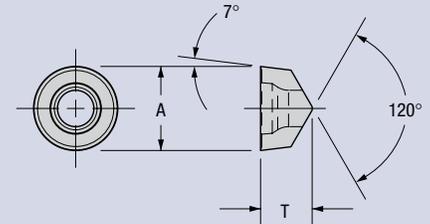
Page GP 04 – grade description

* If edge prep is not shown, call Greenleaf technical service for assistance.



Round Inserts (RCGT-V)

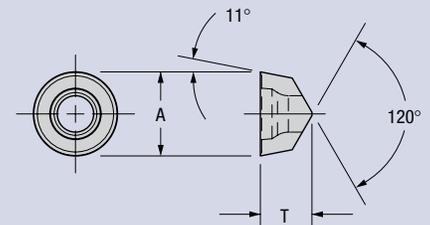
Positive Chipform V-Bottom Carbide



Shape: Round V-Bottom	Part Number	Steel		Stainless Steel					Cast Iron	High-Temp Alloys					Part Number	Dimensions (inches)			
		P15	P25	P25	P35	M15	M15	M15	M20	M35	K15	S					A I.C.	T	
		GA5025	GA5035	GA5125	GA5036	GA5026	G-925	G-920	GA5023	G-915	GA5023	GA5026	G-925	G-920		G-915	G-20M		
	RCGT-2V-TF					○	○	○			○	○	○	●		RCGT-060400V-TF	0.250	0.187	
	RCGT-3V-TF					○	●	○			○	●	○	○	○	RCGT-090700V-TF	0.375	0.312	
	RCGT-4V-TF					○	●	○			○	●	○	●		RCGT-120700V-TF	0.500	0.312	
Carbide Coatings																			
	MT-CVD Coated		PVD Coated		Uncoated														
		GA5025	GA5035	GA5125	GA5036	GA5026	G-925	G-920	GA5023	G-915	GA5023	GA5026	G-925	G-920	G-915	G-20M			
		P15	P25	P35	M15	M15	M15	M20	M35	K15	S								
		Steel		Stainless Steel					Cast Iron	High-Temp Alloys									

Round Inserts (RPGT-V)

Positive Chipform V-Bottom Carbide



Shape: Round V-Bottom	Part Number	Steel		Stainless Steel					Cast Iron	High-Temp Alloys					Part Number	Dimensions (inches)			
		P15	P25	P25	P35	M15	M15	M15	M20	M35	K15	S					A I.C.	T	
		GA5025	GA5035	GA5125	GA5036	GA5026	G-925	G-920	GA5023	G-915	GA5023	GA5026	G-925	G-920		G-915	G-20M		
	RPGT-2V-TF					○	●	●			○	○	○	○	○		RPGT-060400V-TF	0.250	0.187
	RPGT-3V-TF					●	○	○			○	○	○	○	○	○	RPGT-090700V-TF	0.375	0.312
	RPGT-4V-TF					○	○	○			○	○	○	○	○	○	RPGT-120700V-TF	0.500	0.312
Carbide Coatings																			
	MT-CVD Coated		PVD Coated		Uncoated														
		GA5025	GA5035	GA5125	GA5036	GA5026	G-925	G-920	GA5023	G-915	GA5023	GA5026	G-925	G-920	G-915	G-20M			
		P15	P25	P35	M15	M15	M15	M20	M35	K15	S								
		Steel		Stainless Steel					Cast Iron	High-Temp Alloys									

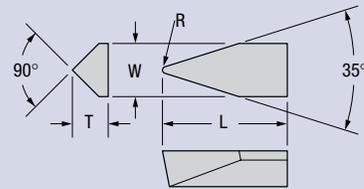
Not Recommended Stocked or Available Upon Request Stocked Standard

v-bottom round inserts - GROOVING, PROFILING and CUT-OFF

35°



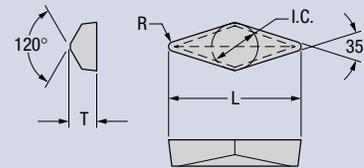
35° V-Bottom Inserts (VPG-V)



Shape: 35° V-Bottom	Part Number ISO	Edge Prep*	Whisker			Si ₃ N ₄	Al ₂ O ₃ -TIC	Al ₂ O ₃	Part Number ANSI	Edge Prep*	Dimensions (millimeters)			
			WG-300	WG-600	WG-700						W	L	T	R
	VPG-33.542V	A	○	○	○	○	○	VPG-33.542V	A	0.375	0.875	0.250	0.031	
	VPG-33.543V	A	●	○	○	○	○	VPG-33.543V	A	0.375	0.875	0.250	0.046	
			WG-300	WG-600	WG-700	GSN100	GEM-7	GEM-19						
			Whisker			Si ₃ N ₄	Al ₂ O ₃ -TIC	Al ₂ O ₃						
Whisker Ceramic	Silicon Nitride	Alumina TIC	Al ₂ O ₃											

* If edge prep is not shown, call Greenleaf technical service for assistance.

35° V-Bottom Inserts (VCGN-V)



Shape: 35° V-Bottom	Part Number ISO	Edge Prep*	Whisker			Si ₃ N ₄	Al ₂ O ₃ -TIC	Al ₂ O ₃	Part Number ANSI	Edge Prep*	Dimensions (millimeters)			
			WG-300	WG-600	WG-700						I.C.	L	T	R
	VCGN-2.532V	A	●	○	○	○	○	VCGN-2.532V	A	0.312	0.892	0.187	0.031	
	VCGN-2.533V	A	●	○	○	○	○	VCGN-2.533V	A	0.312	0.819	0.187	0.047	
		T1	●	○	○	○	○		T1	0.312	0.819	0.187	0.047	
			WG-300	WG-600	WG-700	GSN100	GEM-7	GEM-19						
			Whisker			Si ₃ N ₄	Al ₂ O ₃ -TIC	Al ₂ O ₃						
Whisker Ceramic	Silicon Nitride	Alumina TIC	Al ₂ O ₃											

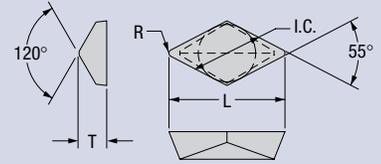
* If edge prep is not shown, call Greenleaf technical service for assistance.

Greenleaf Sales

Phone: 814-763-2915 • 800-458-1850 • Fax: 814-763-4423
 sales@greenleafcorporation.com • www.greenleafglobalsupport.com

Stocked Standard
 Stocked or Available Upon Request
 Not Recommended

55° V-Bottom Inserts



Shape: 55° V-Bottom	Part Number ANSI	Edge Prep*	Whisker			Si ₃ N ₄	Al ₂ O ₃ -TiC	Al ₂ O ₃	Part Number ISO	Edge Prep*	Dimensions (millimeters)			
			WG-300	WG-600	WG-700						I.C.	L	T	R
	DPGN-442V	A	●	○	○	○	○	○	DPGN-442V	A	0.500	1.010	0.250	0.031
	DPGN-443V	A	○	○	○	○	○	○	DPGN-443V	A	0.500	0.973	0.250	0.047
			WG-300	WG-600	WG-700	GSN100	GEM-7	GEM-19						
			Whisker	Si ₃ N ₄	Al ₂ O ₃ -TiC	Al ₂ O ₃								

* If edge prep is not shown, call Greenleaf technical service for assistance.

35° and 55° v-bottom inserts - GROOVING, PROFILING and CUT-OFF

Stocked or Available Upon Request Stocked Standard

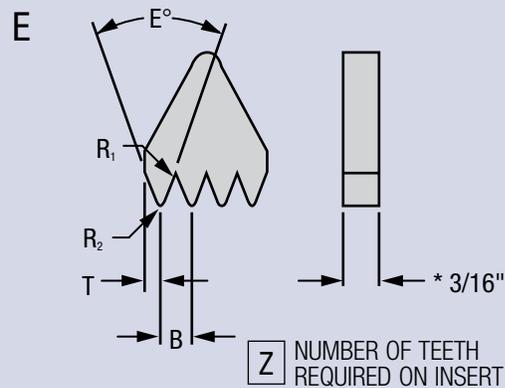
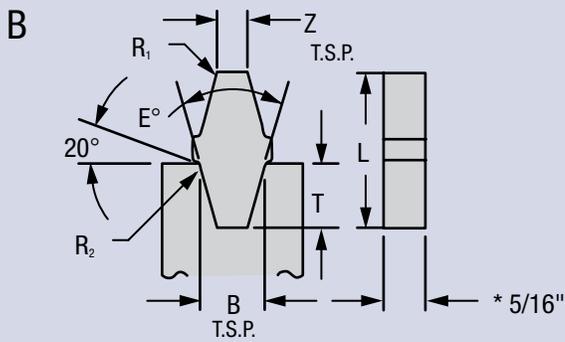
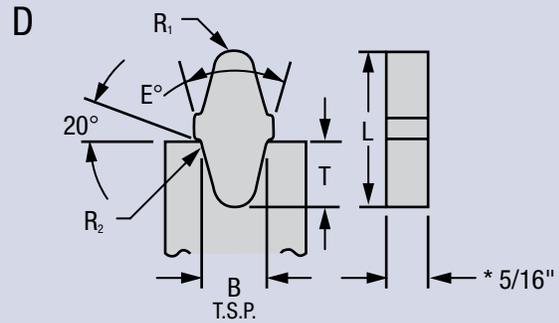
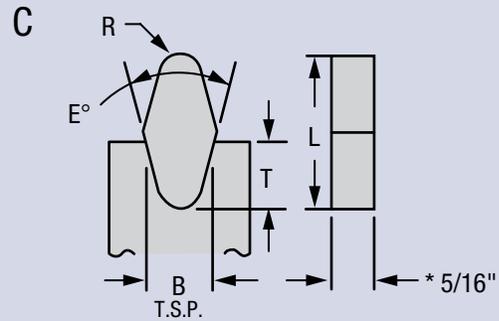
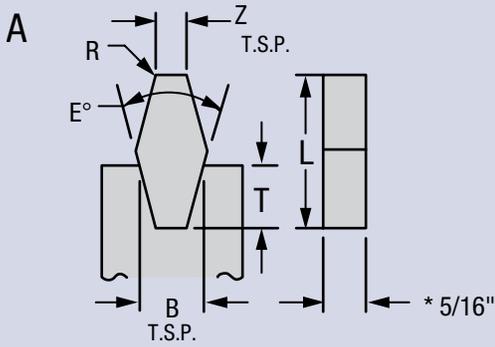
Greenleaf Sales
 Phone: 814-763-2915 • 800-458-1850 • Fax: 814-763-4423
 sales@greenleafcorporation.com • www.greenleafglobalsupport.com

Pulley and Poly Grooving Inserts

When ordering or requesting quotations, you should provide a part print and a sketch with dimensions as indicated in the following format:

Insert Style	B	E°	L
R ₁	R ₂	T	Z

* Recommended – other specifications available upon request.

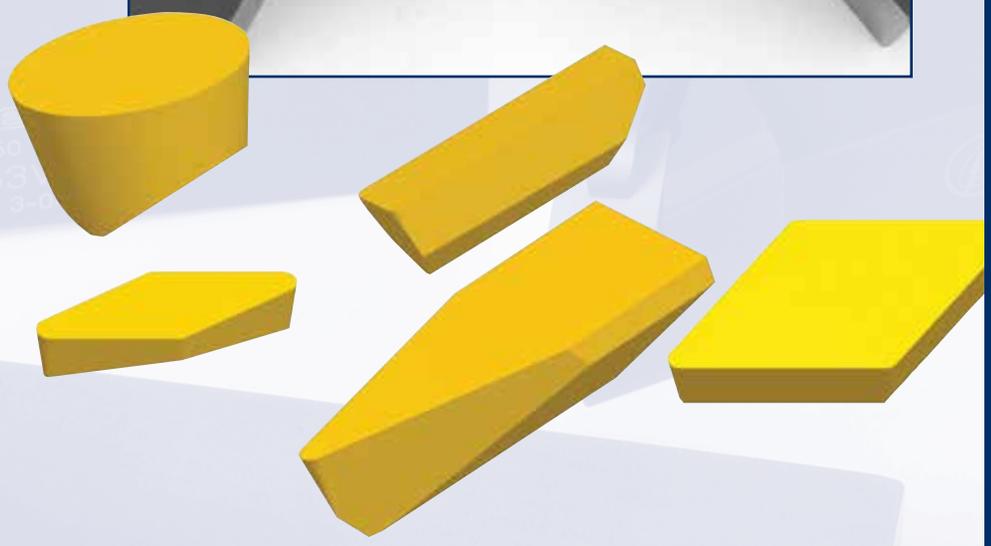


Z NUMBER OF TEETH REQUIRED ON INSERT

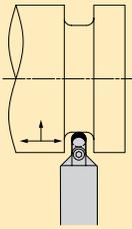
Grooving, Profiling and Cut-Off Toolholders and Bars

The Greenleaf Advanced Tooling System for grooving, profiling and cut off provides every specific application with unsurpassed support to ensure the longest tool life and highest material-removal rates with both carbide and ceramic inserts.

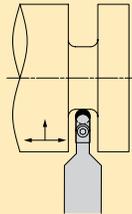
Utilizing 4140 alloyed steel at 42-44 RC, these qualified toolholders are offered in both milled nest and replaceable nest designs to provide further options in your tooling requirements.



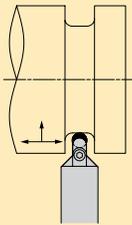
Greenleaf Corporation is continually upgrading its products.
For the most current information, please visit our web site at:
www.greenleafglobalsupport.com

V-Bottom Round Toolholders


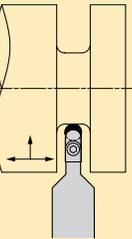
CRDPN-VS
Replaceable Nest
Shallow D.O.C.
page: GP 24



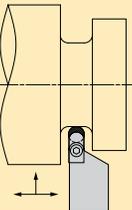
CRDPN-V
Replaceable Nest
Deep D.O.C.
page: GP 24



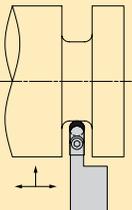
CRDPN-VMS
Milled Nest
Shallow D.O.C.
page: GP 25



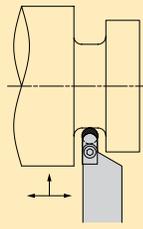
CRDPN-VM
Milled Nest
Deep D.O.C.
page: GP 25



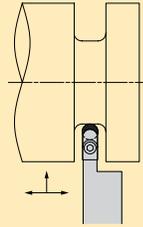
O.D.
Replaceable Nest
Shallow D.O.C.
page: GP 26



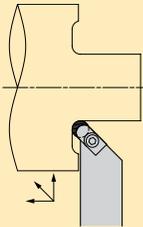
O.D.
Replaceable Nest
Deep D.O.C.
page: GP 26

V-Bottom Round Toolholders *continued*


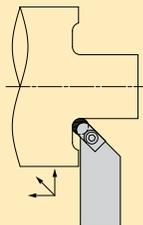
O.D.
Milled Nest
Shallow D.O.C.
page: GP 27



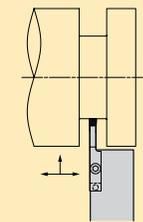
O.D.
Milled Nest
Deep D.O.C.
page: GP 27



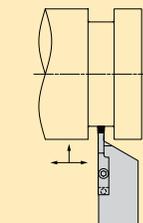
**CRGPR-V
CRGPL-V**
45°
Replaceable Nest
page: GP 28



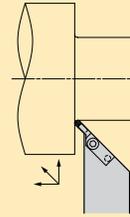
**CRGPR-VM
CRGPL-VM**
45°
Milled Nest
page: GP 28

Single-Ended Groovers


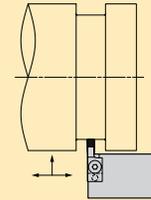
Deep D.O.C.
page: GP 29-30



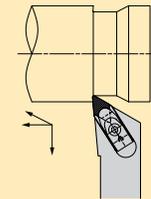
Shallow D.O.C.
page: GP 31-32

Single-Ended Groovers *continued*


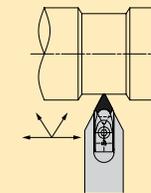
**45° G/P
Toolholder**
page: GP 33



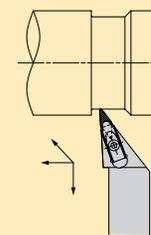
**90° G/P
Toolholder**
page: GP 34-35

55° and 35° V-Bottom


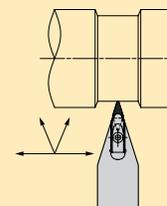
**CDJOR-V
CDJOL-V**
Double Ended
55° Diamond
page: GP 36



CDPON-V
Double Ended
55° Diamond
page: GP 36

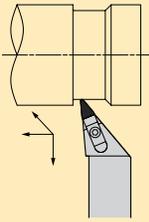


**CVJOR-V
CVJOL-V**
Double Ended
35° Diamond
page: GP 37

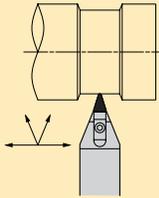


CVVON-V
Double Ended
35° Diamond
page: GP 37

55° and 35° V-Bottom *continued*

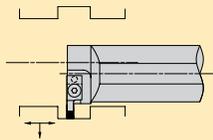


**VJOR-V
VJOL-V**
Single Ended
35° Diamond
page: GP 38

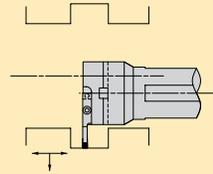


VVON-V
Single Ended
35° Diamond
page: GP 38

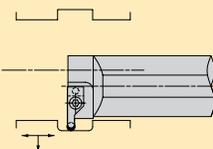
Grooving, Profiling and Cut-Off Bars



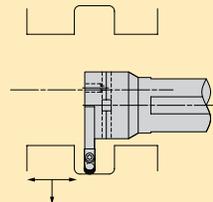
**Cut-Off
Grooving Bar**
page: GP 39



**Cut-Off
Grooving
Support Blade**
For Single-Ended,
V-Bottom Inserts
page: GP 40

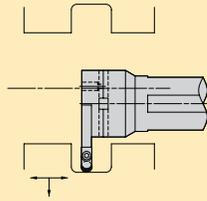


Profiling Bar
Round V-Bottom Insert
Milled Nest
page: GP 41

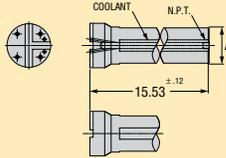


**Profiling
Support Blade**
Round V-Bottom Insert
Milled Nest
page: GP 42

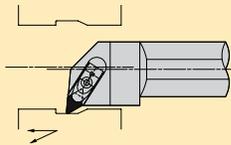
Grooving, Profiling and Cut-Off Bars *continued*



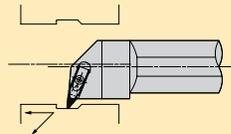
**Profiling
Support Blade**
Round V-Bottom Insert
Replaceable Nest
page: GP 43



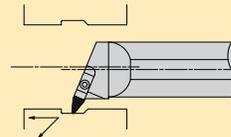
**Shank
Options**
For Bolt-On
Support Blades
page: GP 44



Profiling Bar
Double Ended
55° Diamond
page: GP 45



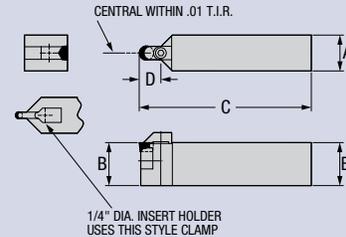
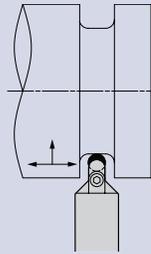
Profiling Bar
Double Ended
35° Diamond
page: GP 45



Profiling Bar
Single Ended
35° Diamond
page: GP 46

CRDPN-VS Toolholder

Round V-Bottom Insert; Replaceable Nest
Shallow D.O.C. (D) Series



Part Number	Gage Insert	Stock	D.O.C. D	Dimensions (inches)			Standard Components				*Tune-Up Kit Includes All Standard Components
				A	B	C	Nest	Nest Screw	Clamp	Clamp Screw	
CRDPN-162VS	** RPN-2V	●	0.375	1.000	1.000	6	410631	#3-48 x 3/8 B.H.C.S.	411910-250VRC	1/4-20 x 3/4 B.H.C.S.	TK-00524
CRDPN-202VS		○	0.375	1.250	1.250	6	410631	#3-48 x 3/8 B.H.C.S.	411910-250VRC	1/4-20 x 3/4 B.H.C.S.	TK-00524
CRDPN-242VS		○	0.375	1.500	1.500	8	410631	#3-48 x 3/8 B.H.C.S.	411910-250VRC	1/4-20 x 3/4 B.H.C.S.	TK-00524
CRDPN-163VS	** RPN-3V	●	0.562	1.000	1.000	6	413970	#6-32 x 1/2 B.H.C.S.	308063	#10-32 x 1/2 S.H.C.S.	TK-00525
CRDPN-203VS		○	0.562	1.250	1.250	6	413970	#6-32 x 1/2 B.H.C.S.	308063	#10-32 x 1/2 S.H.C.S.	TK-00525
CRDPN-243VS		○	0.562	1.500	1.500	8	413970	#6-32 x 1/2 B.H.C.S.	308063	#10-32 x 1/2 S.H.C.S.	TK-00525
CRDPN-164VS	** RPN-4V	○	0.750	1.000	1.000	6	414007	#10-32 x 5/8 B.H.C.S.	308136	1/4-20 x 5/8 S.H.C.S.	TK-00526
CRDPN-204VS		○	0.750	1.250	1.250	6	414007	#10-32 x 5/8 B.H.C.S.	308136	1/4-20 x 5/8 S.H.C.S.	TK-00526
CRDPN-244VS		○	0.750	1.500	1.500	8	414007	#10-32 x 5/8 B.H.C.S.	308136	1/4-20 x 5/8 S.H.C.S.	TK-00526

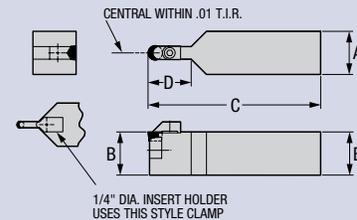
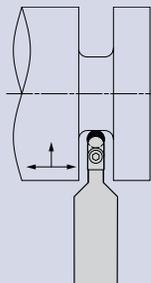
* Tune-Up Kits include one complete set of Standard Components to allow you to refurbish the toolholder.

See page GP 14 for ceramic and carbide inserts.

** RCGN can be used in place of RPN.

CRDPN-V Toolholder

Round V-Bottom Insert; Replaceable Nest Deep
D.O.C. (D) Series



Part Number	Gage Insert	Stock	D.O.C. D	Dimensions (inches)			Standard Components				*Tune-Up Kit Includes All Standard Components
				A	B	C	Nest	Nest Screw	Clamp	Clamp Screw	
CRDPN-162V	** RPN-2V	●	0.750	1.000	1.000	6	410631	#3-48 x 3/8 B.H.C.S.	411910-250VRC	1/4-20 x 3/4 B.H.C.S.	TK-00524
CRDPN-202V		●	0.750	1.250	1.250	6	410631	#3-48 x 3/8 B.H.C.S.	411910-250VRC	1/4-20 x 3/4 B.H.C.S.	TK-00524
CRDPN-242V		●	0.750	1.500	1.500	8	410631	#3-48 x 3/8 B.H.C.S.	411910-250VRC	1/4-20 x 3/4 B.H.C.S.	TK-00524
CRDPN-163V	** RPN-3V	●	1.125	1.000	1.000	6	413970	#6-32 x 1/2 B.H.C.S.	308063	#10-32 x 1/2 S.H.C.S.	TK-00525
CRDPN-203V		●	1.125	1.250	1.250	6	413970	#6-32 x 1/2 B.H.C.S.	308063	#10-32 x 1/2 S.H.C.S.	TK-00525
CRDPN-243V		●	1.125	1.500	1.500	8	413970	#6-32 x 1/2 B.H.C.S.	308063	#10-32 x 1/2 S.H.C.S.	TK-00525
CRDPN-164V	** RPN-4V	●	1.500	1.000	1.000	6	414007	#10-32 x 5/8 B.H.C.S.	308136	1/4-20 x 5/8 S.H.C.S.	TK-00526
CRDPN-204V		●	1.500	1.250	1.250	6	414007	#10-32 x 5/8 B.H.C.S.	308136	1/4-20 x 5/8 S.H.C.S.	TK-00526
CRDPN-244V		●	1.500	1.500	1.500	8	414007	#10-32 x 5/8 B.H.C.S.	308136	1/4-20 x 5/8 S.H.C.S.	TK-00526

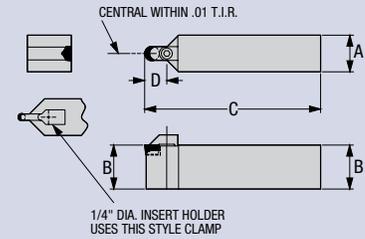
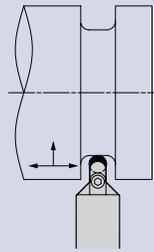
* Tune-Up Kits include one complete set of Standard Components to allow you to refurbish the toolholder.

See page GP 14 for ceramic and carbide inserts.

** RCGN can be used in place of RPN.

CRDPN-VMS Toolholder

Round V-Bottom Insert; Milled Nest
Shallow D.O.C. (D) Series



Part Number	Gage Insert	Stock	D.O.C.	Dimensions (inches)			Standard Components		*Tune-Up Kit Includes All Standard Components	Optional Component Insert Screw
				D	A	B	C	Clamp		
CRDPN-162VMS	** RPGN-2V	○	0.375	1.000	1.000	6	411910-250VRC	1/4-20 x 3/4 B.H.C.S.	TK-00803	PT-542T
CRDPN-202VMS		○	0.375	1.250	1.250	6	411910-250VRC	1/4-20 x 3/4 B.H.C.S.	TK-00803	PT-542T
CRDPN-242VMS		○	0.375	1.500	1.500	8	411910-250VRC	1/4-20 x 3/4 B.H.C.S.	TK-00803	PT-542T
CRDPN-163VMS	** RPGN-3V	○	0.562	1.000	1.000	6	308063	#10-32 x 1/2 S.H.C.S.	TK-00764	PT-545T
CRDPN-203VMS		○	0.562	1.250	1.250	6	308063	#10-32 x 1/2 S.H.C.S.	TK-00764	PT-545T
CRDPN-243VMS		○	0.562	1.500	1.500	8	308063	#10-32 x 1/2 S.H.C.S.	TK-00764	PT-545T
CRDPN-164VMS	** RPGN-4V	○	0.750	1.000	1.000	6	308136	1/4-20 x 3/4 S.H.C.S.	TK-00763	CO-5018
CRDPN-204VMS		○	0.750	1.250	1.250	6	308136	1/4-20 x 3/4 S.H.C.S.	TK-00763	CO-5018
CRDPN-244VMS		○	0.750	1.500	1.500	8	308136	1/4-20 x 3/4 S.H.C.S.	TK-00763	CO-5018

* Tune-Up Kits include one complete set of Standard Components to allow you to refurbish the toolholder.

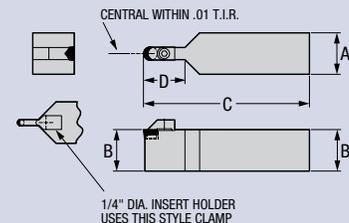
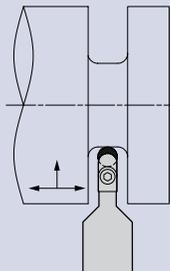
See page GP 14 for ceramic and carbide inserts.

** RCGN can be used in place of RPGN.

NOTE: Use carbide inserts RCGT and RPGT with optional insert screw for finishing.

CRDPN-VM Toolholder

Round V-Bottom Insert; Milled Nest
Deep D.O.C. (D) Series



Part Number	Gage Insert	Stock	D.O.C.	Dimensions (inches)			Standard Components		*Tune-Up Kit Includes All Standard Components	Optional Component Insert Screw
				D	A	B	C	Clamp		
CRDPN-162VM	** RPGN-2V	○	0.750	1.000	1.000	6	411910-250VRC	1/4-20 x 3/4 B.H.C.S.	TK-00803	PT-542T
CRDPN-202VM		○	0.750	1.250	1.250	6	411910-250VRC	1/4-20 x 3/4 B.H.C.S.	TK-00803	PT-542T
CRDPN-242VM		○	0.750	1.500	1.500	8	411910-250VRC	1/4-20 x 3/4 B.H.C.S.	TK-00803	PT-542T
CRDPN-163VM	** RPGN-3V	○	1.125	1.000	1.000	6	308063	#10-32 x 1/2 S.H.C.S.	TK-00764	PT-545T
CRDPN-203VM		○	1.125	1.250	1.250	6	308063	#10-32 x 1/2 S.H.C.S.	TK-00764	PT-545T
CRDPN-243VM		●	1.125	1.500	1.500	8	308063	#10-32 x 1/2 S.H.C.S.	TK-00764	PT-545T
CRDPN-164VM	** RPGN-4V	○	1.500	1.000	1.000	6	308136	1/4-20 x 3/4 S.H.C.S.	TK-00763	CO-5018
CRDPN-204VM		○	1.500	1.250	1.250	6	308136	1/4-20 x 3/4 S.H.C.S.	TK-00763	CO-5018
CRDPN-244VM		○	1.500	1.500	1.500	8	308136	1/4-20 x 3/4 S.H.C.S.	TK-00763	CO-5018

* Tune-Up Kits include one complete set of Standard Components to allow you to refurbish the toolholder.

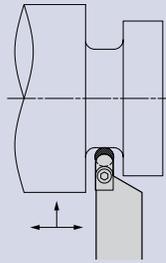
See page GP 14 for ceramic and carbide inserts.

** RCGN can be used in place of RPGN.

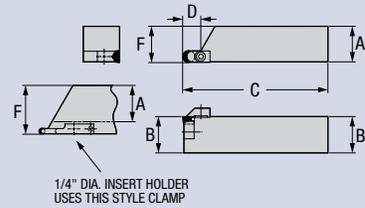
NOTE: Use carbide inserts RCGT and RPGT with optional insert screw for finishing.

O.D. Grooving/Profiling Toolholder

Round V-Bottom Insert; Replaceable Nest
Shallow D.O.C. (D) Series



Right-Hand Toolholder Shown



Part Number		Gage	Stock			D.O.C.				Standard Components				*Tune-Up Kit Includes All Std. Components
Right	Left	Insert	R	L	D	A	B	C	F	Nest	Nest Screw	Clamp	Clamp Screw	
415419-2VRS	-	** RPGN-2V	●		0.375	1.000	1.000	6	1.500	410631	#3-48 x 3/8 B.H.C.S.	411905-250VRC	1/4-20 x 1 S.H.C.S.	TK-00590
-	415420-2VRS			●	0.375	1.000	1.000	6	1.500	410631	#3-48 x 3/8 B.H.C.S.	411906-250VRC	1/4-20 x 1 S.H.C.S.	TK-00591
415421-2VRS	-		●		0.375	1.250	1.250	6	1.750	410631	#3-48 x 3/8 B.H.C.S.	411905-250VRC	1/4-20 x 1 S.H.C.S.	TK-00590
-	415422-2VRS			●	0.375	1.250	1.250	6	1.750	410631	#3-48 x 3/8 B.H.C.S.	411906-250VRC	1/4-20 x 1 S.H.C.S.	TK-00591
415423-2VRS	-		●		0.375	1.500	1.500	8	2.000	410631	#3-48 x 3/8 B.H.C.S.	411905-250VRC	1/4-20 x 1 S.H.C.S.	TK-00590
-	415424-2VRS		●	0.375	1.500	1.500	8	2.000	410631	#3-48 x 3/8 B.H.C.S.	411906-250VRC	1/4-20 x 1 S.H.C.S.	TK-00591	
415427-3VRS	415428-3VRS	** RPGN-3V	○	●	0.562	1.000	1.000	6	1.000	413970	#6-32 x 1/2 B.H.C.S.	308063	#10-32 x 1/2 S.H.C.S.	TK-00525
415429-3VRS	415430-3VRS		●	●	0.562	1.250	1.250	6	1.250	413970	#6-32 x 1/2 B.H.C.S.	308063	#10-32 x 1/2 S.H.C.S.	TK-00525
415431-3VRS	415432-3VRS		●	○	0.562	1.500	1.500	8	1.500	413970	#6-32 x 1/2 B.H.C.S.	308063	#10-32 x 1/2 S.H.C.S.	TK-00525
415435-4VRS	415436-4VRS	** RPGN-4V	○	●	0.750	1.000	1.000	6	1.000	414007	#10-32 x 5/8 B.H.C.S.	308136	1/4-20 x 5/8 S.H.C.S.	TK-00526
415437-4VRS	415438-4VRS		●	●	0.750	1.250	1.250	6	1.250	414007	#10-32 x 5/8 B.H.C.S.	308136	1/4-20 x 5/8 S.H.C.S.	TK-00526
415439-4VRS	415440-4VRS		●	●	0.750	1.500	1.500	8	1.500	414007	#10-32 x 5/8 B.H.C.S.	308136	1/4-20 x 5/8 S.H.C.S.	TK-00526

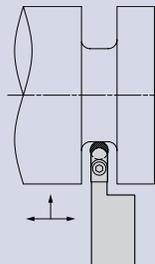
* Tune-Up Kits include one complete set of Standard Components to allow you to refurbish the toolholder.

See page GP 14 for ceramic and carbide inserts.

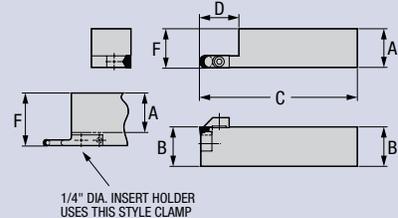
** RCGN can be used in place of RPGN.

O.D. Grooving/Profiling Toolholder

Round, V-Bottom Insert; Replaceable Nest
Deep D.O.C. (D) Series



Right-Hand Toolholder Shown



Part Number		Gage	Stock			D.O.C.				Standard Components				*Tune-Up Kit Includes All Std. Components
Right	Left	Insert	R	L	D	A	B	C	F	Nest	Nest Screw	Clamp	Clamp Screw	
411149-2VRS	-	** RPGN-2V	●		0.750	1.000	1.000	6	1.500	410631	#3-48 x 3/8 B.H.C.S.	411905-250VRC	1/4-20 x 1 S.H.C.S.	TK-00590
-	411150-2VRS			●	0.750	1.000	1.000	6	1.500	410631	#3-48 x 3/8 B.H.C.S.	411906-250VRC	1/4-20 x 1 S.H.C.S.	TK-00591
411151-2VRS	-		●		0.750	1.250	1.250	6	1.750	410631	#3-48 x 3/8 B.H.C.S.	411905-250VRC	1/4-20 x 1 S.H.C.S.	TK-00590
-	411956-2VRS			●	0.750	1.250	1.250	6	1.750	410631	#3-48 x 3/8 B.H.C.S.	411906-250VRC	1/4-20 x 1 S.H.C.S.	TK-00591
411957-2VRS	-		●		0.750	1.500	1.500	8	2.000	410631	#3-48 x 3/8 B.H.C.S.	411905-250VRC	1/4-20 x 1 S.H.C.S.	TK-00590
-	411958-2VRS		●	0.750	1.500	1.500	8	2.000	410631	#3-48 x 3/8 B.H.C.S.	411906-250VRC	1/4-20 x 1 S.H.C.S.	TK-00591	
411157-3VRS	411158-3VRS	** RPGN-3V	●	●	1.125	1.000	1.000	6	1.000	413970	#6-32 x 1/2 B.H.C.S.	308063	#10-32 x 1/2 S.H.C.S.	TK-00525
411159-3VRS	411160-3VRS		●	●	1.125	1.250	1.250	6	1.250	413970	#6-32 x 1/2 B.H.C.S.	308063	#10-32 x 1/2 S.H.C.S.	TK-00525
411161-3VRS	411162-3VRS		●	●	1.125	1.500	1.500	8	1.500	413970	#6-32 x 1/2 B.H.C.S.	308063	#10-32 x 1/2 S.H.C.S.	TK-00525
411165-4VRS	411166-4VRS	** RPGN-4V	●	●	1.500	1.000	1.000	6	1.000	414007	#10-32 x 5/8 B.H.C.S.	308136	1/4-20 x 5/8 S.H.C.S.	TK-00526
411167-4VRS	411168-4VRS		●	●	1.500	1.250	1.250	6	1.250	414007	#10-32 x 5/8 B.H.C.S.	308136	1/4-20 x 5/8 S.H.C.S.	TK-00526
411169-4VRS	411170-4VRS		●	●	1.500	1.500	1.500	8	1.500	414007	#10-32 x 5/8 B.H.C.S.	308136	1/4-20 x 5/8 S.H.C.S.	TK-00526

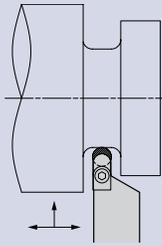
* Tune-Up Kits include one complete set of Standard Components to allow you to refurbish the toolholder.

See page GP 14 for ceramic and carbide inserts.

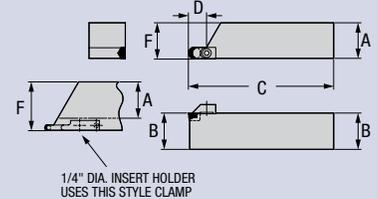
** RCGN can be used in place of RPGN.

O.D. Grooving/Profiling Toolholder

Round, V-Bottom Insert; Milled Nest
Shallow D.O.C. (D) Series



Right-Hand Toolholder Shown



Part Number		Gage	Stock		D.O.C.	Dimensions (inches)				Standard Components		*Tune-Up Kit Includes All Standard Components	Optional Component
Right	Left	Insert	R	L	D	A	B	C	F	Clamp	Clamp Screw		Insert Screw
421450-2VMRS	-	** RPGN-2V	●		0.375	1.000	1.000	6	1.500	411905-250VRC	1/4-20 x 1 S.H.C.S.	TK-00765	PT-542T
-	421451-2VMRS			○	0.375	1.000	1.000	6	1.500	411906-250VRC	1/4-20 x 1 S.H.C.S.	TK-00799	PT-542T
421452-2VMRS	-		○		0.375	1.250	1.250	6	1.750	411905-250VRC	1/4-20 x 1 S.H.C.S.	TK-00765	PT-542T
-	421453-2VMRS		●		0.375	1.250	1.250	6	1.750	411906-250VRC	1/4-20 x 1 S.H.C.S.	TK-00799	PT-542T
421454-2VMRS	-		○		0.375	1.500	1.500	8	2.000	411905-250VRC	1/4-20 x 1 S.H.C.S.	TK-00765	PT-542T
-	421455-2VMRS		○		0.375	1.500	1.500	8	2.000	411906-250VRC	1/4-20 x 1 S.H.C.S.	TK-00799	PT-542T
421458-3VMRS	421459-3VMRS	** RPGN-3V	○	○	0.562	1.000	1.000	6	1.000	308063	#10-32 x 1/2 S.H.C.S.	TK-00764	PT-545T
421460-3VMRS	421461-3VMRS		○	○	0.562	1.250	1.250	6	1.250	308063	#10-32 x 1/2 S.H.C.S.	TK-00764	PT-545T
421462-3VMRS	421463-3VMRS		●	○	0.562	1.500	1.500	8	1.500	308063	#10-32 x 1/2 S.H.C.S.	TK-00764	PT-545T
421466-4VMRS	421467-4VMRS	** RPGN-4V	○	○	0.750	1.000	1.000	6	1.000	308136	1/4-20 x 3/4 S.H.C.S.	TK-00763	CO-5018
421468-4VMRS	421469-4VMRS		○	○	0.750	1.250	1.250	6	1.250	308136	1/4-20 x 3/4 S.H.C.S.	TK-00763	CO-5018
421470-4VMRS	421471-4VMRS		●	●	0.750	1.500	1.500	8	1.500	308136	1/4-20 x 3/4 S.H.C.S.	TK-00763	CO-5018

* Tune-Up Kits include one complete set of Standard Components to allow you to refurbish the toolholder.

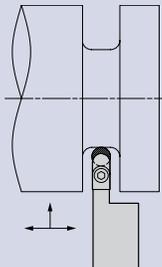
See page GP 14 for ceramic and carbide inserts.

** RCGN can be used in place of RPGN.

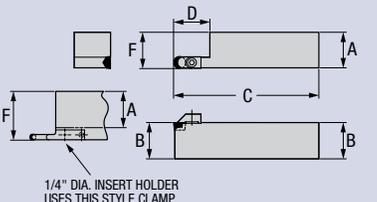
NOTE: Use carbide inserts RCGT and RPGT with optional insert screw for finishing.

O.D. Grooving/Profiling Toolholder

Round, V-Bottom Insert; Milled Nest
Deep D.O.C. (D) Series



Right-Hand Toolholder Shown



Part Number		Gage	Stock		D.O.C.	Dimensions (inches)				Standard Components		*Tune-Up Kit Includes All Standard Components	Optional Component
Right	Left	Insert	R	L	D	A	B	C	F	Clamp	Clamp Screw		Insert Screw
421498-2VMRS	-	** RPGN-2V	●		0.750	1.000	1.000	6	1.500	411905-250VRC	1/4-20 x 1 S.H.C.S.	TK-00765	PT-542T
-	421499-2VMRS			○	0.750	1.000	1.000	6	1.500	411906-250VRC	1/4-20 x 1 S.H.C.S.	TK-00799	PT-542T
421500-2VMRS	-		●		0.750	1.250	1.250	6	1.750	411905-250VRC	1/4-20 x 1 S.H.C.S.	TK-00765	PT-542T
-	421501-2VMRS		○		0.750	1.250	1.250	6	1.750	411906-250VRC	1/4-20 x 1 S.H.C.S.	TK-00799	PT-542T
421502-2VMRS	-		●		0.750	1.500	1.500	8	2.000	411905-250VRC	1/4-20 x 1 S.H.C.S.	TK-00765	PT-542T
-	421503-2VMRS		○		0.750	1.500	1.500	8	2.000	411906-250VRC	1/4-20 x 1 S.H.C.S.	TK-00799	PT-542T
421504-3VMRS	421505-3VMRS	** RPGN-3V	●	○	1.125	1.000	1.000	6	1.000	308063	#10-32 x 1/2 S.H.C.S.	TK-00764	PT-545T
421506-3VMRS	421507-3VMRS		●	●	1.125	1.250	1.250	6	1.250	308063	#10-32 x 1/2 S.H.C.S.	TK-00764	PT-545T
421508-3VMRS	421509-3VMRS		○	○	1.125	1.500	1.500	8	1.500	308063	#10-32 x 1/2 S.H.C.S.	TK-00764	PT-545T
421510-4VMRS	421511-4VMRS	** RPGN-4V	○	○	1.500	1.000	1.000	6	1.000	308136	1/4-20 x 3/4 S.H.C.S.	TK-00763	CO-5018
421512-4VMRS	421513-4VMRS		●	●	1.500	1.250	1.250	6	1.250	308136	1/4-20 x 3/4 S.H.C.S.	TK-00763	CO-5018
421514-4VMRS	421515-4VMRS		○	○	1.500	1.500	1.500	8	1.500	308136	1/4-20 x 3/4 S.H.C.S.	TK-00763	CO-5018

* Tune-Up Kits include one complete set of Standard Components to allow you to refurbish the toolholder.

See page GP 14 for ceramic and carbide inserts.

** RCGN can be used in place of RPGN.

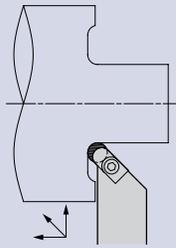
NOTE: Use carbide inserts RCGT and RPGT with optional insert screw for finishing.

10 Business Days or Less

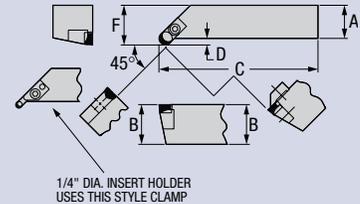
Stocked Standard

CRGPR-V/CRGPL-V

45° Grooving/Profiling Toolholder
Round V-Bottom Insert; Replaceable Nest



Right-Hand
Toolholder Shown



Part Number		Gage	Stock		D.O.C.	Dimensions (inches)				Standard Components				*Tune-Up Kit Includes All Std. Components
Right	Left	Insert	R	L	D	A	B	C	F	Nest	Nest Screw	Clamp	Clamp Screw	
CRGPR-162V	-	●	○		0.250	1.000	1.000	6	1.250	411108	#3-48 x 3/8 B.H.C.S.	412131-250GC	1/4-20 x 3/4 S.H.C.S.	TK-00530
-	CRGPL-162V			○		0.250	1.000	1.000	6	1.250	411108	#3-48 x 3/8 B.H.C.S.	412132-250GC	1/4-20 x 3/4 S.H.C.S.
CRGPR-202V	-	●	●		0.250	1.250	1.250	6	1.500	411108	#3-48 x 3/8 B.H.C.S.	412131-250GC	1/4-20 x 3/4 S.H.C.S.	TK-00530
-	CRGPL-202V			●		0.250	1.250	1.250	6	1.500	411108	#3-48 x 3/8 B.H.C.S.	412132-250GC	1/4-20 x 3/4 S.H.C.S.
CRGPR-242V	-	●	●		0.250	1.500	1.500	8	1.750	411108	#3-48 x 3/8 B.H.C.S.	412131-250GC	1/4-20 x 3/4 S.H.C.S.	TK-00530
-	CRGPL-242V			○		0.250	1.500	1.500	8	1.750	411108	#3-48 x 3/8 B.H.C.S.	412132-250GC	1/4-20 x 3/4 S.H.C.S.
CRGPR-163V	CRGPL-163V	●	○	●	0.250	1.000	1.000	6	1.250	414009	#6-32 x 1/2 B.H.C.S.	308063	#10-32 x 1/2 S.H.C.S.	TK-00528
CRGPR-203V	CRGPL-203V			○	●	0.250	1.250	1.250	6	1.500	414009	#6-32 x 1/2 B.H.C.S.	308063	#10-32 x 1/2 S.H.C.S.
CRGPR-243V	CRGPL-243V		○	●	0.250	1.500	1.500	8	1.750	414009	#6-32 x 1/2 B.H.C.S.	308063	#10-32 x 1/2 S.H.C.S.	TK-00528
CRGPR-164V	CRGPL-164V	●	○	○	0.250	1.000	1.000	6	1.250	414008	#10-32 x 5/8 B.H.C.S.	308136	1/4-20 x 5/8 S.H.C.S.	TK-00529
CRGPR-204V	CRGPL-204V			○	○	0.250	1.250	1.250	6	1.500	414008	#10-32 x 5/8 B.H.C.S.	308136	1/4-20 x 5/8 S.H.C.S.
CRGPR-244V	CRGPL-244V		○	○	0.250	1.500	1.500	8	1.750	414008	#10-32 x 5/8 B.H.C.S.	308136	1/4-20 x 5/8 S.H.C.S.	TK-00529

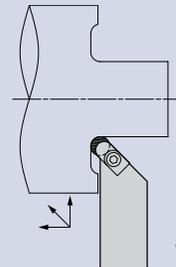
* Tune-Up Kits include one complete set of Standard Components to allow you to refurbish the toolholder.

See page GP 14 for ceramic and carbide inserts.

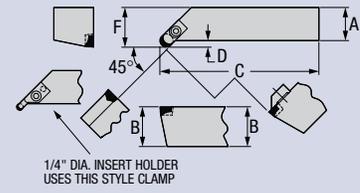
** RCGN can be used in place of RPGN.

CRGPR-VM/CRGPL-VM

45° Grooving/Profiling Toolholder
Round V-Bottom Insert; Milled Nest



Right-Hand
Toolholder Shown



Part Number		Gage	Stock		D.O.C.	Dimensions (inches)				Standard Components		*Tune-Up Kit Includes All Standard Components	Optional Component
Right	Left	Insert	R	L	D	A	B	C	F	Clamp	Clamp Screw		Insert Screw
CRGPR-162VM	-	●	●		0.250	1.000	1.000	6	1.250	412131-250GC	1/4-20 x 3/4 S.H.C.S.	TK-00795	PT-542T
-	CRGPL-162VM			○		0.250	1.000	1.000	6	1.250	412132-250GC	1/4-20 x 3/4 S.H.C.S.	TK-00836
CRGPR-202VM	-	●	○		0.250	1.250	1.250	6	1.500	412131-250GC	1/4-20 x 3/4 S.H.C.S.	TK-00795	PT-542T
-	CRGPL-202VM			○		0.250	1.250	1.250	6	1.500	412132-250GC	1/4-20 x 3/4 S.H.C.S.	TK-00836
CRGPR-242VM	-	●	○		0.250	1.500	1.500	8	1.750	412131-250GC	1/4-20 x 3/4 S.H.C.S.	TK-00795	PT-542T
-	CRGPL-242VM			○		0.250	1.500	1.500	8	1.750	412132-250GC	1/4-20 x 3/4 S.H.C.S.	TK-00836
CRGPR-163VM	CRGPL-163VM	●	○	○	0.250	1.000	1.000	6	1.250	308063	#10-32 x 1/2 S.H.C.S.	TK-00764	PT-545T
CRGPR-203VM	CRGPL-203VM			○	○	0.250	1.250	1.250	6	1.500	308063	#10-32 x 1/2 S.H.C.S.	TK-00764
CRGPR-243VM	CRGPL-243VM		○	○	0.250	1.500	1.500	8	1.750	308063	#10-32 x 1/2 S.H.C.S.	TK-00764	PT-545T
CRGPR-164VM	CRGPL-164VM	●	○	○	0.250	1.000	1.000	6	1.250	308136	1/4-20 x 3/4 S.H.C.S.	TK-00763	CO-5018
CRGPR-204VM	CRGPL-204VM			○	○	0.250	1.250	1.250	6	1.500	308136	1/4-20 x 3/4 S.H.C.S.	TK-00763
CRGPR-244VM	CRGPL-244VM		○	○	0.250	1.500	1.500	8	1.750	308136	1/4-20 x 3/4 S.H.C.S.	TK-00763	CO-5018

* Tune-Up Kits include one complete set of Standard Components to allow you to refurbish the toolholder.

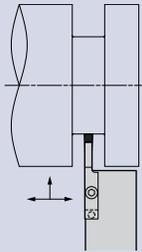
See page GP 14 for ceramic and carbide inserts.

** RCGN can be used in place of RPGN.

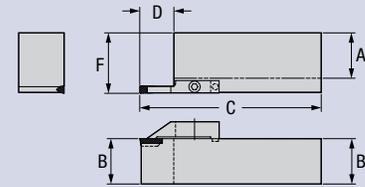
NOTE: Use carbide inserts RCGT and RPGT with optional insert screw for finishing.

Grooving/Profiling/ Cut-Off Toolholder

Deep D.O.C. Series



Right-Hand
Toolholder Shown



Part Number		Groove Width	Stock		D.O.C.	Dimensions (inches)				Standard Components		Tune-Up Kit Includes Standard Clamp and *Clamp Screw	Optional Components	
Right	Left		R	L		D	A	B	C	F	Insert		Clamp	Insert
427635-094VGS	-	0.094	●		0.750	1.000	1.000	6	1.500	WGC-4094	427651-094GC	TK-00881	COS-4094-0	429524-094GC
-	427636-094VGS	0.094		○	0.750	1.000	1.000	6	1.500		427652-094GC	TK-00882		429525-094GC
427637-094VGS	-	0.094	○		0.750	1.250	1.250	6	1.750	WG-4094	427651-094GC	TK-00881	COS-4094-4L	429524-094GC
-	427638-094VGS	0.094		○	0.750	1.250	1.250	6	1.750		427652-094GC	TK-00882		429525-094GC
427639-094VGS	-	0.094	○		0.750	1.500	1.500	8	2.000	WG-4094	427651-094GC	TK-00881	COS-4094-4R	429524-094GC
-	427640-094VGS	0.094		○	0.750	1.500	1.500	8	2.000		427652-094GC	TK-00882		429525-094GC
411173-125VGS	-	0.125	●		0.750	1.000	1.000	6	1.500	WGC-4125	411966-125GC	TK-00592	GTS-4125	429512-125GC
-	411961-125VGS	0.125		●	0.750	1.000	1.000	6	1.500		411967-125GC	TK-00596		429513-125GC
411250-125VGS	-	0.125	●		0.750	1.250	1.250	6	1.750	WG-4125	411966-125GC	TK-00592	COS-4125-0	429512-125GC
-	411251-125VGS	0.125		●	0.750	1.250	1.250	6	1.750		411967-125GC	TK-00596		429513-125GC
411962-125VGS	-	0.125	○		0.750	1.500	1.500	8	2.000	GTS-4125-2	411966-125GC	TK-00592	COS-4125-4R	429512-125GC
-	411963-125VGS	0.125		○	0.750	1.500	1.500	8	2.000		411967-125GC	TK-00596		429513-125GC
411964-156VGS	-	0.156	●		0.750	1.000	1.000	6	1.500	WGC-4156	411968-156GC	TK-00580	GTS-4156	436373-156GC
-	411965-156VGS	0.156		●	0.750	1.000	1.000	6	1.500		411969-156GC	TK-00597		436374-156GC
411256-156VGS	-	0.156	●		0.750	1.250	1.250	6	1.750	WG-4156	411968-156GC	TK-00580	GTS-4156	436373-156GC
-	411257-156VGS	0.156		●	0.750	1.250	1.250	6	1.750		411969-156GC	TK-00597		436374-156GC
411258-156VGS	-	0.156	○		0.750	1.500	1.500	8	2.000	WG-4156	411968-156GC	TK-00580	GTS-4156	436373-156GC
-	411259-156VGS	0.156		○	0.750	1.500	1.500	8	2.000		411969-156GC	TK-00597		436374-156GC
411970-187VGS	-	0.187	●		0.750	1.000	1.000	6	1.500	WGC-4187	411977-187GC	TK-00581	GTS-4187	429518-187GC
-	411178-187VGS	0.187		●	0.750	1.000	1.000	6	1.500		411978-187GC	TK-00593		429519-187GC
411262-187VGS	-	0.187	●		0.750	1.250	1.250	6	1.750	WG-4187	411977-187GC	TK-00581	COS-4187-0	429518-187GC
-	411263-187VGS	0.187		●	0.750	1.250	1.250	6	1.750		411978-187GC	TK-00593		429519-187GC
411971-187VGS	-	0.187	●		0.750	1.500	1.500	8	2.000	GTS-4187-1	411977-187GC	TK-00581	COS-4187-4L	429518-187GC
-	411972-187VGS	0.187		●	0.750	1.500	1.500	8	2.000		411978-187GC	TK-00593		429519-187GC
411179-218VGS	-	0.218	●		1.125	1.000	1.000	6	1.500	WGC-6218	411979-218GC	TK-00582	GTS-4187	-
-	411180-218VGS	0.218		○	1.125	1.000	1.000	6	1.500		411130-218GC	TK-00583		-
411268-218VGS	-	0.218	○		1.125	1.250	1.250	6	1.750	WG-6218	411979-218GC	TK-00582	GTS-4187	-
-	411269-218VGS	0.218		○	1.125	1.250	1.250	6	1.750		411130-218GC	TK-00583		-
411270-218VGS	-	0.218	○		1.125	1.500	1.500	8	2.000	WG-6218	411979-218GC	TK-00582	GTS-4187	-
-	411271-218VGS	0.218		○	1.125	1.500	1.500	8	2.000		411130-218GC	TK-00583		-
411973-250VGS	-	0.250	●		1.125	1.000	1.000	6	1.500	WGC-6250	411980-250GC	TK-00617	GTS-4187	-
-	411974-250VGS	0.250		●	1.125	1.000	1.000	6	1.500		411981-250GC	TK-00598		-
411975-250VGS	-	0.250	●		1.125	1.250	1.250	6	1.750	WG-6250	411980-250GC	TK-00617	GTS-4187	-
-	411275-250VGS	0.250		●	1.125	1.250	1.250	6	1.750		411981-250GC	TK-00598		-
411276-250VGS	-	0.250	●		1.125	1.500	1.500	8	2.000	GTS-6250-1	411980-250GC	TK-00617	GTS-4187	-
-	411277-250VGS	0.250		●	1.125	1.500	1.500	8	2.000		411981-250GC	TK-00598		-
411183-281VGS	-	0.281	○		1.125	1.000	1.000	6	1.500	WGC-6281	411133-281GC	TK-00584	GTS-4187	-
-	411184-281VGS	0.281		○	1.125	1.000	1.000	6	1.500		411134-281GC	TK-00585		-
411280-281VGS	-	0.281	○		1.125	1.250	1.250	6	1.750	WG-6281	411133-281GC	TK-00584	GTS-4187	-
-	411281-281VGS	0.281		○	1.125	1.250	1.250	6	1.750		411134-281GC	TK-00585		-
411282-281VGS	-	0.281	○		1.125	1.500	1.500	8	2.000	WG-6281	411133-281GC	TK-00584	GTS-4187	-
-	411283-281VGS	0.281		○	1.125	1.500	1.500	8	2.000		411134-281GC	TK-00585		-

* All toolholders include standard clamp and 1/4-20 x 1 SHCS.

Continued on next page.

GTS is Greenleaf's groove/turn system insert with chip control. Page GP 09.

COS is Greenleaf's cut-off system insert. Page GP 08.

WG is Greenleaf flat-top groover with an 11° nose clearance. Pages GP 10 and GP 11.

WGC is Greenleaf's flat-top groover with a 6° nose clearance. Pages GP 12 and GP 13.

10 Business Days or Less

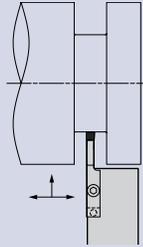
Stocked Standard

Greenleaf Sales
Phone: 814-763-2915 • 800-458-1850 • Fax: 814-763-4423
sales@greenleafcorporation.com • www.greenleafglobalsupport.com

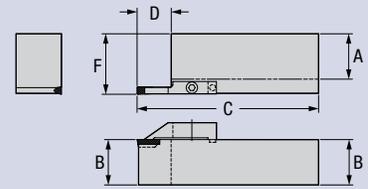


Grooving/Profiling Toolholder

Deep D.O.C. Series (Continued)



Right-Hand Toolholder Shown



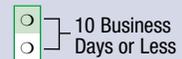
Part Number		Groove Width	Stock		D.O.C.		Dimensions (inches)				Standard Components		Tune-Up Kit Includes Standard Clamp and *Clamp Screw	Optional Components	
Right	Left		R	L	D	A	B	C	F	Insert	Clamp	Insert		Clamp	
411982-312VGS	-	0.312	○		1.500	1.000	1.000	6	1.500	WGC-8312	411985-312GC	TK-00586	-	-	
-	411186-312VGS	0.312		○	1.500	1.000	1.000	6	1.500		411136-312GC	TK-00587	-	-	
411286-312VGS	-	0.312	○		1.500	1.250	1.250	6	1.750	WG-8312	411985-312GC	TK-00586	-	-	
-	411287-312VGS	0.312		●	1.500	1.250	1.250	6	1.750		411136-312GC	TK-00587	-	-	
411288-312VGS	-	0.312	○		1.500	1.500	1.500	8	2.000	WG-8312	411985-312GC	TK-00586	-	-	
-	411289-312VGS	0.312		○	1.500	1.500	1.500	8	2.000		411136-312GC	TK-00587	-	-	
411187-344VGS	-	0.344	○		1.500	1.000	1.000	6	1.500	WGC-8344	411137-344GC	TK-00594	-	-	
-	411188-344VGS	0.344		○	1.500	1.000	1.000	6	1.500		411138-344GC	TK-00588	-	-	
411292-344VGS	-	0.344		●	1.500	1.250	1.250	6	1.750	WG-8344	411137-344GC	TK-00594	-	-	
-	411293-344VGS	0.344		○	1.500	1.250	1.250	6	1.750		411138-344GC	TK-00588	-	-	
411294-344VGS	-	0.344	○		1.500	1.500	1.500	8	2.000	WG-8344	411137-344GC	TK-00594	-	-	
-	411295-344VGS	0.344		○	1.500	1.500	1.500	8	2.000		411138-344GC	TK-00588	-	-	
411189-375VGS	-	0.375	○		1.500	1.000	1.000	6	1.500	WGC-8375	411986-375GC	TK-00595	-	-	
-	411190-375VGS	0.375		○	1.500	1.000	1.000	6	1.500		411987-375GC	TK-00589	-	-	
411983-375VGS	-	0.375		●	1.500	1.250	1.250	6	1.750	WGC-8375	411986-375GC	TK-00595	-	-	
-	411984-375VGS	0.375		●	1.500	1.250	1.250	6	1.750		411987-375GC	TK-00589	-	-	
411300-375VGS	-	0.375	○		1.500	1.500	1.500	8	2.000	WG-8375	411986-375GC	TK-00595	-	-	
-	411301-375VGS	0.375		○	1.500	1.500	1.500	8	2.000		411987-375GC	TK-00589	-	-	

* All toolholders include standard clamp and 1/4-20 x 1 SHCS.

GTS is Greenleaf's groove/turn system insert with chip control. Page GP 09.
 COS is Greenleaf's cut-off system insert. Page GP 08.
 WG is Greenleaf flat-top groover with an 11° nose clearance. Pages GP 10 and GP 11.
 WGC is Greenleaf's flat-top groover with a 6° nose clearance. Pages GP 12 and GP 13.

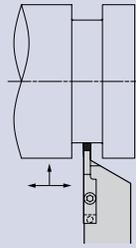
Greenleaf Sales

Phone: 814-763-2915 • 800-458-1850 • Fax: 814-763-4423
 sales@greenleafcorporation.com • www.greenleafglobalsupport.com

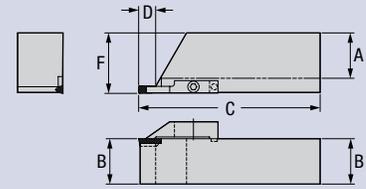


Grooving/Profiling/ Cut-Off Toolholder

Shallow D.O.C. Series



Right-Hand
Toolholder Shown



Part Number		Groove Width	Stock		D.O.C.	Dimensions (inches)				Standard Components		Tune-Up Kit Includes Standard Clamp and *Clamp Screw	Optional Components	
Right	Left		R	L		D	A	B	C	F	Insert		Clamp	Insert
427641-094VGS	-	0.094	●		0.375	1.000	1.000	6	1.500	WG-4094	427651-094GC	TK-00881		429524-094GC
-	427642-094VGS	0.094		●	0.375	1.000	1.000	6	1.500		427652-094GC	TK-00882	COS-4094-0	429525-094GC
427643-094VGS	-	0.094	○		0.375	1.250	1.250	6	1.750	WGC-4094	427651-094GC	TK-00881		429524-094GC
-	427644-094VGS	0.094		○	0.375	1.250	1.250	6	1.750		427652-094GC	TK-00882	COS-4094-4L	429525-094GC
427645-094VGS	-	0.094	○		0.375	1.500	1.500	8	2.000		427651-094GC	TK-00881	COS-4094-4R	429524-094GC
-	427646-094VGS	0.094		○	0.375	1.500	1.500	8	2.000		427652-094GC	TK-00882		429525-094GC
415316-125VGS	-	0.125	●		0.375	1.000	1.000	6	1.500	GTS-4125-1	411966-125GC	TK-00592		429512-125GC
-	415317-125VGS	0.125		●	0.375	1.000	1.000	6	1.500		411967-125GC	TK-00596	GTS-4125	429513-125GC
415318-125VGS	-	0.125	●		0.375	1.250	1.250	6	1.750	GTS-4125-2	411966-125GC	TK-00592	COS-4125-0	429512-125GC
-	415319-125VGS	0.125		●	0.375	1.250	1.250	6	1.750		411967-125GC	TK-00596	COS-4125-4L	429513-125GC
415320-125VGS	-	0.125	○		0.375	1.500	1.500	8	2.000	WGC-4125	411966-125GC	TK-00592	COS-4125-4R	429512-125GC
-	415321-125VGS	0.125		○	0.375	1.500	1.500	8	2.000		411967-125GC	TK-00596		429513-125GC
415324-156VGS	-	0.156	○		0.375	1.000	1.000	6	1.500	WG-4156	411968-156GC	TK-00580		436373-156GC
-	415325-156VGS	0.156		○	0.375	1.000	1.000	6	1.500		411969-156GC	TK-00597		436374-156GC
415326-156VGS	-	0.156	●		0.375	1.250	1.250	6	1.750	WGC-4156	411968-156GC	TK-00580	GTS-4156	436373-156GC
-	415327-156VGS	0.156		○	0.375	1.250	1.250	6	1.750		411969-156GC	TK-00597		436374-156GC
415328-156VGS	-	0.156	○		0.375	1.500	1.500	8	2.000		411968-156GC	TK-00580		436373-156GC
-	415329-156VGS	0.156		○	0.375	1.500	1.500	8	2.000		411969-156GC	TK-00597		436374-156GC
415332-187VGS	-	0.187	●		0.375	1.000	1.000	6	1.500	GTS-4187-1	411977-187GC	TK-00581		429518-187GC
-	415333-187VGS	0.187		●	0.375	1.000	1.000	6	1.500		411978-187GC	TK-00593	GTS-4187	429519-187GC
415334-187VGS	-	0.187	○		0.375	1.250	1.250	6	1.750	GTS-4187-2	411977-187GC	TK-00581	COS-4187-0	429518-187GC
-	415335-187VGS	0.187		●	0.375	1.250	1.250	6	1.750		411978-187GC	TK-00593	COS-4187-4L	429519-187GC
415336-187VGS	-	0.187	○		0.375	1.500	1.500	8	2.000	WGC-4187	411977-187GC	TK-00581	COS-4187-4R	429518-187GC
-	415337-187VGS	0.187		○	0.375	1.500	1.500	8	2.000		411978-187GC	TK-00593		429519-187GC
415340-218VGS	-	0.218	○		0.562	1.000	1.000	6	1.500	WG-6218	411979-218GC	TK-00582		-
-	415341-218VGS	0.218		○	0.562	1.000	1.000	6	1.500		411130-218GC	TK-00583		-
415342-218VGS	-	0.218	○		0.562	1.250	1.250	6	1.750	WGC-6218	411979-218GC	TK-00582		-
-	415343-218VGS	0.218		○	0.562	1.250	1.250	6	1.750		411130-218GC	TK-00583		-
415344-218VGS	-	0.218	○		0.562	1.500	1.500	8	2.000		411979-218GC	TK-00582		-
-	415345-218VGS	0.218		○	0.562	1.500	1.500	8	2.000		411130-218GC	TK-00583		-
415348-250VGS	-	0.250	●		0.562	1.000	1.000	6	1.500	GTS-6250	411980-250GC	TK-00617		-
-	415349-250VGS	0.250		●	0.562	1.000	1.000	6	1.500		411981-250GC	TK-00598		-
415350-250VGS	-	0.250	●		0.562	1.250	1.250	6	1.750	GTS-6250-1	411980-250GC	TK-00617		-
-	415351-250VGS	0.250		●	0.562	1.250	1.250	6	1.750		GTS-6250-2	411981-250GC	TK-00598	
415352-250VGS	-	0.250	○		0.562	1.500	1.500	8	2.000	WG-6250	411980-250GC	TK-00617		-
-	415353-250VGS	0.250		○	0.562	1.500	1.500	8	2.000		WGC-6250	411981-250GC	TK-00598	
415356-281VGS	-	0.281	○		0.562	1.000	1.000	6	1.500	WG-6281	411133-281GC	TK-00584		-
-	415357-281VGS	0.281		○	0.562	1.000	1.000	6	1.500		411134-281GC	TK-00585		-
415358-281VGS	-	0.281	○		0.562	1.250	1.250	6	1.750	WGC-6281	411133-281GC	TK-00584		-
-	415359-281VGS	0.281		○	0.562	1.250	1.250	6	1.750		411134-281GC	TK-00585		-
415360-281VGS	-	0.281	○		0.562	1.500	1.500	8	2.000		411133-281GC	TK-00584		-
-	415361-281VGS	0.281		○	0.562	1.500	1.500	8	2.000		411134-281GC	TK-00585		-

* All toolholders include standard clamp and 1/4-20 x 1 SHCS.

Continued on next page.

GTS is Greenleaf's groove/turn system insert with chip control. Page GP 09.

COS is Greenleaf's cut-off system insert. Page GP 08.

WG is Greenleaf flat-top groover with an 11° nose clearance. Pages GP 10 and GP 11.

WGC is Greenleaf's flat-top groover with a 6° nose clearance. Pages GP 12 and GP 13.

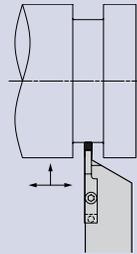
10 Business Days or Less

Stocked Standard

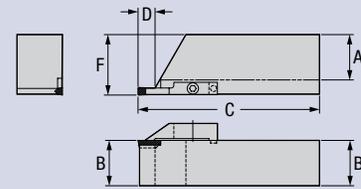
Greenleaf Sales
Phone: 814-763-2915 • 800-458-1850 • Fax: 814-763-4423
sales@greenleafcorporation.com • www.greenleafglobalsupport.com

Grooving/Profiling Cut-Off Toolholder

Shallow D.O.C. Series (Continued)



Right-Hand
Toolholder Shown



Part Number		Groove Width	Stock		D.O.C. D	Dimensions (inches)				Standard Components		Tune-Up Kit Includes Standard Clamp and *Clamp Screw	Optional Components	
Right	Left		R	L		A	B	C	F	Insert	Clamp		Insert	Clamp
415364-312VGS	-	0.312	○		0.750	1.000	1.000	6	1.500	WG-8312	411985-312GC	TK-00586	-	-
-	415365-312VGS	0.312		○	0.750	1.000	1.000	6	1.500		411136-312GC	TK-00587	-	-
415366-312VGS	-	0.312	○		0.750	1.250	1.250	6	1.750	WGC-8312	411985-312GC	TK-00586	-	-
-	415367-312VGS	0.312		○	0.750	1.250	1.250	6	1.750		411136-312GC	TK-00587	-	-
415368-312VGS	-	0.312	○		0.750	1.500	1.500	8	2.000	WG-8344	411985-312GC	TK-00586	-	-
-	415369-312VGS	0.312		○	0.750	1.500	1.500	8	2.000		411136-312GC	TK-00587	-	-
415372-344VGS	-	0.344	○		0.750	1.000	1.000	6	1.500	WG-8344	411137-344GC	TK-00594	-	-
-	415373-344VGS	0.344		○	0.750	1.000	1.000	6	1.500		411138-344GC	TK-00588	-	-
415374-344VGS	-	0.344	○		0.750	1.250	1.250	6	1.750	WGC-8344	411137-344GC	TK-00594	-	-
-	415375-344VGS	0.344		○	0.750	1.250	1.250	6	1.750		411138-344GC	TK-00588	-	-
415376-344VGS	-	0.344	○		0.750	1.500	1.500	8	2.000	WG-8375	411137-344GC	TK-00594	-	-
-	415377-344VGS	0.344		○	0.750	1.500	1.500	8	2.000		411138-344GC	TK-00588	-	-
415380-375VGS	-	0.375	○		0.750	1.000	1.000	6	1.500	WG-8375	411986-375GC	TK-00595	-	-
-	415381-375VGS	0.375		○	0.750	1.000	1.000	6	1.500		411987-375GC	TK-00589	-	-
415382-375VGS	-	0.375	○		0.750	1.250	1.250	6	1.750	WG-8375	411986-375GC	TK-00595	-	-
-	415383-375VGS	0.375		○	0.750	1.250	1.250	6	1.750		411987-375GC	TK-00589	-	-
415384-375VGS	-	0.375	○		0.750	1.500	1.500	8	2.000	WG-8375	411986-375GC	TK-00595	-	-
-	415385-375VGS	0.375		○	0.750	1.500	1.500	8	2.000		411987-375GC	TK-00589	-	-

* All toolholders include standard clamp and 1/4-20 x 1 SHCS.

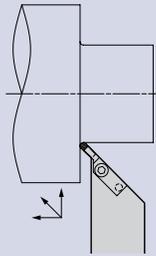
GTS is Greenleaf's groove/turn system insert with chip control. Page GP 09.

COS is Greenleaf's cut-off system insert. Page GP 08.

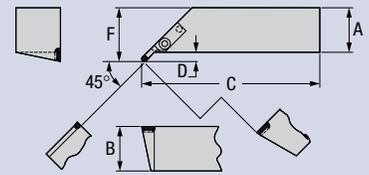
WG is Greenleaf flat-top groover with an 11° nose clearance. Pages GP 10 and GP 11.

WGC is Greenleaf's flat-top groover with a 6° nose clearance. Pages GP 12 and GP 13.

45° Grooving/Profiling Toolholder



Right-Hand Toolholder Shown



Part Number		Gage	Stock		D.O.C.	Dimensions (inches)				Standard Components	Tune-Up Kit Includes Standard Clamp and *Clamp Screw	Optional Components	
Right	Left	Insert	R	L	D	A	B	C	F	Clamp		Insert	Clamp
415293-45VGS -	-	GTS-4125-1			0.313	1.000	1.000	6.020	1.332	415305-GC 415306-GC	TK-00618 TK-00709	GTS-4125	429514-GC 429515-GC
		GTS-4125-2			0.313	1.000	1.000	6.013	1.325				
		WG-4125			0.313	1.000	1.000	6.000	1.312				
		WG-4125-1			0.313	1.000	1.000	6.020	1.332				
		WG-4125-2	●		0.313	1.000	1.000	6.013	1.325				
		WG-4156		●	0.313	1.000	1.000	6.005	1.317				
		WG-4156-1			0.313	1.000	1.000	6.031	1.343				
WG-4156-2			0.313	1.000	1.000	6.024	1.336						
415295-45VGS -	-	GTS-4125-1			0.313	1.250	1.250	6.020	1.582	415305-GC 415306-GC	TK-00618 TK-00709	GTS-4125	429514-GC 429515-GC
		GTS-4125-2			0.313	1.250	1.250	6.013	1.575				
		WG-4125			0.313	1.250	1.250	6.000	1.562				
		WG-4125-1			0.313	1.250	1.250	6.020	1.582				
		WG-4125-2	●		0.313	1.250	1.250	6.013	1.575				
		WG-4156		●	0.313	1.250	1.250	6.005	1.567				
		WG-4156-1			0.313	1.250	1.250	6.031	1.593				
WG-4156-2			0.313	1.250	1.250	6.024	1.586						
415297-45VGS -	-	GTS-4125-1			0.313	1.500	1.500	8.020	1.832	415305-GC 415306-GC	TK-00618 TK-00709	GTS-4125	429514-GC 429515-GC
		GTS-4125-2			0.313	1.500	1.500	8.013	1.825				
		WG-4125			0.313	1.500	1.500	8.000	1.812				
		WG-4125-1			0.313	1.500	1.500	8.020	1.832				
		WG-4125-2	○		0.313	1.500	1.500	8.013	1.825				
		WG-4156		○	0.313	1.500	1.500	8.005	1.817				
		WG-4156-1			0.313	1.500	1.500	8.031	1.843				
WG-4156-2			0.313	1.500	1.500	8.024	1.836						
415299-45VGS -	-	GTS-4187-1			0.313	1.000	1.000	6.033	1.345	415307-GC 415308-GC	TK-00619 TK-00708	GTS-4187	429520-GC 429521-GC
		GTS-4187-2			0.313	1.000	1.000	6.026	1.338				
		WG-4187			0.313	1.000	1.000	6.000	1.312				
		WG-4187-1	○		0.313	1.000	1.000	6.033	1.345				
		WG-4187-2		○	0.313	1.000	1.000	6.026	1.338				
415301-45VGS -	-	GTS-4187-1			0.313	1.250	1.250	6.033	1.595	415307-GC 415308-GC	TK-00619 TK-00708	GTS-4187	429520-GC 429521-GC
		GTS-4187-2			0.313	1.250	1.250	6.026	1.588				
		WG-4187			0.313	1.250	1.250	6.000	1.562				
		WG-4187-1	○		0.313	1.250	1.250	6.033	1.595				
		WG-4187-2		○	0.313	1.250	1.250	6.026	1.588				
415303-45VGS -	-	GTS-4187-1			0.313	1.500	1.500	8.033	1.845	415307-GC 415308-GC	TK-00619 TK-00708	GTS-4187	429520-GC 429521-GC
		GTS-4187-2			0.313	1.500	1.500	8.026	1.838				
		WG-4187			0.313	1.500	1.500	8.000	1.812				
		WG-4187-1	○		0.313	1.500	1.500	8.033	1.845				
		WG-4187-2		○	0.313	1.500	1.500	8.026	1.838				

* All toolholders include standard clamp and 1/4-20 x 1 SHCS.

GTS is Greenleaf's groove/turn system insert with chip control. Page GP 09.

COS is Greenleaf's cut-off system insert. Page GP 08.

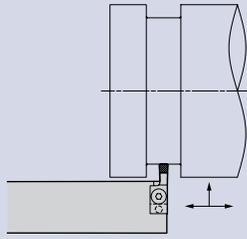
WG is Greenleaf flat-top groover with an 11° nose clearance. Pages GP 10 and GP 11.

WGC is Greenleaf's flat-top groover with a 6° nose clearance. Pages GP 12 and GP 13.

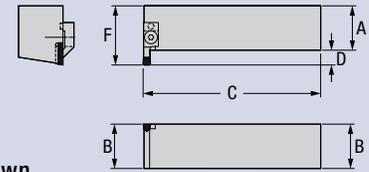
10 Business Days or Less

Stocked Standard

90° Grooving/Profiling Toolholder



Right-Hand Toolholder Shown



Part Number		Groove Width	Stock		D.O.C.		Dimensions (inches)				Standard Components		Tune-Up Kit Includes Standard Clamp and *Clamp Screw	Optional Components		
Right	Left		R	L	D	A	B	C	F	Insert	Clamp	Insert		Clamp		
411693-125VGS	-	0.125	●		0.375	1.000	1.000	6	1.375							
-	411694-125VGS	0.125		●	0.375	1.000	1.000	6	1.375	GTS-4125-1	411766-125GC	TK-00600	GTS-4125	429517-125GC		
411695-125VGS	-	0.125	○		0.375	1.250	1.250	6	1.625	GTS-4125-2	411765-125GC	TK-00599	COS-4125-0	429516-125GC		
-	411696-125VGS	0.125		○	0.375	1.250	1.250	6	1.625	WG-4125	411766-125GC	TK-00600	COS-4125-4R	429517-125GC		
411697-125VGS	-	0.125	○		0.375	1.500	1.500	8	1.875	WGC-4125	411765-125GC	TK-00599	COS-4125-4L	429516-125GC		
-	411698-125VGS	0.125		○	0.375	1.500	1.500	8	1.875		411766-125GC	TK-00600		429517-125GC		
411701-156VGS	-	0.156	○		0.375	1.000	1.000	6	1.375		411767-156GC	TK-00601	-	-		
-	411702-156VGS	0.156		○	0.375	1.000	1.000	6	1.375	WG-4156	411768-156GC	TK-00602	-	-		
411703-156VGS	-	0.156	○		0.375	1.250	1.250	6	1.625		411767-156GC	TK-00601	-	-		
-	411704-156VGS	0.156		○	0.375	1.250	1.250	6	1.625	WGC-4156	411768-156GC	TK-00602	-	-		
411705-156VGS	-	0.156	○		0.375	1.500	1.500	8	1.875		411767-156GC	TK-00601	-	-		
-	411706-156VGS	0.156		○	0.375	1.500	1.500	8	1.875		411768-156GC	TK-00602	-	-		
411709-187VGS	-	0.187	○		0.375	1.000	1.000	6	1.375		411769-187GC	TK-00603		429522-187GC		
-	411710-187VGS	0.187		○	0.375	1.000	1.000	6	1.375	GTS-4187-1	411770-187GC	TK-00604	GTS-4187	429523-187GC		
411711-187VGS	-	0.187	○		0.375	1.250	1.250	6	1.625	GTS-4187-2	411769-187GC	TK-00603	COS-4187-0	429522-187GC		
-	411712-187VGS	0.187		○	0.375	1.250	1.250	6	1.625	WG-4187	411770-187GC	TK-00604	COS-4187-4R	429523-187GC		
411713-187VGS	-	0.187	○		0.375	1.500	1.500	8	1.875	WGC-4187	411769-187GC	TK-00603	COS-4187-4L	429522-187GC		
-	411714-187VGS	0.187		○	0.375	1.500	1.500	8	1.875		411770-187GC	TK-00604		429523-187GC		
411717-218VGS	-	0.218	○		0.500	1.000	1.000	6	1.500		411771-218GC	TK-00605	-	-		
-	411718-218VGS	0.218		○	0.500	1.000	1.000	6	1.500	WG-6218	411772-218GC	TK-00606	-	-		
411719-218VGS	-	0.218	○		0.500	1.250	1.250	6	1.750		411771-218GC	TK-00605	-	-		
-	411720-218VGS	0.218		○	0.500	1.250	1.250	6	1.750	WGC-6218	411772-218GC	TK-00606	-	-		
411721-218VGS	-	0.218	○		0.500	1.500	1.500	8	2.000		411771-218GC	TK-00605	-	-		
-	411722-218VGS	0.218		○	0.500	1.500	1.500	8	2.000		411772-218GC	TK-00606	-	-		
411725-250VGS	-	0.250	○		0.500	1.000	1.000	6	1.500		411773-250GC	TK-00608	-	-		
-	411726-250VGS	0.250		○	0.500	1.000	1.000	6	1.500	GTS-6250	411774-250GC	TK-00607	-	-		
411727-250VGS	-	0.250	●		0.500	1.250	1.250	6	1.750	GTS-6250-1	411773-250GC	TK-00608	-	-		
-	411728-250VGS	0.250		●	0.500	1.250	1.250	6	1.750	GTS-6250-2	411774-250GC	TK-00607	-	-		
411729-250VGS	-	0.250	○		0.500	1.500	1.500	8	2.000	WG-6250	411773-250GC	TK-00608	-	-		
-	411730-250VGS	0.250		○	0.500	1.500	1.500	8	2.000	WGC-6250	411774-250GC	TK-00607	-	-		
411733-281VGS	-	0.281	○		0.500	1.000	1.000	6	1.500		411775-281GC	TK-00609	-	-		
-	411734-281VGS	0.281		○	0.500	1.000	1.000	6	1.500	WG-6281	411776-281GC	TK-00610	-	-		
411735-281VGS	-	0.281	○		0.500	1.250	1.250	6	1.750		411775-281GC	TK-00609	-	-		
-	411736-281VGS	0.281		○	0.500	1.250	1.250	6	1.750	WGC-6281	411776-281GC	TK-00610	-	-		
411737-281VGS	-	0.281	○		0.500	1.500	1.500	8	2.000		411775-281GC	TK-00609	-	-		
-	411738-281VGS	0.281		○	0.500	1.500	1.500	8	2.000		411776-281GC	TK-00610	-	-		
411743-312VGS	-	0.312	○		0.625	1.250	1.250	6	1.875		411777-312GC	TK-00611	-	-		
-	411744-312VGS	0.312		○	0.625	1.250	1.250	6	1.875	WG-8312	411778-312GC	TK-00612	-	-		
411745-312VGS	-	0.312	○		0.625	1.500	1.500	8	2.125	WGC-8312	411777-312GC	TK-00611	-	-		
-	411746-312VGS	0.312		○	0.625	1.500	1.500	8	2.125		411778-312GC	TK-00612	-	-		

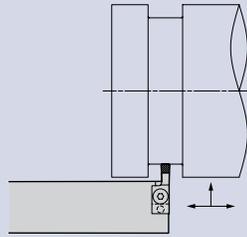
* All toolholders include standard clamp and 1/4-20 x 3/4 BHCS.

Continued on next page.

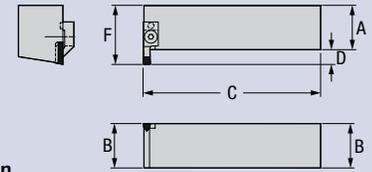
GTS is Greenleaf's groove/turn system insert with chip control. Page GP 09.
 COS is Greenleaf's cut-off system insert. Page GP 08.
 WG is Greenleaf flat-top groover with an 11° nose clearance. Pages GP 10 and GP 11.
 WGC is Greenleaf's flat-top groover with a 6° nose clearance. Pages GP 12 and GP 13.

90° Grooving/Profiling Toolholder

(Continued)



Right-Hand Toolholder Shown



Part Number		Groove Width	Stock		D.O.C.	Dimensions (inches)				Standard Components		Tune-Up Kit Includes Standard Clamp and *Clamp Screw	Optional Components	
Right	Left		R	L		D	A	B	C	F	Insert		Clamp	Insert
411751-344VGS	-	0.344	○		0.625	1.250	1.250	6	1.875	WG-8344	411779-344GC	TK-00613	-	-
-	411752-344VGS	0.344		○	0.625	1.250	1.250	6	1.875		411780-344GC	TK-00614	-	-
411753-344VGS	-	0.344	○		0.625	1.500	1.500	8	2.125	WGC-8344	411779-344GC	TK-00613	-	-
-	411754-344VGS	0.344		○	0.625	1.500	1.500	8	2.125		411780-344GC	TK-00614	-	-
411759-375VGS	-	0.375	○		0.625	1.250	1.250	6	1.875	WG-8375	411781-375GC	TK-00615	-	-
-	411760-375VGS	0.375		○	0.625	1.250	1.250	6	1.875		411782-375GC	TK-00616	-	-
411761-375VGS	-	0.375	○		0.625	1.500	1.500	8	2.125	WGC-8375	411781-375GC	TK-00615	-	-
-	411762-375VGS	0.375		○	0.625	1.500	1.500	8	2.125		411782-375GC	TK-00616	-	-

* All toolholders include standard clamp and 1/4-20 x 3/4 BHCS.

GTS is Greenleaf's groove/turn system insert with chip control. Page GP 09.

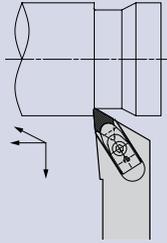
COS is Greenleaf's cut-off system insert. Page GP 08.

WG is Greenleaf flat-top groover with an 11° nose clearance. Pages GP 10 and GP 11.

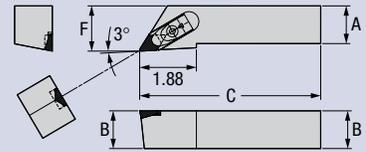
WGC is Greenleaf's flat-top groover with a 6° nose clearance. Pages GP 12 and GP 13.

CDJOR-V/CDJOL-V

Double Ended
55° Diamond



Right-Hand
Toolholder Shown



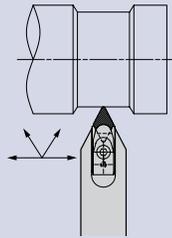
Part Number		Gage	Stock		Dimensions (inches)				Standard Components				*Tune-Up Kit Includes All Std. Components
Right	Left	Insert	R	L	A	B	C	F	Back-up Plate	Plate Screw	Clamp	Clamp Screw	
CDJOR-164V	CDJOL-164V	DPGN-443V	○	○	1.000	1.000	6	1.250	418101	#6-32 x 3/8 S.H.C.S.	418100	1/4-20 x 1 S.H.C.S.	TK-00754
CDJOR-204V	CDJOL-204V	DPGN-443V	○	○	1.250	1.250	6	1.500	418101	#6-32 x 3/8 S.H.C.S.	418100	1/4-20 x 1 S.H.C.S.	TK-00754
CDJOR-244V	CDJOL-244V	DPGN-443V	○	○	1.500	1.500	8	2.000	418101	#6-32 x 3/8 S.H.C.S.	418100	1/4-20 x 1 S.H.C.S.	TK-00754

* Tune-Up Kits include one complete set of Standard Components to allow you to refurbish the toolholder.

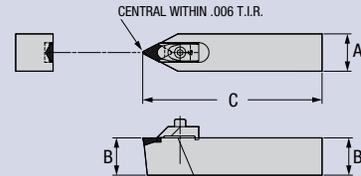
See page GP 19 for inserts.

CDPON-V

Double Ended
55° Diamond



Neutral
Toolholder Shown



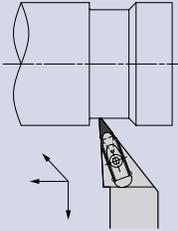
Part Number		Gage	Stock		Dimensions (inches)			Standard Components				*Tune-Up Kit Includes All Std. Components
		Insert			A	B	C	Back-up Plate	Plate Screw	Clamp	Clamp Screw	
CDPON-164V		DPGN-443V	○		1.000	1.000	6	418101	#6-32 x 3/8 S.H.C.S.	418100	1/4-20 x 1 S.H.C.S.	TK-00754
CDPON-204V		DPGN-443V	○		1.250	1.250	6	418101	#6-32 x 3/8 S.H.C.S.	418100	1/4-20 x 1 S.H.C.S.	TK-00754
CDPON-244V		DPGN-443V	○		1.500	1.500	8	418101	#6-32 x 3/8 S.H.C.S.	418100	1/4-20 x 1 S.H.C.S.	TK-00754

* Tune-Up Kits include one complete set of Standard Components to allow you to refurbish the toolholder.

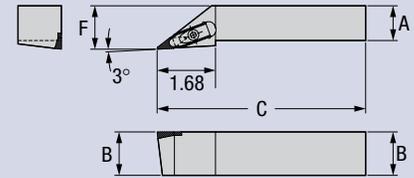
See page GP 19 for inserts.

CVJOR-V/CVJOL-V

Double Ended
35° Diamond



Right-Hand
Toolholder Shown



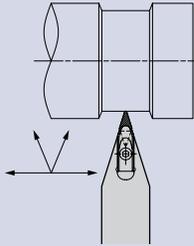
Part Number		Gage	Stock		Dimensions (inches)				Standard Components				*Tune-Up Kit Includes All Std. Components
Right	Left	Insert	R	L	A	B	C	F	Back-up Plate	Plate Screw	Clamp	Clamp Screw	
CVJOR-122.5VC	CVJOL-122.5VC	VCGN-2.532V	○	○	0.750	0.750	5	1.000	418525	#4-40 x 1/4 S.H.C.S.	418524	#10-32 x 3/4 S.H.C.S.	TK-00756
CVJOR-162.5V	CVJOL-162.5V	VCGN-2.532V	●	●	1.000	1.000	6	1.250	418525	#4-40 x 1/4 S.H.C.S.	418524	#10-32 x 3/4 S.H.C.S.	TK-00756
CVJOR-202.5V	CVJOL-202.5V	VCGN-2.532V	●	○	1.250	1.250	6	1.500	418525	#4-40 x 1/4 S.H.C.S.	418524	#10-32 x 3/4 S.H.C.S.	TK-00756
CVJOR-242.5V	CVJOL-242.5V	VCGN-2.532V	○	○	1.500	1.500	8	2.000	418525	#4-40 x 1/4 S.H.C.S.	418524	#10-32 x 3/4 S.H.C.S.	TK-00756

* Tune-Up Kits include one complete set of Standard Components to allow you to refurbish the toolholder.

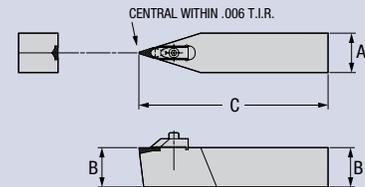
See page GP 18 for inserts.

CVVON-V

Double Ended
35° Diamond



Neutral
Toolholder Shown



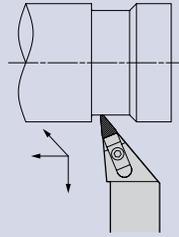
Part Number		Gage	Stock		Dimensions (inches)			Standard Components				*Tune-Up Kit Includes All Std. Components
		Insert			A	B	C	Back-up Plate	Plate Screw	Clamp	Clamp Screw	
CVVON-122.5VC		VCGN-2.532V	○		0.750	0.750	5	418525	#4-40 x 1/4 S.H.C.S.	418524	#10-32 x 3/4 S.H.C.S.	TK-00756
CVVON-162.5V		VCGN-2.532V	○		1.000	1.000	6	418525	#4-40 x 1/4 S.H.C.S.	418524	#10-32 x 3/4 S.H.C.S.	TK-00756
CVVON-202.5V		VCGN-2.532V	○		1.250	1.250	6	418525	#4-40 x 1/4 S.H.C.S.	418524	#10-32 x 3/4 S.H.C.S.	TK-00756
CVVON-242.5V		VCGN-2.532V	○		1.500	1.500	8	418525	#4-40 x 1/4 S.H.C.S.	418524	#10-32 x 3/4 S.H.C.S.	TK-00756

* Tune-Up Kits include one complete set of Standard Components to allow you to refurbish the toolholder.

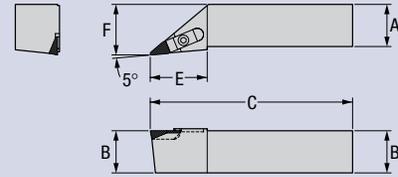
See page GP 18 for inserts.

VJOR-V/VJOL-V

Single Ended
35° Diamond



Right-Hand
Toolholder Shown



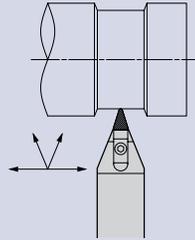
Part Number		Gage	Stock		Dimensions (inches)					Standard Components		*Tune-Up Kit Includes All Standard Components
Right	Left	Insert	R	L	A	B	C	E	F	Clamp	Clamp Screw	
VJOR-164V	VJOL-164V	VPG-33.543V	○	○	1.000	1.000	6	1.688	1.250	3386	#10-32 x 5/8 S.H.C.S.	TK-00578
VJOR-204V	VJOL-204V	VPG-33.543V	○	○	1.250	1.250	6	1.688	1.500	3386	#10-32 x 5/8 S.H.C.S.	TK-00578
VJOR-244V	VJOL-244V	VPG-33.543V	○	○	1.500	1.500	8	1.688	2.000	3386	#10-32 x 5/8 S.H.C.S.	TK-00578

* Tune-Up Kits include one complete set of Standard Components to allow you to refurbish the toolholder.

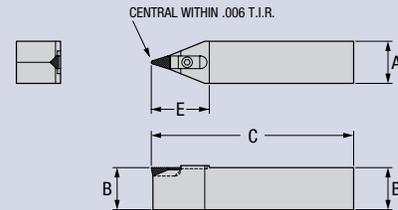
See page GP 18 for inserts.

VVON-V

Single Ended
35° Diamond



Neutral
Toolholder Shown

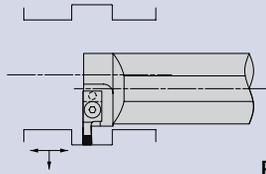


Part Number		Gage	Stock		Dimensions (inches)				Standard Components		*Tune-Up Kit Includes All Standard Components
		Insert	R	L	A	B	C	E	Clamp	Clamp Screw	
VVON-164V		VPG-33.543V	○		1.000	1.000	6	1.719	3386	#10-32 x 5/8 S.H.C.S.	TK-00578
VVON-204V		VPG-33.543V	○		1.250	1.250	6	1.719	3386	#10-32 x 5/8 S.H.C.S.	TK-00578
VVON-244V		VPG-33.543V	○		1.500	1.500	8	1.719	3386	#10-32 x 5/8 S.H.C.S.	TK-00578

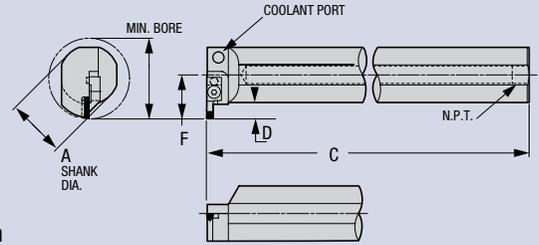
* Tune-Up Kits include one complete set of Standard Components to allow you to refurbish the toolholder.

See page GP 18 for inserts.

Cut-Off Grooving Bar



Right-Hand Grooving Bar Shown



Part Number		Groove Width	Stock		D.O.C.		Dimensions (inches)			Standard Components		Tune-Up Kit Includes Standard Clamp and *Clamp Screw	Optional Components	
Right	Left		R	L	D	Min. Bore	A	C	F	Insert	Clamp		Insert	Clamp
512074-125VGS	-	0.125	○		0.375	2.500	2.000	16.000	1.375	GTS-4125-1	411765-125GC	TK-00599	GTS-4125	429516-125GC
-	512075-125VGS	0.125		○	0.375	2.500	2.000	16.000	1.375	GTS-4125-2	411766-125GC	TK-00600	COS-4125-0	429517-125GC
										WG-4125			COS-4125-4R	
										WGC-4125			COS-4125-4L	
512086-156VGS	-	0.156	○		0.375	2.500	2.000	16.000	1.375	WG-4156	411767-156GC	TK-00601	-	-
-	512087-156VGS	0.156		○	0.375	2.500	2.000	16.000	1.375	WGC-4156	411768-156GC	TK-00602	-	-
512098-187VGS	-	0.187	○		0.375	2.500	2.000	16.000	1.375	GTS-4187-1	411769-187GC	TK-00603	GTS-4187	429522-187GC
-	512099-187VGS	0.187		○	0.375	2.500	2.000	16.000	1.375	GTS-4187-2	411770-187GC	TK-00604	COS-4187-0	429523-187GC
										WG-4187			COS-4187-4R	
										WGC-4187			COS-4187-4L	
512106-218VGS	-	0.218	○		0.500	2.750	2.000	16.000	1.500	WG-6218	411771-218GC	TK-00605	-	-
-	512107-218VGS	0.218		○	0.500	2.750	2.000	16.000	1.500	WGC-6218	411772-218GC	TK-00606	-	-
512116-250VGS	-	0.250	●		0.500	2.750	2.000	16.000	1.500	GTS-6250	411773-250GC	TK-00608	-	-
-	512117-250VGS	0.250		●	0.500	2.750	2.000	16.000	1.500	GTS-6250-1	411774-250GC	TK-00607	-	-
										GTS-6250-2				
										WG-6250				
										WGC-6250				
512126-281VGS	-	0.281	○		0.500	2.750	2.000	16.000	1.500	WG-6281	411775-281GC	TK-00609	-	-
-	512127-281VGS	0.281		○	0.500	2.750	2.000	16.000	1.500	WGC-6281	411776-281GC	TK-00610	-	-
512132-312VGS	-	0.312	○		0.625	3.000	2.000	16.000	1.625	WG-8312	411777-312GC	TK-00611	-	-
-	512133-312VGS	0.312		○	0.625	3.000	2.000	16.000	1.625	WGC-8312	411778-312GC	TK-00612	-	-
512138-344VGS	-	0.344	○		0.625	3.000	2.000	16.000	1.625	WG-8344	411779-344GC	TK-00613	-	-
-	512139-344VGS	0.344		○	0.625	3.000	2.000	16.000	1.625	WGC-8344	411780-344GC	TK-00614	-	-
512144-375VGS	-	0.375	○		0.625	3.000	2.000	16.000	1.625	WG-8375	411781-375GC	TK-00615	-	-
-	512145-375VGS	0.375		○	0.625	3.000	2.000	16.000	1.625	WGC-8375	411782-375GC	TK-00616	-	-

* All toolholders include standard clamp and 1/4-20 x 3/4 BHCS.

GTS is Greenleaf's groove/turn system insert with chip control. Page GP 09.

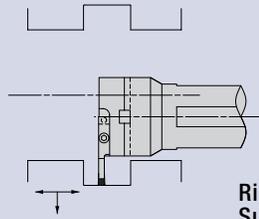
COS is Greenleaf's cut-off system insert. Page GP 08.

WG is Greenleaf flat-top groover with an 11° nose clearance. Pages GP 10 and GP 11.

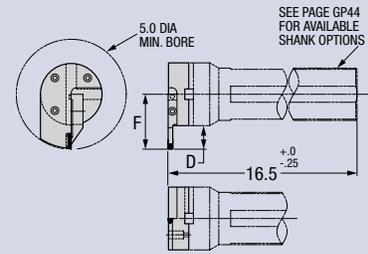
WGC is Greenleaf's flat-top groover with a 6° nose clearance. Pages GP 12 and GP 13.

Cut-Off Grooving Support Blade

For Single Ended V-Bottom Inserts



Right-Hand Support Blade Shown



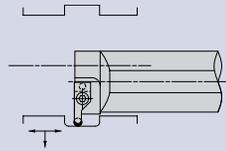
Part Number		Groove Width	Stock		D.O.C. D	Dimensions (inches)		Standard Components		Tune-Up Kit Includes Standard Clamp and *Clamp Screw	Optional Components	
Right	Left		R	L		F	Insert	Clamp	Insert		Clamp	
511309-125VGB	-	0.125	○		0.750	2.250	GTS-4125-1	411967-125GC	TK-00596	GTS-4125	429513-125GC	
-	512228-125VGB	0.125		○	0.750	2.250	GTS-4125-2	411966-125GC	TK-00592	COS-4125-0	429512-125GC	
							WG-4125				COS-4125-4R	
							WGC-4125				COS-4125-4L	
511311-156VGB	-	0.156	○		0.750	2.250	WG-4156	411969-156GC	TK-00597	-	-	
-	511312-156VGB	0.156		○	0.750	2.250	WGC-4156	411968-156GC	TK-00580	-	-	
511313-187VGB	-	0.187	○		0.750	2.250	GTS-4187-1	411978-187GC	TK-00593	GTS-4187	429519-187GC	
-	511314-187VGB	0.187		○	0.750	2.250	GTS-4187-2	411977-187GC	TK-00581	COS-4187-0	429518-187GC	
							WG-4187				COS-4187-4R	
							WGC-4187				COS-4187-4L	
511315-218VGB	-	0.218	○		1.125	2.625	WG-6218	411130-218GC	TK-00583	-	-	
-	512229-218VGB	0.218		○	1.125	2.625	WGC-6218	411979-218GC	TK-00582	-	-	
512230-250VGB	-	0.250	○		1.125	2.625	GTS-6250	411981-250GC	TK-00598	-	-	
-	511318-250VGB	0.250		○	1.125	2.625	GTS-6250-1	411980-250GC	TK-00617	-	-	
							GTS-6250-2					
							WG-6250					
							WGC-6250					
511319-281VGB	-	0.281	○		1.125	2.625	WG-6281	411134-281GC	TK-00585	-	-	
-	511320-281VGB	0.281		○	1.125	2.625	WGC-6281	411133-281GC	TK-00584	-	-	
511321-312-VGB	-	0.312	○		1.500	3.000	WG-8312	411136-312GC	TK-00587	-	-	
-	511322-312VGB	0.312		○	1.500	3.000	WGC-8312	411985-312GC	TK-00586	-	-	
511323-344VGB	-	0.344	○		1.500	3.000	WG-8344	411138-344GC	TK-00588	-	-	
-	511324-344VGB	0.344		○	1.500	3.000	WGC-8344	411137-344GC	TK-00594	-	-	
511325-375VGB	-	0.375	○		1.500	3.000	WG-8375	411987-375GC	TK-00589	-	-	
-	511326-375VGB	0.375		○	1.500	3.000	WGC-8375	411986-375GC	TK-00595	-	-	

* See page GP 44 for available shank options
All toolholders include standard clamp and 1/4-20 x 1 SHCS.

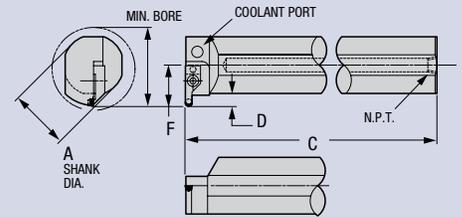
GTS is Greenleaf's groove/turn system insert with chip control. Page GP 09.
COS is Greenleaf's cut-off system insert. Page GP 08.
WG is Greenleaf flat-top groover with an 11° nose clearance. Pages GP 10 and GP 11.
WGC is Greenleaf's flat-top groover with a 6° nose clearance. Pages GP 12 and GP 13.

Profiling Bar

Round V-Bottom Insert
Milled Nest



Right-Hand
Profiling Bar Shown



Part Number		Gage-Option 1		Gage-Option 2		Stock		D.O.C.			Standard Components		*Tune-Up Kit Includes All Std. Components	Optional Component	
Right	Left	Insert	Min. Bore	Insert	Min. Bore	R	L	D	A	C	F	Clamp	Clamp Screw		Insert Screw
519700-2VMRB	-	RPGN-2V	1.500	RCGN-2V	3.500	○		3/8	1.000	12.00	0.875	412131-250GC	1/4-20 x 3/4 S.H.C.S.	TK-00795	PT-542T
-	519701-2VMRB	RPGN-2V	1.500	RCGN-2V	3.500		○	3/8	1.000	12.00	0.875	412132-250GC	1/4-20 x 3/4 S.H.C.S.	TK-00836	PT-542T
519702-2VMRB	-	RPGN-2V	1.750	RCGN-2V	3.500	○		3/8	1.250	13.75	1.000	412131-250GC	1/4-20 x 1 S.H.C.S.	TK-00798	PT-542T
-	519703-2VMRB	RPGN-2V	1.750	RCGN-2V	3.500		○	3/8	1.250	13.75	1.000	412132-250GC	1/4-20 x 1 S.H.C.S.	TK-00848	PT-542T
519704-2VMRB	-	RPGN-2V	2.000	RCGN-2V	3.500	○		3/8	1.500	13.75	1.125	412131-250GC	1/4-20 x 1 S.H.C.S.	TK-00798	PT-542T
-	519705-2VMRB	RPGN-2V	2.000	RCGN-2V	3.500		○	3/8	1.500	13.75	1.125	412132-250GC	1/4-20 x 1 S.H.C.S.	TK-00848	PT-542T
519706-2VMRB	-	RPGN-2V	2.500	RCGN-2V	3.500	●		3/8	2.000	16.00	1.375	412131-250GC	1/4-20 x 1 S.H.C.S.	TK-00798	PT-542T
-	519707-2VMRB	RPGN-2V	2.500	RCGN-2V	3.500		○	3/8	2.000	16.00	1.375	412132-250GC	1/4-20 x 1 S.H.C.S.	TK-00848	PT-542T
519708-3VMRB	519709-3VMRB	RPGN-3V	2.250	RCGN-3V	4.500	○	○	1/2	1.250	13.75	1.125	308063	#10-32 x 1/2 S.H.C.S.	TK-00764	PT-545T
519710-3VMRB	519711-3VMRB	RPGN-3V	2.500	RCGN-3V	4.500	○	○	1/2	1.500	13.75	1.250	308063	#10-32 x 1/2 S.H.C.S.	TK-00764	PT-545T
519712-3VMRB	519713-3VMRB	RPGN-3V	2.750	RCGN-3V	4.500	○	○	1/2	2.000	16.00	1.500	308063	#10-32 x 1/2 S.H.C.S.	TK-00764	PT-545T
519714-4VMRB	519715-4VMRB	RPGN-4V	2.250	RCGN-4V	4.500	○	○	5/8	1.250	13.75	1.250	308136	1/4-20 x 3/4 S.H.C.S.	TK-00763	CO-5018
519716-4VMRB	519717-4VMRB	RPGN-4V	2.500	RCGN-4V	4.500	○	○	5/8	1.500	13.75	1.375	308136	1/4-20 x 3/4 S.H.C.S.	TK-00763	CO-5018
519718-4VMRB	519719-4VMRB	RPGN-4V	2.750	RCGN-4V	4.500	○	○	5/8	2.000	16.00	1.625	308136	1/4-20 x 3/4 S.H.C.S.	TK-00763	CO-5018

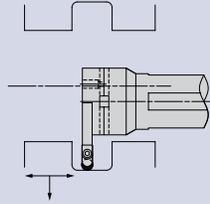
* Tune-Up Kits include one complete set of Standard Components to allow you to refurbish the profiling bar.

See page GP 14 for ceramic and carbide inserts.

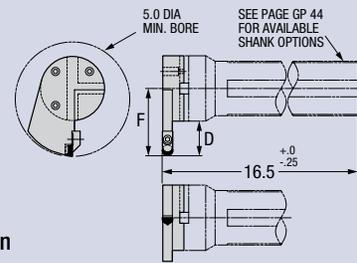
NOTE: Use carbide inserts RCGT and RPGT with optional insert screw for finishing.

Profiling Support Blade

Round V-Bottom Insert
Milled Nest



Right-Hand Profiling Bar Shown



Part Number		Gage	Stock		D.O.C.		Standard Components		*Tune-Up Kit Includes All Standard Components	Optional Component
Right	Left	Insert	R	L	D	F	Clamp	Clamp Screw		Insert Screw
519740-2VMRB	-	** RPGN-2V	○		0.750	2.375	411906-250VRC	1/4-20 x 1 S.H.C.S.	TK-00799	PT-542T
-	519741-2VMRB	** RPGN-2V		○	0.750	2.375	411905-250VRC	1/4-20 x 1 S.H.C.S.	TK-00765	PT-542T
519742-3VMRB	-	** RPGN-3V	○		1.125	2.750	308063	#10-32 x 1/2 S.H.C.S.	TK-00764	PT-545T
-	519743-3VMRB	** RPGN-3V		○	1.125	2.750	308063	#10-32 x 1/2 S.H.C.S.	TK-00764	PT-545T
519744-4VMRB	-	** RPGN-4V	○		1.500	3.125	308136	1/4-20 x 3/4 S.H.C.S.	TK-00763	CO-5018
-	519745-4VMRB	** RPGN-4V		○	1.500	3.125	308136	1/4-20 x 3/4 S.H.C.S.	TK-00763	CO-5018

* Tune-Up Kits include one complete set of Standard Components to allow you to refurbish the support blade.

See page GP 14 for ceramic and carbide inserts.

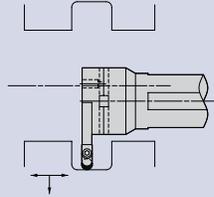
** RCGN can be used in place of RPGN.

See page GP 44 for available shank options.

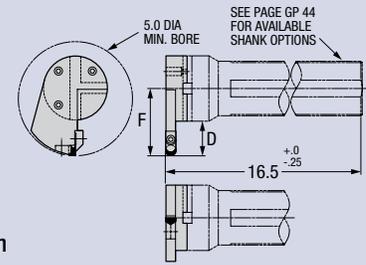
NOTE: Use carbide inserts RCGT and RPQT with optional insert screw for finishing.

Profiling Support Blade

Round V-Bottom Insert
Replaceable Nest



Right-Hand Profiling Bar Shown



Part Number		Gage	Stock		D.O.C.	Dimensions (inches)		Standard Components				*Tune-Up Kit Includes All Standard Components
Right	Left	Insert	R	L	D	F	Nest	Nest Screw	Clamp	Clamp Screw		
512227-2VRB	-	** RPGN-2V	○		0.750	2.375	411108	#3-48 x 3/8 B.H.C.S.	411906-250VRC	1/4-20 x 1 S.H.C.S.	TK-00685	
-	511287-2VRB	** RPGN-2V		○	0.750	2.375	411108	#3-48 x 3/8 B.H.C.S.	411905-250VRC	1/4-20 x 1 S.H.C.S.	TK-00683	
511288-3VRB	-	** RPGN-3V	○		1.125	2.750	414009	#6-32 x 1/2 B.H.C.S.	308063	#10-32 x 1/2 S.H.C.S.	TK-00528	
-	511289-3VRB	** RPGN-3V		●	1.125	2.750	414009	#6-32 x 1/2 B.H.C.S.	308063	#10-32 x 1/2 S.H.C.S.	TK-00528	
511290-4VRB	-	** RPGN-4V	○		1.500	3.125	414008	#10-32 x 5/8 B.H.C.S.	308136	1/4-20 x 5/8 S.H.C.S.	TK-00529	
-	511291-4VRB	** RPGN-4V		○	1.500	3.125	414008	#10-32 x 5/8 B.H.C.S.	308136	1/4-20 x 5/8 S.H.C.S.	TK-00529	

* Tune-Up Kits include one complete set of Standard Components to allow you to refurbish the support blade.

See page GP 14 for ceramic and carbide inserts.

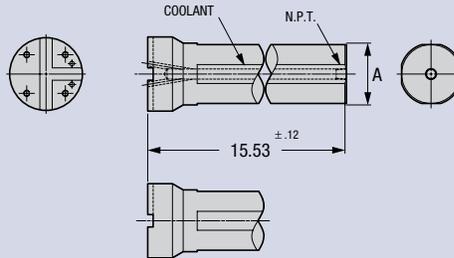
** RCGN can be used in place of RPGN.

See page GP 44 for available shank options.

Shank Options

For Bolt-On Support Blades

Part Number		Stock
Shank No.	A	
511296	2.000	●
511297	2.250	○
511292	2.500	○
511298	3.000	○



Greenleaf Sales

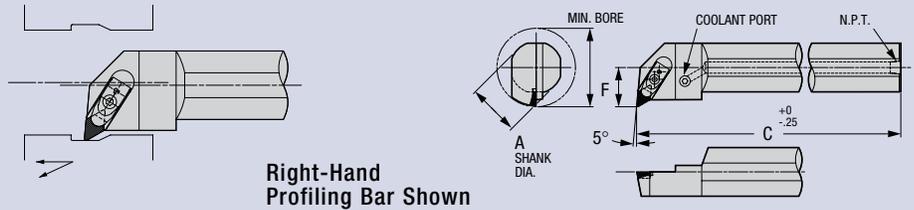
Phone: 814-763-2915 • 800-458-1850 • Fax: 814-763-4423
 sales@greenleafcorporation.com • www.greenleafglobalsupport.com

 Stocked Standard

 10 Business Days or Less

Profiling Bar

Double Ended
55° Diamond



Right-Hand Profiling Bar Shown

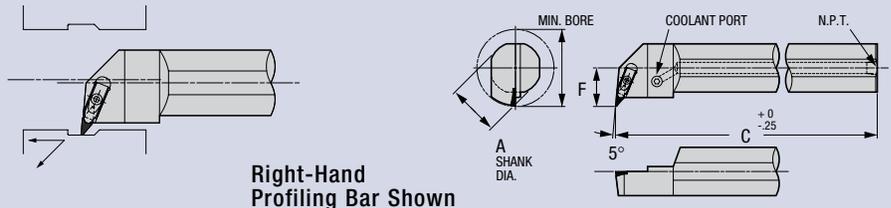
Part Number		Gage	Stock		Min. Bore	Dimensions (inches)			Standard Components				*Tune-Up Kit Includes All Std. Components
Right	Left	Insert	R	L		A	C	F	Back-up Plate	Plate Screw	Clamp	Clamp Screw	
518560-32-55VR	518561-32-55VL	DPGN-443V	○	○	2-3/4	2.000	16	1.500	418101	#6-32 x 3/8 S.H.C.S.	418100	1/4-20 x 1 S.H.C.S.	TK-00754
518562-40-55VR	518563-40-55VL	DPGN-443V	○	○	3-1/4	2.500	16	2.000	418101	#6-32 x 3/8 S.H.C.S.	418100	1/4-20 x 1 S.H.C.S.	TK-00754

* Tune-Up Kits include one complete set of Standard Components to allow you to refurbish the profiling bar.

See page GP 19 for inserts.

Profiling Bar

Double Ended
35° Diamond



Right-Hand Profiling Bar Shown

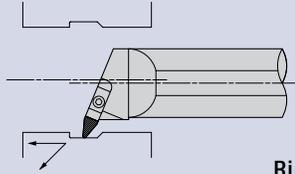
Part Number		Gage	Stock		Min. Bore	Dimensions (inches)			Standard Components				*Tune-Up Kit Includes All Std. Components
Right	Left	Insert	R	L		A	C	F	Back-up Plate	Plate Screw	Clamp	Clamp Screw	
518554-24-35VR	518555-24-35VL	VCGN-2.532V	○	○	2	1.500	14	1.000	418525	#4-40 x 1/4 S.H.C.S.	418524	#10-32 x 3/4 S.H.C.S.	TK-00756
518556-32-35VR	518557-32-35VL	VCGN-2.532V	○	○	2-3/4	2.000	16	1.500	418525	#4-40 x 1/4 S.H.C.S.	418524	#10-32 x 3/4 S.H.C.S.	TK-00756
518558-40-35VR	518559-40-35VL	VCGN-2.532V	○	○	3-1/4	2.500	16	2.000	418525	#4-40 x 1/4 S.H.C.S.	418524	#10-32 x 3/4 S.H.C.S.	TK-00756

* Tune-Up Kits include one complete set of Standard Components to allow you to refurbish the profiling bar.

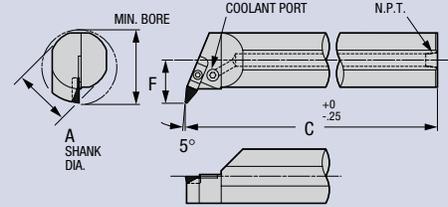
See page GP 18 for inserts.

Profiling Bar

Single Ended
35° Diamond



Right-Hand
Profiling Bar Shown



Part Number		Gage	Stock		Min. Bore	Dimensions (inches)			Standard Components		*Tune-Up Kit Includes All Standard Components
Right	Left	Insert	R	L		A	C	F	Clamp	Clamp Screw	
511339-B244VR	511340-B244VL	VPG-33.543V	○	○	2	1.500	14	1.000	3386	#10-32 x 5/8 S.H.C.S.	TK-00578
511343-B324VR	511344-B324VL	VPG-33.543V	○	○	2-3/4	2.000	16	1.500	3386	#10-32 x 5/8 S.H.C.S.	TK-00578
511347-B404VR	511348-B404VL	VPG-33.543V	○	○	3-1/4	2.500	16	2.000	3386	#10-32 x 5/8 S.H.C.S.	TK-00578

* Tune-Up Kits include one complete set of Standard Components to allow you to refurbish the profiling bar.

See page GP 18 for inserts.

Grooving, Profiling and Cut-Off Support Blades

The Greenleaf Advanced Tooling System for grooving, profiling and cut off is further expanded to a support blade system that couples qualified shanks and qualified support blades to increase the application range of each toolholder or bar. Each Greenleaf tool has the option to utilize 248 support blade combinations of cut-off, V-bottom round profilers, and grooving inserts to meet your cut-off, grooving, profiling and face-grooving application needs.

Quick-change shanks such as CAPTO or KM, as well as straight shank holders and bars, are all part of this tooling system. Call Greenleaf to design your unique right- or left-hand support blade.

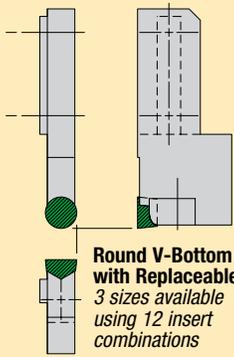


Greenleaf Corporation is continually upgrading its products. For the most current information, please visit our web site at:

www.greenleafglobalsupport.com

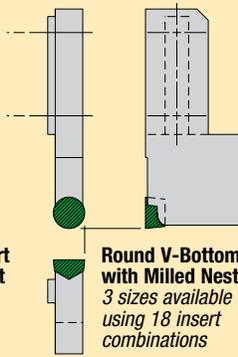
Greenleaf Sales

Phone: 814-763-2915 • 800-458-1850 • Fax: 814-763-4423
sales@greenleafcorporation.com • www.greenleafglobalsupport.com



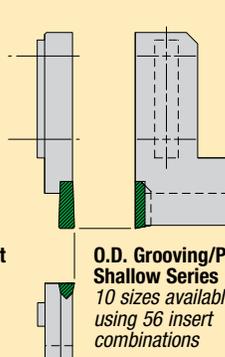
Round V-Bottom Insert with Replaceable Nest
3 sizes available using 12 insert combinations

page GP 50



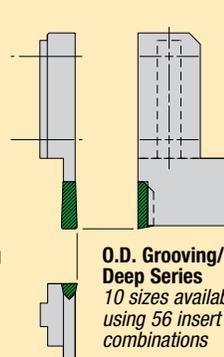
Round V-Bottom Insert with Milled Nest
3 sizes available using 18 insert combinations

page GP 50



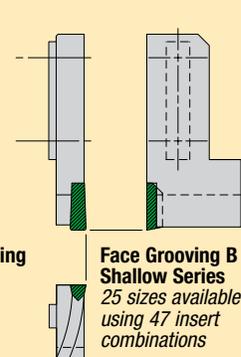
O.D. Grooving/Profiling Shallow Series
10 sizes available using 56 insert combinations

page GP 51



O.D. Grooving/Profiling Deep Series
10 sizes available using 56 insert combinations

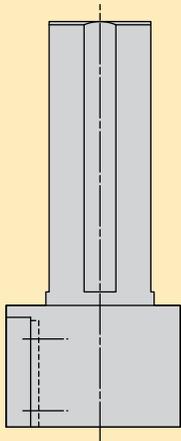
page GP 51



Face Grooving B Shallow Series
25 sizes available using 47 insert combinations

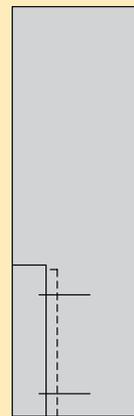
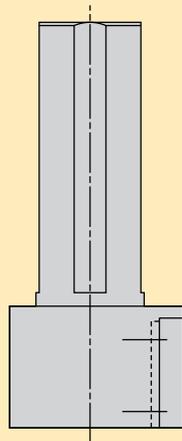
page GP 54

RIGHT HAND



Round Shanks
6 sizes available

page GP 60

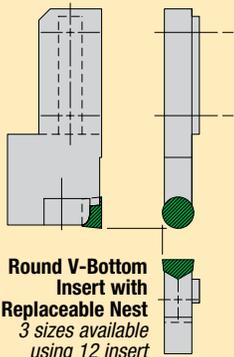


Straight Shanks
6 sizes available

page GP 60

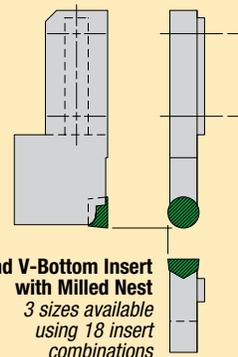


LEFT HAND



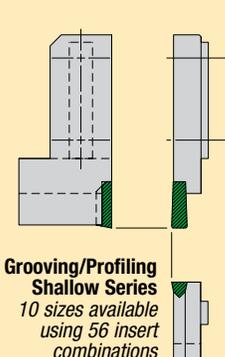
Round V-Bottom Insert with Replaceable Nest
3 sizes available using 12 insert combinations

page GP 50



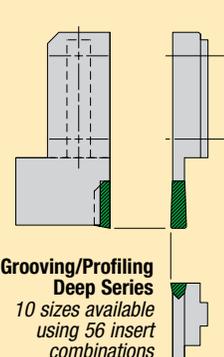
Round V-Bottom Insert with Milled Nest
3 sizes available using 18 insert combinations

page GP 50



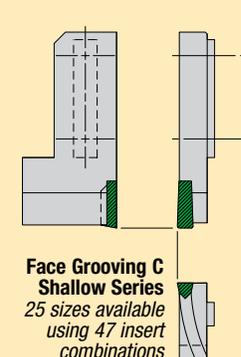
O.D. Grooving/Profiling Shallow Series
10 sizes available using 56 insert combinations

page GP 52



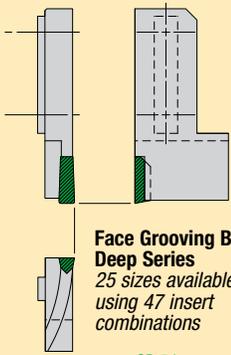
O.D. Grooving/Profiling Deep Series
10 sizes available using 56 insert combinations

page GP 52



Face Grooving C Shallow Series
25 sizes available using 47 insert combinations

page GP 55



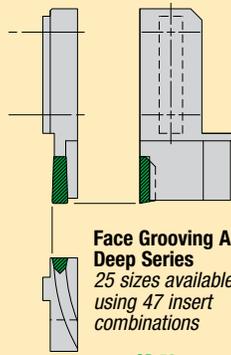
Face Grooving B Deep Series
25 sizes available using 47 insert combinations

page GP 54



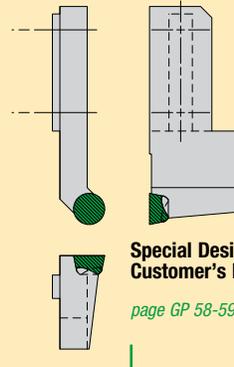
Face Grooving A Shallow Series
25 sizes available using 47 insert combinations

page GP 53



Face Grooving A Deep Series
25 sizes available using 47 insert combinations

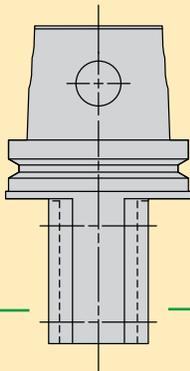
page GP 53



Special Designs to Fit Customer's Parts

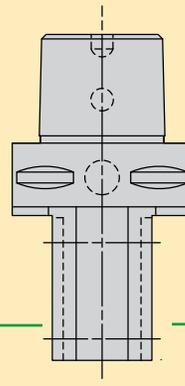
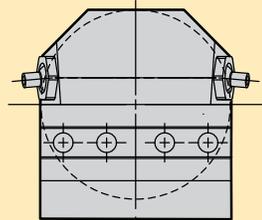
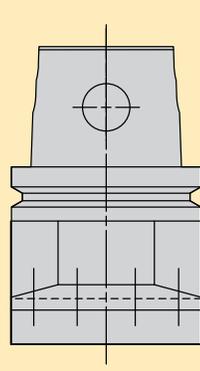
page GP 58-59

RIGHT HAND



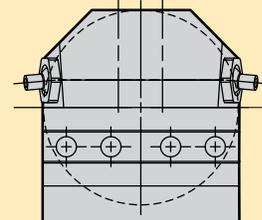
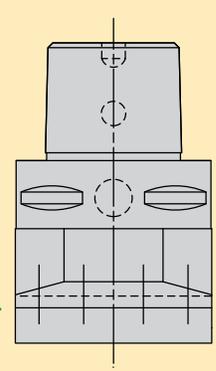
KM Tool Shanks
4 sizes available

page GP 61

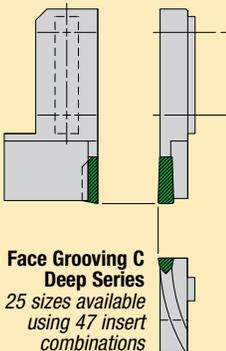


Capto Tool Shanks
4 sizes available

page GP 62

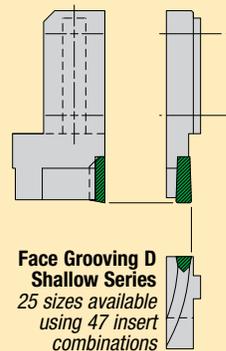


LEFT HAND



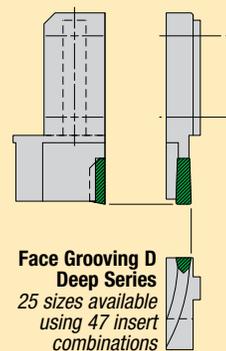
Face Grooving C Deep Series
25 sizes available using 47 insert combinations

page GP 55



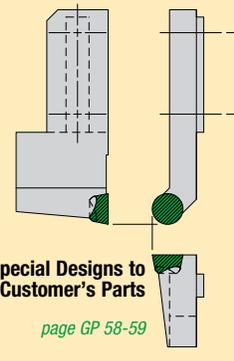
Face Grooving D Shallow Series
25 sizes available using 47 insert combinations

page GP 56



Face Grooving D Deep Series
25 sizes available using 47 insert combinations

page GP 56

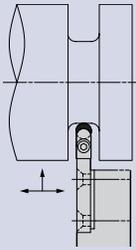


Special Designs to Fit Customer's Parts

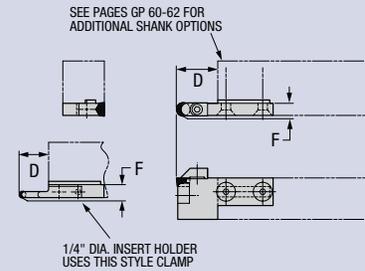
page GP 58-59

O.D. Grooving/Profiling Support Blade

Round V-Bottom Insert
Replaceable Nest



Right-Hand Support Blade Shown



Part Number		Gage	Stock		D.O.C.		Dimensions (inches)		Standard Components				*Tune-Up Kit Includes All Std. Components
Right	Left	Insert	R	L	D	F	Nest	Nest Screw	Clamp	Clamp Screw			
411959-2VR	-	** RPGN-2V	●		0.750	0.469	410631	#3-48 x 3/8 B.H.C.S.	411905-250VRC	1/4-20 x 1 S.H.C.S.	TK-00590		
-	411960-2VR	** RPGN-2V		●	0.750	0.469	410631	#3-48 x 3/8 B.H.C.S.	411906-250VRC	1/4-20 x 1 S.H.C.S.	TK-00591		
411011-3VR	411012-3VR	** RPGN-3V	●	●	1.125	0.469	413970	#6-32 x 1/2 B.H.C.S.	308063	#10-32 x 1/2 S.H.C.S.	TK-00525		
411009-4VR	411010-4VR	** RPGN-4V	●	●	1.500	0.469	414007	#10-32 x 5/8 B.H.C.S.	308136	1/4-20 x 5/8 S.H.C.S.	TK-00526		

* Tune-Up Kits include one complete set of Standard Components to allow you to refurbish the support blade.

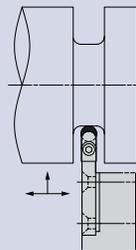
See page GP 14 for ceramic and carbide inserts.

** RCGN can be used in place of RPGN.

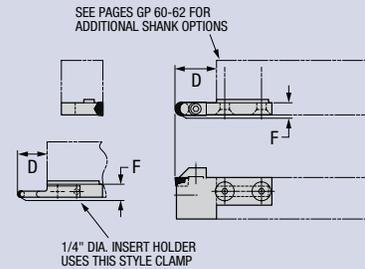
See pages GP 60-62 for additional shank options.

O.D. Grooving/Profiling Support Blade

Round V-Bottom Insert
Milled Nest



Right-Hand Support Blade Shown



Part Number		Gage	Stock		D.O.C.		Dimensions (inches)		Standard Components		*Tune-Up Kit Includes All Standard Components	Optional Component
Right	Left	Insert	R	L	D	F	Clamp	Clamp Screw	Insert Screw			
421534-2VMR	-	** RPGN-2V	○		0.750	0.469	411905-250VRC	1/4-20 x 1 S.H.C.S.	TK-00765	PT-542T		
-	421535-2VMR	** RPGN-2V		○	0.750	0.469	411906-250VRC	1/4-20 x 1 S.H.C.S.	TK-00799	PT-542T		
421536-3VMR	421537-3VMR	** RPGN-3V	○	○	1.125	0.469	308063	#10-32 x 1/2 S.H.C.S.	TK-00764	PT-545T		
421538-4VMR	421539-4VMR	** RPGN-4V	●	○	1.500	0.469	308136	1/4-20 x 3/4 S.H.C.S.	TK-00763	CO-5018		

* Tune-Up Kits include one complete set of Standard Components to allow you to refurbish the support blade.

See page GP 14 for ceramic and carbide inserts.

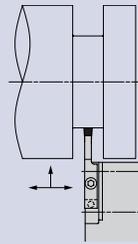
** RCGN can be used in place of RPGN.

See pages GP 60-62 for additional shank options.

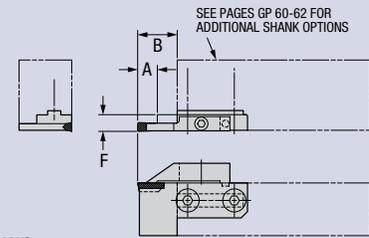
NOTE: Use carbide inserts RCGT and RPGT with optional insert screw for finishing.

O.D. Grooving/Profiling/ Cut-Off Support Blade

Right Hand



Right-Hand
Support Blade Shown



Part Number		Groove Width	Stock		Dimensions (inches)			Standard Components		*Tune-Up Kit Includes Standard Clamp and *Clamp Screw	Optional Components	
Shallow Series	Deep Series		Shallow	Deep	A	B	F	Insert	Clamp		Insert	Clamp
427647-094VG		0.094	○		0.38	–	0.469	WG-4094	427651-094GC	TK-00881	COS-4094-0	429524-094GC
	427648-094VG			○	–	0.75	0.469	WGC-4094	427651-094GC	TK-00881	COS-4094-4L COS-4094-4R	429524-094GC
421109-125VG		0.125	●		0.38	–	0.469	GTS-4125-1	411966-125GC	TK-00592	GTS-4125	429512-125GC
	411988-125VG			●	–	0.75	0.469	GTS-4125-2 WG-4125 WGC-4125	411966-125GC	TK-00592	COS-4125-0 COS-4125-4R COS-4125-4L	429512-125GC
421110-156VG		0.156	○		0.38	–	0.469	WG-4156		TK-00580		
	411066-156VG			●	–	0.75	0.469	WGC-4156	411968-156GC	TK-00580	–	–
421111-187VG		0.187	○		0.38	–	0.469	GTS-4187-1	411977-187GC	TK-00581	GTS-4187	429518-187GC
	411068-187VG			●	–	0.75	0.469	GTS-4187-2 WG-4187 WGC-4187	411977-187GC	TK-00581	COS-4187-0 COS-4187-4R COS-4187-4L	429518-187GC
421112-218VG		0.218	○		0.56	–	0.469	WG-6218	411979-218GC	TK-00582		
	411081-218VG			○	–	1.13	0.469	WGC-6218	411979-218GC	TK-00582	–	–
421113-250VG		0.250	●		0.56	–	0.469	WG-6250	411980-250GC	TK-00617		
	411992-250VG			●	–	1.13	0.469	WGC-6250 GTS-6250 GTS-6250-1 GTS-6250-2	411980-250GC	TK-00617	–	–
421114-281VG		0.281	○		0.56	–	0.469	WG-6281	411133-281GC	TK-00584		
	411085-281VG			○	–	1.13	0.469	WGC-6281	411133-281GC	TK-00584	–	–
421115-312VG		0.312	○		0.75	–	0.469	WG-8312	411985-312GC	TK-00586		
	411087-312VG			○	–	1.50	0.469	WGC-8312	411985-312GC	TK-00586	–	–
421116-344VG		0.344	○		0.75	–	0.469	WG-8344	411137-344GC	TK-00594		
	411089-344VG			○	–	1.50	0.469	WGC-8344	411137-344GC	TK-00594	–	–
421117-375VG		0.375	○		0.75	–	0.469	WG-8375	411986-375GC	TK-00595		
	411994-375VG			●	–	1.50	0.469	WGC-8375	411986-375GC	TK-00595	–	–

* Tune-Up Kits include one complete set of Standard Components to allow you to refurbish the support blade.

All support blades include Standard Clamp and 1/4-20 x 1 SHCS.

GTS is Greenleaf's groove/turn system insert with chip control. Page GP 09.

COS is Greenleaf's cut-off system insert. Page GP 08.

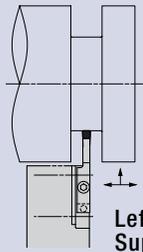
WG is Greenleaf flat-top groover with an 11° nose clearance. Pages GP 10 and GP 11.

WGC is Greenleaf's flat-top groover with a 6° nose clearance. Pages GP 12 and GP 13.

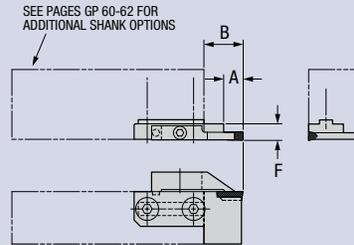
See pages GP 60-62 for additional shank options.

O.D. Grooving/Profiling/ Cut-Off Support Blade

Left Hand



Left-Hand Support Blade Shown



Part Number		Groove Width	Stock		Dimensions (inches)			Standard Components			*Tune-Up Kit Includes Standard Clamp and *Clamp Screw	Optional Components	
Shallow Series	Deep Series		Shallow	Deep	A	B	F	Insert	Clamp	Insert		Clamp	
427649-094VG			○		0.38	-	0.469	WG-4094	427652-094GC	TK-00882	COS-4094-0	429525-094GC	
	427650-094VG	0.094		○	-	0.75	0.469	WGC-4094	427652-094GC	TK-00882	COS-4094-4L COS-4094-4R	429525-094GC	
421100-125VG			●		0.38	-	0.469	GTS-4125-1	411967-125GC	TK-00596	GTS-4125	429513-125GC	
	411989-125VG	0.125		●	-	0.75	0.469	GTS-4125-2 WG-4125 WGC-4125	411967-125GC	TK-00596	COS-4125-0 COS-4125-4R COS-4125-4L	429513-125GC	
421101-156VG			○		0.38	-	0.469	WG-4156	411969-156GC	TK-00597	-	-	
	411990-156VG	0.156		○	-	0.75	0.469	WGC-4156	411969-156GC	TK-00597	-	-	
421102-187VG			○		0.38	-	0.469	GTS-4187-1	411978-187GC	TK-00593	GTS-4187	429519-187GC	
	411991-187VG	0.187		●	-	0.75	0.469	GTS-4187-2 WG-4187 WGC-4187	411978-187GC	TK-00593	COS-4187-0 COS-4187-4R COS-4187-4L	429519-187GC	
421103-218VG			○		0.56	-	0.469	WG-6218	411130-218GC	TK-00583	-	-	
	411082-218VG	0.218		●	-	1.13	0.469	WGC-6218	411130-218GC	TK-00583	-	-	
421104-250VG			●		0.56	-	0.469	WG-6250	411981-250GC	TK-00598	-	-	
	411993-250VG	0.250		●	-	1.13	0.469	WGC-6250 GTS-6250 GTS-6250-1 GTS-6250-2	411981-250GC	TK-00598	-	-	
421105-281VG			○		0.56	-	0.469	WG-6281	411134-281GC	TK-00585	-	-	
	411086-281VG	0.281		○	-	1.13	0.469	WGC-6281	411134-281GC	TK-00585	-	-	
421106-312VG			○		0.75	-	0.469	WG-8312	411136-312GC	TK-00587	-	-	
	411088-312VG	0.312		○	-	1.50	0.469	WGC-8312	411136-312GC	TK-00587	-	-	
421107-344VG			○		0.75	-	0.469	WG-8344	411138-344GC	TK-00588	-	-	
	411090-344VG	0.344		○	-	1.50	0.469	WGC-8344	411138-344GC	TK-00588	-	-	
421108-375VG			○		0.75	-	0.469	WG-8375	411987-375GC	TK-00589	-	-	
	411122-375VG	0.375		●	-	1.50	0.469	WGC-8375	411987-375GC	TK-00589	-	-	

* Tune-Up Kits include one complete set of Standard Components to allow you to refurbish the support blade.

All support blades include Standard Clamp and 1/4-20 x 1 SHCS.

GTS is Greenleaf's groove/turn system insert with chip control. Page GP 09.

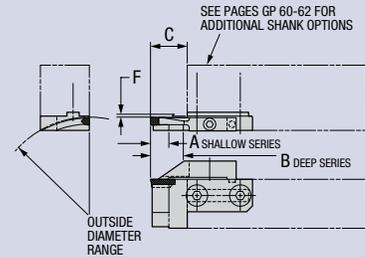
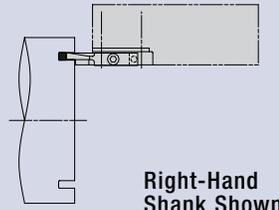
COS is Greenleaf's cut-off system insert. Page GP 08.

WG is Greenleaf flat-top groover with an 11° nose clearance. Pages GP 10 and GP 11.

WGC is Greenleaf's flat-top groover with a 6° nose clearance. Pages GP 12 and GP 13.

See pages GP 60-62 for additional shank options.

Face Grooving Support Blade A



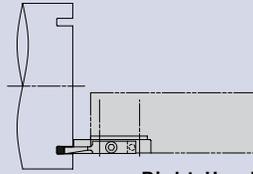
Part Number		Gage	Stock		Outside Diameter Range	Dimensions (inches)				Standard Components		*Tune-Up Kit Includes All Standard Components
Shallow Series	Deep Series	Insert	Shallow	Deep		A	B	C	F	Clamp	Clamp Screw	
421218-125S-030	421243-125L-030	WG-4125	○	○	3.00 / 3.50	0.38	0.63	0.750	0.031	421323-125GC	1/4-20 x 1 S.H.C.S.	TK-00801
421219-125S-035	421244-125L-035	WG-4125	○	○	3.50 / 4.25	0.38	0.63	0.750	0.031	421323-125GC	1/4-20 x 1 S.H.C.S.	TK-00801
421220-125S-0425	421245-125L-0425	WG-4125	○	○	4.25 / 5.50	0.38	0.63	0.750	0.031	421323-125GC	1/4-20 x 1 S.H.C.S.	TK-00801
421221-125S-055	421246-125L-055	WG-4125	○	○	5.50 / 7.50	0.38	0.63	0.750	0.031	421323-125GC	1/4-20 x 1 S.H.C.S.	TK-00801
421222-125S-075	421247-125L-075	WG-4125	○	○	7.50 / 12.50	0.38	0.63	0.750	0.031	421323-125GC	1/4-20 x 1 S.H.C.S.	TK-00801
421223-125S-125	421248-125L-125	WG-4125	○	○	12.50 / 40.00	0.38	0.63	0.750	0.031	421323-125GC	1/4-20 x 1 S.H.C.S.	TK-00801
421224-187S-030	421249-187L-030	WG-4187	○	○	3.00 / 3.50	0.38	0.63	0.750	0.031	421324-187GC	1/4-20 x 1 S.H.C.S.	TK-00762
421225-187S-035	421250-187L-035	WG-4187	○	○	3.50 / 4.25	0.38	0.63	0.750	0.031	421324-187GC	1/4-20 x 1 S.H.C.S.	TK-00762
421226-187S-0425	421251-187L-0425	WG-4187	○	○	4.25 / 5.50	0.38	0.63	0.750	0.031	421324-187GC	1/4-20 x 1 S.H.C.S.	TK-00762
421227-187S-055	421252-187L-055	WG-4187	○	○	5.50 / 7.50	0.38	0.63	0.750	0.031	421324-187GC	1/4-20 x 1 S.H.C.S.	TK-00762
421228-187S-075	421253-187L-075	WG-4187	○	○	7.50 / 12.50	0.38	0.63	0.750	0.031	421324-187GC	1/4-20 x 1 S.H.C.S.	TK-00762
421229-187S-125	421254-187L-125	WG-4187	○	○	12.50 / 40.00	0.38	0.63	0.750	0.031	421324-187GC	1/4-20 x 1 S.H.C.S.	TK-00762
421230-250S-030	421255-250L-030	WG-6250	○	○	3.00 / 4.25	0.56	1.00	1.125	0.031	421325-250GC	1/4-20 x 1 S.H.C.S.	TK-00808
421231-250S-0425	421256-250L-0425	WG-6250	○	○	4.25 / 6.00	0.56	1.00	1.125	0.031	421325-250GC	1/4-20 x 1 S.H.C.S.	TK-00808
421232-250S-060	421257-250L-060	WG-6250	○	○	6.00 / 8.50	0.56	1.00	1.125	0.031	421325-250GC	1/4-20 x 1 S.H.C.S.	TK-00808
421233-250S-085	421258-250L-085	WG-6250	○	○	8.50 / 15.50	0.56	1.00	1.125	0.031	421325-250GC	1/4-20 x 1 S.H.C.S.	TK-00808
421234-250S-155	421259-250L-155	WG-6250	○	○	15.50 / 40.00	0.56	1.00	1.125	0.031	421325-250GC	1/4-20 x 1 S.H.C.S.	TK-00808
421235-312S-030	421260-312L-030	WG-8312	○	○	3.00 / 5.00	0.75	1.31	1.500	0.031	421326-312GC	1/4-20 x 1 S.H.C.S.	TK-00823
421236-312S-050	421261-312L-050	WG-8312	○	○	5.00 / 9.00	0.75	1.31	1.500	0.031	421326-312GC	1/4-20 x 1 S.H.C.S.	TK-00823
421237-312S-090	421262-312L-090	WG-8312	○	○	9.00 / 19.00	0.75	1.31	1.500	0.031	421326-312GC	1/4-20 x 1 S.H.C.S.	TK-00823
421238-312S-190	421263-312L-190	WG-8312	○	○	19.00 and up	0.75	1.31	1.500	0.031	421326-312GC	1/4-20 x 1 S.H.C.S.	TK-00823
421239-375S-030	421264-375L-030	WG-8375	○	○	3.00 / 5.00	0.75	1.31	1.500	0.031	421327-375GC	1/4-20 x 1 S.H.C.S.	TK-00839
421240-375S-050	421265-375L-050	WG-8375	○	○	5.00 / 9.00	0.75	1.31	1.500	0.031	421327-375GC	1/4-20 x 1 S.H.C.S.	TK-00839
421241-375S-090	421266-375L-090	WG-8375	○	○	9.00 / 19.00	0.75	1.31	1.500	0.031	421327-375GC	1/4-20 x 1 S.H.C.S.	TK-00839
421242-375S-190	421267-375L-190	WG-8375	○	○	19.00 and up	0.75	1.31	1.500	0.031	421327-375GC	1/4-20 x 1 S.H.C.S.	TK-00839

* Tune-Up Kits include one complete set of Standard Components to allow you to refurbish the support blade.

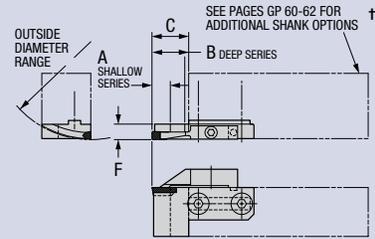
See pages GP 10 and GP 11 for inserts.

See pages GP 60-62 for additional shank options.

Face Grooving Support Blade B



Right-Hand Shank Shown



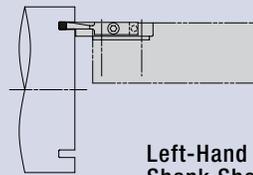
Part Number		Gage	Stock		Outside Diameter Range	Dimensions (inches)				Standard Components		*Tune-Up Kit Includes All Standard Components
Shallow Series	Deep Series	Insert	Shallow	Deep		A	B	C	F	Clamp	Clamp Screw	
421118-125S-030	421143-125L-030	WG-4125	○	○	3.00 / 3.50	0.38	0.63	0.750	0.469	421318-125GC	1/4-20 x 1 S.H.C.S.	TK-00800
421119-125S-035	421144-125L-035	WG-4125	○	○	3.50 / 4.25	0.38	0.63	0.750	0.469	421318-125GC	1/4-20 x 1 S.H.C.S.	TK-00800
421120-125S-0425	421145-125L-0425	WG-4125	○	○	4.25 / 5.50	0.38	0.63	0.750	0.469	421318-125GC	1/4-20 x 1 S.H.C.S.	TK-00800
421121-125S-055	421146-125L-055	WG-4125	○	○	5.50 / 7.50	0.38	0.63	0.750	0.469	421318-125GC	1/4-20 x 1 S.H.C.S.	TK-00800
421122-125S-075	421147-125L-075	WG-4125	○	○	7.50 / 12.50	0.38	0.63	0.750	0.469	421318-125GC	1/4-20 x 1 S.H.C.S.	TK-00800
421123-125S-125	421148-125L-125	WG-4125	○	○	12.50 / 40.00	0.38	0.63	0.750	0.469	421318-125GC	1/4-20 x 1 S.H.C.S.	TK-00800
421124-187S-030	421149-187L-030	WG-4187	○	○	3.00 / 3.50	0.38	0.63	0.750	0.469	421319-187GC	1/4-20 x 1 S.H.C.S.	TK-00794
421125-187S-035	421150-187L-035	WG-4187	○	○	3.50 / 4.25	0.38	0.63	0.750	0.469	421319-187GC	1/4-20 x 1 S.H.C.S.	TK-00794
421126-187S-0425	421151-187L-0425	WG-4187	○	○	4.25 / 5.50	0.38	0.63	0.750	0.469	421319-187GC	1/4-20 x 1 S.H.C.S.	TK-00794
421127-187S-055	421152-187L-055	WG-4187	○	○	5.50 / 7.50	0.38	0.63	0.750	0.469	421319-187GC	1/4-20 x 1 S.H.C.S.	TK-00794
421128-187S-075	421153-187L-075	WG-4187	○	○	7.50 / 12.50	0.38	0.63	0.750	0.469	421319-187GC	1/4-20 x 1 S.H.C.S.	TK-00794
421129-187S-125	421154-187L-125	WG-4187	○	○	12.50 / 40.00	0.38	0.63	0.750	0.469	421319-187GC	1/4-20 x 1 S.H.C.S.	TK-00794
421130-250S-030	421155-250L-030	WG-6250	○	○	3.00 / 4.25	0.56	1.00	1.125	0.469	421320-250GC	1/4-20 x 1 S.H.C.S.	TK-00802
421131-250S-0425	421156-250L-0425	WG-6250	○	○	4.25 / 6.00	0.56	1.00	1.125	0.469	421320-250GC	1/4-20 x 1 S.H.C.S.	TK-00802
421132-250S-060	421157-250L-060	WG-6250	○	○	6.00 / 8.50	0.56	1.00	1.125	0.469	421320-250GC	1/4-20 x 1 S.H.C.S.	TK-00802
421133-250S-085	421158-250L-085	WG-6250	○	○	8.50 / 15.50	0.56	1.00	1.125	0.469	421320-250GC	1/4-20 x 1 S.H.C.S.	TK-00802
421134-250S-155	421159-250L-155	WG-6250	○	○	15.50 / 40.00	0.56	1.00	1.125	0.469	421320-250GC	1/4-20 x 1 S.H.C.S.	TK-00802
421135-312S-030	421160-312L-030	WG-8312	○	○	3.00 / 5.00	0.75	1.31	1.500	0.469	421321-312GC	1/4-20 x 1 S.H.C.S.	TK-00849
421136-312S-050	421161-312L-050	WG-8312	○	○	5.00 / 9.00	0.75	1.31	1.500	0.469	421321-312GC	1/4-20 x 1 S.H.C.S.	TK-00849
421137-312S-090	421162-312L-090	WG-8312	○	○	9.00 / 19.00	0.75	1.31	1.500	0.469	421321-312GC	1/4-20 x 1 S.H.C.S.	TK-00849
421138-312S-190	421163-312L-190	WG-8312	○	○	19.00 and up	0.75	1.31	1.500	0.469	421321-312GC	1/4-20 x 1 S.H.C.S.	TK-00849
421139-375S-030	421164-375L-030	WG-8375	○	○	3.00 / 5.00	0.75	1.31	1.500	0.469	421322-375GC	1/4-20 x 1 S.H.C.S.	TK-00797
421140-375S-050	421165-375L-050	WG-8375	○	○	5.00 / 9.00	0.75	1.31	1.500	0.469	421322-375GC	1/4-20 x 1 S.H.C.S.	TK-00797
421141-375S-090	421166-375L-090	WG-8375	○	○	9.00 / 19.00	0.75	1.31	1.500	0.469	421322-375GC	1/4-20 x 1 S.H.C.S.	TK-00797
421142-375S-190	421167-375L-190	WG-8375	○	○	19.00 and up	0.75	1.31	1.500	0.469	421322-375GC	1/4-20 x 1 S.H.C.S.	TK-00797

* Tune-Up Kits include one complete set of Standard Components to allow you to refurbish the support blade.

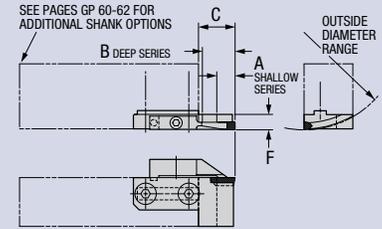
See page GP 10 and GP 11 for inserts.

See pages GP 60-62 for additional shank options.

Face Grooving Support Blade C



Left-Hand Shank Shown



Part Number		Gage	Stock		Outside Diameter Range	Dimensions (inches)				Standard Components		*Tune-Up Kit Includes All Standard Components
Shallow Series	Deep Series	Insert	Shallow	Deep		A	B	C	F	Clamp	Clamp Screw	
421168-125S-030	421193-125L-030	WG-4125	○	○	3.00 / 3.50	0.38	0.63	0.750	0.469	421323-125GC	1/4-20 x 1 S.H.C.S.	TK-00801
421169-125S-035	421194-125L-035	WG-4125	○	○	3.50 / 4.25	0.38	0.63	0.750	0.469	421323-125GC	1/4-20 x 1 S.H.C.S.	TK-00801
421170-125S-0425	421195-125L-0425	WG-4125	○	○	4.25 / 5.50	0.38	0.63	0.750	0.469	421323-125GC	1/4-20 x 1 S.H.C.S.	TK-00801
421171-125S-055	421196-125L-055	WG-4125	○	○	5.50 / 7.50	0.38	0.63	0.750	0.469	421323-125GC	1/4-20 x 1 S.H.C.S.	TK-00801
421172-125S-075	421197-125L-075	WG-4125	○	○	7.50 / 12.50	0.38	0.63	0.750	0.469	421323-125GC	1/4-20 x 1 S.H.C.S.	TK-00801
421173-125S-125	421198-125L-125	WG-4125	○	○	12.50 / 40.00	0.38	0.63	0.750	0.469	421323-125GC	1/4-20 x 1 S.H.C.S.	TK-00801
421174-187S-030	421199-187L-030	WG-4187	○	○	3.00 / 3.50	0.38	0.63	0.750	0.469	421324-187GC	1/4-20 x 1 S.H.C.S.	TK-00762
421175-187S-035	421200-187L-035	WG-4187	○	○	3.50 / 4.25	0.38	0.63	0.750	0.469	421324-187GC	1/4-20 x 1 S.H.C.S.	TK-00762
421176-187S-0425	421201-187L-0425	WG-4187	○	○	4.25 / 5.50	0.38	0.63	0.750	0.469	421324-187GC	1/4-20 x 1 S.H.C.S.	TK-00762
421177-187S-055	421202-187L-055	WG-4187	○	○	5.50 / 7.50	0.38	0.63	0.750	0.469	421324-187GC	1/4-20 x 1 S.H.C.S.	TK-00762
421178-187S-075	421203-187L-075	WG-4187	○	○	7.50 / 12.50	0.38	0.63	0.750	0.469	421324-187GC	1/4-20 x 1 S.H.C.S.	TK-00762
421179-187S-125	421204-187L-125	WG-4187	○	○	12.50 / 40.00	0.38	0.63	0.750	0.469	421324-187GC	1/4-20 x 1 S.H.C.S.	TK-00762
421180-250S-030	421205-250L-030	WG-6250	○	○	3.00 / 4.25	0.56	1.00	1.125	0.469	421325-250GC	1/4-20 x 1 S.H.C.S.	TK-00808
421181-250S-0425	421206-250L-0425	WG-6250	○	○	4.25 / 6.00	0.56	1.00	1.125	0.469	421325-250GC	1/4-20 x 1 S.H.C.S.	TK-00808
421182-250S-060	421207-250L-060	WG-6250	○	○	6.00 / 8.50	0.56	1.00	1.125	0.469	421325-250GC	1/4-20 x 1 S.H.C.S.	TK-00808
421183-250S-085	421208-250L-085	WG-6250	○	○	8.50 / 15.50	0.56	1.00	1.125	0.469	421325-250GC	1/4-20 x 1 S.H.C.S.	TK-00808
421184-250S-155	421209-250L-155	WG-6250	○	○	15.50 / 40.00	0.56	1.00	1.125	0.469	421325-250GC	1/4-20 x 1 S.H.C.S.	TK-00808
421185-312S-030	421210-312L-030	WG-8312	○	○	3.00 / 5.00	0.75	1.31	1.500	0.469	421326-312GC	1/4-20 x 1 S.H.C.S.	TK-00823
421186-312S-050	421211-312L-050	WG-8312	○	○	5.00 / 9.00	0.75	1.31	1.500	0.469	421326-312GC	1/4-20 x 1 S.H.C.S.	TK-00823
421187-312S-090	421212-312L-090	WG-8312	○	○	9.00 / 19.00	0.75	1.31	1.500	0.469	421326-312GC	1/4-20 x 1 S.H.C.S.	TK-00823
421188-312S-190	421213-312L-190	WG-8312	○	○	19.00 and up	0.75	1.31	1.500	0.469	421326-312GC	1/4-20 x 1 S.H.C.S.	TK-00823
421189-375S-030	421214-375L-030	WG-8375	○	○	3.00 / 5.00	0.75	1.31	1.500	0.469	421327-375GC	1/4-20 x 1 S.H.C.S.	TK-00839
421190-375S-050	421215-375L-050	WG-8375	○	○	5.00 / 9.00	0.75	1.31	1.500	0.469	421327-375GC	1/4-20 x 1 S.H.C.S.	TK-00839
421191-375S-090	421216-375L-090	WG-8375	○	○	9.00 / 19.00	0.75	1.31	1.500	0.469	421327-375GC	1/4-20 x 1 S.H.C.S.	TK-00839
421192-375S-190	421217-375L-190	WG-8375	○	○	19.00 and up	0.75	1.31	1.500	0.469	421327-375GC	1/4-20 x 1 S.H.C.S.	TK-00839

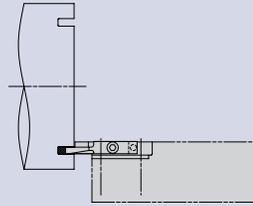
* Tune-Up Kits include one complete set of Standard Components to allow you to refurbish the support blade.

See page GP 10 and GP 11 for inserts.

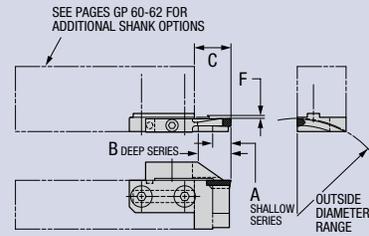
See pages GP 60-62 for additional shank options.



Face Grooving Support Blade D



Left-Hand Shank Shown



Part Number		Gage	Stock		Outside Diameter Range	Dimensions (inches)				Standard Components		*Tune-Up Kit Includes All Standard Components
Shallow Series	Deep Series	Insert	Shallow	Deep		A	B	C	F	Clamp	Clamp Screw	
421268-125S-030	421293-125L-030	WG-4125	○	○	3.00 / 3.50	0.38	0.63	0.750	0.031	421318-125GC	1/4-20 x 1 S.H.C.S.	TK-00800
421269-125S-035	421294-125L-035	WG-4125	○	○	3.50 / 4.25	0.38	0.63	0.750	0.031	421318-125GC	1/4-20 x 1 S.H.C.S.	TK-00800
421270-125S-0425	421295-125L-0425	WG-4125	○	○	4.25 / 5.50	0.38	0.63	0.750	0.031	421318-125GC	1/4-20 x 1 S.H.C.S.	TK-00800
421271-125S-055	421296-125L-055	WG-4125	○	○	5.50 / 7.50	0.38	0.63	0.750	0.031	421318-125GC	1/4-20 x 1 S.H.C.S.	TK-00800
421272-125S-075	421297-125L-075	WG-4125	○	○	7.50 / 12.50	0.38	0.63	0.750	0.031	421318-125GC	1/4-20 x 1 S.H.C.S.	TK-00800
421273-125S-125	421298-125L-125	WG-4125	○	○	12.50 / 40.00	0.38	0.63	0.750	0.031	421318-125GC	1/4-20 x 1 S.H.C.S.	TK-00800
421274-187S-030	421299-187L-030	WG-4187	○	○	3.00 / 3.50	0.38	0.63	0.750	0.031	421319-187GC	1/4-20 x 1 S.H.C.S.	TK-00794
421275-187S-035	421300-187L-035	WG-4187	○	○	3.50 / 4.25	0.38	0.63	0.750	0.031	421319-187GC	1/4-20 x 1 S.H.C.S.	TK-00794
421276-187S-0425	421301-187L-0425	WG-4187	○	○	4.25 / 5.50	0.38	0.63	0.750	0.031	421319-187GC	1/4-20 x 1 S.H.C.S.	TK-00794
421277-187S-055	421302-187L-055	WG-4187	○	○	5.50 / 7.50	0.38	0.63	0.750	0.031	421319-187GC	1/4-20 x 1 S.H.C.S.	TK-00794
421278-187S-075	421303-187L-075	WG-4187	●	○	7.50 / 12.50	0.38	0.63	0.750	0.031	421319-187GC	1/4-20 x 1 S.H.C.S.	TK-00794
421279-187S-125	421304-187L-125	WG-4187	○	○	12.50 / 40.00	0.38	0.63	0.750	0.031	421319-187GC	1/4-20 x 1 S.H.C.S.	TK-00794
421280-250S-030	421305-250L-030	WG-6250	○	○	3.00 / 4.25	0.56	1.00	1.125	0.031	421320-250GC	1/4-20 x 1 S.H.C.S.	TK-00802
421281-250S-0425	421306-250L-0425	WG-6250	○	○	4.25 / 6.00	0.56	1.00	1.125	0.031	421320-250GC	1/4-20 x 1 S.H.C.S.	TK-00802
421282-250S-060	421307-250L-060	WG-6250	○	○	6.00 / 8.50	0.56	1.00	1.125	0.031	421320-250GC	1/4-20 x 1 S.H.C.S.	TK-00802
421283-250S-085	421308-250L-085	WG-6250	○	○	8.50 / 15.50	0.56	1.00	1.125	0.031	421320-250GC	1/4-20 x 1 S.H.C.S.	TK-00802
421284-250S-155	421309-250L-155	WG-6250	○	○	15.50 / 40.00	0.56	1.00	1.125	0.031	421320-250GC	1/4-20 x 1 S.H.C.S.	TK-00802
421285-312S-030	421310-312L-030	WG-8312	○	○	3.00 / 5.00	0.75	1.31	1.500	0.031	421321-312GC	1/4-20 x 1 S.H.C.S.	TK-00849
421286-312S-050	421311-312L-050	WG-8312	○	○	5.00 / 9.00	0.75	1.31	1.500	0.031	421321-312GC	1/4-20 x 1 S.H.C.S.	TK-00849
421287-312S-090	421312-312L-090	WG-8312	○	○	9.00 / 19.00	0.75	1.31	1.500	0.031	421321-312GC	1/4-20 x 1 S.H.C.S.	TK-00849
421288-312S-190	421313-312L-190	WG-8312	○	○	19.00 and up	0.75	1.31	1.500	0.031	421321-312GC	1/4-20 x 1 S.H.C.S.	TK-00849
421289-375S-030	421314-375L-030	WG-8375	○	○	3.00 / 5.00	0.75	1.31	1.500	0.031	421322-375GC	1/4-20 x 1 S.H.C.S.	TK-00797
421290-375S-050	421315-375L-050	WG-8375	○	○	5.00 / 9.00	0.75	1.31	1.500	0.031	421322-375GC	1/4-20 x 1 S.H.C.S.	TK-00797
421291-375S-090	421316-375L-090	WG-8375	○	○	9.00 / 19.00	0.75	1.31	1.500	0.031	421322-375GC	1/4-20 x 1 S.H.C.S.	TK-00797
421292-375S-190	421317-375L-190	WG-8375	○	○	19.00 and up	0.75	1.31	1.500	0.031	421322-375GC	1/4-20 x 1 S.H.C.S.	TK-00797

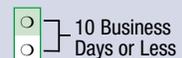
* Tune-Up Kits include one complete set of Standard Components to allow you to refurbish the support blade.

See page GP 10 and GP 11 for inserts.

See pages GP 60-62 for additional shank options.

Greenleaf Sales

Phone: 814-763-2915 • 800-458-1850 • Fax: 814-763-4423
 sales@greenleafcorporation.com • www.greenleafglobalsupport.com



Face Grooving Tools - Ordering Instructions

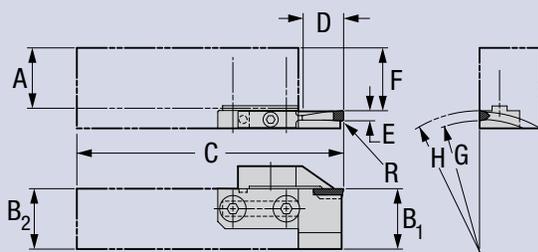
Face grooving tools must be matched to a specific radius and are, therefore, manufactured to order for your particular application.

We offer tools either with integral support blades (SFG) or with separate replaceable blades (AFG). Four combinations are available relative to hand of tool and hand of radius.

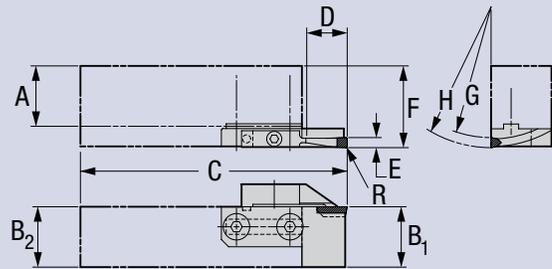
When ordering replaceable blade styles, we suggest the purchase of additional back-up blades at time of original order.

For your convenience in ordering or request for quotation, we have published sample blank engineering data forms. You must provide *ALL* of the dimensional data listed to ensure the correct tool being manufactured.

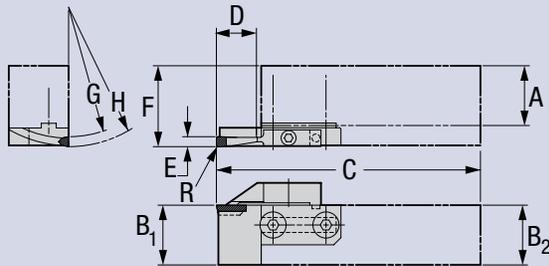
Note: Tools will be quoted either with radius relieved blades or angular relieved blades, according to groove diameter. Radius relieved blades are illustrated.



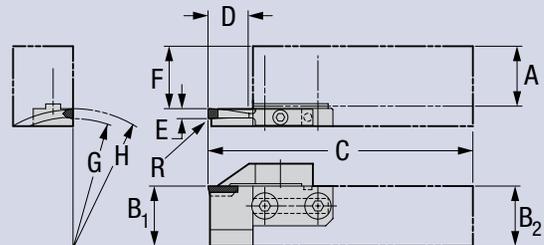
AFGVLL



AFGVLR



AFGVRL

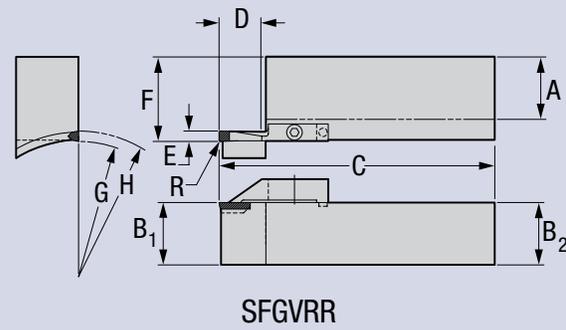
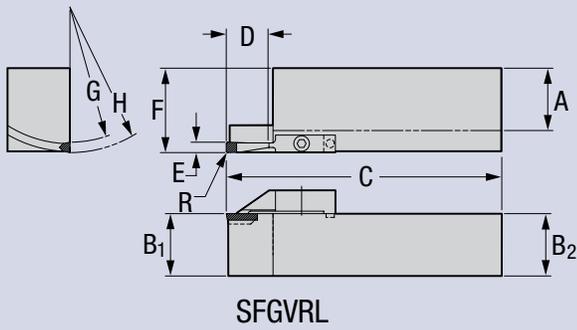
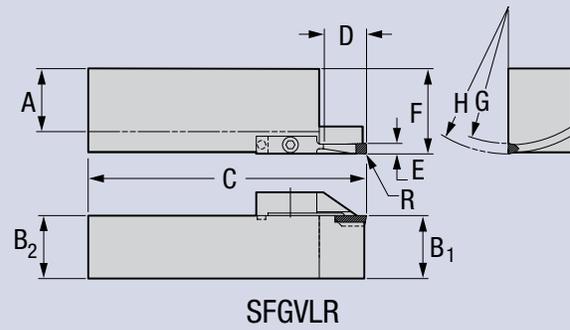
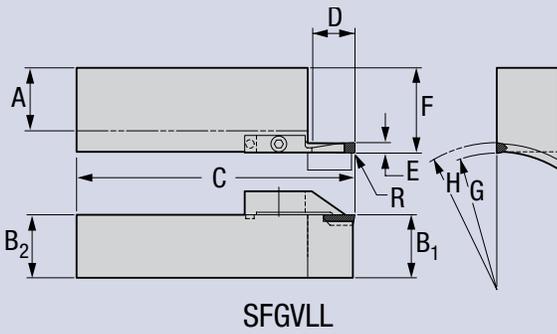


AFGVRR

AFGV__	A	C	F
Drawing #	B ₁	D (depth of cut)	G (radius)
R (radius)	B ₂	E	H (radius)

Greenleaf Sales

Phone: 814-763-2915 • 800-458-1850 • Fax: 814-763-4423
 sales@greenleafcorporation.com • www.greenleafglobalsupport.com

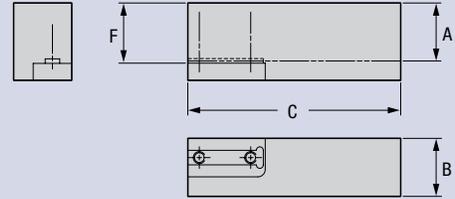


SFGV__	A	C	F
Drawing #	B ₁	D (depth of cut)	G (radius)
R (radius)	B ₂	E	H (radius)



Straight Shank Holder

For Support Blades

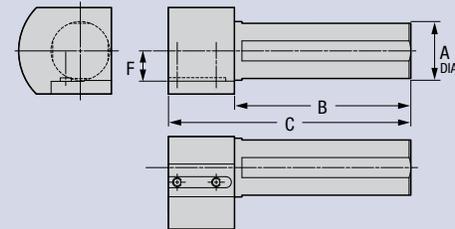


Part Number		Stock		Dimensions (inches)				Standard Component	*Tune-Up Kit Includes All Standard Components
Right	Left	R	L	A	B	C	F	Mounting Screw	
411055	411056	●	●	1.00	1.00	4.50	1.031	5/16-18 x 1 F.H.C.S.	TK-00579
411059	411449	●	●	1.25	1.25	5.50	1.281	5/16-18 x 1 F.H.C.S.	TK-00579
411015	411016	●	●	1.50	1.50	7.50	1.531	5/16-18 x 1 F.H.C.S.	TK-00579

* Tune-Up Kits include one complete set of Standard Components to allow you to refurbish the toolholder.

Round Shank Holder

For Support Blades



Part Number		Stock		Dimensions (inches)				Standard Component	*Tune-Up Kit Includes All Standard Components
Right	Left	R	L	A	B	C	F	Mounting Screw	
519600	519601	○	○	1.50	6.0	8.25	1.031	5/16-18 X 1 F.H.C.S.	TK-00579
519602	519603	●	○	2.00	6.0	8.25	1.281	5/16-18 X 1 F.H.C.S.	TK-00579
519604	519605	○	○	2.50	6.0	8.25	1.531	5/16-18 X 1 F.H.C.S.	TK-00579

* Tune-Up Kits include one complete set of Standard Components to allow you to refurbish the toolholder.

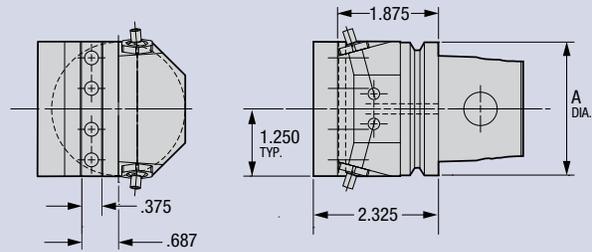
Greenleaf Sales

Phone: 814-763-2915 • 800-458-1850 • Fax: 814-763-4423
 sales@greenleafcorporation.com • www.greenleafglobalsupport.com



KM Shank

Face Mount



Part Number	Stock	Dimensions (inches)		Standard Component	*Tune-Up Kit Includes All Standard Components
		A		Mounting Screw	
† Face Mount					
SBH-KM50-F	○	1.969		5/16-18 X 1 F.H.C.S.	TK-00579
SBH-KM63-F	○	2.480		5/16-18 X 1 F.H.C.S.	TK-00579

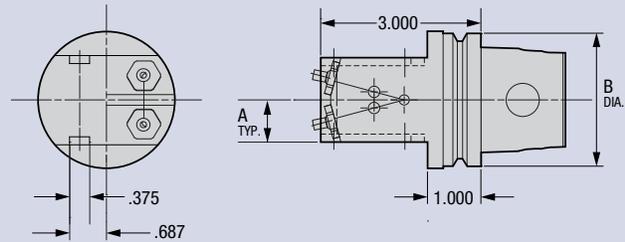
High-pressure coolant – 1,500 PSI Max (100 bar)

* Tune-Up Kits include one complete set of Standard Components to allow you to refurbish the toolholder.

† These tools based on KM63UT shank.

KM Shank

Side Mount



Part Number	Stock	Dimensions (inches)		Standard Component	*Tune-Up Kit Includes All Standard Components
		A	B	Mounting Screw	
† Side Mount					
SBH-KM50-S	○	0.687	1.969	5/16-18 X 1 F.H.C.S.	TK-00579
SBH-KM63-S	○	0.790	2.480	5/16-18 X 1 F.H.C.S.	TK-00579

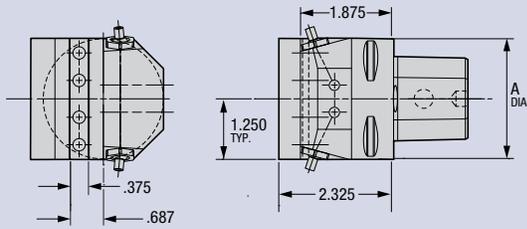
High-pressure coolant – 1,500 PSI Max (100 bar)

* Tune-Up Kits include one complete set of Standard Components to allow you to refurbish the toolholder.

† These tools based on KM63UT shank.

Capto Shank

Face Mount



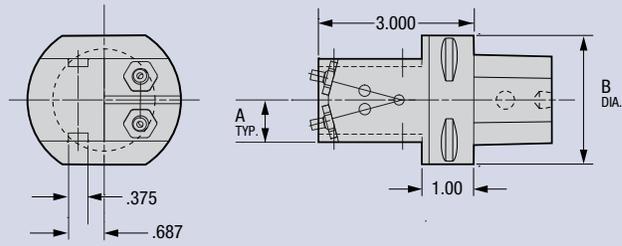
Part Number	Stock	Dimensions (inches)	Standard Component	*Tune-Up Kit Includes All Standard Components
Face Mount	Stock	A	Mounting Screw	
SBH-C5-F	○	1.969	5/16-18 X 1 F.H.C.S.	TK-00579
SBH-C6-F	○	2.480	5/16-18 X 1 F.H.C.S.	TK-00579

High-pressure coolant – 1,500 PSI Max (100 bar)

* Tune-Up Kits include one complete set of Standard Components to allow you to refurbish the toolholder.

Capto Shank

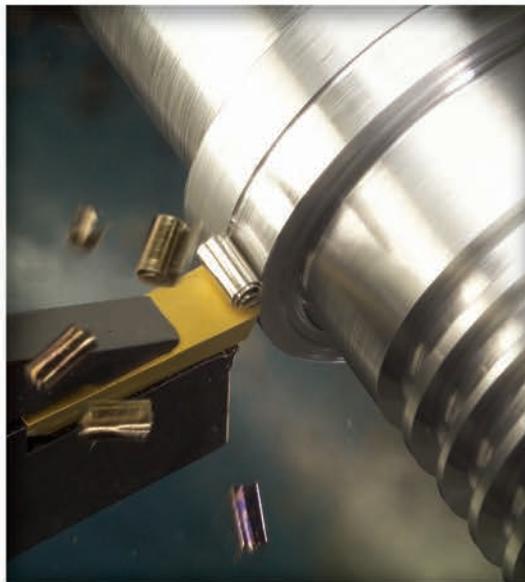
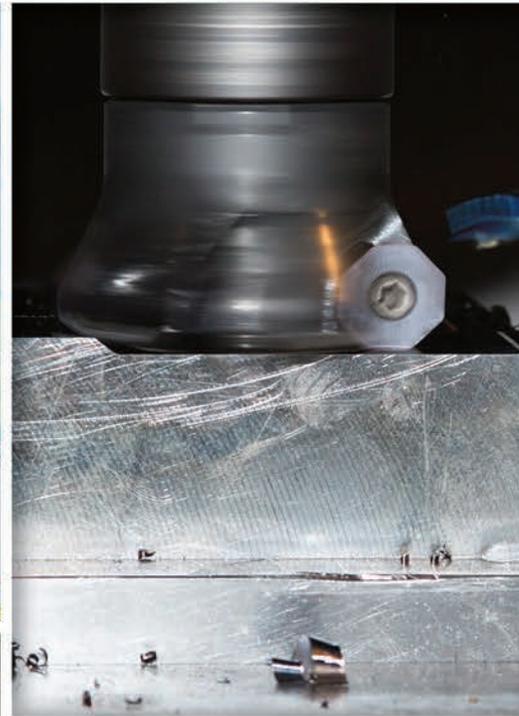
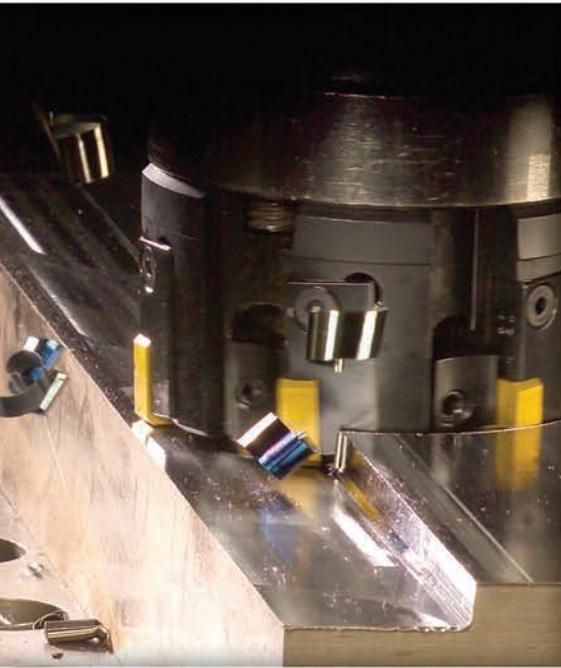
Side Mount



Part Number	Stock	Dimensions (inches)		Standard Component	*Tune-Up Kit Includes All Standard Components
Side Mount	Stock	A	B	Mounting Screw	
SBH-C5-S	○	0.687	1.969	5/16-18 X 1 F.H.C.S.	TK-00579
SBH-C6-S	●	0.790	2.480	5/16-18 X 1 F.H.C.S.	TK-00579

High-pressure coolant – 1,500 PSI Max (100 bar)

* Tune-Up Kits include one complete set of Standard Components to allow you to refurbish the toolholder.



MADE IN THE USA

*Greenleaf Corporation
is ISO 9001 Certified.*

GREENLEAF CORPORATION

18695 Greenleaf Drive
PO Box 1040
Saegertown, PA 16433 USA
US Phone: +1-814-763-2915
sales@greenleafcorporation.com

GREENLEAF EUROPE BV

De Steeg 2
6333 AP Schimmert
The Netherlands
EU Phone: +31-45-404-1774
eurooffice@greenleafcorporation.com

GREENLEAF (HUNAN) HIGH-TECH MATERIALS CO., LTD.

6F, Building C1, Lu Gu Com-Park
No. 27 Wenxuan Road
High-Tech Zone
Changsha, Hunan 410205
China
CN Phone: +86-731-89954796
info@greenleafcorporation.com.cn