



SUMITOMO

CARBIDE - CBN - DIAMOND

NEW

GND

Grooving Tool Holders GND Type

High Rigidity Body

The GND series is designed for grooving and features a single-piece construction made of special steel. This design reduces chatter and also delivers steady performance for turning, profiling, and facing.

Wide Range of Chipbreakers

The GND lineup features 5 types of chipbreakers for various machining applications. Offers consistent chip control under various conditions.



Multi-Purpose
General Feed
MG Chipbreaker

Multi-Purpose
Low Feed
ML Chipbreaker

Grooving
General Feed
GG Chipbreaker

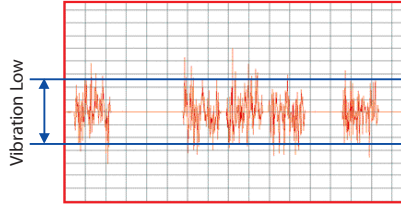
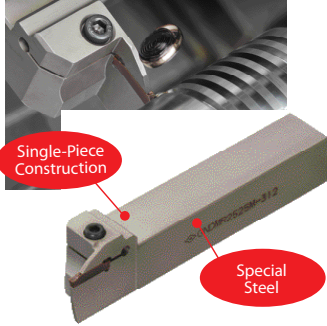
Grooving
Low Feed
GL Chipbreaker

Profiling
General Feed
RG Chipbreaker

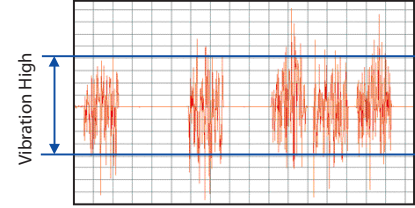
1001 Business Center Drive, Mt. Prospect, IL 60056-6080
P.O. Box 545, Mt. Prospect, IL, 60056-0545
800-950-5202 • 847-635-0044 • FAX: 847-635-7866
www.sumicarbide.com

Eliminates Vibration

High rigid design reduces vibration by as much as 30% over conventional types



GND
GND Type



Conventional Tool (Unit Type)

SCM415 Part Material	GNDL R2525M-220 Holder	GCM N2002-GG Insert	$v_c=100\text{m/min}$, $f=0.10\text{mm/rev}$, $a_p=20.0\text{mm}$, Wet Cutting Conditions
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Excellent Chip Control

Special chipbreakers for various machining applications (grooving, turning, profiling)

Grooving



GND Type (GG Type Chipbreaker)

SCM415
Part Material

GNDL R2525M-320 Holder GCM N3002-GG Insert

$v_c=50\text{ SFM}$, $f=0.006\text{ IPR}$, $a_p=0.472"$, Wet
Cutting Conditions



Conventional Tool



GND Type (RG Type Chipbreaker)

SCM415
Part Material

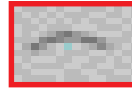
GNDM R2525M-312 Holder GCM N3015-RG Insert

$v_c=328\text{ SFM}$, $f=0.005\text{ IPR}$, $a_p=0.039"$, Wet
Cutting Conditions



Conventional Tool

Turning

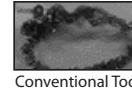


GND Type (ML Type Chipbreaker)

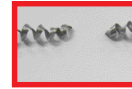
SCM415
Part Material

GNDM R2525M-312 Holder GCM N3002-ML Insert

$v_c=328\text{ SFM}$, $f=0.004\text{ IPR}$, $a_p=0.020"$ Wet
Cutting Conditions



Conventional Tool

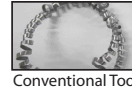


GND Type (RG Type Chipbreaker)

SCM415
Part Material

GNDM R2525M-312 Holder GCM N3015-RG Insert

$v_c=100\text{m/min}$, $f=0.15\text{mm/rev}$, $a_p=0.1\text{mm}$, Wet
Cutting Conditions



Conventional Tool

Improved Precision

Our precision sintering technology delivers $\pm 0.03\text{mm}$ accuracy for all grooving widths (from 2.0 to 6.0 mm).

Product Range

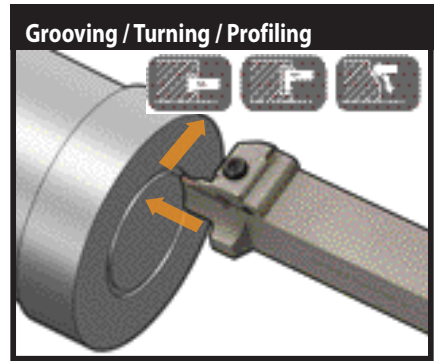
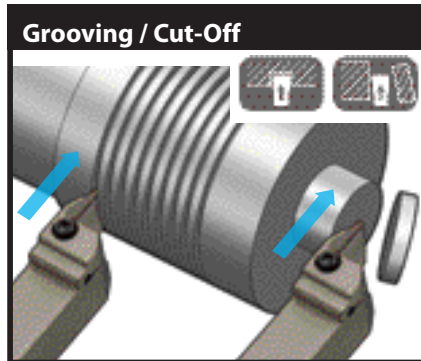
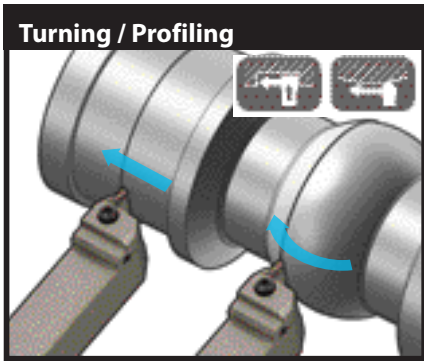
Application	Series	Shape	Seat Size (mm)					Max. Grooving Depth (INCH)	Work Dia. (METRIC)	Page
			2	3	4	5	6			
External Grooving	GNDM Straight		2	3	4	5	6	.500 .700		
	GNDMS L-Style		3	4	5	6	.400 (Shank: .750") .500 (Shank: 1.000") .550 (Shank: 1.000")			
	GNDL Straight		2	3	4	5	6	.750 1.000		
	GNDLS L-Style		2	3	4	5	6	.600 (Shank: .750") .700 (Shank: 1.000") .900		
Core Grooving	GDNF Straight		2	3	4	5	6	.500 .700 .900 .900	$\varnothing 35$ $\varnothing 55$ $\varnothing 50$ $\varnothing 300$ $\varnothing 40$ 55 $\varnothing 50$ $\varnothing 1,000$	





GND Type Holder Selection Guide

External Grooving



Face Grooving



GNDM Type / GNDMS Type
Perfect for turning and profiling. Can also be used for grooving.

<p>GNDM</p>  <p>Straight Type</p>	<p>GNDMS</p>  <p>L Style</p>
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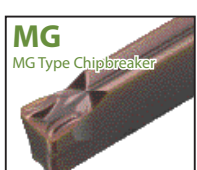





GNDL Type / GNDLS Type
Perfect for grooving and cut-off applications. Handles deep grooving with ease.

<p>GNDL</p>  <p>Straight Type</p>	<p>GNDLS</p>  <p>L-Style</p>
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GNDF Type
For facing work.

<p>GNDF</p>  <p>Straight Type</p>
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SEC-GND Type Chipbreaker Selection

Turning		Grooving		Profiling	
<p>General Feed Type</p> <p>Standard chipbreaker for turning</p>	<p>Low Feed Type</p> <p>For low-feed chip control</p>	<p>General Feed Type</p> <p>First choice for grooving</p>	<p>Low Feed Type</p> <p>For low-feed chip control</p>	<p>Application Specific</p> <p>For R grooving</p>	<p>General Feed Type</p> <p>Perfect for profiling</p>
<p>MG</p> <p>MG Type Chipbreaker</p> 	<p>ML</p> <p>ML Type Chipbreaker</p> 	<p>GG</p> <p>GG Type Chipbreaker</p> 	<p>GL</p> <p>GL Type Chipbreaker</p> 	<p>RG</p> <p>RG Type Chipbreaker</p> 	<p>RG</p> <p>RG Type Chipbreaker</p> 

If chips are long when using GG and GL type chipbreakers for grooving, chip control can be improved by using MG or ML type chipbreakers.



Chipbreaker Selection Guide

Seat Size	Recommended Cutting Conditions		Nose Radius	Catalog Number
	Grooving	Turning		
2			.008	GCM N2094R0.5 GG GCM N2094R0.5 GL
			3	
4			.008	GCM N4002 GG GCM N4002 GL
			.016	GCM N4004 ML GCM N4004 GG
			.032	GCM N4008 MG
			.079	GCM N4020 RG
5			.008	GCM N5187R0.5 GG GCM N5187R0.5 GL
			.016	GCM N5187R1.0 ML GCM N5187R0.5 GG
			.032	GCM N5187R2.0 MG
			.09375	GCM N5187 RG
6			.008	GCM N6250R0.5 GG GCM N6250R0.5 GL
			.016	GCM N6250R1.0 ML GCM N6250R1.0 GG
			.032	GCM N6250R2.0 MG
			.125	GCM N6250 RG

When face grooving, use cutting conditions closer to the lower limit of the recommended cutting conditions to ensure that chips are long.

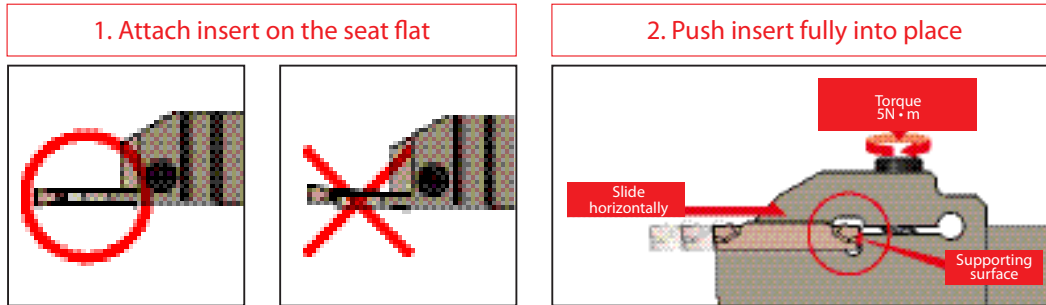
Recommended Cutting Speed

Grades	AC530U			
Material	P Free-Cutting Steel	P Carbon Steel / Alloy Steel	M Stainless Steel	N Brass
Cutting Speed <i>SFM</i>	165 ~ 650	165 ~ 650	165 ~ 500	230 ~ 985



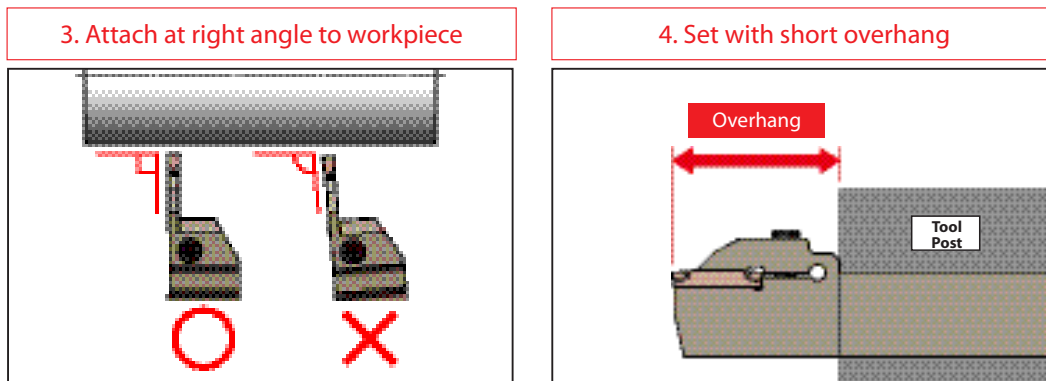
Notes on Attaching Inserts

- Remove any debris or oil from the insert seat before attaching the insert.
- Grind off any burr or flaws on the insert seat.
- Slide the insert flat over its seat.
- Clamp the insert with its opposite end (the holder side) firmly against the supporting surface.
- The recommended tightening torque is **5 N·m**. Tightening above the recommended torque may damage the insert which could cause injury and other accidents.



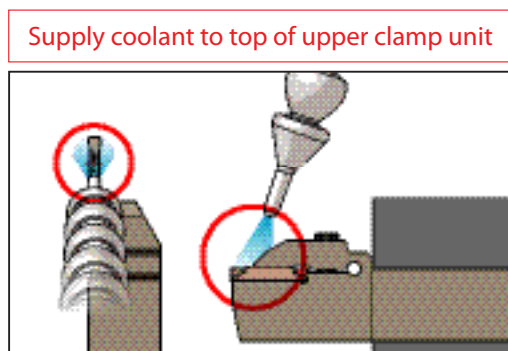
Notes on Attaching Holders

- Remove any debris or oil from the tool post before attaching the holder.
- Grind off any burr or flaws on the tool post.
- Attach the insert so that it is perpendicular to the workpiece.
- Set holder with shortest possible overhang.

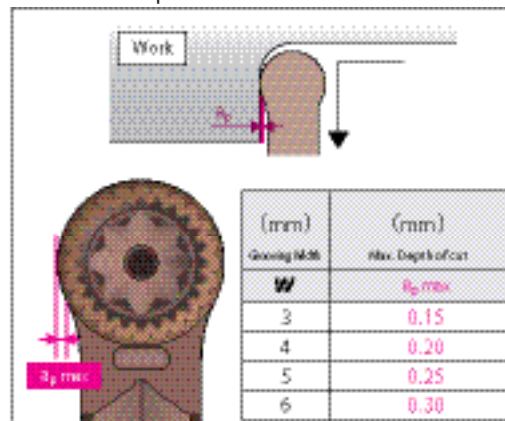


Notes on Setting Coolant Supply Nozzle

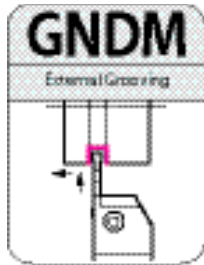
- Set the coolant supply nozzle so that coolant can be supplied from the top of the upper clamp unit.



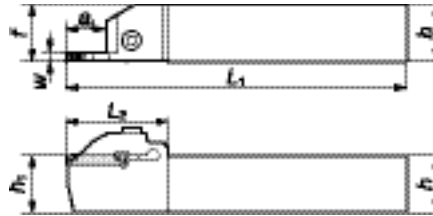
Maximum depth of cut when pulling up with RG chipbreaker



External Multi-Purpose (Grooving / Turning / Profiling)



Use for multi-purpose or post leg is set for turning / profiling.

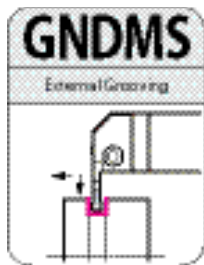


Above figures show right hand tools

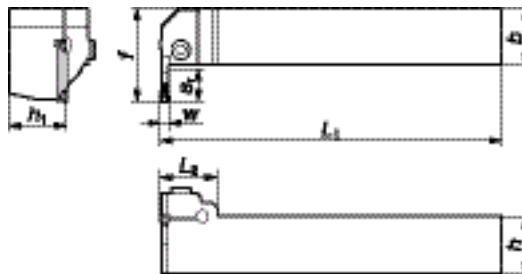
Catalog Number	Dimensions (in)						Groove Width W (inch)	Max. Groove depth ar (inch)	Seat Size		
	h	b	L1	f	h1	L2					
GNDM L/R 123K-050	.750	.750	5.000	.750	.750	1.441	.125	.500	3		
GNDM L/R 124K-070	.750	.750	5.000	.750	.750	1.772	.157	.700	4		
GNDM L/R 125K-070	.750	.750	5.000	.750	.750	1.772	.1875	.700	5		
GNDM L/R 126K-070	.750	.750	5.000	.750	.750	1.772	.250	.700	6		
GNDM L/R 163M-050	1.000	1.000	6.000	1.000	1.000	1.441	.125	.500	3		
GNDM L/R 164M-070	1.000	1.000	6.000	1.000	1.000	1.772	.157	.700	4		
GNDM L/R 165M-070	1.000	1.000	6.000	1.000	1.000	1.772	.1875	.700	5		
GNDM L/R 166M-070	1.000	1.000	6.000	1.000	1.000	1.772	.250	.700	6		

Select holders and inserts with the same grooving widths (w). Refer to page 11 for applicable inserts.

External L-Styled (Side Cut) Multi-Purpose (Grooving / Turning / Profiling)



Use for multi-purpose or post leg insert for turning / profiling.



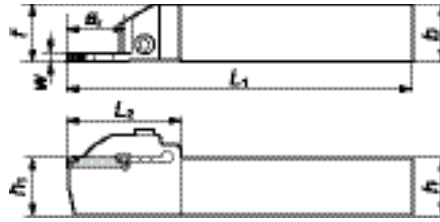
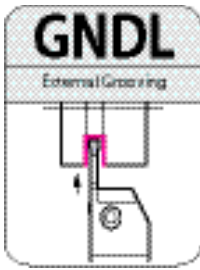
Above figures show right hand tools

Catalog Number	Dimensions (in)						Groove Width W (inch)	Max. Groove depth ar (inch)	Seat Size		
	h	b	L1	f	h1	L2					
GNDMS L/R 123K-040	.750	.750	5.000	1.222	.750	1.000	.125	.4000	3		
GNDMS L/R 124K-050	.750	.750	5.000	1.300	.750	1.000	.157	.5000	4		
GNDMS L/R 125K-050	.750	.750	5.000	1.300	.750	1.000	.1875	.5000	5		
GNDMS L/R 163M-050	1.000	1.000	6.000	1.551	1.000	1.000	.125	.5000	3		
GNDMS L/R 164M-055	1.000	1.000	6.000	1.630	1.000	1.000	.157	.5500	4		
GNDMS L/R 165M-055	1.000	1.000	6.000	1.630	1.000	1.000	.1875	.5500	5		
GNDMS L/R 166M-055	1.000	1.000	6.000	1.630	1.000	1.000	.250	.5500	6		

Select holders and inserts with the same grooving widths (w). Refer to page 11 for applicable inserts.



External Deep Grooving / Cut-Off

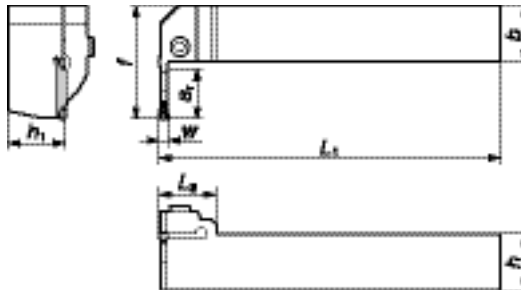
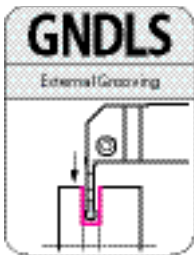


Above figures show right hand tools

Catalog Number	Dimensions (in)						Groove Width W (inch)	Max. Groove depth ar (inch)	Seat Size		
	h	b	L1	f	h1	L2					
GNDL L/R 122K-075	.750	.750	5.000	.750	.750	1.752	.094	.750	2	BX0520	LH040
GNDL L/R 123K-075	.750	.750	5.000	.750	.750	1.752	.125	.750	3		
GNDL L/R 124K-100	.750	.750	5.000	.750	.750	1.969	.157	1.000	4		
GNDL L/R 125K-100	.750	.750	5.000	.750	.750	1.969	.1875	1.000	5		
GNDL L/R 126K-100	.750	.750	5.001	.750	.750	1.969	.250	1.000	6		
GNDL L/R 162M-075	1.000	1.000	6.000	1.000	1.000	1.752	.094	.750	2		
GNDL L/R 163M-075	1.000	1.000	6.000	1.000	1.000	1.752	.125	.750	3		
GNDL L/R 164M-100	1.000	1.000	6.000	1.000	1.000	1.969	.157	1.000	4		
GNDL L/R 165M-100	1.000	1.000	6.000	1.000	1.000	1.969	.187	1.000	5		
GNDL L/R 166M-100	1.000	1.000	6.000	1.000	1.000	1.969	.250	1.000	6		

Select holders and inserts with the same grooving widths (w). Refer to page 11 for applicable inserts.

External L-Style (Side Cut) Grooving



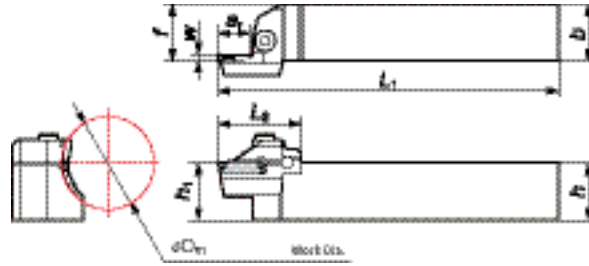
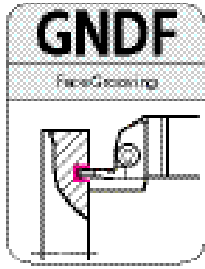
Above figures show right hand tools

Catalog Number	Dimensions (in)						Groove Width W (inch)	Max. Groove depth ar (inch)	Seat Size		
	h	b	L1	f	h1	L2					
GNDLS L/R 122K-060	.750	.750	5.000	1.459	.750	1.000	.094	.600	2	BX0520	LH040
GNDLS L/R 123K-060	.750	.750	5.000	1.459	.750	1.000	.125	.600	3		
GNDLS L/R 124K-070	.750	.750	6.000	1.787	.750	1.000	.157	.700	4		
GNDLS L/R 162M-070	1.000	1.000	6.000	1.787	1.000	1.000	.094	.700	2		
GNDLS L/R 163M-070	1.000	1.000	6.000	1.787	1.000	1.000	.125	.700	3		
GNDLS L/R 164M-090	1.000	1.000	6.000	1.984	1.000	1.000	.157	.900	4		
GNDLS L/R 165M-090	1.000	1.000	6.000	1.984	1.000	1.000	.1875	.900	5		
GNDLS L/R 166M-090	1.000	1.000	6.000	1.984	1.000	1.000	.250	.900	6		

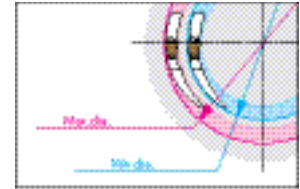
Select holders and inserts with the same grooving widths (w). Refer to page 11 for applicable inserts.



Face Grooving



Above figures show right hand tools



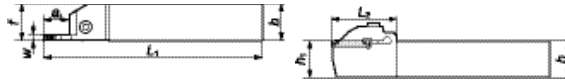
Work diameters in stock table indicate external diameter of face groove.

Catalog Number	Dimensions (in)						Work Dia. ØDm		Grooving width	Max. Groove depth	Seat Size	Cap Screw	Wrench
	h	b	L1	f	h1	L2	Min.	Max.					
GNDF L/R 123K-050-035	.750	.750	5.000	.750	.750	1.402	1.378	1.772	.125	.500	3	BX0520	LH040
GNDF L/R 123K-050-040	.750	.750	5.000	.750	.750	1.402	1.575	2.165	.125	.500	3		
GNDF L/R 123K-070-050	.750	.750	5.000	.750	.750	1.638	1.969	2.756	.125	.700	3		
GNDF L/R 123K-070-065	.750	.750	5.000	.750	.750	1.638	2.559	3.397	.125	.700	3		
GNDF L/R 123K-070-090	.750	.750	5.000	.750	.750	1.638	3.543	5.906	.125	.700	3		
GNDF L/R 123K-070-140	.750	.750	5.000	.750	.750	1.638	5.512	7.874	.125	.700	3		
GNDF L/R 123K-070-180	.750	.750	5.000	.750	.750	1.638	7.087	11.811	.125	.700	3		
GNDF L/R 124K-070-040	.750	.750	5.000	.750	.750	1.638	1.575	2.165	.157	.700	4		
GNDF L/R 124K-090-050	.750	.750	5.000	.750	.750	1.835	1.969	2.756	.157	.900	4		
GNDF L/R 124K-090-065	.750	.750	5.000	.750	.750	1.835	2.559	3.543	.157	.900	4		
GNDF L/R 124K-090-085	.750	.750	5.000	.750	.750	1.835	3.346	5.118	.157	.900	4		
GNDF L/R 124K-090-125	.750	.750	5.000	.750	.750	1.835	4.921	7.874	.157	.900	4		
GNDF L/R 124K-090-180	.750	.750	5.000	.750	.750	1.835	7.087	11.811	.157	.900	4		
GNDF L/R 124K-090-280	.750	.750	5.000	.750	.750	1.835	11.024	39.370	.157	.900	4		
GNDF L/R 125K-090-050	.750	.750	5.000	.750	.750	1.835	1.969	2.756	.1875	.900	5		
GNDF L/R 125K-090-065	.750	.750	5.000	.750	.750	1.835	2.559	3.543	.1875	.900	5		
GNDF L/R 125K-090-085	.750	.750	5.000	.750	.750	1.835	3.346	5.118	.1875	.900	5		
GNDF L/R 125K-090-125	.750	.750	5.000	.750	.750	1.835	4.921	7.874	.1875	.900	5		
GNDF L/R 125K-090-180	.750	.750	5.000	.750	.750	1.835	7.087	11.811	.1875	.900	5		
GNDF L/R 125K-090-280	.750	.750	5.000	.750	.750	1.835	11.024	39.370	.1875	.900	5		
GNDF L/R 126K-090-050	.750	.750	5.000	.750	.750	1.835	1.969	2.953	.250	.900	6		
GNDF L/R 126K-090-070	.750	.750	5.000	.750	.750	1.835	2.756	4.331	.250	.900	6		
GNDF L/R 126K-090-100	.750	.750	5.000	.750	.750	1.835	3.397	7.874	.250	.900	6		
GNDF L/R 126K-090-180	.750	.750	5.000	.750	.750	1.835	7.087	11.811	.250	.900	6		
GNDF L/R 126K-090-280	.750	.750	5.000	.750	.750	1.835	11.024	39.370	.250	.900	6		
GNDF L/R 163M-050-035	1.000	1.000	6.000	1.000	1.000	1.402	1.378	1.772	.125	.500	3	BX0520	LH040
GNDF L/R 163M-050-040	1.000	1.000	6.000	1.000	1.000	1.402	1.575	2.165	.125	.500	3		
GNDF L/R 163M-070-050	1.000	1.000	6.000	1.000	1.000	1.638	1.969	2.756	.125	.700	3		
GNDF L/R 163M-070-065	1.000	1.000	6.000	1.000	1.000	1.638	2.559	3.397	.125	.700	3		
GNDF L/R 163M-070-090	1.000	1.000	6.000	1.000	1.000	1.638	3.543	5.906	.125	.700	3		
GNDF L/R 163M-070-140	1.000	1.000	6.000	1.000	1.000	1.638	5.512	7.874	.125	.700	3		
GNDF L/R 163M-070-180	1.000	1.000	6.000	1.000	1.000	1.638	7.087	11.811	.125	.700	3		
GNDF(L/R)164M-050-035	1.000	1.000	5.000	.750	.750	1.638	1.575	2.165	.157	.700	4		
GNDF(L/R)164M-050-040	1.000	1.000	5.000	.750	.750	1.835	1.969	2.756	.157	.900	4		
GNDF(L/R)164M-070-050	1.000	1.000	5.000	.750	.750	1.835	2.559	3.543	.157	.900	4		
GNDF(L/R)164M-070-065	1.000	1.000	5.000	.750	.750	1.835	3.346	5.118	.157	.900	4		
GNDF(L/R)164M-070-090	1.000	1.000	5.000	.750	.750	1.835	4.921	7.874	.157	.900	4		
GNDF(L/R)164M-070-140	1.000	1.000	5.000	.750	.750	1.835	7.087	11.811	.157	.900	4		
GNDF(L/R)164M-070-180	1.000	1.000	5.000	.750	.750	1.835	11.024	39.370	.157	.900	4		
GNDF L/R 165M-090-050	1.000	1.000	6.000	1.000	1.000	1.835	1.969	2.756	.1875	.900	5	BX0520	LH040
GNDF L/R 165M-090-065	1.000	1.000	6.000	1.000	1.000	1.835	2.559	3.543	.1875	.900	5		
GNDF L/R 165M-090-085	1.000	1.000	6.000	1.000	1.000	1.835	3.346	5.118	.1875	.900	5		
GNDF L/R 165M-090-125	1.000	1.000	6.000	1.000	1.000	1.835	4.921	7.874	.1875	.900	5		
GNDF L/R 165M-090-180	1.000	1.000	6.000	1.000	1.000	1.835	7.087	11.811	.1875	.900	5		
GNDF L/R 165M-090-280	1.000	1.000	6.000	1.000	1.000	1.835	11.024	39.370	.1875	.900	5		
GNDF L/R 166M-090-050	1.000	1.000	6.000	1.000	1.000	1.835	1.969	2.953	.250	.900	6		
GNDF L/R 166M-090-070	1.000	1.000	6.000	1.000	1.000	1.835	2.756	4.331	.250	.900	6		
GNDF L/R 166M-090-100	1.000	1.000	6.000	1.000	1.000	1.835	3.397	7.874	.250	.900	6		
GNDF L/R 166M-090-180	1.000	1.000	6.000	1.000	1.000	1.835	7.087	11.811	.250	.900	6		
GNDF L/R 166M-090-280	1.000	1.000	6.000	1.000	1.000	1.835	11.024	39.370	.250	.900	6		

Select holders and inserts with the same grooving widths (w). Refer to page 11 for applicable inserts.



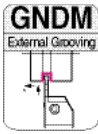
External Multi-purpose Type (Grooving, Turning, and Copying)



■ Holders * Use the multi-purpose copying insert for turning (wide grooves).

Above figures show right hand tools

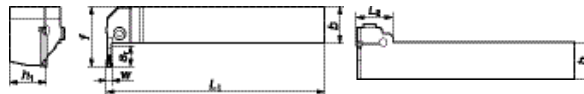
■ Spare Parts



Catalog Number	Dimensions (mm)						Groove Width W(mm)	Max. Groove Depth ar (mm)	Seat Size	Cap Screw	Recommended Tightening Torque (N-m)	Wrench
	h	b	L1	f	h1	L2						
GNDM R/L2020K-312	20	20	125	20	20	36.6	3.0	12	3	BX0520	5.0	LH040
GNDM R/L2020K-418	20	20	125	20	20	45.0	4.0	18	4			
GNDM R/L2020K-518	20	20	125	20	20	45.0	5.0	18	5			
GNDM R/L2020K-618	20	20	125	20	20	45.0	6.0	18	6			
GNDM R/L2525M-312	25	25	150	25	25	36.6	3.0	12	3			
GNDM R/L2525M-418	25	25	150	25	25	45.0	4.0	18	4			
GNDM R/L2525M-518	25	25	150	25	25	45.0	5.0	18	5			
GNDM R/L2525M-618	25	25	150	25	25	45.0	6.0	18	6			

Select holders and inserts with the same grooving widths (w). Refer to page 11 for applicable inserts.

External -Styled (Side Cut) Multi-purpose Type (Grooving, Turning, and Copying)



■ Holders * Use the multi-purpose copying insert for turning (wide grooves).

Above figures show right hand tools

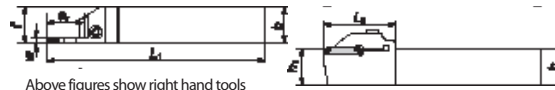
■ Spare Parts



Catalog Number	Dimensions (mm)						Groove Width W(mm)	Max. Groove Depth ar (mm)	Seat Size	Cap Screw	Recommended Tightening Torque (N-m)	Wrench
	h	b	L1	f	h1	L2						
GNDMS R/L2020K-310	20	20	125	32	20	25	3.0	10	3	BX0520	5.0	LH040
GNDMS R/L2020K-412	20	20	125	34	20	25	4.0	12	4			
GNDMS R/L2020K-512	20	20	125	34	20	25	5.0	12	5			
GNDMS R/L2525M-312	25	25	150	39	25	25	3.0	12	3			
GNDMS R/L2525M-414	25	25	150	41	25	25	4.0	14	4			
GNDMS R/L2525M-514	25	25	150	41	25	25	5.0	14	5			
GNDMS R/L2525M-614	25	25	150	41	25	25	6.0	14	6			

Select holders and inserts with the same grooving widths (w). Refer to page 11 for applicable inserts.

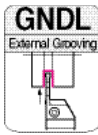
External Deep Grooving & Cut-Off



■ Holders

Above figures show right hand tools

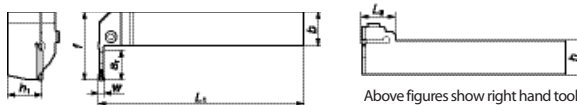
■ Spare Parts



Catalog Number	Dimensions (mm)						Groove Width W(mm)	Max. Groove Depth ar (mm)	Seat Size	Cap Screw	Recommended Tightening Torque (N-m)	Wrench
	h	b	L1	f	h1	L2						
GNDL R/L2020K-220	20	20	125	20	20	44.5	2.0	20	2	BX0520	5.0	LH040
GNDL R/L2020K-320	20	20	125	20	20	44.5	3.0	20(18)	3			
GNDL R/L2020K-425	20	20	125	20	20	50.0	4.0	25(23)	4			
GNDL R/L2020K-525	20	20	125	20	20	50.0	5.0	25(23)	5			
GNDL R/L2020K-625	20	20	125	20	20	50.0	6.0	25(23)	6			
GNDL R/L2525M-220	25	25	150	25	25	44.5	2.0	20	2			
GNDL R/L2525M-320	25	25	150	25	25	44.5	3.0	20(18)	3			
GNDL R/L2525M-425	25	25	150	25	25	50.0	4.0	25(23)	4			
GNDL R/L2525M-525	25	25	150	25	25	50.0	5.0	25(23)	5			
GNDL R/L2525M-625	25	25	150	25	25	50.0	6.0	25(23)	6			

Select holders and inserts with the same grooving widths (w). Dimensions in parentheses under maximum grooving depth are for applications that use copying inserts (RG Type Breakers). Refer to page 11 for applicable inserts.

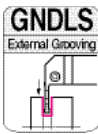
External L-Styled (Side Cut) Grooving



■ Holders

Above figures show right hand tools

■ Spare Parts

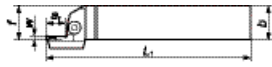


Catalog Number	Dimensions (mm)						Groove Width W(mm)	Max. Groove Depth ar (mm)	Seat Size	Cap Screw	Recommended Tightening Torque (N-m)	Wrench
	h	b	L1	f	h1	L2						
GNDLS R/L2020K-216	20	20	125	38	20	25	2.0	16	2	BX0520	5.0	LH040
GNDLS R/L2020K-316	20	20	125	38	20	25	3.0	16	3			
GNDLS R/L2525M-218	25	25	150	45	25	25	2.0	18	2			
GNDLS R/L2525M-318	25	25	150	45	25	25	3.0	18	3			
GNDLS R/L2525M-423	25	25	150	50	25	25	4.0	23	4			
GNDLS R/L2525M-523	25	25	150	50	25	25	5.0	23	5			
GNDLS R/L2525M-623	25	25	150	50	25	25	6.0	23	6			

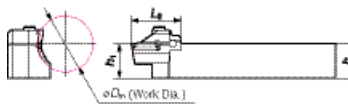
Select holders and inserts with the same grooving widths (w). Refer to page 11 for applicable inserts.



Face Grooving



Above figures show right hand tools
 ■ Holders * Use the multi-purpose copying insert for turning (wide grooves).



Work diameters in the stock table indicate external diameters of face grooves.

■ Spare Parts



Catalog Number	Dimensions (mm)						Work Dia. (mm) øDm	Groove Width W(mm)	Max. Groove Depth ar (mm)	Seat Size	Cap Screw	Recommended Tightening Torque (N-m)	Wrench
	h	b	L1	f	h1	L2							
GND F R/L2020K-312-035	20	20	125	20	20	35.6	35 to 45	3.0	12	3	BX0520	5.0	LH040
GND F R/L2020K-312-040	20	20	125	20	20	35.6	40 to 55	3.0	12				
GND F R/L2020K-318-050	20	20	125	20	20	41.6	50 to 70	3.0	18				
GND F R/L2020K-318-065	20	20	125	20	20	41.6	65 to 100	3.0	18				
GND F R/L2020K-318-090	20	20	125	20	20	41.6	90 to 150	3.0	18				
GND F R/L2020K-318-140	20	20	125	20	20	41.6	140 to 200	3.0	18				
GND F R/L2020K-318-180	20	20	125	20	20	41.6	180 to 300	3.0	18				
GND F R/L2020K-418-040	20	20	125	20	20	41.6	40 to 55	4.0	18	4	BX0520	5.0	LH040
GND F R/L2020K-423-050	20	20	125	20	20	46.6	50 to 70	4.0	23				
GND F R/L2020K-423-065	20	20	125	20	20	46.6	65 to 90	4.0	23				
GND F R/L2020K-423-085	20	20	125	20	20	46.6	85 to 130	4.0	23				
GND F R/L2020K-423-125	20	20	125	20	20	46.6	125 to 200	4.0	23				
GND F R/L2020K-423-180	20	20	125	20	20	46.6	180 to 300	4.0	23				
GND F R/L2020K-423-280	20	20	125	20	20	46.6	280 to 1000	4.0	23				
GND F R/L2020K-523-050	20	20	125	20	20	46.6	50 to 70	5.0	23	5	BX0520	5.0	LH040
GND F R/L2020K-523-065	20	20	125	20	20	46.6	65 to 90	5.0	23				
GND F R/L2020K-523-085	20	20	125	20	20	46.6	85 to 130	5.0	23				
GND F R/L2020K-523-125	20	20	125	20	20	46.6	125 to 200	5.0	23				
GND F R/L2020K-523-180	20	20	125	20	20	46.6	180 to 300	5.0	23				
GND F R/L2020K-523-280	20	20	125	20	20	46.6	280 to 1000	5.0	23				
GND F R/L2020K-623-050	20	20	125	20	20	46.6	50 to 75	6.0	23	6	BX0520	5.0	LH040
GND F R/L2020K-623-070	20	20	125	20	20	46.6	70 to 110	6.0	23				
GND F R/L2020K-623-100	20	20	125	20	20	46.6	100 to 200	6.0	23				
GND F R/L2020K-623-180	20	20	125	20	20	46.6	180 to 300	6.0	23				
GND F R/L2020K-623-280	20	20	125	20	20	46.6	280 to 1000	6.0	23				
GND F R/L2525M-312-035	25	25	150	25	25	35.6	35 to 45	3.0	12				
GND F R/L2525M-312-040	25	25	150	25	25	35.6	40 to 55	3.0	12				
GND F R/L2525M-318-050	25	25	150	25	25	41.6	50 to 70	3.0	18				
GND F R/L2525M-318-065	25	25	150	25	25	41.6	65 to 100	3.0	18				
GND F R/L2525M-318-090	25	25	150	25	25	41.6	90 to 150	3.0	18				
GND F R/L2525M-318-140	25	25	150	25	25	41.6	140 to 200	3.0	18				
GND F R/L2525M-318-180	25	25	150	25	25	41.6	180 to 300	3.0	18				
GND F R/L2525M-418-040	25	25	150	25	25	41.6	40 to 55	4.0	18	4	BX0520	5.0	LH040
GND F R/L2525M-423-050	25	25	150	25	25	46.6	50 to 70	4.0	23				
GND F R/L2525M-423-065	25	25	150	25	25	46.6	65 to 90	4.0	23				
GND F R/L2525M-423-085	25	25	150	25	25	46.6	85 to 130	4.0	23				
GND F R/L2525M-423-125	25	25	150	25	25	46.6	125 to 200	4.0	23				
GND F R/L2525M-423-180	25	25	150	25	25	46.6	180 to 300	4.0	23				
GND F R/L2525M-423-280	25	25	150	25	25	46.6	280 to 1000	4.0	23				
GND F R/L2525M-523-050	25	25	150	25	25	46.6	50 to 70	5.0	23	5	BX0520	5.0	LH040
GND F R/L2525M-523-065	25	25	150	25	25	46.6	65 to 90	5.0	23				
GND F R/L2525M-523-085	25	25	150	25	25	46.6	85 to 130	5.0	23				
GND F R/L2525M-523-125	25	25	150	25	25	46.6	125 to 200	5.0	23				
GND F R/L2525M-523-180	25	25	150	25	25	46.6	180 to 300	5.0	23				
GND F R/L2525M-523-280	25	25	150	25	25	46.6	280 to 1000	5.0	23				
GND F R/L2525M-623-050	25	25	150	25	25	46.6	50 to 75	6.0	23	6	BX0520	5.0	LH040
GND F R/L2525M-623-070	25	25	150	25	25	46.6	70 to 110	6.0	23				
GND F R/L2525M-623-100	25	25	150	25	25	46.6	100 to 200	6.0	23				
GND F R/L2525M-623-180	25	25	150	25	25	46.6	180 to 300	6.0	23				
GND F R/L2525M-623-280	25	25	150	25	25	46.6	280 to 1000	6.0	23				

Select holders and inserts with the same grooving widths (w). Refer to page 11 for applicable inserts.



Grooving Toolholders

GND Series - Inserts

GROOVING TOOLHOLDERS

GND SERIES



Fig. 1

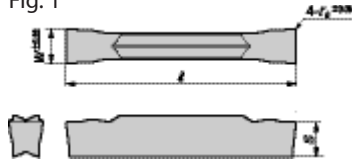


Fig. 2

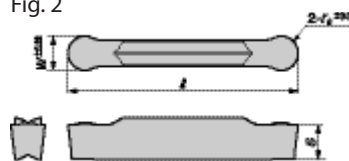
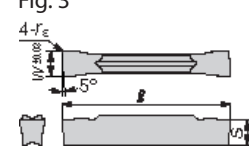


Fig. 3



Type	Catalog Number	Coated Carbide		Dimensions (inch)					Fig.
		AC530U		W	rE	ℓ	Seat	S	
Deep Grooving Cut-off	General feed GG type	GCMN2094R0.5-GG	●	.094	.0078	.831	2	.142	1
		GCMN3125R0.5-GG	●	.125	.0078	.831	3	.150	
		GCMN5187R0.5-GG	●	.1875	.0078	1.039	4	.161	
	Low feed GL type	GCMN6250R0.5-GG	●	.250	.0078	1.039	6	.177	1
		GCMN6250R1.0-GG	●	.250	.0156	1.039	6	.177	
		GCMN2094R0.5-GL	●	.094	.0078	.831	2	.142	
Multi function (traversing)	General feed MG type	GCMN3125R1.0-MG	●	.125	.0156	.831	3	.150	1
		GCMN5187R2.0-MG	●	.1875	.01875	1.039	5	.161	
		GCMN6250R2.0-MG	●	.250	.01875	1.039	6	.177	
	Low feed ML type	GCMN3125R0.5-ML	●	.125	.0078	.831	3	.150	1
		GCMN5187R1.0-ML	●	.1875	.0156	1.039	5	.161	
		GCMN6250R1.0-ML	●	.250	.0156	1.039	6	.177	
Profiling	General feed RG type	GCMN3125-RG	●	.125	.0625	.831	3	.150	2
		GCMN5187-RG	●	.1875	.0935	1.039	5	.161	
		GCMN6250-RG	●	.250	.125	1.039	6	.177	
Type	Cat. No.	Coated Carbide		Dimensions (inch)					Fig.
		AC530U		W	rE	ℓ	Seat	S	
Cut-off	CG type	R	L						
		●	●	2.0	0.2	21.1	2	3.6	3
		●	●	3.0	0.2	21.1	3	3.8	
●	●	4.0	0.2	26.4	4	4.0			

Catalog Number	Coated Carbide	Dimensions				Fig.
	AC530U	w	rE	ℓ	s	
GCM N3004-MG	●	3	0.4	21.1	3.8	1
N4008-MG	●	4	0.8	26.4	4.0	
N5008-MG	●	5	0.8	26.4	4.1	
N6008-MG	●	6	0.8	26.4	4.5	
GCM N3002-ML	●	3	0.2	21.1	3.8	1
N4004-ML	●	4	0.4	26.4	4.0	
N5004-ML	●	5	0.4	26.4	4.1	
N6004-ML	●	6	0.4	26.4	4.5	
GCM N3015-RG	●	3	1.5	21.1	3.8	2
N4020-RG	●	4	2.0	26.4	4.0	
N5025-RG	●	5	2.5	27.2	4.1	
N6030-RG	●	6	3.0	27.5	4.5	

Catalog Number	Coated Carbide	Dimensions				Fig.
	AC530U	w	rE	ℓ	s	
GCM N2002-GG	●	2	0.2	21.1	3.6	1
N3002-GG	●	3	0.2	21.1	3.8	
N4002-GG	●	4	0.2	26.4	4.0	
N5002-GG	●	5	0.2	26.4	4.1	
N6002-GG	●	6	0.2	26.4	4.5	
GCM N3004-GG	●	3	0.4	21.1	3.8	
N4004-GG	●	4	0.4	26.4	4.0	1
N5004-GG	●	5	0.4	26.4	4.1	
N6004-GG	●	6	0.4	26.4	4.5	
GCM N2002-GL	●	2	0.2	21.1	3.6	
N3002-GL	●	3	0.2	21.1	3.8	
N4002-GL	●	4	0.2	26.4	4.0	
N5002-GL	●	5	0.2	26.4	4.1	1
N6002-GL	●	6	0.2	26.4	4.5	





SUMITOMO

CARBIDE - CBN - DIAMOND

Sumitomo Electric Carbide, Inc.

Headquarters

1001 Business Center Drive
Mount Prospect, IL 60056-2181
P.O. Box 545, Mt. Prospect, IL 60056-0545
Phone: (800) 950-5202
Phone: (847) 635-0044
Fax: (847) 635-7866
<http://www.sumicarbide.com>

Detroit Branch

14496 Sheldon Road #230
Plymouth, MI 48170
Phone: (800) 239-5177
Phone: (734) 451-0200
Fax: (734) 451-5338

Cincinnati Branch

4450 Carver Woods Drive
Cincinnati, OH 45242-5545
Phone: (800) 879-1887
Phone: (513) 891-4000
Fax: (513) 794-2911

Huntsville Branch

6700 Odyssey Drive
Suite 211
Huntsville, AL 35806
Phone: (256) 971-1203
Fax: (256) 971-1205

Torrance Branch

21241 South Western Avenue
Suite 120
Torrance, CA 90501
Phone: (800) 950-5202
Fax: (310) 782-0211

Sumitomo Hardmetal Mexico (SHMM)

Av. Aguascalientes Sur #2625
Fracc. Jardines de las Fuentes
Aguascalientes, AGS Mexico
C.P. 20278
Phone: 011-52-449-993-2740
Fax: 011-52-449-993-2753

Sumicarbide Canada, Inc.

2600 Skymark Avenue
Building 6, Suite 103
Mississauga, ON L4W 5B2
Canada
Phone: (905) 282-9986
Fax: (905) 282-9984

