

# Cutting Tools

## CARBIDE INSERTS

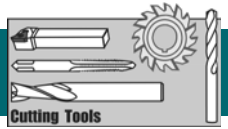
When ordering, please indicate the Types, Sizes, as well the Chip Breakers to us.  
Such as CNMG120408, DNMG150608-V2, etc.

### INDEXABLE CUTTING INSERTS

<b>S</b> Square (90°)	SNUN	SPUN	SFUN	SPMR-T	SPMR-M	SNMA	SNMM-A	SNMM-H	SNMM-Y
SNMG-ZF1	SNMG-ZF3	SNMG-ZG	SCMT-V	SCMT-ZM	SCMT-ZF3	SCGH-ZR54	SCUW	SPGB	SPMW
SNMG-ZKM	SCMT-HKF	<b>T</b> Triangle(60°)	TNUN	TPUN	TNMA	TPGA	TPUR-T	TNMM-V	TNMG-A
TNMG-ZPF	TNMG-ZPS	TNMG-ZKM	TNMG-ZKF	<b>C</b> Rhombic(80°)	CNMA	CNMM-V	CNMM-M	CNMM-H	CNMM-ZR
CCMT	CNMT-V	CCMT-V	CPGT-ZM	CCMT-ZF	CCMT-ZF3	CNMG-ZPR	CNMM-ZPQ	CNMG-ZPM	CCMT-HPM
CNMG-ZKR	CCMT-HKR	CCMT-HKM	<b>D</b> Rhombic(55°)	DNMA	DNMM-V	DNMM-M	DNMG-V	DNMG-M	DNMM-ZF
DCMT-HMM	DCMT-HKM	<b>K</b>	KOUX-L11	KOUX-R11	KNUX-L11	KNUX-R11	<b>V</b> Rhombic(35°)	VNMA	VNMM-V
WNMG-Y	WCMT-V	WCMT-ZF3	<b>R</b> Round	RNMN	RNMA	RNMM-V	RCMM-ZR51	RCMM-V	RCUT

### MILLING INSERTS

<b>S</b>	SNA(C/K)N-ANN	SNA(C/K)N-ENN	SPMW-ANN	SPFN-T	SPA(C/K)N-EDR(L)	SECN-EER/(L)	SFAN-EER(L)	SPMW-EDR(L)	<b>L</b>



## CARBIDE INSERTS

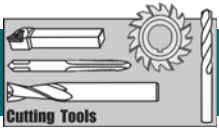
When ordering, please indicate the Types, Sizes, as well the Chip Breakers to us.  
Such as CNMG120408, DNMG150608-V2, etc.

### INDEXABLE CUTTING INGERTS

SNMM-M	SNMM-V	SNMM-ZM24	SNMG-ZM24	SNMM-ZR	SNMM-ZR51	SNMM-ZR53	SNMG-V	SNMG-ZM	SNMG-ZF
SNMG-ZV1	SCMT-ZPR	SNMG-ZPM	SNMT-ZPF	SNMM-ZMR	SCMT-HMR	SNMG-ZMM	SNMG-ZMF	SNMG-ZKR	SCMT-HKR
TNMG-V	TNMG-ZM	TNMG-ZM54	TNMG-ZG	TNUW	TCGW	TCUW	TCMT-ZM	TCMT-ZF3	TCMT-V
CNMM-ZR51	CNMM-ZM	CNMG-V	CNMG-ZG	CNMG-ZM	CNMG-ZF	CNMG-ZF2	CNMG-ZR54	CNMG-ZR53	CCCW/CCMW
CNMG-ZPF	CCMT-HPF	CNMG-ZPS	CNMM-ZMQ	CNMG-ZMR	CCMT-HMR	CCMT-HMM	CNMG-ZMM	CNMG-ZMF	CCMT-HMF
DNMG-ZF	DNMG-ZF3	DNMG-ZM	DNMG-V	DCMT	DCMT-ZF3	DCMT-V	DCMW	DCMT-HPR	DCMT-HPM
VNMG-V	VAGT-ZF	VBMT-V	VBMT-ZF3	VBMT-ZM	<b>W</b> Non-equilateral hexagon	WNMM-C	WNMM-V	WNMM-ZM	WNMG-ZM
RPMW	RCMT-V	RCMX-ZV	<b>Q</b>	QC14	QC07				

### MILLING INSERTS

LPEX-EDR(L)	LPEN	<b>F</b>	FPCN	<b>T</b>	TEC(K)N-PER(L)	TPA(C/K)N-PDR(L)	TPA(C/K)N-PPN		



# Cutting Tools

## CHIP-BREAKER APPLICATION

### CONVENTIONAL CHARACTERISTICS OF CHIP SPACE AND SCOPE OF APPLICATION

CHOICE STANDARD	TYPE	EXAMPLE	CLASSIFICATION	CHARACTERISTICS AND APPLICATION
BASIC CHOICE	ZF1		Super-finishing	<ul style="list-style-type: none"> <li>Sharp edge and well finished processing surface.</li> <li>Suitable for feedrate of 0.03-0.15mm/r and cutting depth of 0.2-0.5 mm</li> <li>Suitable for shallow cutting depth</li> </ul>
	ZF		Finishing	<ul style="list-style-type: none"> <li>Omnibearing chip space with sharp cutting edge.</li> <li>Suitable for cutting depth of 0.5-2.0mm</li> <li>Suitable for feedrate of 0.1-0.25mm/r</li> </ul>
	ZF2			
	ZM		Semi-finishing	<ul style="list-style-type: none"> <li>Conventional chip space for wide scope of application</li> <li>Suitable for feedrate of 0.2-0.4 mm/r and cutting depth of 1-4mm</li> </ul>
	ZF3			
	ZG			
	ZR		Roughing	<ul style="list-style-type: none"> <li>With good controlling capability of chips, suitable for high feed, feedrate of 0.3-0.6 mm/r and cutting depth of 3-8mm.</li> </ul>
	ZR51			
	ZR53			
	ZR54			
	ZM24			
	V		General-purpose	<ul style="list-style-type: none"> <li>Ranged between finishing and roughing chip breakers with smooth chip-removing.</li> </ul>
	M			

WWW.PRECOTOOLS.CN