

2017.A PROMOTION

VALID from February to June, 2017

- ▶ New Turning Grades
- ▶ RM4
- ▶ HRMD
- ▶ RM3 (New)
- ▶ Auto Tools
- ▶ KGT
- ▶ TPDB
- ▶ King Drill



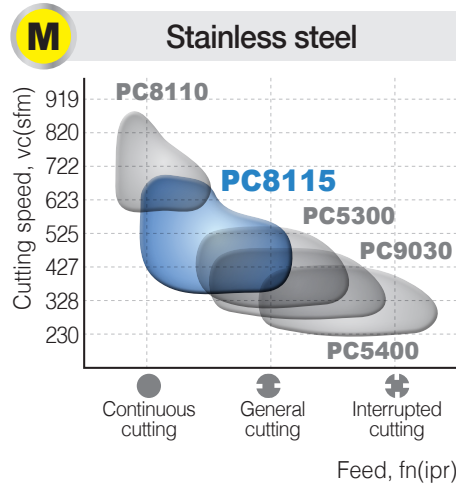
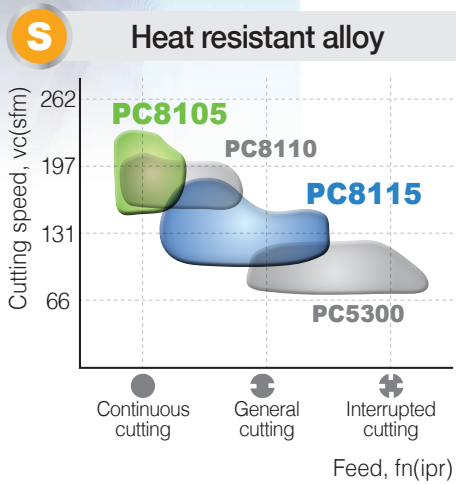
 **KORLOY AMERICA Inc.**

NEW TURNING GRADES

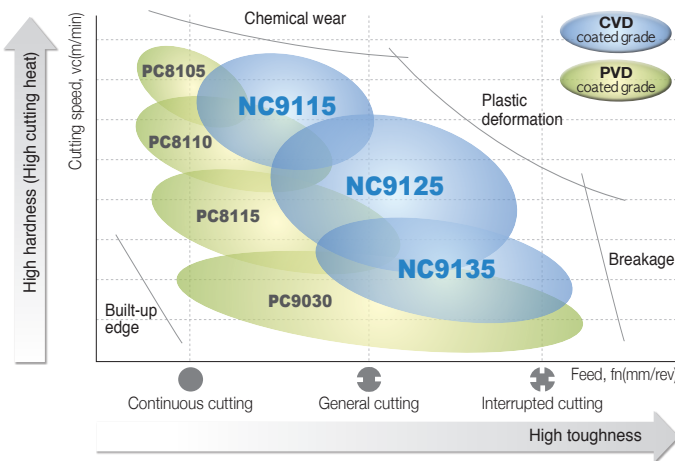
PC8105 / PC8110 / PC8115 / NC9115 / NC9125 / NC9135

Buy 20 get 10 FREE PC8100 and NC9100 series

■ PC8000 Series Grade Choice



■ NC9000 Series Grade Choice



■ Chip Removal Volume per Cutting Speed

Grade	ISO	Cutting speed (sfm)	Chip removal volume (in ³)
NC9135	M35	492	12.9
PVD coated grade	M30		15.6
Competitor	M35	656	7.7
NC9135	M35		7.7
PVD coated grade	M30		3.4
Competitor	M35		4.0

Higher productivity than PVD grades at high speeds over 150m/min

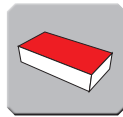
RICH MILL RM4

Heavy Duty Free Cutting 90° Face Mill

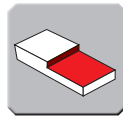
The Definition of High Performance

GET FREE CUTTER

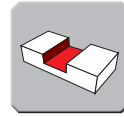
With the purchase of 10 inserts per cutter pocket*



Facing



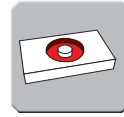
Shouldering



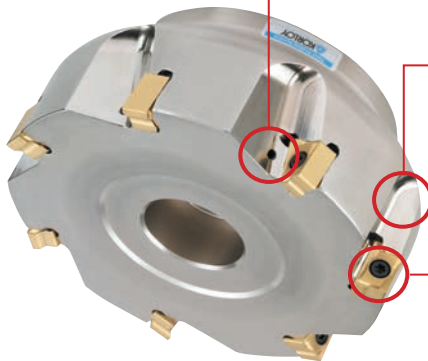
Slotting



Ramping



Helical cutting

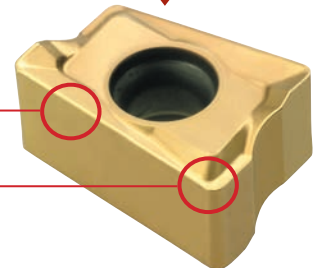


- Through coolant system Longer tool life due to direct cooling injection into the cutting edge of insert
- Wide chip pocket for better chip evacuation
- Simple screw on system



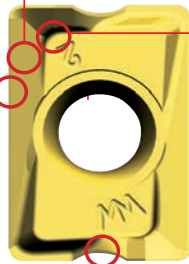
Double sided insert has 4 cutting edges

- Strong negative insert with high rake angle for improved performance



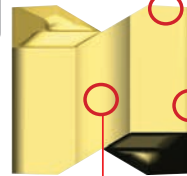
• Chip breaker High rake angle chip breaker / Improving chip control

• Major cutting edge High rake angle chip breaker / Better surface roughness



• Step design Improving chip control / Reducing cutting load

• Concave design 4 cutting edges / Minimize interference



• Minor cutting edge Special design of cutting edge to improve surface roughness

• Clearance face Strong negative face. Strong cutting edge

- Limited to Stock Standard Cutters and Inserts
- Includes RM4Z cutters
- *To 4" diameter. 15 per pocket 4" – 8" (inserts quantity rounded up to nearest ten.)
- *Over 8" requires 20 inserts per pocket

HRMD

High Feed Milling

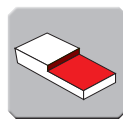
You have to run it to believe it

GET FREE CUTTER

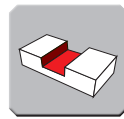
With the purchase of 10 inserts per cutter pocket
And 1 year Replacement Warranty



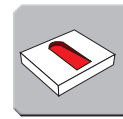
Facing



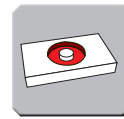
Shouldering



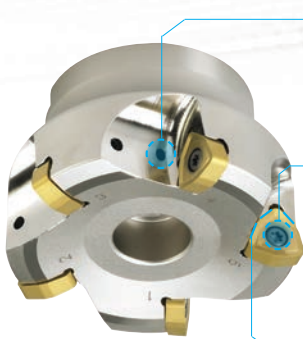
Slotting



Ramping



Helical cutting



Inner coolant system

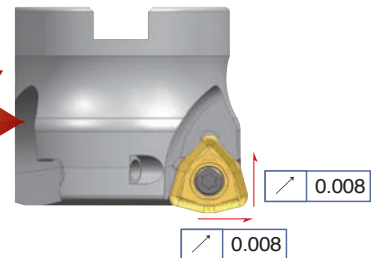
- Improvement of chip control and evacuation
- Longer tool life due to reduced cutting temperature
- High rake angle cutting edge reduces cutting load

Simple screw on system

- Strong clamping
- Convenient clamping
- Wide chip pocket for better chip evacuation
- Negative design with high rake angle

3-Surface constrained System

- Strong clamping
- Stable clamping against different cutting resistances in various machining applications
- 6 cutting edges



NOTE : Some insert feature information is repeated. This occurs because multiple insert features provide the same benefit. Example: Symmetrical design.

Recommended cutting condition

	Workpiece	Hardness	Grades	vc (sfm)	fz (ipt)
P	General structural steel, Mild steel	Under 200HB	PC3500	650(330~750)	1.0 ~ 2.0
			PC3545		
	Carbon steel, Alloy steel	Under 30HRC	PC3500	590(330~720)	1.0 ~ 1.5
			PC3545		
High Carbon steel, Alloy steel	30~40 HRC	PC3500	520(330~660)	0.8 ~ 1.3	
		PC3545			
	Pre-hardened steel	40~50 HRC	PC3500	390(260~190)	0.6 ~ 1.2
			PC5300		
M	Stainless steel	Under 270HB	PC5300	390(260~490)	0.8 ~ 1.3
			PC3545		
K	Cast iron	Under 350N/mm ²	PC5300	590(330~720)	1.2 ~ 1.8

▮ Limited to Stock Standard Cutters and Inserts

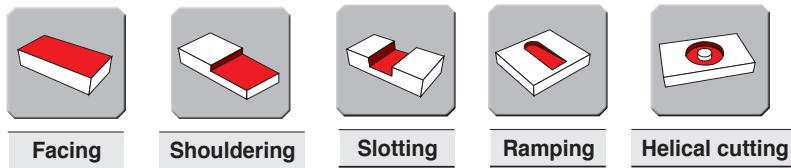
▮ Warranty requires registration of cutter with Korloy America. Subject to limitations. Korloy America reserves the right to change the terms and conditions of the warranty.

90° True Perpendicularity

Multi operational, high feed milling cutter

GET A FREE RM3

With the purchase of 10 inserts per cutter pocket Or Swap any current competitors shoulder mill and receive a FREE cutter with the purchase of 10 inserts per inch of cutter diameter.

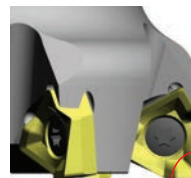
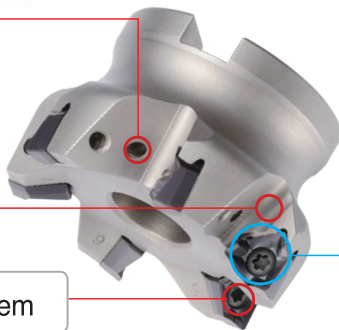


Features of cutter

Through coolant system provides longer tool life due to direct cooling injection onto the cutting edge of insert.

Excellent chip evacuation

- Wide chip pocket
- Simple Screw-on system



True perpendicularity

90°



3-face clamping seat

Full flat bottom seat

Strong clamping

Features of insert

Chip breaker
- High rake angle
- Smooth chip flow

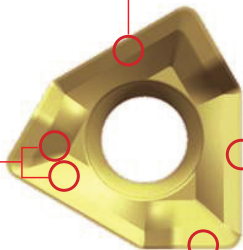
Step design
- Good chip evacuation
- Low cutting force

Minor cutting edge
- Wiper action for better surface finish

Major cutting edge
- High rake
- Sharpened edge

Max. ap
XNKT08 : 0.315 inch
XNKT06 : 0.217 inch

2-step clearance
- Strong clamping
- Rigidity improvement



AUTO TOOL



Precision Machining

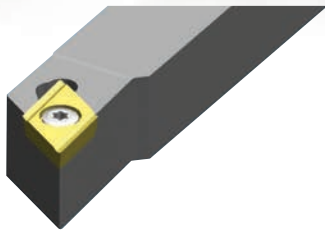
with Korloy Quality, Performance, Value

GET FREE HOLDER

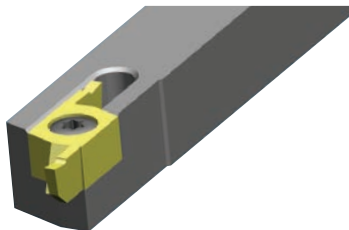
With the purchase of 10 inserts for matching holder



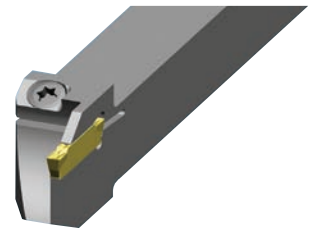
■ **Type**



ISO



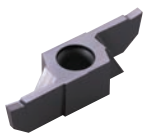
FGT



MGT

■ **Multi functional Auto Tool (FGT)**

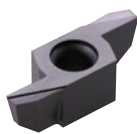
Possible to clamp on only one holder (Ex : 06 size whole inserts - Clamping on the 06 size holder)



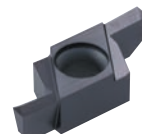
SG : Grooving



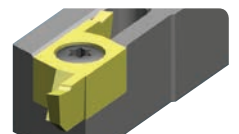
ST : Threading



SB : Back-turning



SGB : Grooving & Back-turning



SC : Parting off

■ **Recommend cutting condition**

Workpiece	Turning		Grooving		Parting off		Back-turning	
	Cutting Speed(sfm)	Feed(ipr)	Cutting Speed(sfm)	Feed(ipr)	Cutting Speed(sfm)	Feed(ipr)	Cutting Speed(sfm)	Feed(ipr)
Stainless steel	160~400	0.0008~0.0079	100~400	0.0008~0.0020	160~400	0.0008~0.0020	100~400	0.0008~0.0079
Carbon steel	160~490	0.0004~0.0098	160~490	0.0008~0.0031	160~490	0.0008~0.0031	160~490	0.0004~0.0098
Free-cutting steel	100~490	0.0008~0.0098	100~490	0.0008~0.0031	100~490	0.0008~0.0031	100~490	0.0004~0.0098
Non-ferrous metal	230~660	0.0012~0.0098	230~660	0.0012~0.0039	230~660	0.0012~0.0039	230~660	0.0012~0.0118

🚫 Limited to Stock Standard Holders and Inserts



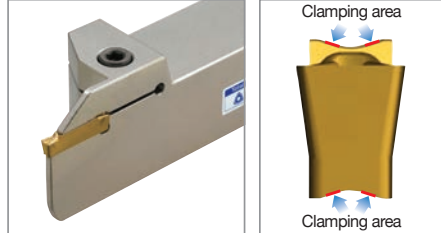
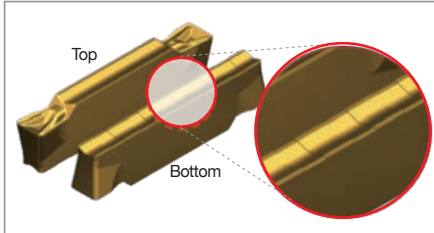
KGT SERIES

NEW!

New and Improved KGT
More Performance, Precision, Stability

10 FREE INSERTS

With the purchase of Any KGT Holder



■ Recommended Insert

Designation	Geometry	Picture	Application									
			For external machining			For face grooving		For Internal machining		Copying	For relieving	Special machining
			Parting	Grooving	Turning	Grooving	Turning	Grooving	Turning	Copying	Relieving	Special
KGMN	L Light Grooving		○	⊙		○						
	R Rough Grooving		○	⊙		○						
	T Turning-Multi Grooving		○	⊙	⊙	⊙	⊙					
KGMI	T Internal Grooving							⊙	⊙			
KRMN	C Copying									⊙	⊙	
KGMRL	LP Light Parting		⊙									
	RP Rough Parting		⊙									
KGGN	B Blank			○								⊙
	A Aluminum Grooving		○	⊙	○							
KRGN	A Aluminum Profiling									⊙	⊙	

■ Limited to Stock Standard Holders and Inserts

TPDB

3D, 5D, and 8D Drills for Combined Precision and Productivity

FREE DRILL BODY

With the purchase of 3 Tips*

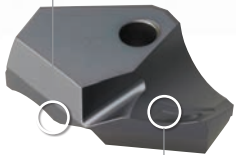
* 3D and 5D only. 8D requires 5 Tips

OR

BUY 2 GET 1 FREE

Features

• Cutting edge with low cutting resistance



• Improved chip control due to chip breaker

• Flute with excellent chip evacuation

• Superior rigidity and wear resistance of holder

• Screw on clamping system

• Auto-centering system

Recommended cutting condition

(inch)

Designation			Grades	vc (sfm)	fn(aspect ratio=3D~5D)			
ISO	Workpiece	HB			Feed(ipr) per drill diameter(inch)			
					0.3937~0.6260	0.6300~0.9803	0.9843~1.1772	
P	Carbon steel	Low carbon steel	80~120	PC5300 PC5335	365(265~464)	0.0059~0.0118	0.0079~0.0138	0.0098~0.0157
		High carbon steel	180~280	PC5300 PC5335	332(232~431)	0.0059~0.0118	0.0079~0.0138	0.0098~0.0157
	Alloy steel	Low alloy steel	140~260	PC5300	365(265~464)	0.0071~0.0138	0.0091~0.0150	0.0110~0.0169
		Low pre-hardened steel	200~400	PC5300	249(166~332)	0.0071~0.0138	0.0091~0.0150	0.0110~0.0169
		High alloy steel	50~260	PC5300	232(166~298)	0.0071~0.0118	0.0079~0.0138	0.0098~0.0157
		High pre-hardened steel	220~450	PC5300	199(133~265)	0.0071~0.0118	0.0079~0.0138	0.0098~0.0157
M	Stainless steel	Austenite series	135~275 Ni>8%	PC5300	166(99~232)	0.0051~0.0098	0.0059~0.0118	0.0067~0.0130
		Ferrite series Martensite series	135~275	PC5300	182(133~232)	0.0051~0.0098	0.0059~0.0118	0.0067~0.0130
K	Cast iron	Gray cast iron	150~230	PC5300	365(265~464)	0.0071~0.0138	0.0079~0.0157	0.0098~0.0177
		Ductile cast iron	160~260	PC5300	332(232~431)	0.0071~0.0138	0.0079~0.0157	0.0098~0.0177
S	Heat Resisting Steel	Ni pre-hardened steel	130~400	PC5300	133(66~199)	0.0039~0.0079	0.0047~0.0087	0.0051~0.0098
		Ti pre-hardened steel	130~400	PC5300	133(66~199)	0.0039~0.0079	0.0047~0.0087	0.0051~0.0098
		High hardened steel	400 above	PC5300	116(66~166)	0.0039~0.0079	0.0047~0.0087	0.0051~0.0098

- In case of 8D, reduce the cutting conditions to 40-50% of the above conditions or machine the beginning of hole first (1.5D).
- In case of interrupted machining, reduce the feed to 30-50% of the above conditions and start machining around the interrupted part.

• Limited to Stock Standard Drills and Inserts

KING DRILL

HIGH PERFORMANCE and Improved Chip Evacuation

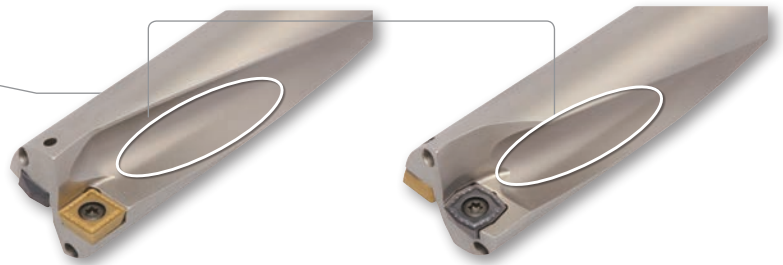
FREE DRILL BODY

up to 1.0 inch with the purchase of 40 inserts
up to 2.0 inch with the purchase of 60 inserts

Features

Optimized Flute System - 2 Coolant Holes Applied

- The optimized shape of the flute increases the rigidity of the drill body and improves chip evacuation



Recommended cutting condition

(inch)

Workpiece			Insert		vc (sfm)	Feed(aspect ratio=2D, 3D, 4D)							
			Chip Breaker	Grade		Fn(ipr) depending on drill Dia.							
ISO	Workpiece	Hardness(HB)		Central	Peripheral	0.47~0.63	0.64~0.91	0.92~1.14	1.15~1.65	1.66~2.36			
P	Carbon steel	Low carbon steel	80~180	LD	PC5335	PC5335	394(197~558)	0.0016~0.0031	0.0016~0.0031	0.0016~0.0031	0.0031~0.0016	0.0016~0.0031	
				PD	PC5300	PC3500	492(394~591)						
		NC5330	591(459~722)	High carbon	180~280	PD	PC5300	PC3500	394(295~492)	0.0016~0.0039	0.0016~0.0047	0.0024~0.0063	0.0047~0.0024
	NC5330	492(361~623)	0.0016~0.0024					0.0016~0.0028	0.0016~0.0031	0.0028~0.0016	0.0016~0.0031		
	LD	PC5335	PC5335					394(197~525)	0.0024~0.0039	0.0024~0.0039	0.0024~0.0055	0.0039~0.0024	0.0024~0.0055
	Alloy steel	Low alloy steel	140~260	LD	PC5335	PC3500	PC3500	492(394~558)	0.0024~0.0047	0.0024~0.0047	0.0024~0.0063	0.0047~0.0024	0.0024~0.0063
NC5330							591(459~689)	0.0024~0.0031	0.0024~0.0031	0.0024~0.0047	0.0031~0.0024	0.0024~0.0047	
PD		PC5300	PC5300	328(164~492)	0.0016~0.0039	0.0024~0.0039	0.0024~0.0055	0.0039~0.0024	0.0024~0.0055				
PD		PC5300	PC3500	328(164~525)	0.002~0.0043	0.002~0.0043	0.002~0.0059	0.0043~0.002	0.002~0.0059				
Hardened low alloy steel	200~400	PD	PC5300	PC5300	230(98~394)	0.0016~0.0031	0.0024~0.0031	0.0024~0.0047	0.0031~0.0024	0.0024~0.0047			
Hardened high alloy steel	300~450	PD	PC5300	PC5300	230(98~394)	0.0016~0.0031	0.0024~0.0031	0.0024~0.0047	0.0031~0.0024	0.0024~0.0047			
M	Stainless steel	135-275	LD	PD5335	PC5335	394(262~459)	0.0016~0.0028	0.0016~0.0028	0.0016~0.0031	0.0028~0.0016	0.0016~0.0031		
			PD	PC5300	PC5300	427(328~525)	0.0016~0.0028	0.0016~0.0028	0.0016~0.0031	0.0028~0.0016	0.0016~0.0031		
K	Cast iron	Gray cast iron	150~230	PD	PC5300	PC6510	623(492~820)	0.0016~0.0047	0.002~0.0055	0.0039~0.0087	0.0055~0.0039	0.0039~0.0102	
		Ductile cast iron	150~230	PD	PC5300	PC6510	427(328~525)	0.0016~0.0028	0.0016~0.0031	0.002~0.0047	0.0031~0.002	0.002~0.0047	
S	Heat-resisting alloy	Ni-heat resisting alloy	130~400	PD	PC5300	PC5300	164(98~328)	0.0016~0.0039	0.0016~0.0039	0.0016~0.0039	0.0039~0.0016	0.0016~0.0039	
							197(131~262)	0.0016~0.0031	0.0016~0.0039	0.0024~0.0055	0.0039~0.0024	0.0024~0.0063	
		Ti-heat resisting alloy	130~400	PD	PC5335	PC5335	197(131~262)	0.0016~0.0031	0.0016~0.0039	0.0024~0.0055	0.0039~0.0024	0.0024~0.0063	
N	Alloyed aluminum Alloyed copper	Alloyed aluminum	30~150	ND	H01	H01	984(820~1312)	0.0020~0.0055	0.0024~0.0063	0.0039~0.0087	0.0063~0.0039	0.0047~0.0098	
							Alloyed copper	150-160	ND	H01	H01	820(656~984)	0.0020~0.0055

※ The Max. feed of 5D holders is 70%~80% of the max. conditions of 2D/3D/4D holders.

※ In interrupted machining part, reduce 30~50% of feed from the above machining around interrupted part.

▶ Limited to Stock Standard Drills and Inserts

▶ Up to 1" valid on 2D-3D-4D-5D drills. Over 1" - up to 2" valid on 2D-3D-4D drills. 5D over 1" drills require 80 inserts.

Place
Stamp
Here

MEET or BEAT Challenge

DON'T FORGET ABOUT KORLOY'S MEET OR BEAT CHALLENGE

Korloy Will meet or beat any published promotional offer of any competitor.
Ask your Korloy representative for more details or call at 1-888-711-0001

Current promotional offer cannot be used or combined with other promotions or special offers. Korloy reserves the right to change or modify the terms and conditions of the promotion. Tech Support: 1-844-248-3666

