

# ***GY Series***

# **GY Mono Block**

# **Grooving Revolution**

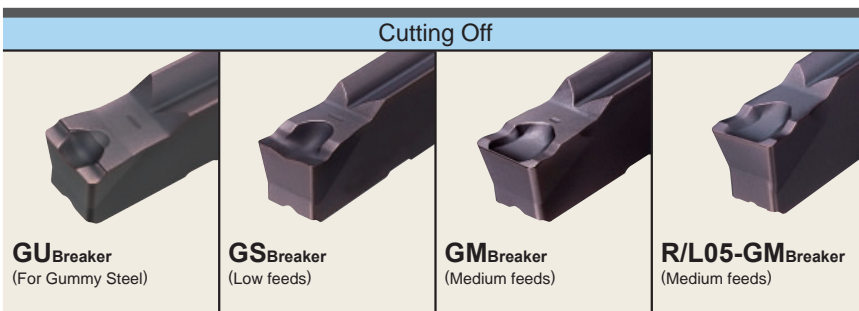
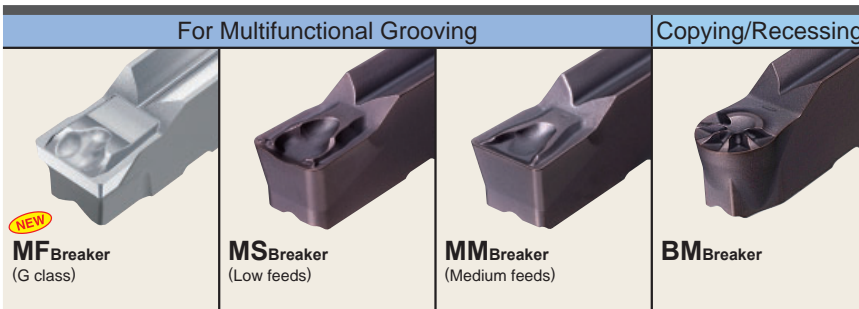
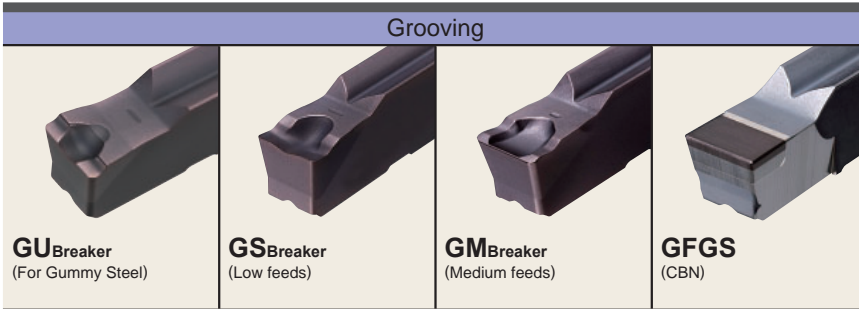
**One piece type ensure high rigidity and cost effective.**



# INSERT

## A WIDE SELECTION OF INSERTS

### ● Breaker system



### ● Selection of groove widths



### ● Different corner radii available

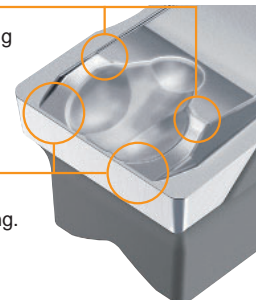


NEW

### ● MF Breaker

Efficient chip breaking when cross-feed machining.

Chips are controlled when finish machining.



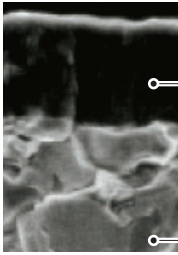
## ● INSERT GRADE

Machining Condition	Work Material				
	P Steel	M Stainless Steel	K Cast Iron	S Heat resistant Alloy / Titanium Alloy	H Hardened steel
Stable	NX2525				MB8025
Machining Condition	MY5015			VP10RT	
	VP10RT	VP10RT	MY5015	RT9010	
	VP20RT	VP20RT	VP10RT	VP20RT	
Unstable		VP20RT	VP20RT	VP20RT	

Note1) VP20RT is the first recommended grade for materials other than hardened steel.

Note2) For VP10RT, VP20RT and MY5015, wet cutting is recommended.

### **VP20RT (1st Recommendation)**

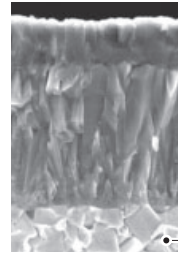


● PVD coated grade suitable for a wide range of applications. The combination of a special tough cemented carbide substrate with MIRACLE coating provides an excellent balance of wear and fracture resistance.

MIRACLE Coating

Carbide substrate (HRA90.5)

### **MY5015**

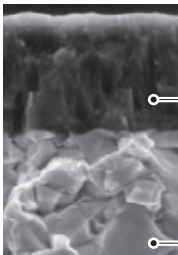


● MY5015 is a CVD coated grade with excellent wear resistance even at high temperatures. It provides longer tool life when machining cast and ductile cast irons. Also suitable for high speed continuous cutting of steels.

CVD Coated Carbide

Carbide substrate

### **VP10RT (2nd Recommendation)**



● PVD coated grade with a cemented carbide substrate harder than VP20RT. For use on difficult to cut materials and for extending tool life.

MIRACLE Coating

Carbide substrate (HRA92.0)

### **RT9010**

● First recommended grade for titanium alloys.  
It is not recommended for use on non-ferrous alloys.

### **NX2525**

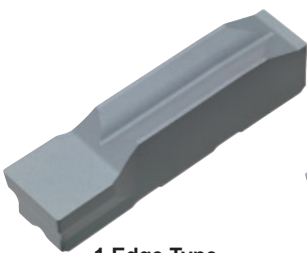
● NX2525, a cermet grade for finish machining of steels and for good surface finishes at lower cutting speeds.

### **MB8025**

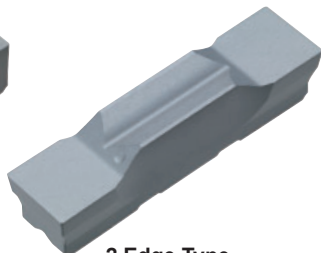
● MB8025 is a sintered CBN grade for hardened steel.

## ● **BLANK INSERTS**

● Blank inserts for custom grinding



1 Edge Type



2 Edge Type

\* Blank inserts to be ground by customers.

### **RT9010/RT9020 for blank insert**

● First recommendation for blanks inserts is RT9020 due to the tougher carbide substrate that is suitable for a wider range of applications.  
RT9010 has a harder substrate than RT9020 and is ideal for longer tool life on stable cutting applications.  
Both grades are recommended to have a coating applied that is suitable for the required application.

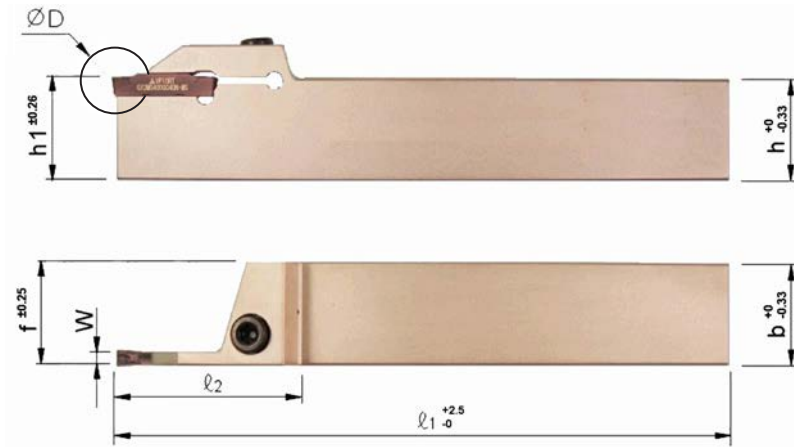


Figure 1

Right Hand Tool Holder Shown

Short Series (Groove & Turn)													
Insert Width W (mm)	Max. Groove Depth ØD (mm)	Order Number	Insert Number	Dimensions (mm)								Clamp Screw	Wrench
				h	b	l <sub>1</sub>	l <sub>2</sub>	h <sub>1</sub>	f	s <sub>1</sub>	fig		
2.00	12	Z-GYHR2020K00-W20D12	GY2M0200D***N-**	20	20	125	35	20	20.15	-	1	SR-M5X30	L4
		Z-GYHR2525M00-W20D12		25	25	150	35	25	25.15	-	1		
		Z-GYHL2020K00-W20D12		20	20	125	35	20	20.15	-	1		
		Z-GYHL2525M00-W20D12		25	25	150	35	25	25.15	-	1		
3.00	12	Z-GYHR2020K00-W30D12	GY2M0300F***N-**	20	20	125	35	20	20.15	-	1		
		Z-GYHR2525M00-W30D12		25	25	150	35	25	25.15	-	1		
		Z-GYHL2020K00-W30D12		20	20	125	35	20	20.15	-	1		
		Z-GYHL2525M00-W30D12		25	25	150	35	25	25.15	-	1		
4.00	16	Z-GYHR2020K00-W40D16	GY2M0400G***N-**	20	20	125	40	20	20.25	-	1		
		Z-GYHR2525M00-W40D16		25	25	150	40	25	25.25	-	1		
		Z-GYHL2020K00-W40D16		20	20	125	40	20	20.25	-	1		
		Z-GYHL2525M00-W40D16		25	25	150	40	25	25.25	-	1		
5.00	16	Z-GYHR2020K00-W50D16	GY2M0500H***N-**	20	20	125	40	20	20.25	-	1		
		Z-GYHR2525M00-W50D16		25	25	150	40	25	25.25	-	1		
		Z-GYHL2020K00-W50D16		20	20	125	40	20	20.25	-	1		
		Z-GYHL2525M00-W50D16		25	25	150	40	25	25.25	-	1		

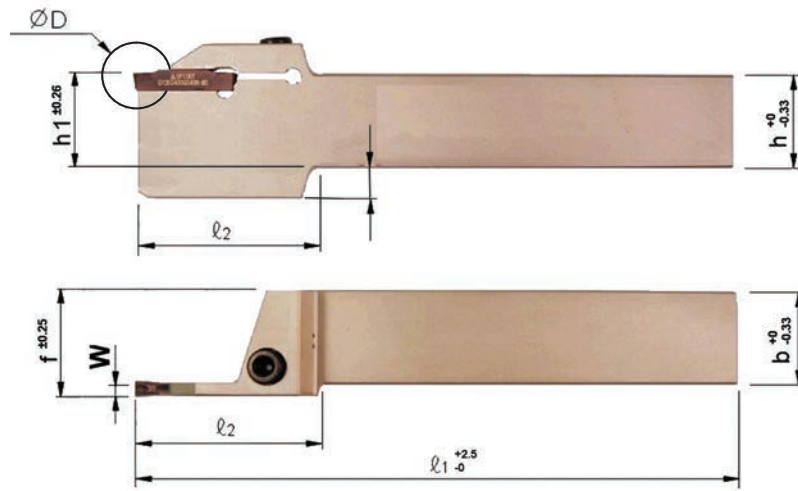


Figure 2

Right Hand Tool Holder Shown

Long Series (Cut-off & Groove only)													
Insert Width W (mm)	Max. Groove Depth ØD (mm)	Order Number	Insert Number	Dimensions (mm)								Clamp Screw	Wrench
				h	b	l <sub>1</sub>	l <sub>2</sub>	h <sub>1</sub>	f	s <sub>1</sub>	fig		
2.00	30	Z-GYHR2020K00-W20D30	GY2M0200D***N-**	20	20	125	35	20	20.15	-	1	SR-M5X30	L4
		Z-GYHR2525M00-W20D30		25	25	150	35	25	25.15	-	1		
		Z-GYHL2020K00-W20D30		20	20	125	35	20	20.15	-	1		
		Z-GYHL2525M00-W20D30		25	25	150	35	25	25.15	-	1		
3.00	40	Z-GYHR2020K00-W30D40	GY2M0300F***N-**	20	20	125	39.5	20	20.25	-	1		
		Z-GYHR2525M00-W30D40		25	25	150	39.5	25	25.25	-	1		
		Z-GYHL2020K00-W30D40		20	20	125	39.5	20	20.25	-	1		
		Z-GYHL2525M00-W30D40		25	25	150	39.5	25	25.25	-	1		
4.00	50	Z-GYHR2020K00-W40D50	GY2M0400G***N-**	20	20	125	44.5	20	20.25	-	1		
		Z-GYHR2525M00-W40D50		25	25	150	44.5	25	25.25	-	1		
		Z-GYHL2020K00-W40D50		20	20	125	44.5	20	20.25	-	1		
		Z-GYHL2525M00-W40D50		25	25	150	44.5	25	25.25	-	1		
5.00	50	Z-GYHR2020K00-W50D50	GY2M0500H***N-**	20	20	125	44.5	20	20.25	-	1		
		Z-GYHR2525M00-W50D50		25	25	150	44.5	25	25.25	-	1		
		Z-GYHL2020K00-W50D50		20	20	125	44.5	20	20.25	-	1		
		Z-GYHL2525M00-W50D50		25	25	150	44.5	25	25.25	-	1		
8.00	50	Z-GYPR2525M00-K50	GY2M0800K***N-**	25	25	150	47	25	28	7	2	SR-M6X30	
		Z-GYPR3225P00-K50		32	25	170	47	32	28	-	1		
		Z-GYPR3232P00-K50		32	32	170	47	32	35	-	1		
		Z-GYPL2525M00-K50		25	25	150	47	25	28	7	2		
		Z-GYPL3225P00-K50		32	25	170	47	32	28	-	1		
		Z-GYPL3232P00-K50		32	32	170	47	32	35	-	1		

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**For Your Safety**

●Don't handle inserts and chips without gloves.●Please machine within the recommended application range and exchange expired tools with new ones in advance of breakage.●Please use safety covers and wear safety glasses.●When using compounded cutting oils, please take fire precautions.●When attaching inserts or spare parts, please use only the correct wrench or spanner.

**Please contact our local distributor**

**[www.mitsubishicarbide.com](http://www.mitsubishicarbide.com)**