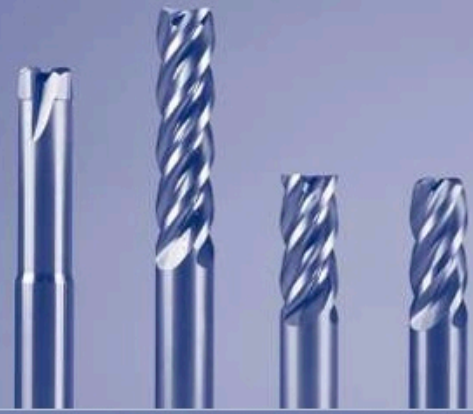


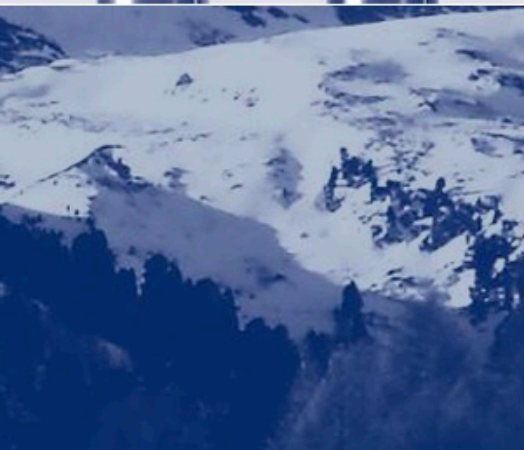


VARTEX
TECHNOLOGIES



PRODUCT LINE

KOREA MANUFACTURER OF CARBIDE CUTTING TOOLS



ABOUT US

KOREA MANUFACTURER OF CARBIDE CUTTING TOOLS



VARTEX Tools is a manufacturer of carbide cutting tools established in Korea. From its inception, Vartex has been focused on understanding customers' needs and striving to exceed their expectations.

Since as early as 2014, we have been ground-breaking MULTI-MATERIAL concept that, through innovative technologies, allows cutting tools to work on a multitude of materials. This reduces our customers' stock of unused and obsolete cutting tools, increases production flexibility and improves efficiency.

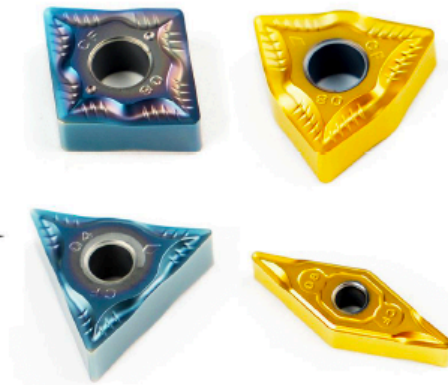
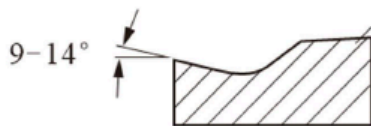
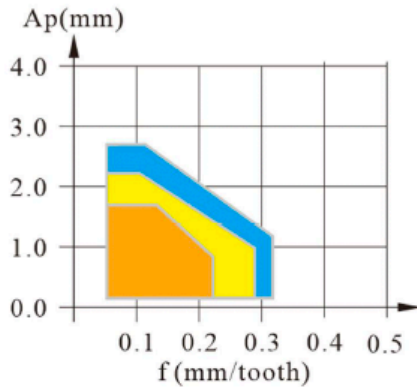
Our original ALPHA line of multi material cutting tools perform as good as or better than dedicated cutting tools from our competitors, on most materials.

Since 2021, we have complemented our offering by adding our MAGIA line, the highest performance cutting tools available. Based on innovative tungsten carbide, CVD coating and our globally patented ultra thick hyper pulsed PVD coatings, we reach unparalleled performance. Vartex continues its fast paced expansion with 2 subsidiaries and representation in over 10 countries

Titanium Alloy Finishing and Semi-finishing

CF Chip-breaker

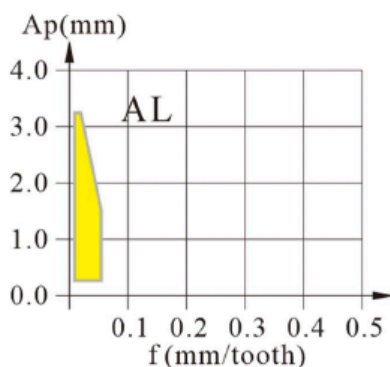
Recommended VC=40-50-60 mm/min



Specification
CNMG120404-CF
CNMG120408,12-CF
DNMG110404&08-CF
DNMG150404&08-CF
DNMG150604&08-CF
TNGG160401-CF
TNGG160402-CF
TNGG160404-CF
TNGG160408-CF
TNMG160404&08,12-CF
VNMG12T304&08-CF
VNMG160404&08-CF
WNMG080404-CF
WNMG080408&12-CF

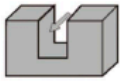
AL Chip-breaker

Recommended VC=20-80 mm/min

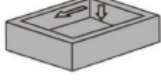


Specification
CCGT0602005, 01-AL
CCGT060202, 04-AL
CCGT09T3005, 01-AL
CCGT09T302, 04-AL
DCGT0702005, 01-AL
DCGT070202, 04-AL
DCGT11T3005, 01-AL
DCGT11T302, 04-AL
VBGT1103005, 01-AL
VBGT110302, 04-AL
VCGT1103005, 01-AL
VCGT110302, 04-AL
VPGT1103005, 01-AL
VPGT110302, 04-AL

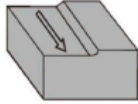
Titanium Alloy High-Feed SD Milling Insert



槽加工
Slot



开框加工
Pocket

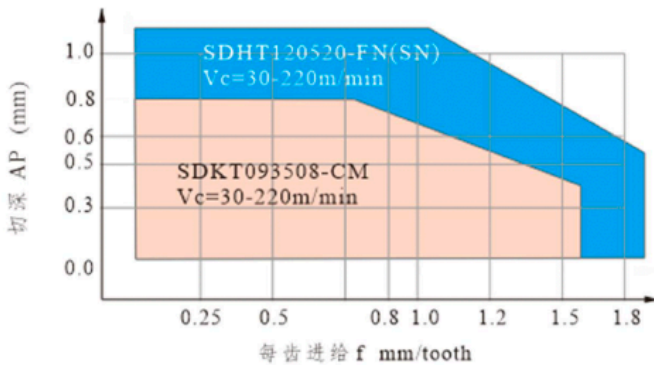


平面铣
Square Shoulder



仿形加工
Profile

FN: Sharp
SN: Strong



Specification
SDKT093508-CM
SDMT120520-CM
SDHT120520-CM
SDHT120520-FN
SDMT120520-SN
SDMT120512-HT
SDMT150512-HT
SDMT120520-TFN

FEATURE

- Strong Cutting Edge · Great Wear-resistance
- Excellent Stability and Performance

Superalloy Machining

Semi-finishing and Finishing



M class Tolerance

Specification

CNMG120408-
CNMG120404-
TNMG160404-
TNMG160408-

Finishing



E and G class Tolerance

Specification

CNEG120404-CF
CNEG120408-CF
CNEG120408-CM
VBGT160402-CM

CM/CF Chip-breaker

·Indigenous R&D ·Sharp cutting edge ·Excellent Chip Control

 VT 6230 S

NEW PVD grade for small A_p and large F_n , Recommended $V_c=100-140-180$ mm/min

 VT 2430 S

Ultra Abrasion-resistant Composite, Applicable to Dry Machining

 VT 6230 S

Great wear-resistance for hard-to-cut materials

Superalloy Heavy Machining



CNR chip-breaker

- Indigenous R&D Patent
- For heavy rough machining on S and M class material

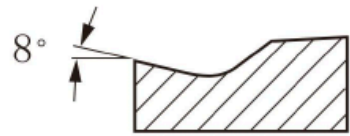
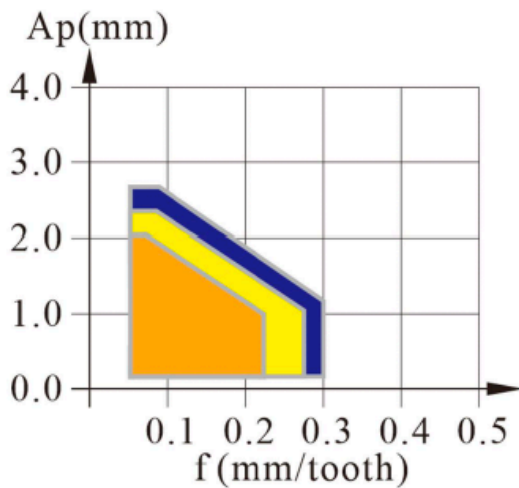
VT 2140TS

- CVD Coated Grade with excellent performance
- For stainless steel and superalloy
- Efficient on both continuous and intermittent machining
- Applicable to roughing and semi-finishing

Specification
CNMG120408-CNR
CNMG120412-CNR
CNMG160608-CNR
CNMG160612-CNR
CNMG190608-CNR
CNMG190612-CNR
WNMG080408-CNR
WNMG080412-CNR

Stainless Steel Machining

CM Chip-breaker with Bronze Grade VT 6230S
For semi-finsihing and finishing



Specification
CNMG120404, 08, 12-CM
DNMG150404, 08-CM
DNMG150604, 08-CM
SNMG120404, 08, 12-CM
TNMG160404, 08, 12-CM
VNMG160404, 08, 12-CM
WNMG080404, 08, 12-CM
CNMU09T304, 08-CM
TNMU120304, 08-CM

VT 6230S

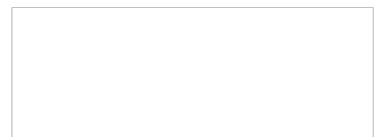


TiSiN+X ULTRA wear-resistant layer

ALTIN wear-resistant coating base

Features

- Sharp cutting edge, auto chip control
- Recommended $V_c = 60-120-180$ mm/min



Stainless Steel Machining



CMA Chip-breaker

- Double-sided
- For universal medium cutting
- Positive land provides sharp cutting action

VT 2025 S GRADE

- For medium to rough machining of stainless steel
- Applicable to intermittent machining on hexagonal and square bar



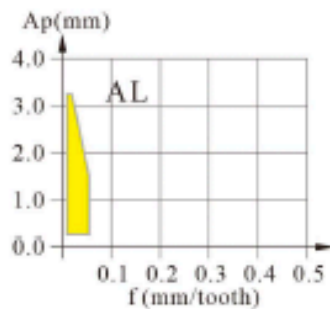
Specification

WNMG080408-
WNMG080412-
TNMG160404-
TNMG160408-
WNMG080404-
VNMG160404-
VNMG160408-
CNMG120404-
CNMG120408-
CNMG120412-

Chip-Breaker For Small Parts Machining

AL Finishing

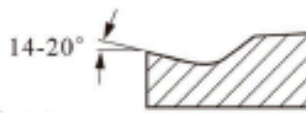
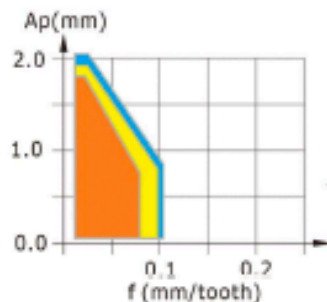
- Sharp Cutting Edge
- Inhibits Chip Accumulation



Specification
CCGT0602005, 01-AL
CCGT060202, 04-AL
CCGT09T3005, 01-AL
CCGT09T302, 04-AL
DCGT0702005, 01-AL
DCGT070202, 04-AL
DCGT11T3005, 01-AL
DCGT11T302, 04-AL
VBGT1103005, 01-AL
VBGT110302, 04-AL
VCGT1103005, 01-AL
VCGT110302, 04-AL
VPGT1103005, 01-AL
VPGT110302, 04-AL

CF Semi-finishing

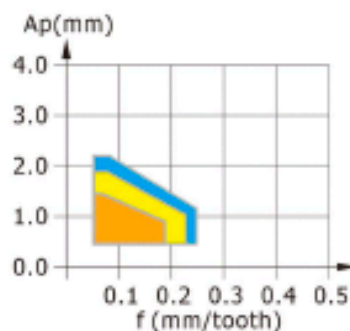
- Specialized in Hard-to-cut Materials
- Anti-adhesion ·Heat-resistant ·Patented



Specification
CCGT060201 - CF
CCGT060202 - CF
CCGT09T301 - CF
CCGT09T302 - CF
CCGT09T304 - CF
DCGT070201 - CF
DCGT070202 - CF
DCGT11T301 - CF
DCGT11T302 - CF
DCGT11T304 - CF
VBGT110301 - CF
VBGT110302 - CF
VCGT110301 - CF
VCGT110302 - CF
VPGT110301 - CF
VPGT110302 - CF

CM Roughing

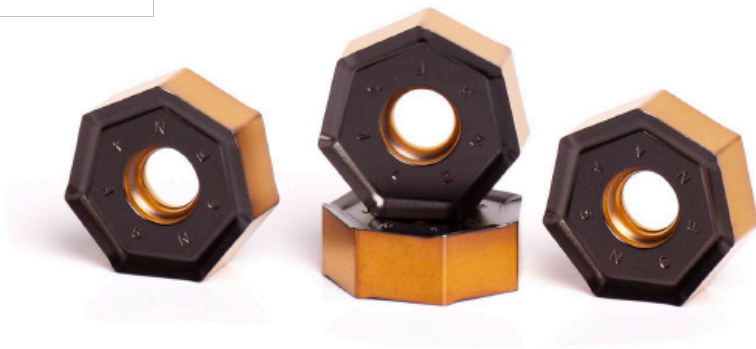
- Excellent Chip Control
- Great Wear-resistance ·Patented



Specification
CCGT060202, CCMT060202,04, 08-CM
CCGT09T302, CCMT09T302,04, 08-CM
CCMT120404, 08, 12-CM
DCGT070202, DCMT070204-CM
DCGT11T302, DCMT11T304-CM
SCMT09T304, 08-CM
TCGT110202, TCMT110204, 08-CM
VBGT110302-CM
VCGT110302-CM
VPGT110302-CM
VBGT160402, VBMT160404,08-CM
VCGT160402,04,08-CM

XNMMU0805ANFN

Heavy Milling
Hard-to-cut
Materials



$A_p < 4.8mm$

VT 2150

- CVD Coated Grade with excellent performance
- Efficient on both continuous and intermittent machining
- Applicable to roughing and semi-finishing on P, M and S

VT 2650

- PVD Coated Grade with Great Impact and Wear Resistance
- Excellent Versatility on M and S

Milling Case—

■ Work piece	1.4848, Volute, Rough Milling
■ Cutting condition	$V_c=118$ $F_z=0.202$ $A_p=2.5-3.5$ $A_e=50$ D63*5T(Customer) $V_c=100$ $F_z=0.196$ $A_p=2.5-3.5$ $A_e=75$ D80*8T(Our tool)
■ Machine information	CNC Machining Center (3-axis,Tongtai,BBT50)outside air cooling
■ Tool information	Insert: XNMMU0805ANFN.□□2150TS (D80*8T)
■ Machining sketch	




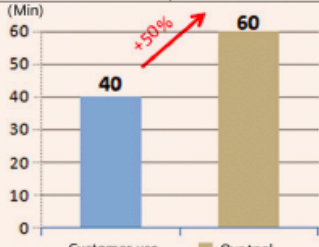
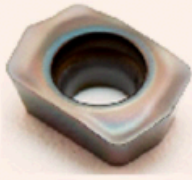

EDHT0402ER-CM High-Feed Milling

Diameters in Stock

8, 8.5, 9.0, 9.5, 10, 10.5, 11, 11.5, 12, 12.5, 13, 13.5, 14, 16

- Applicable to low carbon steel, M and S class material
- Indigenous R&D chip-breaker, sharp cutting edge for fast machining
- Excellent roughing option to replace solid cutters, with less power demand

Milling Case—VT 2430

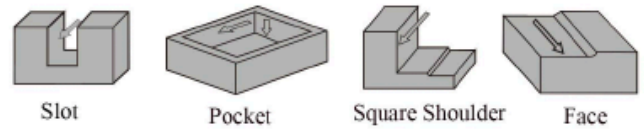
■ Work piece	H13, Surface roughing
■ Cutting condition	Vc=126 Fz=0.38 Ap=0.3 Ae=8.0 Compressed Air
■ Machine information	CNC Machining Center (4-Axis)
■ Tool information	Insert: EDHT0402ER-CM VT2430FS (D10*2T)
■ Machining sketch	 BT40+ER tool holder+alloy rod+threaded coupling
  	

Customer Review:

It is now used a round nose end mill with 4 flutes, and then grinded and coated after use.
By using inserts, tool life is improved with reduced cost and convenient insert changing process.



LNHX11T4 Milling insert



Ap max 9.0mm

Features:

- Indigenous Research and Development
- Sharp Cutting Edge
- High verticality and Precise Grinding
- Suitable for hard-to-cut materials
- Double-sided insert with four cutting edges

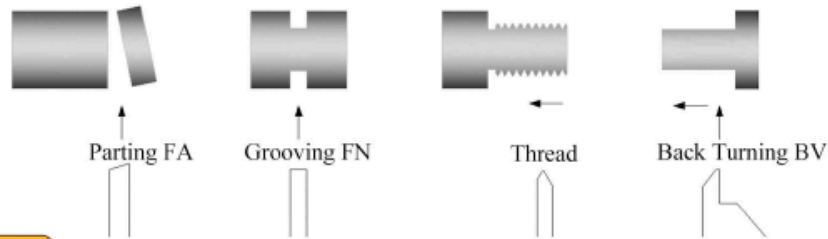
Specification

LNHX11T404AFN
LNHX11T408AFN
LNHX11T410AFN
LNHX11T412AFN
LNHX11T415AFN
LNHX11T416AFN
LNHX11T420AFN
LNHX11T424AFN

Corner radius can be customized under range 0.4-2.4mm



Precision Ground grooving blade CMTPR/L



Features:

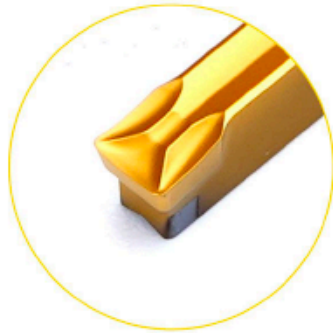
- ✓ Ultra-fine particle cemented carbide base material with Indigenous R&D wear-resistant coating for fast cutting;
- ✓ The tool holder adopts three-dimensional positioning groove design, which is closely attached and firmly clamped;
- ✓ ONE tool as versatile solution of forward and backward turning, parting, grooving and threading
- ✓ Customized production for Non-standard demands

Specification

Right hand blade	Left hand blade
CMTPR050	CMTPL050
CMTPR080	CMTPL080
CMTPR100	CMTPL100
CMTPR125	CMTPL125
CMTPR150	CMTPL150
CMTPR175	CMTPL175
CMTPR200	CMTPL200
CMTPR250	CMTPL250



Double-Ended Grooving Insert



DESIGN FEATURE

Side edge applies for direct cross feed.

Round edge greatly reduces cutting resistance.

Reinforcement on the cutting edge increases tool life.

Golden Shark CP2630TM

- Strong Impact Resistance
- Applicable to Intermittent Machining

Sliver Shark CP2630TN

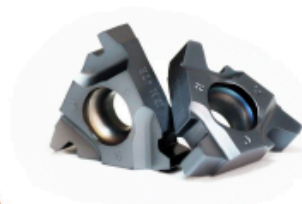
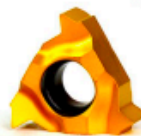
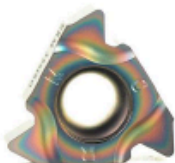
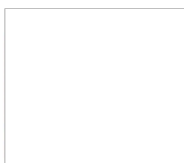
- Excellent Balance between Wear and Impact Resistance
- Versatile for hard-to-cut materials

Blue Daemon CP2430FS

- Ultra Abrasion-resistant Composite
- Applicable to Dry Machining

Specification	Type
CD15N1.50S-0.15T	Flat Head
CD22N2.00S-0.2T	
CD22N2.50S-0.2T	
CD22N3.00S-0.3T	
CD22N3.00M-0.4T	
CD25N4.00S-0.4T	
CD25N4.00M-0.4T	Round head
CD25N5.00S-0.4T	
CD25N5.00M-0.8T	
CD25N6.00M-0.8T	
CD22N2.00S-1.0R	Round head
CD22N3.00S-1.5R	
CD25N4.00S-2.0R	
CD25N5.00S-2.5R	Inclined
CD15R1.50E-06F1	
CD22R2.00E-06F1	

Threading Inserts



ERM/IRM with chip-breaker are pressed and then ground threading inserts for precise tooth type and excellent chip control

Specification
11IRM 100ISO
11IRM 150ISO
11IRM 200ISO
16IRM 100ISO
16IRM 125ISO
16IRM 150ISO
16ERM 050ISO
16ERM 150ISO
16ERM 11BSPT
22IRM 350ISO
22IRM 450ISO
22ERM 500ISO

Test Grade VT 330

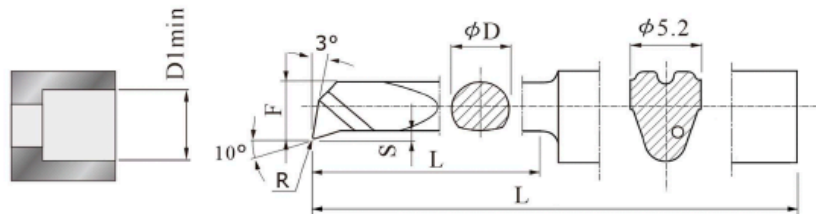


■ Work piece	SUS304 Stainless Steel						
■ Cutting condition	VC1=100 VC2=120 Threading Passes=11 P=1.814 , External Fluid Cooling						
■ Machine information	Horizontal CNC Lathe						
■ Tool information	Insert: 16ERM 14W-G.Cl S Holder: (■25*25)						
■ Machining sketch							
	<div style="display: flex; align-items: center;"> <div style="flex: 1;"> <table border="1"> <caption>Bar Chart Data</caption> <thead> <tr> <th>Condition</th> <th>Average Value (AVG)</th> </tr> </thead> <tbody> <tr> <td>VC1=100</td> <td>1123</td> </tr> <tr> <td>VC2=120</td> <td>872</td> </tr> </tbody> </table> </div> <div style="flex: 1; text-align: center;"> </div> </div>	Condition	Average Value (AVG)	VC1=100	1123	VC2=120	872
Condition	Average Value (AVG)						
VC1=100	1123						
VC2=120	872						

Micro tools



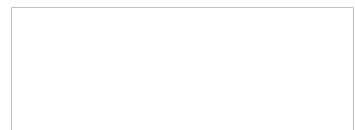
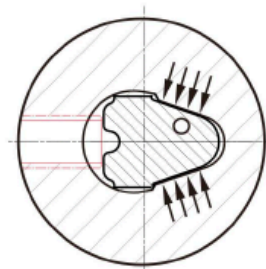
Features:



- Internal Coolant Channel
- Three-point clamping position to increase clamping strength
- Avoid repeated positioning and tool alignment
- Quick and convenient disassembly and assembly
- Excellent surface finish and stable tool life

Specification
CBFR 100 050 R005
CBFR 150 060 R005
CBFR 200 060 R005
CBFR 250 100 R005
CBFR 300 100 R005
CBFR 350 100 R010
CBFR 400 100 R010
CBFR 500 150 R010
CBFR 600 150 R010
CBFR 680 150 R010

Strong clamping force
Good rigidity up to 7*D



Solid Carbide Slitting Saw



Main Application:

1. Antenna slot, such as iPhone 4s
2. Head actuator arm on computer
3. Automotive parts and components