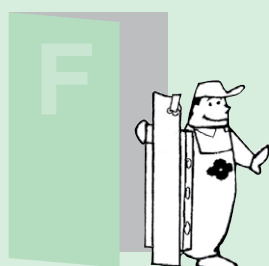


Cut-Off Tools

F33 to F46

F



F

Cut-Off Tools

Grooving

Cut-Off

Threading

Cut-Off Tools		SEC-Cut-Off Tool Series Selection Guide	F34
		Introduction of SumiGrip	F35
	SumiGrip Jr.	STFH Type	F36
		STFS Type	F37
	SumiGrip	WCFH Type	F38
		WCFS Type	F39
	SEC-Small Diameter Cut-off Tools	SCT Type	F40
	SEC-Grooving/Cut-Off Tools	GNDM Type	F42
		GNDL Type	F44
		GNDM Type / GNDML Type (Small Tool)	F46

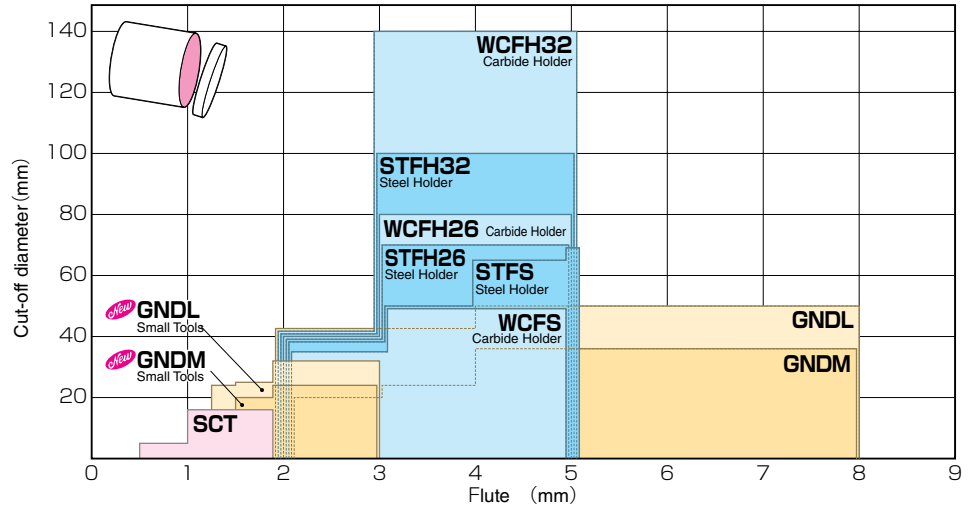
Stock Indications and Symbols

- mark: Standard stocked item
- mark: To be replaced by a new item featured on the same page
- ▲ mark: To be replaced by new item
(Please confirm stock availability)

- * mark: Semi-standard stock (Please confirm stock availability)
- mark: Stock or planned stock (Please confirm stock availability)
- No mark: Made-to-order item
- mark: We cannot produce

SEC-Cut-off Tool Series SELECTION GUIDE

Cut-Off



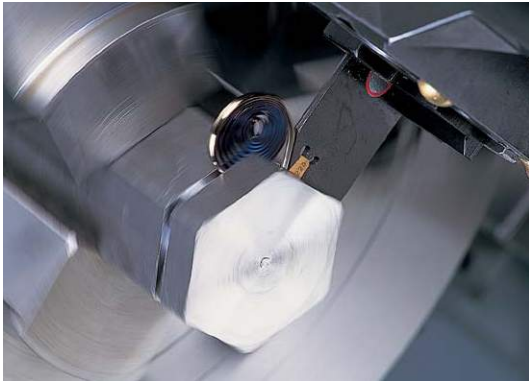
Range of Tool Application (For Solid Workpieces)

Application	Series	Shape	Insert Shape (): No. of corners	Cut-off diameter (mm)					Characteristics
				25	50	75	100	Width* (mm)	
Small Tools	SCT			16.0				2.0	<ul style="list-style-type: none"> Can maintain excellent cutting performance by regrinding inserts Can clamp even from behind 2-cornered type
Small to Medium Dia.	GNDM/ GNDL Small Tools			32.0				1.25	<ul style="list-style-type: none"> High-rigidity design and outstanding chip control Polishless 2-cornered type, available with widths starting at 1.25mm
	GNDM/ GNDL			50.0				2.0	<ul style="list-style-type: none"> High-rigidity body, rigid clamping Outstanding chip control Polishless 2-cornered type
Medium to Large Dia.	STFH/ STFS (SumiGrip Jr.)			100.0				2.0	<ul style="list-style-type: none"> Applicable to large diameter up to $\phi 100$mm Economical steel shank 1-cornered self-grip type
	WCFH/ WCFS (SumiGrip)			140.0				2.0	<ul style="list-style-type: none"> Applicable to large diameter up to $\phi 140$mm High-rigidity carbide shank 1-cornered self-grip type

Cut-off Tool Series

SEC-Small Diameter Cut-off Tools SCT Type		<ul style="list-style-type: none"> Our first recommendation for small lathes Reduces cutting resistance and central burrs thanks to excellent cutting performance! 	
SEC-Cut-off Tools GND Type (GNDM Type/GNDL Type)		<ul style="list-style-type: none"> Our first recommendation for small to medium diameters Enables stable cutting off thanks to high-rigidity body and rigid clamping 	
SEC-Cut-off Tools SumiGrip Jr. (Steel Shank) SumiGrip (Carbide Shank)		<ul style="list-style-type: none"> Our first recommendation for medium to large diameters Blade type is also provided to enable cutting off up to $\phi 140$mm 	

SEC-Cut-Off Tools

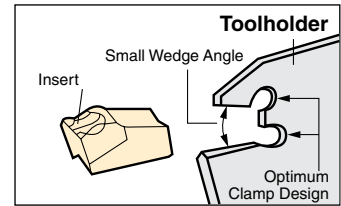


Characteristics

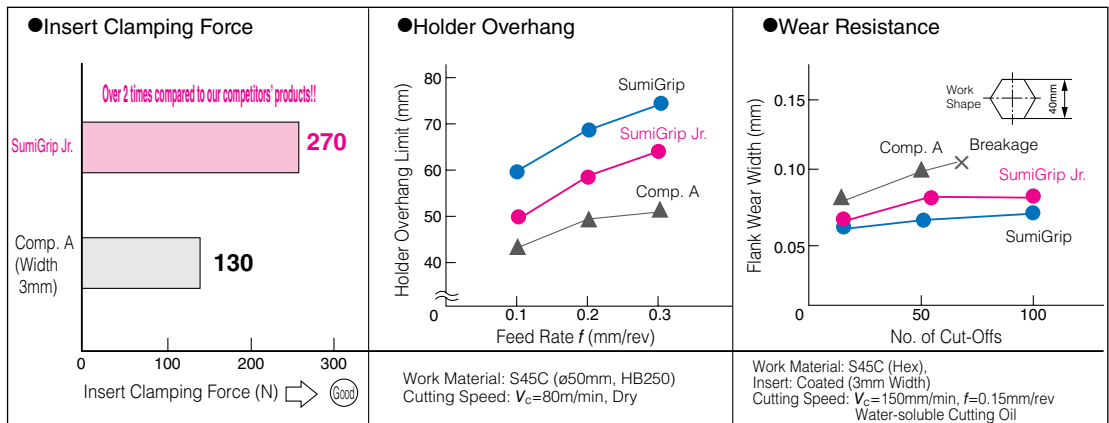
- Carbide and steel holders (SumiGrip Jr.) are available.
- Enables interrupted cutting.
- Applicable to cutting off, grooving, chamfering, etc.

Types

- ① Tool block type
- ② Shank type



Performance

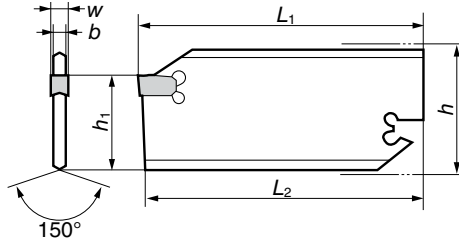
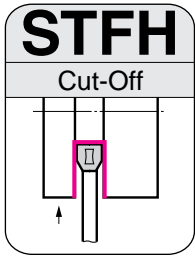


Tool Block Type Selection Guide

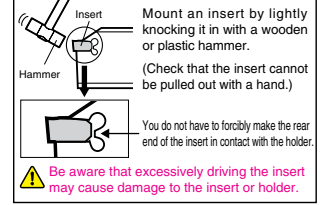
Tool block (one unit)	<p>● SBN Type</p> <p>Ex. : SBN20-26</p> <ul style="list-style-type: none"> · Applicable when the tool post of the machining tool is like A shown on the right. 	<p>A General-Purpose Lathe etc.</p> <p>Tool Post</p> <p>Tool block</p> <p>Spacer</p> <p>(Clamp from above)</p>	<p>B Turret Type Tool Post</p> <p>Tool Post</p> <p>Tool block</p> <p>Wedge</p> <p>(Clamp from the side)</p>
Tool block (2 piece unit)	<p>● SBU Type</p> <p>Ex. : SBU20-26</p> <ul style="list-style-type: none"> · Applicable whether the tool post of the machining tool is like A or B shown on the right. · Ensures a wide clamping range even when the overhang of the holder is long thanks to the large clamp. 		

STFH Type

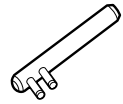
Cut-off Tools SCT-SB Type



Mounting Inserts



Spare Parts



Holders

Cat. No.	Stock	Dimensions (mm)						Max. Cut-off Diameter	Applicable Insert	Applicable Tool Block	Spanner
		h	b	L ₁	h ₁	L ₂	w				
STFH 26-2	●	26	1.6	109	21.4	108	2	40	WCF02□	SBN 20-26 SBU 20-26	SL-4
STFH 26-3	●	26	2.4	109	21.4	108	3	70	WCF03□		
STFH 26-4	●	26	3.4	109	21.4	108	4	70	WCF04□		
STFH 26-5	●	26	4.3	109	21.4	108	5	70	WCF05□		
STFH 32-2	●	32	1.6	149	25.0	148	2	40	WCF02□	SBN 20-32 SBN 25-32	
STFH 32-3	●	32	2.4	149	25.0	148	3	100	WCF03□		
STFH 32-4	●	32	3.4	149	25.0	148	4	100	WCF04□	SBU 20-32	
STFH 32-5	●	32	4.3	149	25.0	148	5	100	WCF05□	SBU 25-32	

* Shape of STFH32-2 is slightly different from the above figure.

Tool Block (Integrated Unit) Spare Parts

Cat. No.	Stock	Dimensions (mm)					Clamp	Double Screw	Spanner
		h _a	h _b	h _c	H	L			
SBN 20-26	●	20	20	10.0	45	80	BWS30	WB8-20	LH040
SBN 20-32	●	20	20	13.5	50	100			
SBN 25-32	●	25	25	8.5	50	110			

Tool Block (Separable Unit) Spare Parts

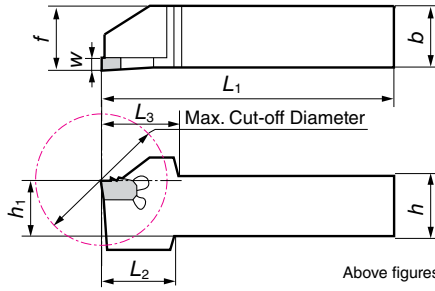
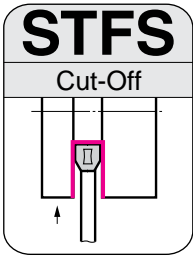
Cat. No.	Stock	Dimensions (mm)					Clamp	Cap Screw	Spanner
		h _a	h _b	h _c	H	L			
SBU 20-26	●	20	20	10.0	45	80	BCS15	BX0622	LH050
SBU 20-32	●	20	20	13.5	50	100	BCS20		
SBU 25-32	●	25	25	8.5	50	110	BCS25		

Inserts (Inserts are same as those for the carbide holder SumiGrip Series.)

Neutral (N) 2-R0.2 2°	WCF□□ General Steel		WCF□2T Small Dia. Low Force		WCF□□A Exotic Metal, Low Feed				WCF□□B (Cast Iron, Non Ferrous Metal)		Applicable Holder		
	Cat. No.	Coated Carbide	w	Cat. No.	Coated Carbide	Cermets		Carbide		Cat. No.		Carbide	w
		AC830P			AC225	T1500A	T1200A	A30	G10E			G10E	
Right Hand (R) 2-R0.2 2°	WCF N2T	●	2	WCF N2A	●	—	—	—	—	—	—	—	STFH 26-2 STFH 32-2
Left Hand (L) 2-R0.2 2°	WCF R2T	●	2	—	—	—	—	—	—	—	—	—	
	WCF L2T	●	2	—	—	—	—	—	—	—	—	—	STFH 26-3 STFH 32-3
WCF N3	●	3	WCF N3A	●	●	▲	●	●	3	WCF N3B	●	3	
	WCF R3	●	3	WCF R3A	●	—	—	—	3	WCF R3B	●	3	
WCF L3	●	3	WCF L3A	●	—	—	—	—	3	WCF L3B	●	3	STFH 26-5 STFH 32-5
WCF N4	●	4	WCF N4A	●	●	—	—	—	4	WCF N4B	●	4	
WCF R4	●	4	WCF R4A	●	—	—	—	—	4	WCF R4B	●	4	
WCF L4	●	4	WCF L4A	●	—	—	—	—	4	WCF L4B	●	4	
WCF N5	●	5	WCF N5A	●	—	—	—	—	5	WCF N5B	●	5	
WCF R5	●	5	WCF R5A	●	—	—	—	—	5	WCF R5B	●	5	
WCF L5	●	5	WCF L5A	●	—	—	—	—	5	WCF L5B	●	5	

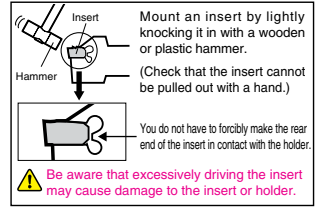
WCF□□B type is similar in shape with WCF□□ type but with smaller edge treatment.

Cut-Off (Shank Type)

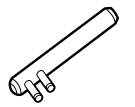


Above figures show right hand tools.

● Mounting Inserts



■ Spare Parts



■ Holders

Cat. No.	Stock		Dimensions (mm)									Max. Cut-off Diameter	Applicable Insert	Spanner
	R	L	h	b	L ₁	f	h ₁	L ₂	L ₃	w				
STFS R/L1010-2	●	●	10	10	86	10	10	17	17	2	28	WCF□2□	SL-4	
STFS R/L1212-2	●	●	12	12	110	12	12	18	18	2	30			
STFS R/L1616-2	●	●	16	16	110	16	16	—	19	2	32			
STFS R/L2020-2	●	●	20	20	125	20	20	—	24	2	40	WCF□3□		
STFS R/L1616-3	●	●	16	16	110	16	16	20	22	3	35			
STFS R/L2012-3	●	●	20	12	110	12	20	—	24	3	40			
STFS R/L2020-3	●	●	20	20	125	20	20	—	30	3	50	WCF□4□		
STFS R/L2525-3	●	●	25	25	150	25	25	—	30	3	50			
STFS R/L2020-4	●	●	20	20	125	20	20	—	33	4	55			
STFS R/L2525-4	●	●	25	25	150	25	25	—	38	4	65	WCF□5□		
STFS R/L2020-5	●	●	20	20	125	20	20	—	35	5	60			
STFS R/L2525-5	●	●	25	25	150	25	25	—	40	5	70			

■ Recommended Cutting Conditions

Grade	Cutting Speed v _c (m/min) Feed Rate f (mm/rev)	P General Steel	P Soft Steel	P Die Steel	M Stainless Steel	K Cast Iron
ACE-Coat AC830P	v _c f	100 to 230 0.10 to 0.30	120 to 250 0.08 to 0.15	60 to 150 0.08 to 0.15	80 to 200 0.08 to 0.25	—
For WCF □ 2T	v _c f	50 to 230 0.03 to 0.10	50 to 250 0.02 to 0.10	50 to 150 0.03 to 0.10	50 to 200 0.03 to 0.10	—
ACE-Coat AC225*	v _c f	80 to 200 0.08 to 0.25	100 to 230 0.04 to 0.20	60 to 150 0.04 to 0.20	60 to 180 0.05 to 0.20	—
Cermet T1500A T1200A	v _c f	80 to 200 0.03 to 0.15	100 to 230 0.05 to 0.20	60 to 150 0.03 to 0.08	60 to 180 0.03 to 0.10	—
Carbide A30 (*Cast Iron: G10E)	v _c f	50 to 120 0.05 to 0.20	70 to 150 0.04 to 0.15	50 to 120 0.04 to 0.15	70 to 150 0.04 to 0.15	*50 to 120 *0.06 to 0.20

* AC225: CVD coated carbide grade for low-speed, low-feed-rate cutting.

■ Inserts (Inserts are same as those for the carbide holder SumiGrip Series.)

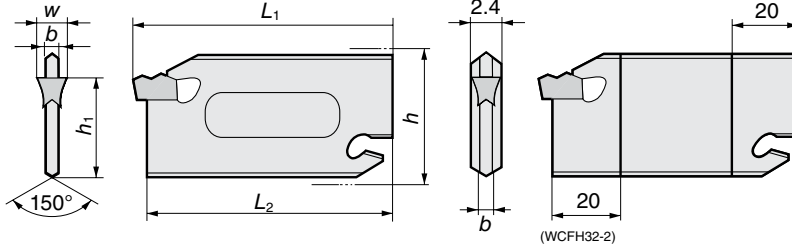
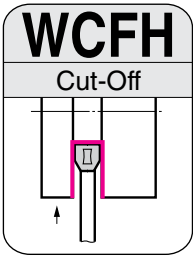
Neutral (N) 2-R0.2 2° 2° W	WCF□□ General Steel		WCF□2T Small Dia. Low Force		WCF□□A Exotic Metal, Low Feed				WCF□□B Cast Iron, Non Ferrous Metal		Applicable Holder		
	Cat. No.	Coated Carbide AC830P	w	Cat. No.	Coated Carbide AC225	Cermet T1500A	T1200A	Carbide A30	G10E	w		Cat. No.	Carbide G10E
Right Hand (R) 2-R0.2 2° 2° W	WCF N2T	●	2	WCF N2A	●	—	—	—	—	2	—	—	—
Left Hand (L) 2-R0.2 2° 2° W	WCF R2T	●	2	—	—	—	—	—	—	—	—	—	—
	WCF L2T	●	2	—	—	—	—	—	—	—	—	—	—
WCF □ 2T : f _g =0.15	WCF N3	●	3	WCF N3A	●	●	▲	●	●	3	WCF N3B	●	3
	WCF R3	●	3	WCF R3A	●	—	—	●	—	3	WCF R3B	●	3
	WCF L3	●	3	WCF L3A	●	—	—	—	—	3	WCF L3B	●	3
WCF □ 2T : f _g =0.15	WCF N4	●	4	WCF N4A	●	●	—	—	—	4	WCF N4B	●	4
	WCF R4	●	4	WCF R4A	●	—	—	—	—	4	WCF R4B	●	4
	WCF L4	●	4	WCF L4A	●	—	—	—	—	4	WCF L4B	●	4
WCF □ 2T : f _g =0.15	WCF N5	●	5	WCF N5A	●	—	—	—	—	5	WCF N5B	●	5
	WCF R5	●	5	WCF R5A	●	—	—	—	—	5	WCF R5B	●	5
	WCF L5	●	5	WCF L5A	●	—	—	—	—	5	WCF L5B	●	5

WCF □ □ B type is similar in shape with WCF □ □ type but with smaller edge treatment.

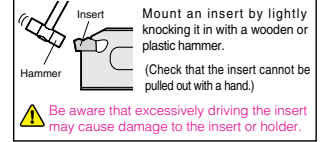
▲ mark : To be replaced by new item (Please confirm stock availability)

WCFH Type

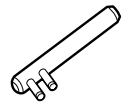
Cut-Off (Tool Block Type)



Mounting Inserts



Spare Parts



Above figures show right hand tools.

Holders

Cat. No.	Stock	Dimensions (mm)							Max. Cut-off Diameter	Applicable Insert	Applicable Tool Block	Spanner
		h	b	L ₁	h ₁	L ₂	w					
WCFH 26-2	●	26	1.7	110	21.4	109.0	2		WCF□2○	SBN 20-26 SBU 20-26	SL-2	
WCFH 26-3	●	26	2.4	110	21.4	108.5	3		WCF□3○		SL-1	
WCFH 26-4	●	26	3.4	110	21.4	108.5	4		WCF□4○			
WCFH 26-5	●	26	4.3	110	21.4	108.5	5		WCF□5○			
WCFH 32-2	●	32	1.7	150	25.0	149.0	2		WCF□2○	SBN 20-32 SBN 25-32 SBU 20-32 SBU 25-32	SL-2	
WCFH 32-3	●	32	2.4	150	25.0	148.5	3		WCF□3○		SL-1	
WCFH 32-4	●	32	3.4	150	25.0	148.5	4		WCF□4○			
WCFH 32-5	●	32	4.3	150	25.0	148.5	5		WCF□5○			

Tool Block (Integrated Unit)

Spare Parts

Cat. No.	Stock	Dimensions (mm)					Clamp	Double Screw	Spanner
		h _a	h _b	h _c	H	L			
SBN 20-26	●	20	20	10.0	45	80	BWS30	WB8-20	LH040
SBN 20-32	●	20	20	13.5	50	100			
SBN 25-32	●	25	25	8.5	50	110			

Tool Block (Separable Unit)

Spare Parts

Cat. No.	Stock	Dimensions (mm)					Clamp	Cap Screw	Spanner
		h _a	h _b	h _c	H	L			
SBU 20-26	●	20	20	10.0	45	80	BCS15	BX0622	LH050
SBU 20-32	●	20	20	13.5	50	100	BCS20		
SBU 25-32	●	25	25	8.5	50	110	BCS25		

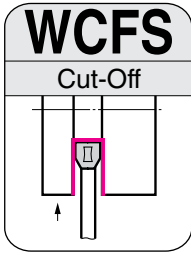
Inserts (Inserts are same as those for the steel SumiGrip Jr. holder.)

Neutral (N) Right Hand (R) Left Hand (L)	WCF□○ General Steel			WCF□2T Small Dia. Low Force			WCF□○A Exotic Metal, Low Feed			WCF□○B Cast Iron, Non Ferrous Metal			Applicable Holder
	Cat. No.	Coated Carbide	w	Cat. No.	Coated Carbide	Cermet	Carbide		Cat. No.	Carbide	w		
		AC830P			AC225	T1500A	T1200A	A30		G10E	G10E		
WCF N2T	●	2	WCF N2A	●	—	—	—	—	—	—	—	WCFH 26-2 WCFH 32-2	
WCF R2T	●	2	—	—	—	—	—	—	—	—	—		
WCF L2T	●	2	—	—	—	—	—	—	—	—	—		
WCF N3	●	3	WCF N3A	●	●	▲	●	●	3	WCF N3B	●	3	WCFH 26-3 WCFH 32-3
WCF R3	●	3	WCF R3A	●	—	—	●	—	3	WCF R3B	●	3	
WCF L3	●	3	WCF L3A	●	—	—	—	—	3	WCF L3B	●	3	
WCF N4	●	4	WCF N4A	●	●	—	—	—	4	WCF N4B	●	4	WCFH 26-4 WCFH 32-4
WCF R4	●	4	WCF R4A	●	—	—	—	—	4	WCF R4B	●	4	
WCF L4	●	4	WCF L4A	●	—	—	—	—	4	WCF L4B	●	4	
WCF N5	●	5	WCF N5A	●	—	—	—	—	5	WCF N5B	●	5	WCFH 26-5 WCFH 32-5
WCF R5	●	5	WCF R5A	●	—	—	—	—	5	WCF R5B	●	5	
WCF L5	●	5	WCF L5A	●	—	—	—	—	5	WCF L5B	●	5	

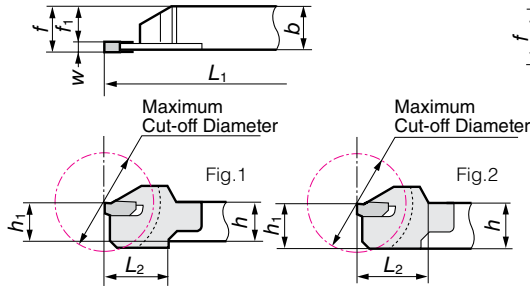
WCF□○B type is similar in shape with WCF□○ type but with smaller edge treatment.

SEC-Cut-Off Tools WCFS Type

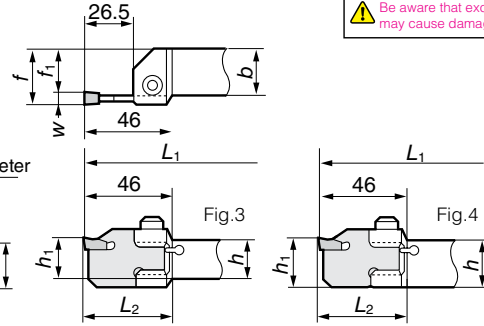
Cut-Off (Shank Type)



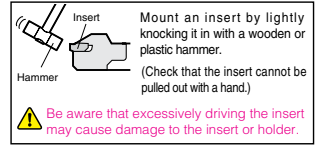
Brazed Type



Clamp Type



Mounting Inserts

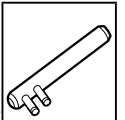


■ Holders

Series	Cat. No.	Stock		Dimensions (mm)										Max. Cut-off Diameter	Applicable Blade	Applicable Insert	Fig.	Spanner
		R	L	h	b	L ₁	f	f ₁	h ₁	L ₂	w							
Brazed Type	WCFS R/L1010-2	●	●	10	10	86	10	8	10	10	2	28	—	WCF□2○	1	SL-2		
	WCFS R/L1212-2	●	●	12	12	110	12	10	12	18	2	30	—	WCF□2○	1			
	WCFS R/L1616-2	●	●	16	16	100	16	14	16	25	2	35	—	WCF□2○	2	SL-1		
	WCFS R/L1616-3	●	●	16	16	100	16	13	16	25	3	35	—	WCF□3○	2			
Clamp Type	WCFS R/L20-3	●	●	20	20	125	23	20	20	46	3	50	WCFH17-3	WCF□3○	3	SL-1		
	WCFS R/L20-4	●	●	20	20	125	24	20	20	46	4	50	WCFH17-4	WCF□4○	3			
	WCFS R/L20-5	●	●	20	20	125	25	20	20	46	5	50	WCFH17-5	WCF□5○	3			
	WCFS R/L25-3	●	●	25	25	150	28	25	25	46	3	50	WCFH17-3	WCF□3○	4			
	WCFS R/L25-4	●	●	25	25	150	29	25	25	46	4	50	WCFH17-4	WCF□4○	4			
	WCFS R/L25-5	●	●	25	25	150	30	25	25	46	5	50	WCFH17-5	WCF□5○	4			

Above figures show right hand tools.

■ Spare Parts



■ Blades

Cat. No.	Stock	Dimensions (mm)		Applicable Holder
		w	B	
WCFH 17-3	●	3	2.4	WCFS R/L20-3,25-3
WCFH 17-4	●	4	3.4	WCFS R/L20-4,25-4
WCFH 17-5	●	5	4.3	WCFS R/L20-5,25-5

■ Spare Parts

Cap Screw	Spanner	Applicable Holder
BX0622	LH050	All Clamp Types

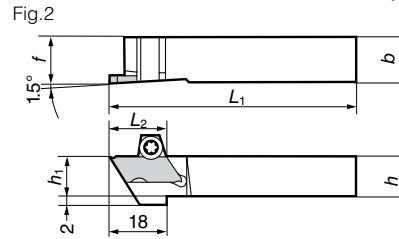
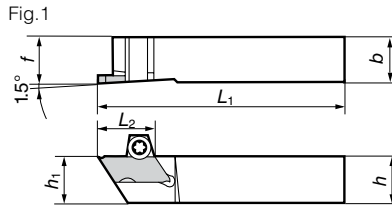
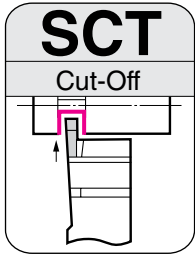
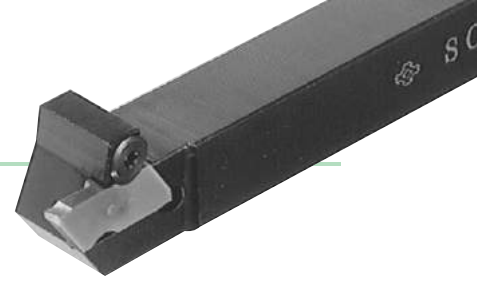
Blade is included with the holder.

■ Inserts (Inserts are same as those for the steel SumiGrip Jr. holder.)

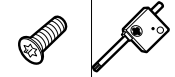
Neutral (N) 2-R0.2 2° 2° 2°	WCF□○ General Steel		WCF□2T Small Dia. Low Force		WCF□○A Exotic Metal, Low Feed					WCF□○B Cast Iron, Non Ferrous Metal			Applicable Holder	
	Cat. No.	Coated Carbide	w	Cat. No.	Coated Carbide	Cermet	Carbide		w	Cat. No.	Carbide	w		
		AC830P			AC225	T1500A	T1200A	A30			G10E			G10E
Right Hand (R) 2-R0.2 2° 2° 8°	WCF N2T	●	2	WCF N2A	●	—	—	—	—	2	—	—	—	WCFS R/L1010-2
WCF R2T	●	2	—	—	—	—	—	—	—	—	—	—	—	WCFS R/L1212-2
WCF L2T	●	2	—	—	—	—	—	—	—	—	—	—	—	WCFS R/L1616-2
Left Hand (L) 2-R0.2 2° 2° 8°	WCF N3	●	3	WCF N3A	●	●	▲	●	●	3	WCF N3B	●	3	WCFS R/L1616-3
	WCF R3	●	3	WCF R3A	●	—	—	—	—	3	WCF R3B	●	3	WCFS R/L20-3
WCF L3	●	3	WCF L3A	●	—	—	—	—	3	WCF L3B	●	3	WCFS R/L25-3	
WCF N4	●	4	WCF N4A	●	●	—	—	—	4	WCF N4B	●	4	WCFS R/L20-4	
WCF R4	●	4	WCF R4A	●	—	—	—	—	4	WCF R4B	●	4		WCFS R/L25-4
WCF L4	●	4	WCF L4A	●	—	—	—	—	4	WCF L4B	●	4	—	
WCF N5	●	5	WCF N5A	●	—	—	—	—	5	WCF N5B	●	5	WCFS R/L20-5	
WCF R5	●	5	WCF R5A	●	—	—	—	—	5	WCF R5B	●	5		WCFS R/L25-5
WCF L5	●	5	WCF L5A	●	—	—	—	—	5	WCF L5B	●	5		

WCF□○B type is similar in shape with WCF□○ type but with smaller edge treatment.

▲ mark: To be replaced by new item (Please confirm stock availability)



Spare Parts



■ Holders (Right Hand)

Above figures show right hand tools.

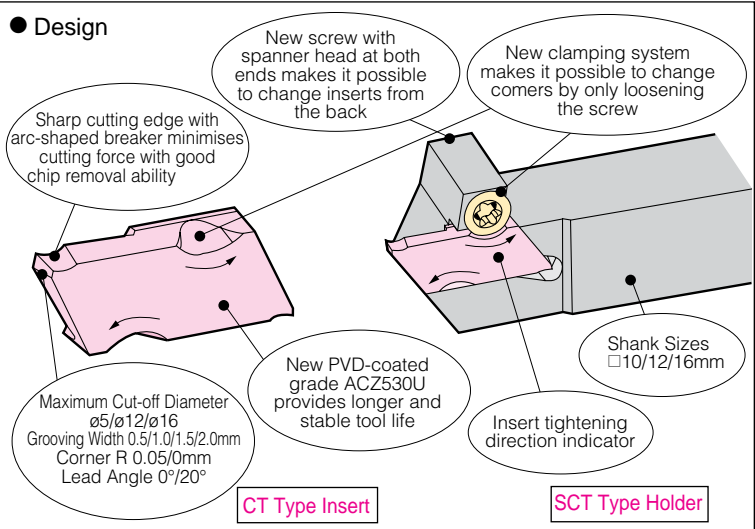
Cat. No.	Stock	Dimensions (mm)						Applicable Insert	Fig.	Screw	Spanner
		h	b	L ₁	f	h ₁	L ₂				
SCT R1010	●	10	10	120	10	10	15	CT R05○○○○(-NB) CT R12○○○○(-NB)	1	BFTX0410T8L	TRX08
SCT R1212	●	12	12	120	12	12	15				
SCT R1616	●	16	16	120	16	16	15	CT R16○○○○(-NB)	2	BFTX0410T8R	TRX08
SCT R1010-16	●	10	10	120	10	10	18				
SCT R1212-16	●	12	12	120	12	12	18	CT R16○○○○(-NB)	1	BFTX0410T8R	TRX08
SCT R1616-16	●	16	16	120	16	16	18				

■ Holders (Left Hand)

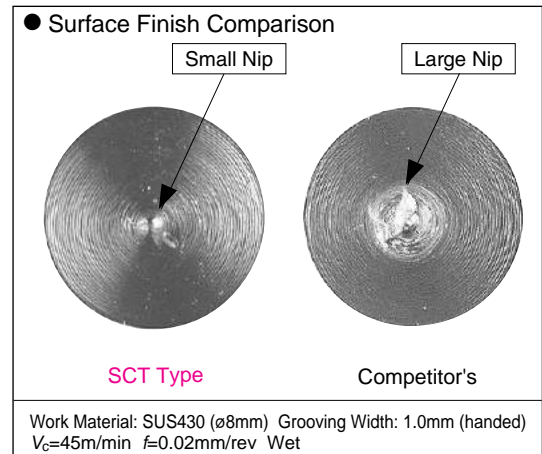
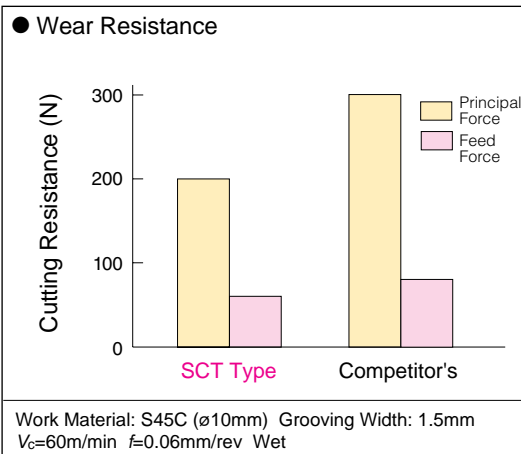
Cat. No.	Stock	Dimensions (mm)						Applicable Insert	Fig.	Screw	Spanner
		h	b	L ₁	f	h ₁	L ₂				
SCT L1010	●	10	10	120	10	10	15	CT L05○○○○(-NB) CT L12○○○○(-NB)	1	BFTX0410T8R	TRX08
SCT L1212	●	12	12	120	12	12	15				
SCT L1616	●	16	16	120	16	16	15	CT L16○○○○(-NB)	2	BFTX0410T8R	TRX08
SCT L1010-16	●	10	10	120	10	10	18				
SCT L1212-16	●	12	12	120	12	12	18	CT L16○○○○(-NB)	1	BFTX0410T8R	TRX08
SCT L1616-16	●	16	16	120	16	16	18				

■ Characteristics

- **New clamping system**
New clamping system makes it possible to change corners by only loosening the screw from the back.
- **High quality surface finish**
Excellent chip removal with good surface finish even at the centre of the end face.
- **Stable and long tool life**
PVD-coated grade AC530U provides stability and longer tool life.



■ Comparison Test



■ Insert and Holder Variations (Figures below show inserts with chipbreaker)

Holder Style	SCTR			SCTL		
Insert	CTROOR	CTROON	CTROOL	CTLOOR	CTLOON	CTLOOL
Orientation						
Insert Shape and Dimensions						

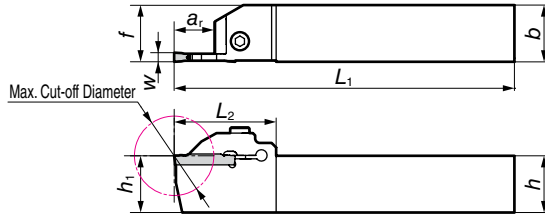
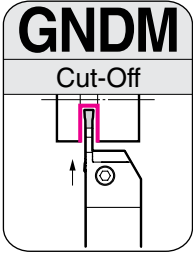
■ Inserts (For Right-handed Holders)

Cat. No.	Coated Carbide AC530U			Max. Cut-off Diameter (mm)	Dimensions (mm)				Chipbreaker	Applicable Toolholder		
	R	N	L		w	r _E	ℓ	s				
CTR 050505 R/N/L	●	●	●	5	0.5	0.05	19	7	Yes	SCT R1010 SCT R1212 SCT R1616		
CTR 050500 R/N/L	●	●	●	5	0							
CTR 121005 R/N/L	●	●	●	12	1.0							
CTR 121505 R/N/L	●	●	●	12	1.5							
CTR 122005 R/N/L	●	●	●	12	2.0							
CTR 121000 R/N/L	●	●	●	12	1.0							
CTR 121500 R/N/L	●	●	●	12	1.5							
CTR 122000 R/N/L	●	●	●	12	2.0							
CTR 161005 R/N/L	●	●	●	16	1.0	0.05	23.1	8.3			Yes	SCT R1010-16 SCT R1212-16 SCT R1616-16
CTR 161505 R/N/L	●	●	●	16	1.5							
CTR 162005 R/N/L	●	●	●	16	2.0							
CTR 161000 R/N/L	●	●	●	16	1.0							
CTR 161500 R/N/L	●	●	●	16	1.5							
CTR 162000 R/N/L	●	●	●	16	2.0							
CTR 050500 R/N/L-NB	●	●	●	5	0.5	0	19	7	No	SCT R1010 SCT R1212 SCT R1616		
CTR 121000 R/N/L-NB	●	●	●	12	1.0							
CTR 121500 R/N/L-NB	●	●	●	12	1.5							
CTR 122000 R/N/L-NB	●	●	●	12	2.0							
CTR 161000 R/N/L-NB	●	●	●	16	1.0	0	23.1	8.3			No	SCT R1010-16 SCT R1212-16 SCT R1616-16
CTR 161500 R/N/L-NB	●	●	●	16	1.5							
CTR 162000 R/N/L-NB	●	●	●	16	2.0							

■ Inserts (For Left-handed Holders)

Cat. No.	Coated Carbide AC530U			Max. Cut-off Diameter (mm)	Dimensions (mm)				Chipbreaker	Applicable Toolholder		
	R	N	L		w	r _E	ℓ	s				
CTL 050505 R/N/L	●	●	●	5	0.5	0.05	19	7	Yes	SCT L1010 SCT L1212 SCT L1616		
CTL 050500 R/N/L	●	●	●	5	0							
CTL 121005 R/N/L	●	●	●	12	1.0							
CTL 121505 R/N/L	●	●	●	12	1.5							
CTL 122005 R/N/L	●	●	●	12	2.0							
CTL 121000 R/N/L	●	●	●	12	1.0							
CTL 121500 R/N/L	●	●	●	12	1.5							
CTL 122000 R/N/L	●	●	●	12	2.0							
CTL 161005 R/N/L	●	●	●	16	1.0	0.05	23.1	8.3			Yes	SCT L1010-16 SCT L1212-16 SCT L1616-16
CTL 161505 R/N/L	●	●	●	16	1.5							
CTL 162005 R/N/L	●	●	●	16	2.0							
CTL 161000 R/N/L	●	●	●	16	1.0							
CTL 161500 R/N/L	●	●	●	16	1.5							
CTL 162000 R/N/L	●	●	●	16	2.0							
CTL 050500 R/N/L-NB	●	●	●	5	0.5	0	19	7	No	SCT L1010 SCT L1212 SCT L1616		
CTL 121000 R/N/L-NB	●	●	●	12	1.0							
CTL 121500 R/N/L-NB	●	●	●	12	1.5							
CTL 122000 R/N/L-NB	●	●	●	12	2.0							
CTL 161000 R/N/L-NB	●	●	●	16	1.0	0	23.1	8.3			No	SCT L1010-16 SCT L1212-16 SCT L1616-16
CTL 161500 R/N/L-NB	●	●	●	16	1.5							
CTL 162000 R/N/L-NB	●	●	●	16	2.0							

GNDM Type



Above figures show right hand tools.

■ Holders

■ Spare Parts

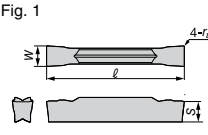



Cap Screw	Spanner
BX0520	LH040
BX0620	LH050

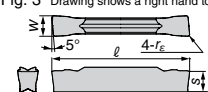

Cat. No.	Stock		Dimensions (mm)							Grooving Width (mm)	Max. Cut-off Dia. (mm)	Applicable Insert	Cap Screw	Recommended Tightening Torque (N·m)	Spanner
	R	L	h	b	L ₁	f	h ₁	L ₂	a _r						
GNDM R/L2020K-210 <i>New</i>	●	●	20	20	125	20	20	33.6	10	2.0	20	GCM □2000-□□	BX0520	5.0	LH040
GNDM R/L2020K-312	●	●	20	20	125	20	20	36.6	12	3.0	24	GCM □3000-□□			
GNDM R/L2020K-418	●	●	20	20	125	20	20	45.0	18	4.0	36	GCM □4000-□□			
GNDM R/L2020K-518	●	●	20	20	125	20	20	45.0	18	5.0	36	GCM N5000-□□			
GNDM R/L2020K-618	●	●	20	20	125	20	20	45.0	18	6.0	36	GCM N6000-□□			
GNDM R/L2525M-210 <i>New</i>	●	●	25	25	150	25	25	33.6	10	2.0	20	GCM □2000-□□	BX0520	5.0	LH040
GNDM R/L2525M-312	●	●	25	25	150	25	25	36.6	12	3.0	24	GCM □3000-□□			
GNDM R/L2525M-418	●	●	25	25	150	25	25	45.0	18	4.0	36	GCM □4000-□□			
GNDM R/L2525M-518	●	●	25	25	150	25	25	45.0	18	5.0	36	GCM N5000-□□			
GNDM R/L2525M-618	●	●	25	25	150	25	25	45.0	18	6.0	36	GCM N6000-□□			
GNDM R/L3225P-312			32	25	170	25	32	36.6	12	3.0	24	GCM □3000-□□	BX0620	6.0	LH050
GNDM R/L3225P-418			32	25	170	25	32	45.0	18	4.0	36	GCM □4000-□□			
GNDM R/L3225P-518			32	25	170	25	32	45.0	18	5.0	36	GCM N5000-□□			
GNDM R/L3225P-618			32	25	170	25	32	45.0	18	6.0	36	GCM N6000-□□			
GNDM R/L3225P-718			32	25	170	25	32	50.0	18	7.0	36	GCM N7000-□□			
GNDM R/L3225P-818			32	25	170	25	32	50.0	18	8.0	36	GCM N8000-□□			
GNDM R/L3232P-312	●	●	32	32	170	32	32	36.6	12	3.0	24	GCM □3000-□□	BX0620	6.0	LH050
GNDM R/L3232P-418	●	●	32	32	170	32	32	45.0	18	4.0	36	GCM □4000-□□			
GNDM R/L3232P-518	●	●	32	32	170	32	32	45.0	18	5.0	36	GCM N5000-□□			
GNDM R/L3232P-618	●	●	32	32	170	32	32	45.0	18	6.0	36	GCM N6000-□□			
GNDM R/L3232P-718	●	●	32	32	170	32	32	50.0	18	7.0	36	GCM N7000-□□			
GNDM R/L3232P-818	●	●	32	32	170	32	32	50.0	18	8.0	36	GCM N8000-□□			

Select holders and inserts with the same grooving widths (w). The maximum cut-off diameter indicated above is for inserts where r_e = 0.2 mm.

GNDM Type

For GNDM

Application	Shape	Appearance	Cat. No.	Coated Carbide				Dimensions (mm)				Pcs./Pack	Fig.	
				AC830P	AC425K	AC520U	AC530U	w		r _ε	ℓ			s
								Cutting width	Tolerance					
Grooving / Cut-Off Fig. 1 	GG Type 	General Purpose Type	GCM N2002-GG	●		●	●	2.0	±0.03	0.2	21.1	3.6	5	1
			GCM N3002-GG	●		●	●	3.0	±0.03	0.2	21.1	3.8		
			GCM N4002-GG	●		●	●	4.0	±0.03	0.2	26.4	4.0		
			GCM N5002-GG	●		●	●	5.0	±0.03	0.2	26.4	4.1		
			GCM N6002-GG	●		●	●	6.0	±0.03	0.2	26.4	4.5		
			GCM N3004-GG	●		●	●	3.0	±0.03	0.4	21.1	3.8		
			GCM N4004-GG	●		●	●	4.0	±0.03	0.4	26.4	4.0		
			GCM N5004-GG	●		●	●	5.0	±0.03	0.4	26.4	4.1		
			GCM N6004-GG	●		●	●	6.0	±0.03	0.4	26.4	4.5		
			GCM N7004-GG	●		●	●	7.0	±0.04	0.4	28.75	5.5		
			GCM N8004-GG	●		●	●	8.0	±0.04	0.4	28.75	6.0		
			GL Type 	Low Feed Type	GCM N2002-GL	●		●	●	2.0	±0.03	0.2		
	GCM N3002-GL	●				●	●	3.0	±0.03	0.2	21.1	3.8		
	GCM N4002-GL	●				●	●	4.0	±0.03	0.2	26.4	4.0		
	GCM N5002-GL	●				●	●	5.0	±0.03	0.2	26.4	4.1		
	GCM N6002-GL	●				●	●	6.0	±0.03	0.2	26.4	4.5		
	GCM N7004-GL	●				●	●	7.0	±0.04	0.4	28.75	5.5		
	GF Type 	Low cutting force Type	GCM N2002-GF	●		●	●	2.0	±0.03	0.2	21.1	3.6	5	1
			GCM N3002-GF	●		●	●	3.0	±0.03	0.2	21.1	3.8		
			GCM N4002-GF	●		●	●	4.0	±0.03	0.2	26.4	4.0		
GCM N5002-GF			●		●	●	5.0	±0.03	0.2	26.4	4.1			
GCM N6002-GF			●		●	●	6.0	±0.03	0.2	26.4	4.5			

Application	Shape	Appearance	Cat. No.	Coated Carbide						Dimensions (mm)				Pcs./Pack	Fig.				
				AC830P		AC425K		AC520U		AC530U		w				r _ε	ℓ	s	
				R	L	R	L	R	L	R	L	Cutting width	Tolerance						
Cut-Off Fig. 3 Drawing shows a right hand tool. 	CG Type 	General Purpose Type	GCM R/L2002-CG-05	●	●			●	●	●	●	2.0	±0.03	0.2	21.1	3.6	5	3	
			GCM R/L3002-CG-05	●	●			●	●	●	●	●	3.0	±0.03	0.2	21.3			3.8
			GCM R/L4002-CG-05	●	●			●	●	●	●	●	4.0	±0.03	0.2	26.7			4.0

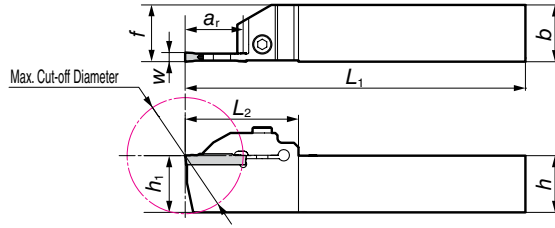
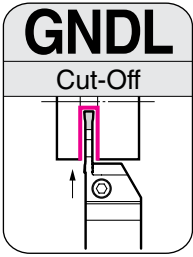
Select holders and inserts with the same grooving widths (w).

Recommended Cutting Conditions (GNDM)

Work Material	P Carbon Steel / Alloy Steel			M Stainless Steel			K Cast Iron			S Exotic Alloy	
Grade	AC830P	AC520U	AC530U	AC830P	AC520U	AC530U	AC425K	AC520U	AC530U	AC520U	AC530U
Cutting Speed v _c (m/min)	80 to 200	80 to 200	50 to 200	70 to 150	70 to 150	50 to 150	80 to 200	60 to 200	50 to 200	20 to 80	20 to 60

Grooving / Cut-Off	Breaker	Feed Rate f (mm/rev)			
		GG	GL	GF	CG
Grooving Widths w (mm)	2.0	0.05 to 0.25	0.03 to 0.15	0.03 to 0.12	0.05 to 0.20
	3.0	0.10 to 0.30	0.05 to 0.18	0.05 to 0.15	0.08 to 0.25
	4.0	0.15 to 0.35	0.08 to 0.22	0.05 to 0.18	0.10 to 0.30
	5.0	0.20 to 0.40	0.10 to 0.25	0.08 to 0.20	-
	6.0	0.20 to 0.45	0.12 to 0.30	0.10 to 0.25	-
	7.0	0.20 to 0.50	0.15 to 0.35	-	-
	8.0	0.20 to 0.55	0.18 to 0.40	-	-

GNDL Type



Above figures show right hand tools.

■ Holders

Cat. No.	Stock		Dimensions (mm)							Grooving Width (mm)	Max. Cut-off Dia. (mm)	Applicable Insert
	R	L	h	b	L ₁	f	h ₁	L ₂	a _r			
GNDL R/L2020K-220	●	●	20	20	125	20	20	44.5	20	2.0	40	GCM □2000-□□
GNDL R/L2020K-320	●	●	20	20	125	20	20	44.5	20	3.0	40	GCM □3000-□□
GNDL R/L2020K-425	●	●	20	20	125	20	20	50.0	25	4.0	50	GCM □4000-□□
GNDL R/L2020K-525	●	●	20	20	125	20	20	50.0	25	5.0	50	GCM N5000-□□
GNDL R/L2020K-625	●	●	20	20	125	20	20	50.0	25	6.0	50	GCM N6000-□□
GNDL R/L2525M-220	●	●	25	25	150	25	25	44.5	20	2.0	40	GCM □2000-□□
GNDL R/L2525M-320	●	●	25	25	150	25	25	44.5	20	3.0	40	GCM □3000-□□
GNDL R/L2525M-425	●	●	25	25	150	25	25	50.0	25	4.0	50	GCM □4000-□□
GNDL R/L2525M-525	●	●	25	25	150	25	25	50.0	25	5.0	50	GCM N5000-□□
GNDL R/L2525M-625	●	●	25	25	150	25	25	50.0	25	6.0	50	GCM N6000-□□
GNDL R/L3225P-320			32	25	170	25	32	44.5	20	3.0	40	GCM □3000-□□
GNDL R/L3225P-425			32	25	170	25	32	50.0	25	4.0	50	GCM □4000-□□
GNDL R/L3225P-525			32	25	170	25	32	50.0	25	5.0	50	GCM N5000-□□
GNDL R/L3225P-625			32	25	170	25	32	50.0	25	6.0	50	GCM N6000-□□
GNDL R/L3225P-725			32	25	170	25	32	50.0	25	7.0	50	GCM N7000-□□
GNDL R/L3225P-825			32	25	170	25	32	50.0	25	8.0	50	GCM N8000-□□
GNDL R/L3232P-320	●	●	32	32	170	32	32	44.5	20	3.0	40	GCM □3000-□□
GNDL R/L3232P-425	●	●	32	32	170	32	32	50.0	25	4.0	50	GCM □4000-□□
GNDL R/L3232P-525	●	●	32	32	170	32	32	50.0	25	5.0	50	GCM N5000-□□
GNDL R/L3232P-625	●	●	32	32	170	32	32	50.0	25	6.0	50	GCM N6000-□□
GNDL R/L3232P-725	●	●	32	32	170	32	32	50.0	25	7.0	50	GCM N7000-□□
GNDL R/L3232P-825	●	●	32	32	170	32	32	50.0	25	8.0	50	GCM N8000-□□

■ Spare Parts

Cap Screw	Recommended Tightening Torque (N·m)	Spanner
BX0520	5.0	LH040
BX0620	6.0	LH050

Select holders and inserts with the same grooving widths (w). The maximum cut-off diameter indicated above is for inserts where r_e = 0.2 mm.

■ For GNDL

Application	Shape	Appearance	Cat. No.	Coated Carbide				Dimensions (mm)			Pcs./Pack	Fig.					
				AC830P	AC425K	AC520U	AC530U	w		r _ε			ℓ	s			
								Cutting width	Tolerance								
Grooving / Cut-Off		GG Type 	GCM N2002-GG	●		●	●	2.0	±0.03	0.2	21.1	3.6	5	1			
			GCM N3002-GG	●		●	●	3.0	±0.03	0.2	21.1	3.8					
			GCM N4002-GG	●		●	●	4.0	±0.03	0.2	26.4	4.0					
			GCM N5002-GG	●		●	●	5.0	±0.03	0.2	26.4	4.1					
			GCM N6002-GG	●		●	●	6.0	±0.03	0.2	26.4	4.5					
			GCM N3004-GG	●		●	●	3.0	±0.03	0.4	21.1	3.8	5	1			
			GCM N4004-GG	●		●	●	4.0	±0.03	0.4	26.4	4.0					
			GCM N5004-GG	●		●	●	5.0	±0.03	0.4	26.4	4.1					
			GCM N6004-GG	●		●	●	6.0	±0.03	0.4	26.4	4.5					
		General Purpose Type			GCM N7004-GG	●		●	●	7.0	±0.04	0.4	28.75	5.5			
		General Purpose Type			GCM N8004-GG	●		●	●	8.0	±0.04	0.4	28.75	6.0			
		GL Type 	GCM N2002-GL	●		●	●	2.0	±0.03	0.2	21.1	3.6	5	1			
			GCM N3002-GL	●		●	●	3.0	±0.03	0.2	21.1	3.8					
			GCM N4002-GL	●		●	●	4.0	±0.03	0.2	26.4	4.0					
			GCM N5002-GL	●		●	●	5.0	±0.03	0.2	26.4	4.1					
			GCM N6002-GL	●		●	●	6.0	±0.03	0.2	26.4	4.5					
			Low Feed Type			GCM N7004-GL	●		●	●	7.0	±0.04	0.4	28.75	5.5		
			Low Feed Type			GCM N8004-GL	●		●	●	8.0	±0.04	0.4	28.75	6.0		
GF Type 	GCM N2002-GF		●		●	●	2.0	±0.03	0.2	21.1	3.6	5	1				
	GCM N3002-GF		●		●	●	3.0	±0.03	0.2	21.1	3.8						
	GCM N4002-GF	●		●	●	4.0	±0.03	0.2	26.4	4.0							
	GCM N5002-GF	●		●	●	5.0	±0.03	0.2	26.4	4.1							
	GCM N6002-GF	●		●	●	6.0	±0.03	0.2	26.4	4.5							
Low cutting force Type																	

Application	Shape	Appearance	Cat. No.	Coated Carbide						Dimensions (mm)			Pcs./Pack	Fig.					
				AC830P		AC425K		AC520U		AC530U		w			r _ε	ℓ	s		
				R	L	R	L	R	L	R	L	Cutting width						Tolerance	
Cut-Off		CG Type 	GCM R/L2002-CG-05	●	●			●	●	●	●	2.0	±0.03	0.2	21.1	3.6	5	3	
			GCM R/L3002-CG-05	●	●			●	●	●	●	●	3.0	±0.03	0.2	21.3			3.8
			GCM R/L4002-CG-05	●	●			●	●	●	●	●	4.0	±0.03	0.2	26.7			4.0
General Purpose Type																			

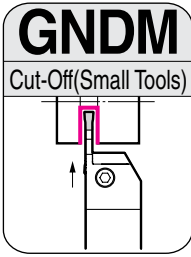
Select holders and inserts with the same grooving widths (w).

■ Recommended Cutting Conditions (GNDL)

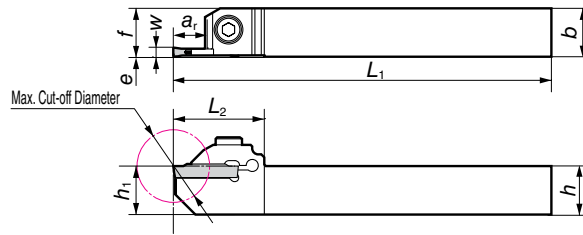
Work Material	P Carbon Steel / Alloy Steel			M Stainless Steel			K Cast Iron			S Exotic Alloy	
Grade	AC830P	AC520U	AC530U	AC830P	AC520U	AC530U	AC425K	AC520U	AC530U	AC520U	AC530U
Cutting Speed v _c (m/min)	80 to 200	80 to 200	50 to 200	70 to 150	70 to 150	50 to 150	80 to 200	60 to 200	50 to 200	20 to 80	20 to 60

Grooving / Cut-Off	Breaker	Feed Rate f (mm/rev)			
		GG	GL	GF	CG
Grooving Widths w (mm)	2.0	0.05 to 0.25	0.03 to 0.15	0.03 to 0.12	0.05 to 0.20
	3.0	0.10 to 0.30	0.05 to 0.18	0.05 to 0.15	0.08 to 0.25
	4.0	0.15 to 0.35	0.08 to 0.22	0.05 to 0.18	0.10 to 0.30
	5.0	0.20 to 0.40	0.10 to 0.25	0.08 to 0.20	-
	6.0	0.20 to 0.45	0.12 to 0.30	0.10 to 0.25	-
	7.0	0.20 to 0.50	0.15 to 0.35	-	-
	8.0	0.20 to 0.55	0.18 to 0.40	-	-

GNDM/GNDL Type (Zero Off-set)

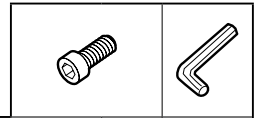


New



Above figures show right hand tools.

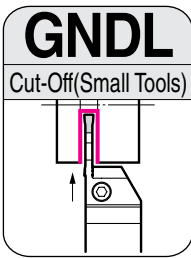
■ Spare Parts



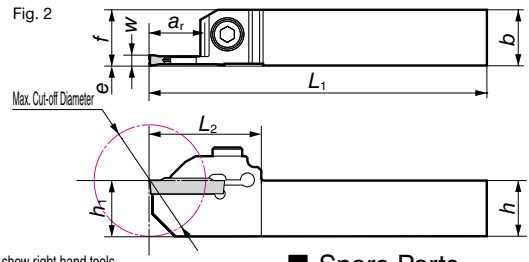
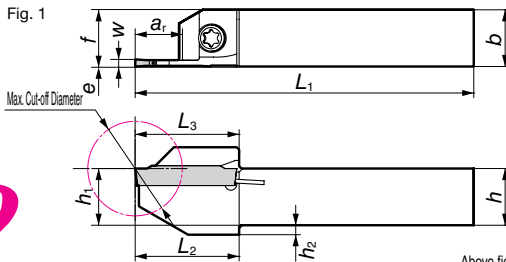
■ Holders

Cat. No.	Stock		Dimensions (mm)								Grooving Width (mm) w	Max. Cut-off Dia. (mm)	Applicable Insert	Cap Screw	Recommended Tightening Torque (N·m)	Spanner
	R	L	h	b	L ₁	f	h ₁	L ₂	e							
GNDM R/L1616JX-1.510	●	●	16	16	120	(16)	16	26	0	1.5	20	GCM N150005-GF	BX0515	4.0	LH040	
GNDM R/L1616JX-212	●	●	16	16	120	(16)	16	30	0	2.0	24	GCM □2000-□□				
GNDM R/L1616JX-312	●	●	16	16	120	(16)	16	30	0	3.0	24	GCM □3000-□□				

Select holders and inserts with the same grooving widths (w).

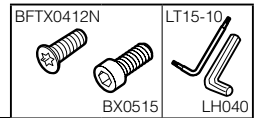


New



Above figures show right hand tools.

■ Spare Parts



■ Holders

Cat. No.	Stock		Dimensions (mm)										Grooving Width (mm) w	Max. Cut-off Dia. (mm)	Fig.	Applicable Insert	Insert Screw/	Recommended Tightening Torque (N·m)	Spanner
	R	L	h	b	L ₁	f	h ₁	h ₂	L ₂	L ₃	e								
GNDL R/L1010JX-1.2510	●	●	10	10	120	(10)	10	2.0	18	18.3	0	1.25	20	1	GCM N125005-GF	BFTX0412N	3.0	LT15-10	
GNDL R/L1010JX-1.510	●	●	10	10	120	(10)	10	2.0	18	18.3	0	1.50	20		GCM N150005-GF				
GNDL R/L1010JX-210	●	●	10	10	120	(10)	10	2.0	22	22.3	0	2.00	20		GCM □2000-□□				
GNDL R/L1010JX-310	●	●	10	10	120	(10)	10	2.0	22	22.3	0	3.00	20		GCM □3000-□□				
GNDL R/L1212JX-1.2512	●	●	12	12	120	(12)	12	2.0	19	19.3	0	1.25	24	1	GCM N125005-GF	BFTX0412N	3.0	LT15-10	
GNDL R/L1212JX-1.512	●	●	12	12	120	(12)	12	2.0	19	19.3	0	1.50	24		GCM N150005-GF				
GNDL R/L1212JX-212.5	●	●	12	12	120	(12)	12	2.0	22	22.3	0	2.00	25		GCM □2000-□□				
GNDL R/L1212JX-312.5	●	●	12	12	120	(12)	12	2.0	22	22.3	0	3.00	25		GCM □3000-□□				
GNDL R/L1616JX-1.512.5	●	●	16	16	120	(16)	16	—	32	—	0	1.50	25	2	GCM N150005-GF	BX0515	4.0	LH040	
GNDL R/L1616JX-216	●	●	16	16	120	(16)	16	—	32	—	0	2.00	32		GCM □2000-□□				
GNDL R/L1616JX-316	●	●	16	16	120	(16)	16	—	32	—	0	3.00	32		GCM □3000-□□				

Select holders and inserts with the same grooving widths (w).

■ GNDM (Small Tools) / GNDL (Small Tools)

Application	Shape	Type	Cat. No.	Coated Carbide				Dimensions (mm)				Recommended Tightening Torque (N·m)	Fig.	
				AC830P	AC425K	AC520U	AC530U	w		r _ε	ℓ			s
				Cutting width		Tolerance		r _ε	ℓ	s				
Grooving / Cut-Off 	General Purpose Type	GCM N2002-GG	●		●	●	2.0	±0.03	0.2	21.1	3.6	5	1	
		GCM N3002-GG	●		●	●	3.0	±0.03	0.2	21.1	3.8			
		GCM N3004-GG	●		●	●	3.0	±0.03	0.4	21.1	3.8			
	Low cutting force Type	GCM N2002-GL	●		●	●	2.0	±0.03	0.2	21.1	3.6	5	1	
		GCM N3002-GL	●		●	●	3.0	±0.03	0.2	21.1	3.8			
		GCM N150005-GF <i>New</i>	—	—	—	●	1.25	±0.03	0.05	17.4	3.2			
Low cutting force Type	GCM N150005-GF <i>New</i>	—	—	—	●	1.5	±0.03	0.05	17.4	3.7	5	1		
	GCM N2002-GF <i>New</i>	—	—	—	●	2.0	±0.03	0.2	21.1	3.6				
	GCM N3002-GF <i>New</i>	●		●	●	3.0	±0.03	0.2	21.1	3.8				

Application	Shape	Type	Cat. No.	Coated Carbide				Dimensions (mm)				Recommended Tightening Torque (N·m)	Fig.	
				AC830P	AC425K	AC520U	AC530U	w		r _ε	ℓ			s
				R	L	R	L	Cutting width		Tolerance				r _ε
Cut-Off 	General Purpose Type	GCM R/L2002-CG-05	●	●	●	●	2.0	±0.03	0.2	21.1	3.6	5	3	
		GCM R/L3002-CG-05	●	●	●	●	3.0	±0.03	0.2	21.3	3.8			

Select holders and inserts with the same grooving widths (w). Recommended Cutting Conditions **F45**