



SUMITOMO

CARBIDE - CBN - DIAMOND

*SumiMill*

**GOALMILL**



High Performance Milling Systems

***Milling cutter for roughing & finishing of cast iron***



# SumiMill GOALMILL

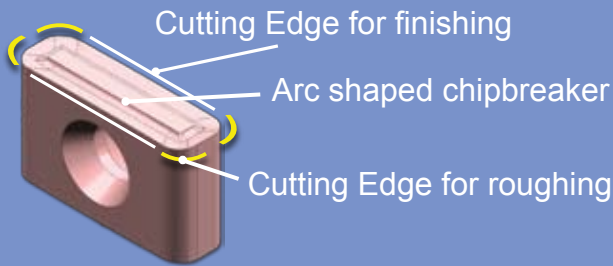
for cast iron roughing & finishing



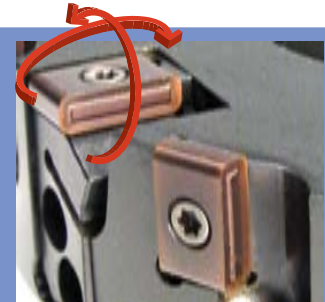
## Features & Benefits

- Excellent surface finish capabilities
- Consists of fixed pocket inserts on the periphery
- Cartridges adjust easily and use the same insert as the periphery pockets
- All LNGX inserts have 8 cutting edges (12 when used with both right and left hand cutters)

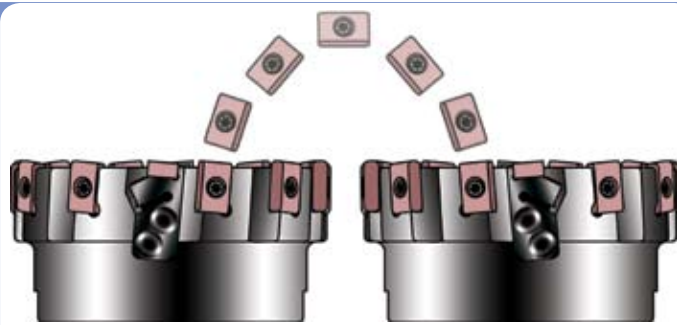
## Insert Features



Four indexes can be used in the periphery pocket if the insert is rotated.



Flip the insert on its side and four indexes can also be used in the finishing cartridge.



By switching the insert to a left hand cutter, **FOUR MORE ROUGHING EDGES** can now be used. A total of 12 indexes are possible when using both right and left hand cutters.\*

\*Left-handed cutters are made to order



Master Tool can provide custom-made milling cutters to accommodate your specific applications.

Roughing <50Rz	Semi-finishing <18Rz	Finishing <12.5Rz
45° 	45° w/wiper 	90° 

Fig. 1

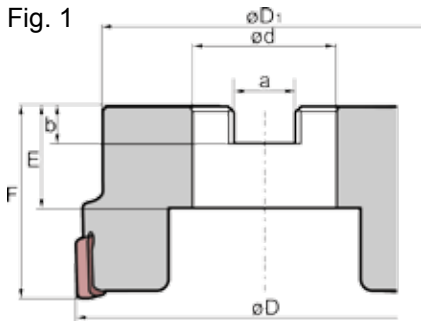


Fig. 2

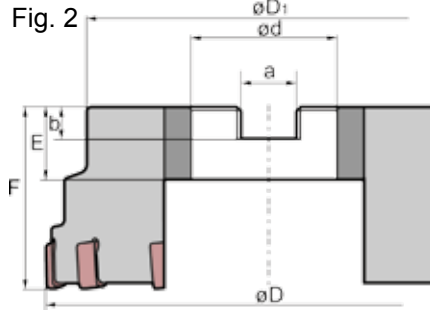
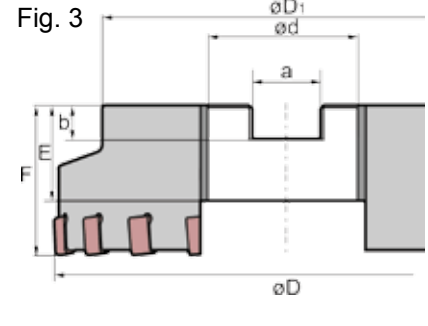


Fig. 3



**GOALMILL Cutter Bodies**

Catalog Number	Stock	Dimensions (inch)							# of Teeth		Fig.	Effective Cutting Dia.
		$\phi D$	$\phi D_1$	$\phi d$	a	b	E	F	Roughing	Wiper		
GFV54000R	●	4.000	3.380	1.500	0.638	0.385	1.060	2.000	10	4	1	3.342
GFV56000R	●	6.000	4.880	2.000	0.761	0.438	1.000	2.500	12	4	2	5.342
GFV58000R	●	8.000	6.040	2.500	1.136	0.560	1.595	2.500	20	6	3	7.342

NOTE: Left-handed cutters are made to order

**GOALMILL Inserts & Hardware**

Catalog Number	Stock	Dimensions (inch)				Insert Screw*	Insert Wrench
		L	W	T	R		
LNGX160516PNFN-W-K244L9	●	0.625	0.375	0.187	0.063	BFTX03588	TTX15W
LNGX160516PNFN-W-K246L9	●						

\*Torque specifications for insert screw= 26.5 in/lbs.

**Cartridge & Hardware**

Wiper Cartridge*	Cartridge Mount Screw	Wrench for Cartridge Mount Screw	Axial Adjustment Screw	Wrench for Adjustment Screw
GFVK5R	BX0418	LT15	ED090225E	TTX15W

\*Insert not included with cartridge

**Micro Adjustment:**

- Check each of the fixed pocket milling inserts to find the one at the highest setting.
- Load the wiper cartridges into the face mill body and torque the cartridge mount screw
- Adjust the wiper cartridge using the axial adjustment screw so that it is .0010" ~ .0012" above the highest fixed pocket milling insert



NOTE: If the wiper inserts will be indexed without presetting the wiper cartridge heights again, the first preset height should be from 0.0015" to 0.0020" (0.025 to 0.050 mm) above the highest fixed pocket.

**Recommended Cutting Conditions**

Gray Cast Iron			
Grade	SFM	D.O.C.	IPT
K244L9	450~1150	0.004~0.030	0.004~0.015
K246L9	400~650		

Ductile Cast Iron			
Grade	SFM	D.O.C.	IPT
K244L9	450~800	0.004~0.030	0.004~0.015
K246L9	400~600		

\*Greater depths of cut (up to 4mm) possible if wiper cartridges are removed.



# SUMITOMO

**CARBIDE - CBN - DIAMOND**

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