

For Small Parts Machining

BORING BARS

NEW
Product

Compatible with Swiss-Type Automatic Lathes



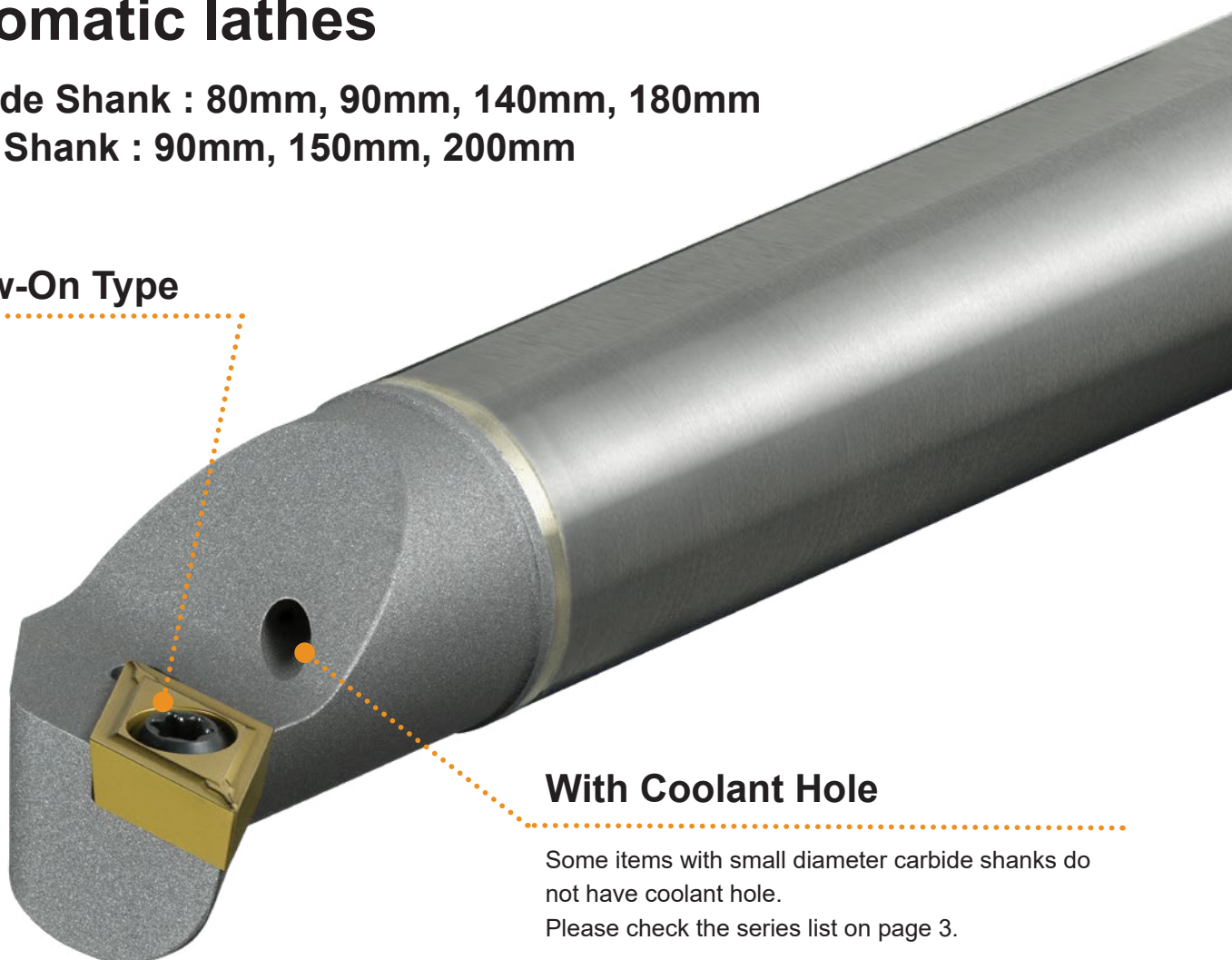
Boring Bar for Machining Small Parts

Overall length compatible with Swiss-Type automatic lathes

Carbide Shank : 80mm, 90mm, 140mm, 180mm

Steel Shank : 90mm, 150mm, 200mm

Screw-On Type



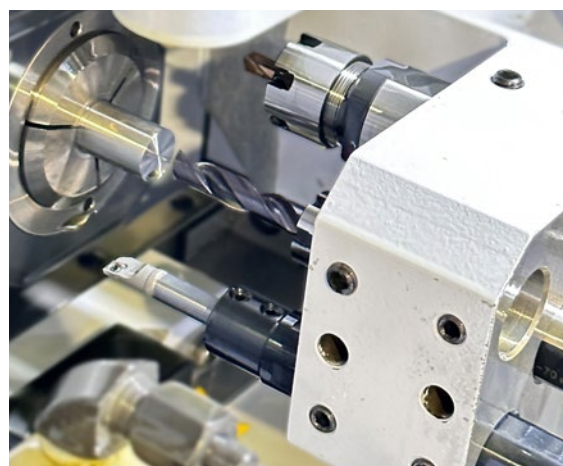
With Coolant Hole

Some items with small diameter carbide shanks do not have coolant hole.

Please check the series list on page 3.

No Need to Shorten the Shank

The length of the tools are compatible with Swiss-type automatic lathes, therefore no need to cut the shank to prevent interference.

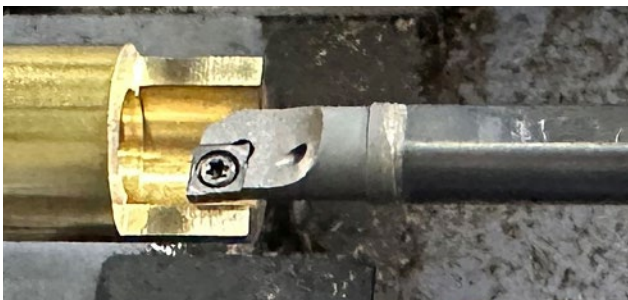


Features

Through Coolant Carbide Shank with Minimum Machining Diameter of 9 mm

The boring bar with a minimum machining diameter of 9mm provides a large clearance and enables excellent chip evacuation.

Clearance comparison : Hole diameter 11 mm

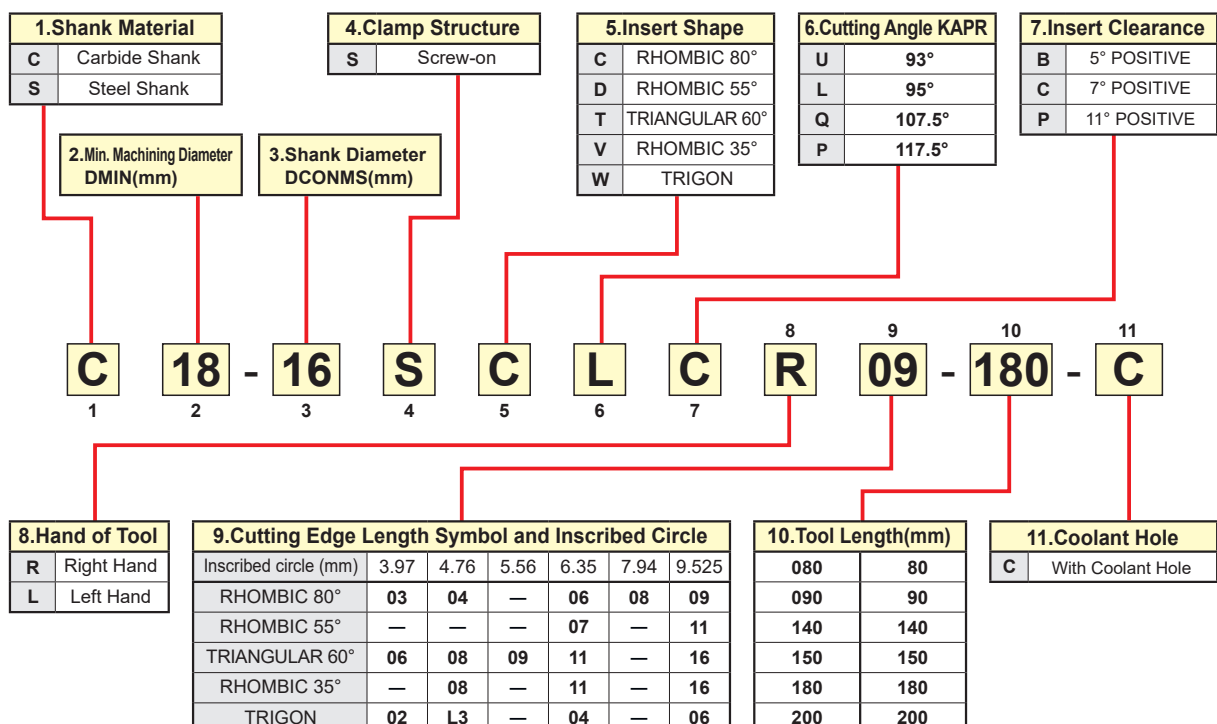


Boring Bar for Machining Small Parts
Minimum Machining Diameter of 9 mm



Dimple Bar
Minimum Machining Diameter of 10 mm

IDENTIFICATION



Selection Standard

Insert Shape	Holder Type	Tool Cutting Edge Angle KAPR	Shank Material	Tool Length	Min Machining Diameter DMIN	Shank Diameter DCONMS	Economical	Cutting Edge Strength	Profile Turning	Internal Coolant	Deep Boring (L/D≥6)	Holder Page	Insert Page
RHOMBIC 80° Normal Clearance 7°	SCLC	95°	Carbide	80,90	5—8	4—7		◎			◎	4	27-33
			Carbide	90,140,180	9—34	8—32		◎		◎	◎	5	
			Steel	90,150	14—34	12—32		◎		◎		6	
RHOMBIC 80° Normal Clearance 11°	SCLP	95°	Carbide	140,180	12—30	10—25		◎		◎	◎	7	34-35
			Steel	90,150	14—30	12—25		◎		◎		8	
TRIANGULAR 60° Normal Clearance 7°	STUC	93°	Carbide	90	7—8	6—7	◎				◎	9	42-44
			Carbide	90,140,180	9—32	8—25	◎			◎	◎	10	
			Steel	90,150	14—40	12—32	◎			◎		11	
TRIANGULAR 60° Normal Clearance 11°	STUP	93°	Carbide	90,140,180	10—34	8—25	◎			◎	◎	12	45-47
			Steel	90,150	14—34	12—25	◎			◎		13	
RHOMBIC 55° Normal Clearance 7°	SDUC	93°	Carbide	140,180	14—32	10—25			◎	◎	◎	14	36-41
			Steel	150	16—32	12—25			◎	◎		15	
RHOMBIC 55° Normal Clearance 7°	SDQC	107.5°	Carbide	140,180	13—30	10—25			◎	◎	◎	16	36-41
			Steel	90,150	16—30	12—25			◎	◎		17	
RHOMBIC 35° Normal Clearance 7°	SVUC	93°	Carbide	140	16	12			◎	◎		18	51-52
			Steel	90	16	12			◎	◎		19	
	SVPC	117.5°	Carbide	140	16	10			◎	◎		20	
RHOMBIC 35° Normal Clearance 5°	SVUB	93°	Carbide	180	20—34	16—25			◎	◎		18	48-50
			Steel	150,200	20—40	16—32			◎	◎		19	
	SVPB	117.5°	Carbide	180	20—34	12—25			◎	◎		20	
			Steel	150,200	20—40	12—32			◎	◎		21	
TRIGON Normal Clearance 7°	SWUC	93°	Carbide	80,90	6—8	5—7	◎	◎			◎	22	53
			Carbide	90,140,180	10—22	8—20	◎	◎		◎	◎	23	
			Steel	90,150	14—22	12—20	◎	◎		◎		24	

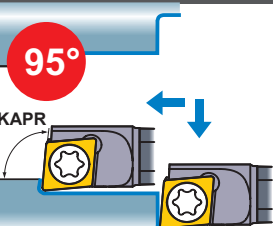
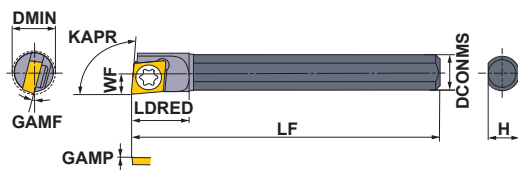
Direction for the use of CPGT · TPG/MX type inserts

Boring bars for machining small parts can use the inserts listed in the table below by changing the clamp screws.

Insert Type	Clamp Screw	Insert Type	Clamp Screw
CPGT0802 $\bigcirc\bigcirc$ ($\phi 7.94$)	TS3	TPGX0802 $\bigcirc\bigcirc$ ($\phi 4.76$)	CS200T
CPGT0903 $\bigcirc\bigcirc$ ($\phi 9.525$)	TS4	TPG/MX0902 $\bigcirc\bigcirc$ ($\phi 5.56$)	CS250T
		TPG/MX1103 $\bigcirc\bigcirc$ ($\phi 9.525$)	CS300890T

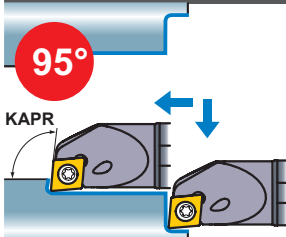
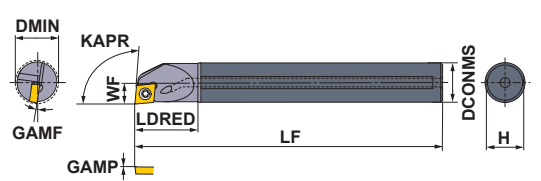
* If the screw is too long the shorten as necessary.

BORING BARS NEW

C-SCLC				Carbide shank without coolant hole							CC ⁰⁰ inserts		Finish	
											L-F			
											CBN/PCD			
											 (03,04)			
											 (03,04)			
												Right hand tool holder shown.		
DMIN	Order Number	Hand	Stock	DCONMS	LF	LDRED	WF	H	GAMF	GAMP	Insert Number			
5	C05-04SCLCR03-080	R	●	4	80	7	2.5	3.7	15°	0°		03S1 ⁰⁰		
5	C05-04SCLCL03-080	L	●	4	80	7	2.5	3.7	15°	0°		03S1 ⁰⁰		
6	C06-05SCLCR03-080	R	●	5	80	9	3.0	4.7	13°	0°		03S1 ⁰⁰		
6	C06-05SCLCL03-080	L	●	5	80	9	3.0	4.7	13°	0°		03S1 ⁰⁰		
7	C07-06SCLCR04-090	R	●	6	90	9	3.5	5.7	13°	0°		04T0 ⁰⁰		
7	C07-06SCLCL04-090	L	●	6	90	9	3.5	5.7	13°	0°		04T0 ⁰⁰		
8	C08-07SCLCR04-090	R	●	7	90	10	4.0	6.7	11°	0°		04T0 ⁰⁰		
8	C08-07SCLCL04-090	L	●	7	90	10	4.0	6.7	11°	0°		04T0 ⁰⁰		

Boring Bar for Machining Small Parts

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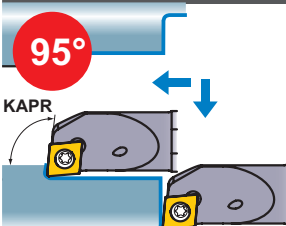
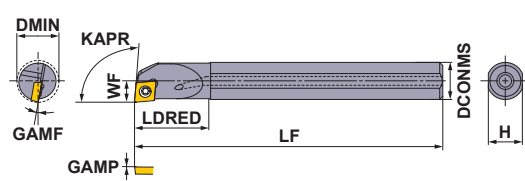
C-SCLC-C				Carbide shank with coolant hole CC inserts							Finish		Finish		Light		Light	
											FS (06,09)		FS-P (06,09)		LS (06,09)		LS-P (06,09)	
											Medium MP (06,09)		Medium MM (06,09)		Flat Top (06,09)		CBN/PCD (04,06,09)	
				Right hand tool holder shown.														
DMIN	Order Number	Hand	Stock	DCONMS	LF	LDRED	WF	H	GAMF	GAMP	Insert Number							
9	C09-08SCLCR04-090-C	R	●	8	90	14	4.5	7	10°	0°	CC						04T0	
10	C10-08SCLCR04-090-C	R	●	8	90	14	5.0	7	9°	0°							04T0	
10	C10-08SCLCR06-140-C	R	●	8	140	14	5.0	7	9°	0°							0602	
10	C10-08SCLCL06-140-C	L	●	8	140	14	5.0	7	9°	0°							0602	
12	C12-10SCLCR06-140-C	R	●	10	140	18	6.0	9	12°	0°							0602	
12	C12-10SCLCL06-140-C	L	●	10	140	18	6.0	9	12°	0°							0602	
14	C14-12SCLCR06-140-C	R	●	12	140	23	7.0	11	10°	0°							0602	
14	C14-12SCLCL06-140-C	L	●	12	140	23	7.0	11	10°	0°							0602	
18	C18-16SCLCR09-180-C	R	●	16	180	28	9.0	15	10°	0°							09T3	
18	C18-16SCLCL09-180-C	L	●	16	180	28	9.0	15	10°	0°							09T3	
22	C22-20SCLCR09-180-C	R	●	20	180	32	11.0	19	8°	0°							09T3	
27	C27-25SCLCR09-180-C	R	●	25	180	38	13.5	24	6°	0°							09T3	
34	C34-32SCLCR09-180-C	R	●	32	180	48	17.0	31	4°	0°							09T3	

Spare Parts

Boring Bar Type	*	
	 Clamp Screw	 Wrench
C SCLCR04	TS21	TKY06F
C SCLCR/L06	TS25	TKY08F
C SCLCR/L09	TS4	TKY15F

* Clamp Torque (N • m) : TS21=0.6, TS25=1.0, TS4=3.5

● : Inventory maintained in Japan.

S-SCLC-C				Steel shank with coolant hole CC ₀₀ inserts							Finish		Finish		Light		Light	
											FS		FS-P		LS		LS-P	
																		
											(06,09)		(06,09)		(06,09)		(06,09)	
											Medium		Medium		Flat Top		CBN/PCD	
											MP		MM					
																		
				Right hand tool holder shown.							(06,09)		(06,09)		(06,09)		(06,09)	
DMIN	Order Number	Hand	Stock	DCONMS	LF	LDRED	WF	H	GAMF	GAMP	Insert Number							
14	S14-12SCLCR06-090-C	R	●	12	90	24	7.0	11	10°	0°	CC ₀₀							
14	S14-12SCLCL06-090-C	L	●	12	90	24	7.0	11	10°	0°								
18	S18-16SCLCR09-150-C	R	●	16	150	30	9.0	15	10°	0°								
18	S18-16SCLCL09-150-C	L	●	16	150	30	9.0	15	10°	0°								
22	S22-20SCLCR09-150-C	R	●	20	150	36	11.0	19	8°	0°								
22	S22-20SCLCL09-150-C	L	●	20	150	36	11.0	19	8°	0°								
27	S27-25SCLCR09-150-C	R	●	25	150	46	13.5	24	6°	0°								
27	S27-25SCLCL09-150-C	L	●	25	150	46	13.5	24	6°	0°								
34	S34-32SCLCR09-150-C	R	●	32	150	58	17.0	31	4°	0°								
34	S34-32SCLCL09-150-C	L	●	32	150	58	17.0	31	4°	0°								

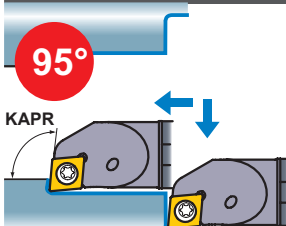
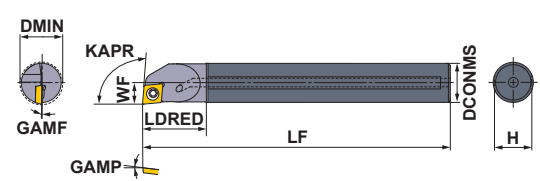
Spare Parts

Boring Bar Type	*	
		
S14-12SCLCR/L06	TS25	TKY08F
S ₀₀ - ₀₀ SCLCR/L09	TS4	TKY15F

* Clamp Torque (N • m) : TS25=1.0, TS4=3.5

Boring Bar for Machining Small Parts

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C-SCLP-C				Carbide shank with coolant hole							CP ⁰⁰ inserts					
											Finish		Finish		Light	
											FV		FS		LM	
																
											(08,09)		(08,09)		(08,09)	
											Medium		Medium		CBN/PCD	
											MM		MS			
																
											(08,09)		(08,09)		(08,09)	
Right hand tool holder shown.																
DMIN	Order Number	Hand	Stock	DCONMS	LF	LDRED	WF	H	GAMF	GAMP	Insert Number					
12	C12-10SCLPR08-140-C	R	●	10	140	18	6.0	9	5°	5°	CP ⁰⁰	0802 ⁰⁰				
12	C12-10SCLPL08-140-C	L	●	10	140	18	6.0	9	5°	5°		0802 ⁰⁰				
14	C14-12SCLPR08-140-C	R	●	12	140	23	7.0	11	4°	5°		0802 ⁰⁰				
14	C14-12SCLPL08-140-C	L	●	12	140	23	7.0	11	4°	5°		0802 ⁰⁰				
16	C16-12SCLPR09-140-C	R	●	12	140	23	8.0	11	4°	5°		0903 ⁰⁰				
16	C16-12SCLPL09-140-C	L	●	12	140	23	8.0	11	4°	5°		0903 ⁰⁰				
18	C18-16SCLPR09-180-C	R	●	16	180	28	9.0	15	3.5°	5°		0903 ⁰⁰				
18	C18-16SCLPL09-180-C	L	●	16	180	28	9.0	15	3.5°	5°		0903 ⁰⁰				
22	C22-20SCLPR09-180-C	R	●	20	180	32	11.0	19	2°	5°		0903 ⁰⁰				
22	C22-20SCLPL09-180-C	L	●	20	180	32	11.0	19	2°	5°		0903 ⁰⁰				
27	C27-25SCLPR09-180-C	R	●	25	180	38	13.5	24	0°	5°		0903 ⁰⁰				
30	C30-25SCLPR09-180-C	R	●	25	180	38	15.0	24	0°	5°		0903 ⁰⁰				

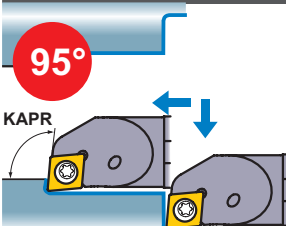
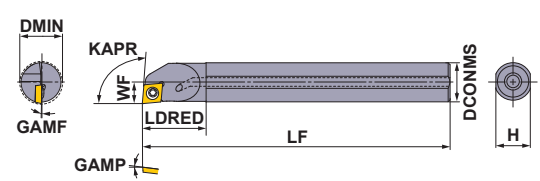
Spare Parts

Boring Bar Type	*	
		
C ⁰⁰ -SCLPR/L08	TS3D	TKY10F
C ⁰⁰ -SCLPR/L09	TS4D	TKY15F

* Clamp Torque (N • m) : TS3D=2.5, TS4D=3.5

By changing the clamp screw, It is possible to use the inserts listed page 3 for details.

● : Inventory maintained in Japan.

S-SCLP-C				Steel shank with coolant hole		CP ⁰⁰ inserts					Finish		Finish		Light	
											FV (08,09)		FS (08,09)		LM (08,09)	
											Medium MM (08,09)		Medium MS (08,09)		CBN/PCD (08,09)	
											Right hand tool holder shown.					
DMIN	Order Number	Hand	Stock	DCONMS	LF	LDRED	WF	H	GAMF	GAMP	Insert Number					
14	S14-12SCLPR08-090-C	R	●	12	90	24	7.0	11	4°	5°	CP ⁰⁰	0802 ⁰⁰				
14	S14-12SCLPL08-090-C	L	●	12	90	24	7.0	11	4°	5°		0802 ⁰⁰				
16	S16-12SCLPR09-090-C	R	●	12	90	24	8.0	11	4°	5°		0903 ⁰⁰				
16	S16-12SCLPL09-090-C	L	●	12	90	24	8.0	11	4°	5°		0903 ⁰⁰				
18	S18-16SCLPR09-150-C	R	●	16	150	30	9.0	15	3.5°	5°		0903 ⁰⁰				
18	S18-16SCLPL09-150-C	L	●	16	150	30	9.0	15	3.5°	5°		0903 ⁰⁰				
22	S22-20SCLPR09-150-C	R	●	20	150	36	11.0	19	2°	5°		0903 ⁰⁰				
22	S22-20SCLPL09-150-C	L	●	20	150	36	11.0	19	2°	5°		0903 ⁰⁰				
27	S27-25SCLPR09-150-C	R	●	25	150	46	13.5	24	0°	5°		0903 ⁰⁰				
27	S27-25SCLPL09-150-C	L	●	25	150	46	13.5	24	0°	5°		0903 ⁰⁰				
30	S30-25SCLPR09-150-C	R	●	25	150	46	15.0	24	0°	5°		0903 ⁰⁰				
30	S30-25SCLPL09-150-C	L	●	25	150	46	15.0	24	0°	5°		0903 ⁰⁰				

Spare Parts

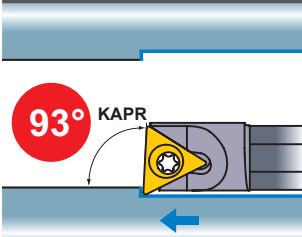
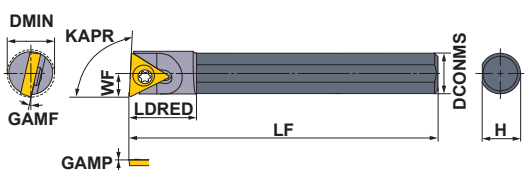
Boring Bar Type	*	
		
S14-12SCLPR/L08	TS3D	TKY10F
S ⁰⁰ - ⁰⁰ SCLPR/L09	TS4D	TKY15F

* Clamp Torque (N • m) : TS3D=2.5, TS4D=3.5

By changing the clamp screw, It is possible to use the inserts listed page 3 for details.

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BORING BARS NEW

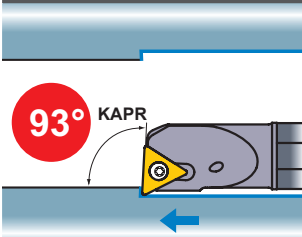
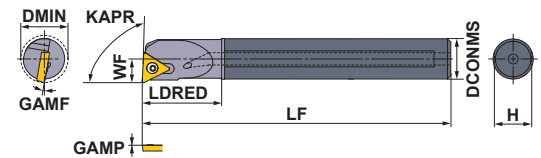
C-STUC			Carbide shank without coolant hole			TC ⁰⁰ inserts					Finish R/L-F  (06)		
												Right hand tool holder shown.	
DMIN	Order Number	Hand	Stock	DCONMS	LF	LDRED	WF	H	GAMF	GAMP	Insert Number		
7	C07-06STUCR06-090	R	●	6	90	10	3.5	5.7	13°	0°	TC ⁰⁰	0601 ⁰⁰	
7	C07-06STUCL06-090	L	●	6	90	10	3.5	5.7	13°	0°		0601 ⁰⁰	
8	C08-07STUCR06-090	R	●	7	90	10	4.0	6.7	12°	0°		0601 ⁰⁰	
8	C08-07STUCL06-090	L	●	7	90	10	4.0	6.7	12°	0°		0601 ⁰⁰	

Spare Parts

Boring Bar Type	*	
		
C ⁰⁰ - ⁰⁰ STUCR/L06	TS2C	TKY06F

* Clamp Torque (N • m) : TS2C=0.6

● : Inventory maintained in Japan.

C-STUC-C				Carbide shank with coolant hole		TC [○] Inserts					Finish		Finish		Light		Light	
											FP		FM		LP		LM	
											(09,11,16)		(09,11,16)		(09,11,16)		(09,11,16)	
											Medium		Medium		Flat Top		CBN/PCD	
											MP		MM					
											(09,11,16)		(09,11,16)		(11,16)		(06,09,11,16)	
Right hand tool holder shown.																		
DMIN	Order Number	Hand	Stock	DCONMS	LF	LDRED	WF	H	GAMF	GAMP	Insert Number							
9	C09-08STUCR06-090-C	R	●	8	90	14	4.5	7	11°	0°	TC [○]	0601 [○]						
10	C10-08STUCR09-090-C	R	●	8	90	14	5.0	7	14°	0°		0902 [○]						
10	C10-08STUCL09-090-C	L	●	8	90	14	5.0	7	14°	0°		0902 [○]						
12	C12-10STUCR09-140-C	R	●	10	140	18	6.2	9	12°	0°		0902 [○]						
12	C12-10STUCL09-140-C	L	●	10	140	18	6.2	9	12°	0°		0902 [○]						
14	C14-12STUCR09-140-C	R	●	12	140	23	7.2	11	10°	0°		0902 [○]						
14	C14-12STUCL09-140-C	L	●	12	140	23	7.2	11	10°	0°		0902 [○]						
18	C18-16STUCR11-180-C	R	●	16	180	28	9.2	15	8°	0°		1102 [○]						
18	C18-16STUCL11-180-C	L	●	16	180	28	9.2	15	8°	0°		1102 [○]						
22	C22-20STUCR11-180-C	R	●	20	180	32	11.2	19	6°	0°		1102 [○]						
22	C22-20STUCL11-180-C	L	●	20	180	32	11.2	19	6°	0°		1102 [○]						
27	C27-20STUCR11-180-C	R	●	20	180	32	13.5	19	5°	0°		1102 [○]						
27	C27-20STUCL11-180-C	L	●	20	180	32	13.5	19	5°	0°		1102 [○]						
32	C32-25STUCR16-180-C	R	●	25	180	38	17.0	24	5°	0°		16T3 [○]						
32	C32-25STUCL16-180-C	L	●	25	180	38	17.0	24	5°	0°		16T3 [○]						

Spare Parts

Boring Bar Type	*	
		
C09-08STUCR06	TS2C	TKY06F
C [○] [○] [○] [○] STUCR/L09	TS22	TKY06F
C [○] [○] [○] [○] STUCR/L11	TS25	TKY08F
C32-25STUCR/L16	TS4	TKY15F

* Clamp Torque (N · m) : TS2C=0.6, TS22=0.6, TS25=1.0, TS4=3.5

Boring Bar for Machining Small Parts

BORING BARS NEW

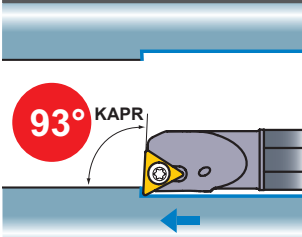
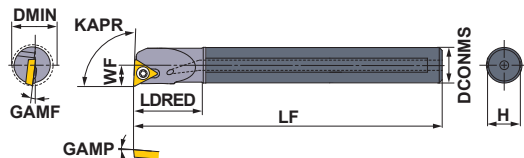
S-STUC-C				Steel shank with coolant hole TC Inserts							Finish	Finish	Light	Light
											FP	FM	LP	LM
											(09,11,16)	(09,11,16)	(09,11,16)	(09,11,16)
											Medium	Medium	Flat Top	CBN/PCD
											MP	MM		
											(09,11,16)	(09,11,16)	(11,16)	(09,11,16)
DMIN	Order Number	Hand	Stock	DCONMS	LF	LDRED	WF	H	GAMF	GAMP	Insert Number			
14	S14-12STUCR09-090-C	R	●	12	90	24	7.2	11	10°	0°	TC			
14	S14-12STUCL09-090-C	L	●	12	90	24	7.2	11	10°	0°				
18	S18-16STUCR11-150-C	R	●	16	150	30	9.2	15	8°	0°				
18	S18-16STUCL11-150-C	L	●	16	150	30	9.2	15	8°	0°				
22	S22-20STUCR11-150-C	R	●	20	150	36	11.2	19	6°	0°				
22	S22-20STUCL11-150-C	L	●	20	150	36	11.2	19	6°	0°				
27	S27-20STUCR11-150-C	R	●	20	150	36	13.5	19	5°	0°				
27	S27-20STUCL11-150-C	L	●	20	150	36	13.5	19	5°	0°				
32	S32-25STUCR16-150-C	R	●	25	150	46	17.0	24	5°	0°				
32	S32-25STUCL16-150-C	L	●	25	150	46	17.0	24	5°	0°				
40	S40-32STUCR16-150-C	R	●	32	150	58	22.0	31	3°	0°				
40	S40-32STUCL16-150-C	L	●	32	150	58	22.0	31	3°	0°				

Spare Parts

Boring Bar Type	*	
S14-12STUCR/L09	TS22	TKY06F
S-STUCR/L11	TS25	TKY08F
S-STUCR/L16	TS4	TKY15F

* Clamp Torque (N • m) : TS22=0.6, TS25=1.0, TS4=3.5

● : Inventory maintained in Japan.

C-STUP-C				Carbide shank with coolant hole							TP ⁰⁰ inserts		Finish	
											FS		FV	
											(09,11)		(08,09,11)	
											Light		CBN/PCD	
											LP		(08,09,11)	
											Right hand tool holder shown.		(09,11)	
DMIN	Order Number	Hand	Stock	DCONMS	LF	LDRED	WF	H	GAMF	GAMP	Insert Number			
10	C10-08STUPR08-090-C	R	●	8	90	14	5.0	7	10°	5°	TP ⁰⁰	0802 ⁰⁰		
10	C10-08STUPL08-090-C	L	●	8	90	14	5.0	7	10°	5°		0802 ⁰⁰		
12	C12-10STUPR09-140-C	R	●	10	140	18	6.2	9	8°	5°		0902 ⁰⁰		
12	C12-10STUPL09-140-C	L	●	10	140	18	6.2	9	8°	5°		0902 ⁰⁰		
14	C14-12STUPR09-140-C	R	●	12	140	23	7.2	11	7°	5°		0902 ⁰⁰		
14	C14-12STUPL09-140-C	L	●	12	140	23	7.2	11	7°	5°		0902 ⁰⁰		
18	C18-16STUPR11-180-C	R	●	16	180	28	9.2	15	3.5°	5°		1103 ⁰⁰		
18	C18-16STUPL11-180-C	L	●	16	180	28	9.2	15	3.5°	5°		1103 ⁰⁰		
22	C22-20STUPR11-180-C	R	●	20	180	32	11.2	19	2°	5°		1103 ⁰⁰		
22	C22-20STUPL11-180-C	L	●	20	180	32	11.2	19	2°	5°		1103 ⁰⁰		
27	C27-25STUPR11-180-C	R	●	25	180	38	13.7	24	0°	5°		1103 ⁰⁰		
27	C27-25STUPL11-180-C	L	●	25	180	38	13.7	24	0°	5°		1103 ⁰⁰		
34	C34-25STUPR11-180-C	R	●	25	180	38	17.2	24	0°	5°		1103 ⁰⁰		
34	C34-25STUPL11-180-C	L	●	25	180	38	17.2	24	0°	5°		1103 ⁰⁰		

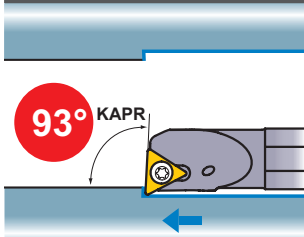
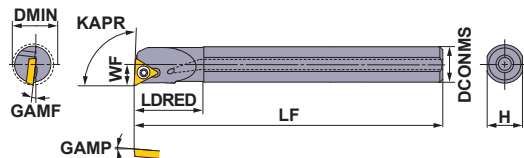
Spare Parts

Boring Bar Type	*	
		
C10-08STUPR/L08	TS2D	TKY06F
C ⁰⁰ - ⁰⁰ STUPR/L09	TS25D	TKY08F
C ⁰⁰ - ⁰⁰ STUPR/L11	TS31D	TKY10F

* Clamp Torque (N • m) : TS2D=0.6, TS25D=1.6, TS31D=2.5

By changing the clamp screw, It is possible to use the inserts listed page 3 for details.

BORING BARS NEW

S-STUP-C		Steel shank with coolant hole				TP ⁰⁰ inserts				Finish		Finish	
												FS	FV
												(09,11)	(08,09,11)
												Light	CBN/PCD
												LP	(08,09,11)
Right hand tool holder shown.													
DMIN	Order Number	Hand	Stock	DCONMS	LF	LDRED	WF	H	GAMF	GAMP	Insert Number		
14	S14-12STUPR09-090-C	R	●	12	90	24	7.2	11	7°	5°	TP ⁰⁰	0902 ⁰⁰	
14	S14-12STUPL09-090-C	L	●	12	90	24	7.2	11	7°	5°		0902 ⁰⁰	
18	S18-16STUPR11-150-C	R	●	16	150	30	9.2	15	3.5°	5°		1103 ⁰⁰	
18	S18-16STUPL11-150-C	L	●	16	150	30	9.2	15	3.5°	5°		1103 ⁰⁰	
22	S22-20STUPR11-150-C	R	●	20	150	36	11.2	19	2°	5°		1103 ⁰⁰	
22	S22-20STUPL11-150-C	L	●	20	150	36	11.2	19	2°	5°		1103 ⁰⁰	
27	S27-25STUPR11-150-C	R	●	25	150	46	13.7	24	0°	5°		1103 ⁰⁰	
27	S27-25STUPL11-150-C	L	●	25	150	46	13.7	24	0°	5°		1103 ⁰⁰	
34	S34-25STUPR11-150-C	R	●	25	150	46	17.2	24	0°	5°		1103 ⁰⁰	
34	S34-25STUPL11-150-C	L	●	25	150	46	17.2	24	0°	5°		1103 ⁰⁰	

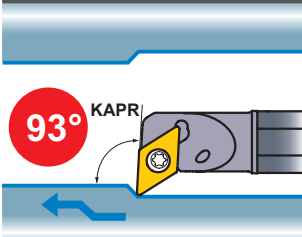
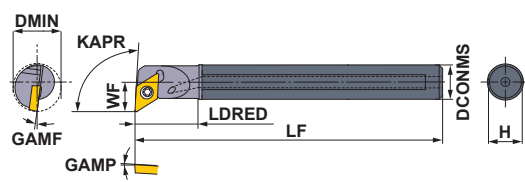
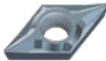
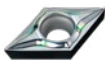
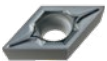
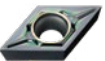
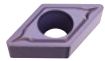
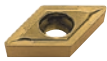
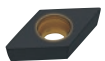
Spare Parts

Boring Bar Type		
	Clamp Screw	Wrench
S14-12STUPR/L09	TS25D	TKY08F
S ⁰⁰ - ⁰⁰ STUPR/L11	TS31D	TKY10F

* Clamp Torque (N • m) : TS25D=1.6, TS31D=2.5

By changing the clamp screw, It is possible to use the inserts listed page 3 for details.

● : Inventory maintained in Japan.

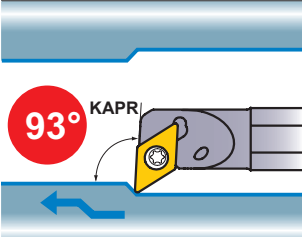
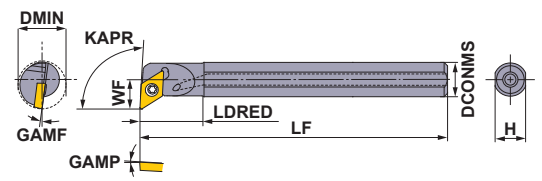
C-SDUC-C				Carbide shank with coolant hole		DC $\bigcirc\bigcirc$ inserts					Finish		Finish		Light		Light		
												FS		FS-P		LS		LS-P	
																			
												(07,11)		(07,11)		(07,11)		(07,11)	
												Medium		Medium		Medium		Flat Top	
				Right hand tool holder shown.								MP		MM		Standard			
																			
												(07,11)		(07,11)		(07,11)		(07,11)	
DMIN	Order Number	Hand	Stock	DCONMS	LF	LDRED	WF	H	GAMF	GAMP	Insert Number								
14	C14-10SDUCR07-140-C	R	●	10	140	18	8.7	9	7.5°	3°	DC $\bigcirc\bigcirc$	0702 $\bigcirc\bigcirc$							
14	C14-10SDUCL07-140-C	L	●	10	140	18	8.7	9	7.5°	3°		0702 $\bigcirc\bigcirc$							
16	C16-12SDUCR07-180-C	R	●	12	180	23	9.7	11	6.5°	3°		0702 $\bigcirc\bigcirc$							
16	C16-12SDUCL07-180-C	L	●	12	180	23	9.7	11	6.5°	3°		0702 $\bigcirc\bigcirc$							
20	C20-16SDUCR07-180-C	R	●	16	180	28	11.7	15	5°	3°		0702 $\bigcirc\bigcirc$							
20	C20-16SDUCL07-180-C	L	●	16	180	28	11.7	15	5°	3°		0702 $\bigcirc\bigcirc$							
23	C23-16SDUCR07-180-C	R	●	16	180	28	14.5	15	5°	3°		0702 $\bigcirc\bigcirc$							
23	C23-16SDUCL07-180-C	L	●	16	180	28	14.5	15	5°	3°		0702 $\bigcirc\bigcirc$							
27	C27-20SDUCR11-180-C	R	●	20	180	32	16.5	19	5°	3°		11T3 $\bigcirc\bigcirc$							
27	C27-20SDUCL11-180-C	L	●	20	180	32	16.5	19	5°	3°		11T3 $\bigcirc\bigcirc$							
32	C32-25SDUCR11-180-C	R	●	25	180	38	19.0	24	5°	3°		11T3 $\bigcirc\bigcirc$							
32	C32-25SDUCL11-180-C	L	●	25	180	38	19.0	24	5°	3°		11T3 $\bigcirc\bigcirc$							

Spare Parts

Boring Bar Type	*	
	 Clamp Screw	 Wrench
C-SDUCR/L07	TS25	TKY08F
C-SDUCR/L11	TS4	TKY15F

* Clamp Torque (N • m) : TS25=1.0, TS4=3.5

BORING BARS NEW

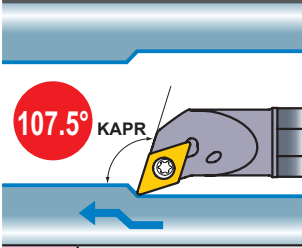
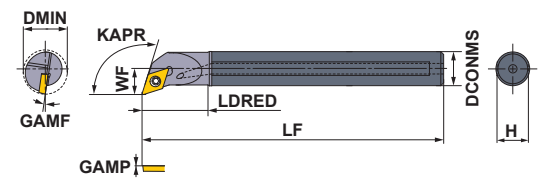
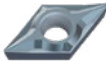
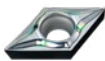
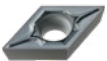
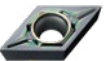
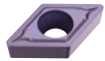
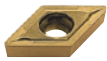
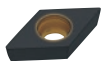
S-SDUC-C				Steel shank with coolant hole DC Inserts							Finish	Finish	Light	Light
											FS	FS-P	LS	LS-P
											(07,11)	(07,11)	(07,11)	(07,11)
											Medium	Medium	Medium	Flat Top
											MP	MM	Standard	
				Right hand tool holder shown.							(07,11)	(07,11)	(07,11)	(07,11)
DMIN	Order Number	Hand	Stock	DCONMS	LF	LDRED	WF	H	GAMF	GAMP	Insert Number			
16	S16-12SDUCR07-150-C	R	●	12	150	21	9.7	11	6.5°	3°	DC			
16	S16-12SDUCL07-150-C	L	●	12	150	21	9.7	11	6.5°	3°				
20	S20-16SDUCR07-150-C	R	●	16	150	21	11.7	15	5°	3°				
20	S20-16SDUCL07-150-C	L	●	16	150	21	11.7	15	5°	3°				
23	S23-16SDUCR07-150-C	R	●	16	150	21	14.5	15	5°	3°				
23	S23-16SDUCL07-150-C	L	●	16	150	21	14.5	15	5°	3°				
27	S27-20SDUCR11-150-C	R	●	20	150	23	16.5	19	5°	3°				
27	S27-20SDUCL11-150-C	L	●	20	150	23	16.5	19	5°	3°				
32	S32-25SDUCR11-150-C	R	●	25	150	24	19.0	24	5°	3°				
32	S32-25SDUCL11-150-C	L	●	25	150	24	19.0	24	5°	3°				
											Insert Number			
											0702			
											0702			
											0702			
											0702			
											0702			
											11T3			
											11T3			
											11T3			
											11T3			

Spare Parts

Boring Bar Type	★	
	 Clamp Screw	 Wrench
S-SDUCR/L07	TS25	TKY08F
S-SDUCR/L11	TS4	TKY15F

★ Clamp Torque (N • m) : TS25=1.0, TS4=3.5

● : Inventory maintained in Japan.

C-SDQC-C				Carbide shank with coolant hole		DC Inserts					Finish		Finish		Light		Light	
												FS	FS-P	LS	LS-P			
																		
												(07,11)	(07,11)	(07,11)	(07,11)			
												Medium	Medium	Medium	Flat Top			
				Right hand tool holder shown.								MP	MM	Standard				
																		
												(07,11)	(07,11)	(07,11)	(07,11)			
DMIN	Order Number	Hand	Stock	DCONMS	LF	LDRED	WF	H	GAMF	GAMP	Insert Number							
13	C13-10SDQCR07-140-C	R	●	10	140	18	7.5	9	10°	0°	DC	0702						
13	C13-10SDQCL07-140-C	L	●	10	140	18	7.5	9	10°	0°		0702						
16	C16-12SDQCR07-140-C	R	●	12	140	23	9.25	11	8°	0°		0702						
16	C16-12SDQCL07-140-C	L	●	12	140	23	9.25	11	8°	0°		0702						
20	C20-16SDQCR07-180-C	R	●	16	180	28	11.3	15	6°	0°		0702						
20	C20-16SDQCL07-180-C	L	●	16	180	28	11.3	15	6°	0°		0702						
23	C23-16SDQCR07-180-C	R	●	16	180	28	12.8	15	5°	0°		0702						
23	C23-16SDQCL07-180-C	L	●	16	180	28	12.8	15	5°	0°		0702						
25	C25-20SDQCR11-180-C	R	●	20	180	32	14.4	19	5°	0°		11T3						
25	C25-20SDQCL11-180-C	L	●	20	180	32	14.4	19	5°	0°		11T3						
30	C30-25SDQCR11-180-C	R	●	25	180	38	16.9	24	4°	0°		11T3						
30	C30-25SDQCL11-180-C	L	●	25	180	38	16.9	24	4°	0°		11T3						

Spare Parts

Boring Bar Type	*	
	 Clamp Screw	 Wrench
C-SDQCR/L07	TS25	TKY08F
C-SDQCR/L11	TS4	TKY15F

* Clamp Torque (N • m) : TS25=1.0, TS4=3.5

BORING BARS NEW

S-SDQC-C				Steel shank with coolant hole		DC $\bigcirc\bigcirc$ inserts					Finish		Finish		Light		Light				
														FS		FS-P		LS		LS-P	
														(07,11)		(07,11)		(07,11)		(07,11)	
														Medium		Medium		Medium		Flat Top	
														MP		MM		Standard			
														(07,11)		(07,11)		(07,11)		(07,11)	
DMIN	Order Number	Hand	Stock	DCONMS	LF	LDRED	WF	H	GAMF	GAMP	Insert Number										
16	S16-12SDQCR07-090-C	R	●	12	90	22	9.25	11	8°	0°	DC $\bigcirc\bigcirc$						0702 $\bigcirc\bigcirc$				
16	S16-12SDQCL07-090-C	L	●	12	90	22	9.25	11	8°	0°							0702 $\bigcirc\bigcirc$				
20	S20-16SDQCR07-150-C	R	●	16	150	25	11.3	15	6°	0°							0702 $\bigcirc\bigcirc$				
20	S20-16SDQCL07-150-C	L	●	16	150	25	11.3	15	6°	0°							0702 $\bigcirc\bigcirc$				
23	S23-16SDQCR07-150-C	R	●	16	150	25	12.8	15	5°	0°							0702 $\bigcirc\bigcirc$				
23	S23-16SDQCL07-150-C	L	●	16	150	25	12.8	15	5°	0°							0702 $\bigcirc\bigcirc$				
25	S25-20SDQCR11-150-C	R	●	20	150	31	14.4	19	5°	0°							11T3 $\bigcirc\bigcirc$				
25	S25-20SDQCL11-150-C	L	●	20	150	31	14.4	19	5°	0°							11T3 $\bigcirc\bigcirc$				
30	S30-25SDQCR11-150-C	R	●	25	150	38	16.9	24	4°	0°							11T3 $\bigcirc\bigcirc$				
30	S30-25SDQCL11-150-C	L	●	25	150	38	16.9	24	4°	0°							11T3 $\bigcirc\bigcirc$				

Spare Parts

Boring Bar Type		
	Clamp Screw	Wrench
S ₀₀ - ₀₀ SDQCR/L07	TS25	TKY08F
S ₀₀ - ₀₀ SDQCR/L11	TS4	TKY15F

★ Clamp Torque (N • m) : TS25=1.0, TS4=3.5

● : Inventory maintained in Japan.

C-SVUC/B-C				Carbide shank with coolant hole		VC/VB○○ inserts				Finish	Finish	Light	Light
						FP	FM	LP	LM				
						(11,16)	(08,11,16)	(08,11,16)	(08,11,16)				
						Medium	Medium	Medium	CBN				
						MP	MM	Standard	CBN				
						(16)	(16)	(16)	(11,16)				
DMIN	Order Number	Hand	Stock	DCONMS	LF	LDRED	WF	WF2	H	GAMF	GAMP	Insert Number	
16	C16-12SVUCR08-140-C	R	●	12	140	23	11.5	5.6	11	8°	0°	VC○○	0802○○
20	C20-16SVUBR11-180-C	R	●	16	180	28	16.0	8.1	15	8°	0°	VB○○	1103○○
20	C20-16SVUBL11-180-C	L	●	16	180	28	16.0	8.1	15	8°	0°		1103○○
25	C25-20SVUBR11-180-C	R	●	20	180	32	18.0	8.1	19	7°	0°		1103○○
30	C30-20SVUBR11-180-C	R	●	20	180	32	18.0	8.1	19	6°	0°		1103○○
34	C34-25SVUBR16-180-C	R	●	25	180	38	20.5	8.4	24	13°	0°		1604○○

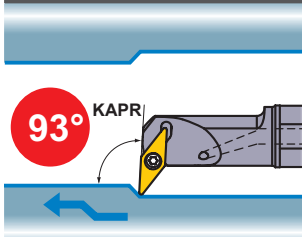
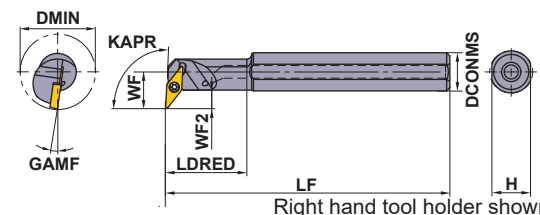
Spare Parts

Boring Bar Type	★	
C16-12SVUCR08	TS202	TKY06F
○○○○SVUBR/L11	TS255	TKY08F
C34-25SVUBR16	TS35D	TKY15F

★ Clamp Torque (N • m) : TS202=0.6, TS255=1.0, TS35D=3.5

Boring Bar for Machining Small Parts

BORING BARS NEW

S-SVUC/B-C				Steel shank with coolant hole		VC/VB $\circ\circ$ inserts				Finish		Finish		Light		Light			
												FP		FM		LP		LM	
												(11,16)		(08,11,16)		(08,11,16)		(08,11,16)	
												Medium		Medium		Medium		CBN	
												MP		MM		Standard			
												(16)		(16)		(16)		(11,16)	
DMIN	Order Number	Hand	Stock	DCONMS	LF	LDRED	WF	WF2	H	GAMF	GAMP	Insert Number							
16	S16-12SVUCR08-090-C	R	●	12	90	25.5	11.5	5.6	11	8°	0°	VC $\circ\circ$	0802 $\circ\circ$						
20	S20-16SVUBR11-150-C	R	●	16	150	32.5	16.0	8.1	15	8°	0°	VB $\circ\circ$	1103 $\circ\circ$						
20	S20-16SVUBL11-150-C	L	●	16	150	32.5	16.0	8.1	15	8°	0°		1103 $\circ\circ$						
25	S25-20SVUBR11-150-C	R	●	20	150	40.5	18.0	8.1	19	7°	0°		1103 $\circ\circ$						
30	S30-20SVUBR11-150-C	R	●	20	150	40.5	18.0	8.1	19	6°	0°		1103 $\circ\circ$						
34	S34-25SVUBR16-150-C	R	●	25	150	40.0	20.5	8.4	24	13°	0°		1604 $\circ\circ$						
40	S40-32SVUBR16-200-C	R	●	32	200	84.0	28.0	12.4	31	9°	0°	1604 $\circ\circ$							

Spare Parts

Boring Bar Type	★	
		
S16-12SVUCR08	TS202	TKY06F
S $\circ\circ\circ$ - $\circ\circ\circ$ SVUBR/L11	TS255	TKY08F
S $\circ\circ\circ$ - $\circ\circ\circ$ SVUBR16	TS35D	TKY15F

★ Clamp Torque (N • m) : TS202=0.6, TS255=1.0, TS35D=3.5

● : Inventory maintained in Japan.

C-SVPC/B-C				Carbide shank with coolant hole		VC/VB $\circ\circ$ inserts				Finish		Finish		Light		Light	
				FP		FM		LP		LM							
				(11,16)		(08,11,16)		(08,11,16)		(08,11,16)							
				Medium		Medium		Medium		CBN							
				MP		MM		Standard									
				(16)		(16)		(16)		(11,16)							
DMIN	Order Number	Hand	Stock	DCONMS	LF	LDRED	WF	WF2	H	GAMF	GAMP	Insert Number					
16	C16-10SVPCR08-140-C	R	●	10	140	18	8.0	3.1	9	8°	-5°	VC $\circ\circ$	0802 $\circ\circ$				
16	C16-10SVPCL08-140-C	L	●	10	140	18	8.0	3.1	9	8°	-5°		0802 $\circ\circ$				
20	C20-12SVPBR11-180-C	R	●	12	180	23	10.0	4.1	11	8°	-5°	VB $\circ\circ$	1103 $\circ\circ$				
20	C20-12SVPBL11-180-C	L	●	12	180	23	10.0	4.1	11	8°	-5°		1103 $\circ\circ$				
25	C25-16SVPBR11-180-C	R	●	16	180	28	12.5	4.6	15	6°	-5°		1103 $\circ\circ$				
25	C25-16SVPBL11-180-C	L	●	16	180	28	12.5	4.6	15	6°	-5°		1103 $\circ\circ$				
30	C30-20SVPBR11-180-C	R	●	20	180	32	15.0	5.1	19	5°	-5°		1103 $\circ\circ$				
34	C34-25SVPBR16-180-C	R	●	25	180	38	17.0	4.9	24	13°	-5°		1604 $\circ\circ$				

Spare Parts

Boring Bar Type	★	
C16-10SVPCR/L08	TS202	TKY06F
C $\circ\circ$ - $\circ\circ$ SVPBR/L11	TS255	TKY08F
C34-25SVPBR16	TS35D	TKY15F

★ Clamp Torque (N • m) : TS202=0.6, TS255=1.0, TS35D=3.5

Boring Bar for Machining Small Parts

BORING BARS NEW

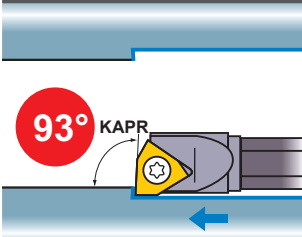
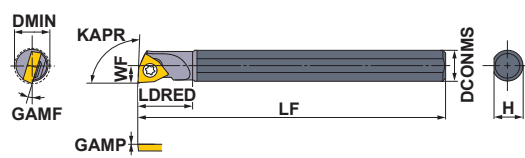
S-SVPB-C				Steel shank with coolant hole				VB $\circ\circ$ inserts				Finish	Finish	Light	Light
												FP	FM	LP	LM
												(11,16)	(11,16)	(11,16)	(11,16)
												Medium	Medium	Medium	CBN
												MP	MM	Standard	
												(16)	(16)	(16)	(11,16)
DMIN	Order Number	Hand	Stock	DCONMS	LF	LDRED	WF	WF2	H	GAMF	GAMP	Insert Number			
20	S20-12SVPBR11-150-C	R	●	12	150	29	10.0	4.1	11	8°	-5°	VB $\circ\circ$	1103 $\circ\circ$		
20	S20-12SVPBL11-150-C	L	●	12	150	29	10.0	4.1	11	8°	-5°		1103 $\circ\circ$		
25	S25-16SVPBR11-150-C	R	●	16	150	35	12.5	4.6	15	6°	-5°		1103 $\circ\circ$		
25	S25-16SVPBL11-150-C	L	●	16	150	35	12.5	4.6	15	6°	-5°		1103 $\circ\circ$		
30	S30-20SVPBR11-150-C	R	●	20	150	41	15.0	5.1	19	5°	-5°		1103 $\circ\circ$		
34	S34-25SVPBR16-150-C	R	●	25	150	51	17.0	4.9	24	13°	-5°		1604 $\circ\circ$		
40	S40-32SVPBR16-200-C	R	●	32	200	54	22.0	6.4	31	9°	-5°		1604 $\circ\circ$		

Spare Parts

Boring Bar Type	★	
	 Clamp Screw	 Wrench
S $\circ\circ$ - $\circ\circ$ SVPBR/L11	TS255	TKY08F
S $\circ\circ$ - $\circ\circ$ SVPBR16	TS35D	TKY15F

★ Clamp Torque (N • m) : TS255=1.0, TS35D=3.5

● : Inventory maintained in Japan.

C-SWUC				Carbide shank without coolant hole							WC ^{○○} inserts		Finish	
											FV  (02,L3) CBN/PCD  (L3)			
												Right hand tool holder shown.		
DMIN	Order Number	Hand	Stock	DCONMS	LF	LDRED	WF	H	GAMF	GAMP	Insert Number			
6	C06-05SWUCR02-080	R	●	5	80	9	3.0	4.7	17°	0°	WC ^{○○}	0201 ^{○○}		
6	C06-05SWUCL02-080	L	●	5	80	9	3.0	4.7	17°	0°		0201 ^{○○}		
8	C08-07SWUCRL3-090	R	●	7	90	10	4.0	6.7	15°	0°		L302 ^{○○}		
8	C08-07SWUCLL3-090	L	●	7	90	10	4.0	6.7	15°	0°		L302 ^{○○}		

Spare Parts

Boring Bar Type		
	Clamp Screw	Wrench
C06-05SWUCR/L02	TS21	TKY06F
C08-07SWUCR/LL3	TS2	TKY06F

★ Clamp Torque (N • m) : TS21=0.6, TS2=0.6

BORING BARS NEW

C-SWUC-C

Carbide shank
with coolant hole

WC⁰⁰inserts

93° KAPR

Finish
FV

(04,06)

Medium

MP

(04,06)

Right hand tool holder shown.

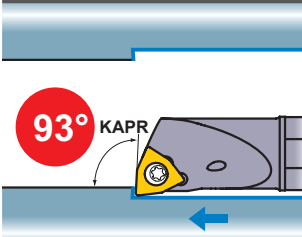
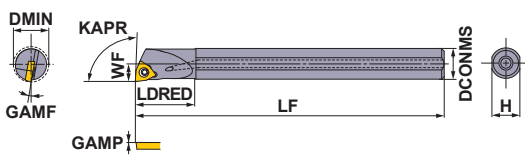
DMIN	Order Number	Hand	Stock	DCONMS	LF	LDRED	WF	H	GAMP	GAMP	Insert Number	
10	C10-08SWUCR04-090-C	R	●	8	90	14	5.0	7	15°	0°	WC ⁰⁰	0402 ⁰⁰
10	C10-08SWUCL04-090-C	L	●	8	90	14	5.0	7	15°	0°		0402 ⁰⁰
12	C12-10SWUCR04-090-C	R	●	10	90	18	6.0	9	12°	0°		0402 ⁰⁰
12	C12-10SWUCL04-090-C	L	●	10	90	18	6.0	9	12°	0°		0402 ⁰⁰
14	C14-12SWUCR04-140-C	R	●	12	140	23	7.0	11	10°	0°		0402 ⁰⁰
14	C14-12SWUCL04-140-C	L	●	12	140	23	7.0	11	10°	0°		0402 ⁰⁰
16	C16-12SWUCR06-140-C	R	●	12	140	23	8.0	11	12°	0°		06T3 ⁰⁰
16	C16-12SWUCL06-140-C	L	●	12	140	23	8.0	11	12°	0°		06T3 ⁰⁰
18	C18-16SWUCR06-140-C	R	●	16	140	28	9.0	15	10°	0°		06T3 ⁰⁰
18	C18-16SWUCL06-140-C	L	●	16	140	28	9.0	15	10°	0°		06T3 ⁰⁰
22	C22-20SWUCR06-180-C	R	●	20	180	32	11.0	19	7°	0°		06T3 ⁰⁰
22	C22-20SWUCL06-180-C	L	●	20	180	32	11.0	19	7°	0°		06T3 ⁰⁰

Spare Parts

Boring Bar Type		
	Clamp Screw	Wrench
C ⁰⁰ - ⁰⁰ SWUCR/L04	TS25	TKY08F
C ⁰⁰ - ⁰⁰ SWUCR/L06	TS4	TKY15F

★ Clamp Torque (N • m) : TS25=1.0, TS4=3.5

● : Inventory maintained in Japan.

S-SWUC-C				Steel shank with coolant hole							WC $\circ\circ$ inserts		Finish	
											FV			
											 (04,06)			
											Medium MP  (04,06)			
												Right hand tool holder shown.		
DMIN	Order Number	Hand	Stock	DCONMS	LF	LDRED	WF	H	GAMF	GAMP	Insert Number			
14	S14-12SWUCR04-090-C	R	●	12	90	24	7.0	11	10°	0°	WC $\circ\circ$	0402 $\circ\circ$		
14	S14-12SWUCL04-090-C	L	●	12	90	24	7.0	11	10°	0°		0402 $\circ\circ$		
16	S16-12SWUCR06-090-C	R	●	12	90	24	8.0	11	12°	0°		06T3 $\circ\circ$		
16	S16-12SWUCL06-090-C	L	●	12	90	24	8.0	11	12°	0°		06T3 $\circ\circ$		
18	S18-16SWUCR06-090-C	R	●	16	90	30	9.0	15	10°	0°		06T3 $\circ\circ$		
18	S18-16SWUCL06-090-C	L	●	16	90	30	9.0	15	10°	0°		06T3 $\circ\circ$		
22	S22-20SWUCR06-150-C	R	●	20	150	36	11.0	19	7°	0°		06T3 $\circ\circ$		
22	S22-20SWUCL06-150-C	L	●	20	150	36	11.0	19	7°	0°		06T3 $\circ\circ$		

Spare Parts

Boring Bar Type		
	Clamp Screw	Wrench
S14-12SWUCR/L04	TS25	TKY08F
S $\circ\circ\circ$ SWUCR/L06	TS4	TKY15F

★ Clamp Torque (N • m) : TS25=1.0, TS4=3.5

Boring Bar for Machining Small Parts

RECOMMENDED CUTTING CONDITIONS

(mm)

	Workpiece Material	Properties	Cutting Mode	Chip Breaker	Grade	Cutting Speed vc(m/min)	Feed f(mm/rev)	Depth of Cut ap
P	Pure Iron Free Cutting Steel	—	Finish	R/L-F	MS6015	150 (50–250)	0.01–0.15	0.1–0.4
			Light	LS-P	MS6015	150 (50–250)	0.01–0.15	0.3–2.2
			Light	R/L-SS	MS6015	150 (50–250)	0.01–0.15	0.2–0.8
			Medium	R/L-SN	MS6015	150 (50–250)	0.01–0.15	0.1–0.4
			Medium	SMG	MS6015	150 (50–250)	0.01–0.15	0.1–1.5
	Carbon Steel Alloy Steel	Hardness 180–280HB	Finish	R/L-F	MS6015	100 (50–150)	0.01–0.15	0.1–0.4
			Light	LS-P	MS6015	100 (50–150)	0.01–0.15	0.3–2.2
			Light	R/L-SS	MS6015	100 (50–150)	0.01–0.15	0.2–0.8
			Medium	R/L-SN	MS6015	100 (50–150)	0.01–0.15	0.1–0.4
			Medium	SMG	MS6015	100 (50–150)	0.01–0.15	0.1–1.5
M	Austenitic Stainless Steel	—	Finish	FS-P	MS7025	60 (40–100)	0.01–0.08	0.2–0.5
			Finish	FS-P	MS9025	100 (60–150)	0.04–0.15	0.2–0.5
			Finish	R/L-F	MS7025	60 (40–100)	0.01–0.08	0.1–0.4
			Finish	R-SRF	MS9025	100 (60–150)	0.04–0.15	0.1–0.4
			Light	LS-P	MS7025	60 (40–100)	0.01–0.08	0.3–2.2
			Light	LS-P	MS9025	100 (60–150)	0.05–0.15	0.3–2.2
			Medium	R-SN	MS7025	60 (40–100)	0.01–0.08	0.1–3.8
			Medium	R-SN	MS9025	100 (60–150)	0.05–0.15	0.1–3.8
	Ferritic and Martensitic Stainless Steel	—	Finish	FS-P	MS7025	60 (40–100)	0.01–0.08	0.2–0.5
			Finish	R-SRF	MS7025	60 (40–100)	0.01–0.08	0.1–0.4
			Light	LS-P	MS7025	60 (40–100)	0.01–0.08	0.3–2.2
			Light	R-SN	MS7025	60 (40–100)	0.01–0.08	0.1–3.8
	Soft Magnetic Stainless Steel (SUS440C、SUS420J2etc.)	Hardness 230HBW	Finish	FS-P	MS7025	80 (40–160)	0.02–0.08	0.2–1.4
			Finish	FS-P	MS9025	100 (50–180)	0.04–0.12	0.2–1.4
			Finish	R-SRF	MS7025	80 (40–160)	0.03–0.08	0.1–0.4
			Finish	R-SRF	MS9025	100 (50–180)	0.05–0.12	0.1–0.4
			Light	LS-P	MS7025	80 (40–160)	0.02–0.10	0.3–2.2
			Light	LS-P	MS9025	100 (50–180)	0.04–0.15	0.3–2.2
			Medium	R-SN	MS7025	80 (40–160)	0.01–0.10	0.1–3.8
			Medium	R-SN	MS9025	100 (50–180)	0.01–0.10	0.1–3.8
	Precipitation Hardening Stainless Steel (SUS630、SUS631etc.)	Hardness <450HB	Finish	FS-P	MS7025	60 (40–80)	0.01–0.10	0.1–1.0
			Finish	FS-P	MS9025	70 (50–100)	0.03–0.15	0.1–1.0
			Finish	R-SRF	MS7025	60 (40–80)	0.01–0.10	0.1–0.4
			Finish	R-SRF	MS9025	70 (50–100)	0.03–0.15	0.1–0.4
			Light	LS-P	MS7025	60 (40–80)	0.04–0.10	0.2–2.2
			Light	LS-P	MS9025	70 (50–100)	0.04–0.15	0.2–2.2
			Medium	R-SN	MS7025	60 (40–80)	0.03–0.10	0.3–2.2
			Medium	R-SN	MS9025	70 (50–100)	0.04–0.15	0.2–2.2

(mm)								
Workpiece Material		Properties	Cutting Mode	Chip Breaker	Grade	Cutting Speed vc(m/min)	Feed f(mm/rev)	Depth of Cut ap
K	Grey Cast Iron	Tensile Strength ≤350MPa	Finish	Flat Top	MC5115	225 (150—300)	0.04—0.15	0.1—0.5
			Finish	Flat Top	HTi10	100 (50—150)	0.04—0.15	0.1—0.5
			Light	Flat Top	MC5115	225 (150—300)	0.04—0.15	0.2—1.0
			Light	Flat Top	HTi10	100 (50—150)	0.04—0.15	0.2—1.0
			Medium	Flat Top	MC5115	225 (150—300)	0.04—0.15	0.1—2.0
			Medium	Flat Top	HTi10	100 (50—150)	0.04—0.15	0.1—2.0
S	Heat Resistant Alloy (SUH etc.)	—	Finish	FS-P	MS9025	80 (40—140)	0.04—0.12	0.2—1.0
			Finish	R-SRF	MS9025	80 (40—140)	0.05—0.12	0.1—0.4
			Light	LS-P	MS9025	80 (40—140)	0.04—0.15	0.3—2.2
			Medium	R-SN	MS9025	80 (40—140)	0.01—0.10	0.1—3.8

Note 1) If chatter vibration occurs, adjust the cutting conditions and perform machining.

Note 2) If the tool overhang amount is $L/D = 5$ or more for carbide shank or $L/D = 3$ or more for steel shank, please reduce the cutting speed by 10% to 20%.

Note 3) Regarding the feed rate and depth of cut for breakers not listed in the table, please refer to the general catalogue C010J page A058 of for 7° positive and page A066 for 11° positive. For cutting speed, please refer to the grade introduction page A034.



General Catalogue

 **80° CC TYPE INSERTS
WITH HOLE**

* Indicates the maximum value of the corner R.

● = NEW

(10 inserts in one case)

● : Stable Cutting (1st recommendation) ● : General Cutting (1st recommendation) ✖ : Unstable Cutting (1st recommendation)
○ : Stable Cutting (2nd recommendation) ○ : General Cutting (2nd recommendation) ✖ : Unstable Cutting (2nd recommendation)

Workpiece Material	P	Steel																																				
	M	Stainless Steel																																				
	K	Cast Iron																																				
	N	Non-ferrous Metal																																				
	S	Heat Resistant Alloy, Titanium Alloy																																				
Shape	Order Number	RE (mm)	Coated																Coated Cermet		Cermet	Carbide																
			MS6015 NEW MC6115 NEW MC6125	MC6015	MC6025	UE6105	UE6110	UE6020	MS7025	MC7015	MC7025	MP7035	US7020	US735	NEW MC5105 NEW MC5115 NEW MC5125	MS9025	MP9005	MP9015	MP9025	VP10RT	VP15TF	VP30RT	UP20M	MP3025	AP25N	VP25N	VP45N	NX2525	NX3035	MT9005	RT9010	UT120T	HT105T	HT110	TF15			
AZ  Medium Cutting ~ Finish Cutting	CCGT060202-AZ	0.2																																				
	CCGT060204-AZ	0.4																																				
	CCGT09T302-AZ	0.2																																				
	CCGT09T304-AZ	0.4																																				
	CCGT09T308-AZ	0.8																																				
R/L-F  Finish Cutting	*2 CCGT03S1V3L-F	0.03																																				
	*2 CCGT03S101L-F	0.1																																				
	*2 CCGT03S102L-F	0.2																																				
	*2 CCGT03S104L-F	0.4																																				
	*2 CCGT04T0V3L-F	0.03																																				
	*2 CCGT04T001L-F	0.1																																				
	*2 CCGT04T002L-F	0.2																																				
	*2 CCGT04T004L-F	0.4																																				
	*2 CCGT03S101MR-F	0.1*1	●																																			
	*2 CCGT03S101ML-F	0.1*1	●																																			
	*2 CCGT03S102MR-F	0.2*1	●																																			
	*2 CCGT03S102ML-F	0.2*1	●																																			
	*2 CCGT03S104MR-F	0.4*1	●																																			
	*2 CCGT03S104ML-F	0.4*1	●																																			
	*2 CCGT04T001MR-F	0.1*1	●																																			
	*2 CCGT04T001ML-F	0.1*1	●																																			
	*2 CCGT04T002MR-F	0.2*1	●																																			
	*2 CCGT04T002ML-F	0.2*1	●																																			
	*2 CCGT04T004MR-F	0.4*1	●																																			
	*2 CCGT04T004ML-F	0.4*1	●																																			
R/L-F  Finish Cutting	CCGH060202R-F	0.2																																				
	CCGH060202L-F	0.2																																				
	CCGH060204R-F	0.4																																				
	CCGH060204L-F	0.4																																				
	CCGH060202MR-F	0.2*1	●																																			
	CCGH060202ML-F	0.2*1	●																																			
	CCGH060204MR-F	0.4*1	●																																			
CCGH060204ML-F	0.4*1	●																																				
LP  Light Cutting	CCMT060202-LP	0.2		●																																		
	CCMT060204-LP	0.4		●	●	▲	▲		▲																●				●									
	CCMT060208-LP	0.8		●	●	▲	▲		▲																●				●									
	CCMT09T304-LP	0.4		●	●	▲	▲		▲																●				●									
	CCMT09T308-LP	0.8		●	●	▲	▲		▲																●				●									

*1 Indicates the maximum value of the corner R.

*2 Diameter of inscribed circle is special.

● = NEW



Boring Bar for Machining Small Parts

80° CC TYPE INSERTS WITH HOLE

● : Stable Cutting (1st recommendation) ● : General Cutting (1st recommendation) ✱ : Unstable Cutting (1st recommendation)
○ : Stable Cutting (2nd recommendation) ○ : General Cutting (2nd recommendation) ✱ : Unstable Cutting (2nd recommendation)

Workpiece Material	P	Steel																								
	M	Stainless Steel																								
	K	Cast Iron																								
	N	Non-ferrous Metal																								
	S	Heat Resistant Alloy, Titanium Alloy																								

Shape	Order Number	RE (mm)	Coated												Coated Cermet			Cermet		Carbide																			
			NEW MS6015 MC6115	NEW MC6125	MC6015	MC6025	UE6105	UE6110	UE6020	MS7025	MC7015	MC7025	MP7035	US7020	US735	NEW MC5105	NEW MC5115	NEW MC5125	MS9025	MP9005	MP9015	MP9025	VP10RT		VP15TF	VP30RT	UP20M	MP3025	AP25N	VP25N	VP45N	NX2525	NX3035	MT9005	RT9010	UT120T	HT105T	HT110	TF15
 Light Cutting	CCMT060202-LM	0.2								●	●																												
	CCMT060204-LM	0.4								●	●	●												●															
	CCMT060208-LM	0.8									●	●	●										●																
	CCMT09T302-LM	0.2								●	●																												
	CCMT09T304-LM	0.4								●	●	●												●															
	CCMT09T308-LM	0.8								●	●	●												●															
 Light Cutting	CCMT060202-LS	0.2																	●	●	●												●						
	CCMT060204-LS	0.4																	●	●	●												●						
	CCMT09T302-LS	0.2																	●	●	●												●						
	CCMT09T304-LS	0.4																	●	●	●												●						
	CCMT09T308-LS	0.8																	●	●	●												●						
 Light Cutting	CCGT060201M-LS	0.1*																	●	●	●																		
	CCGT060202M-LS	0.2*																	●	●	●																		
	CCGT060204M-LS	0.4*																		●		●																	
	CCGT09T301M-LS	0.1*																	●	●	●																		
	CCGT09T302M-LS	0.2*																	●	●	●																		
	CCGT09T304M-LS	0.4*																	●	●	●																		
 Light Cutting	CCGT0602V5M-LS-P	0.05*																	●																				
	CCGT060201M-LS-P	0.1*	●							●									●															●					
	CCGT060202M-LS-P	0.2*	●							●									●															●					
	CCGT060204M-LS-P	0.4*								●									●																				
	CCGT09T301M-LS-P	0.1*	●							●									●															●					
	CCGT09T302M-LS-P	0.2*	●							●									●															●					
	CCGT09T304M-LS-P	0.4*	●							●									●															●					
 Light Cutting	CCMH060202-SV	0.2				▲		▲						●									●			●	●	●											
	CCMH060204-SV	0.4				▲		▲						●									●			●	●	●											
 Light Cutting (Wiper)	CCMT060202-SW	0.2	●	●	▲	▲	▲	▲															●			●	●	●											
	CCMT060204-SW	0.4	●	●	▲	▲	▲	▲								●							●			●	●	●											
	CCMT060208-SW	0.8																																					
	CCMT09T302-SW	0.2	●	●	▲	▲	▲	▲								●								●			●	●	●										
	CCMT09T304-SW	0.4	●	●	▲	▲	▲	▲					▲			●								●			●	●	●										
	CCMT09T308-SW	0.8																						●															

* Indicates the maximum value of the corner R.

● = NEW

● : Inventory maintained in Japan.

▲ : Inventory maintained in Japan. To be replaced by new products.

(10 inserts in one case)

● : Stable Cutting (1st recommendation) ● : General Cutting (1st recommendation) ✱ : Unstable Cutting (1st recommendation)
○ : Stable Cutting (2nd recommendation) ○ : General Cutting (2nd recommendation) ✱ : Unstable Cutting (2nd recommendation)

Workpiece Material	P	Steel																																	
	M	Stainless Steel																																	
	K	Cast Iron																																	
	N	Non-ferrous Metal																																	
	S	Heat Resistant Alloy, Titanium Alloy																																	
Shape	Order Number	RE (mm)	Coated																Coated Cermet	Cermet	Carbide														
			MS6015 NEW MC6115 NEW MC6125 NEW	MC6015	MC6025	UE6105	UE6110	UE6020	MS7025	MC7015	MC7025	MP7035	US7020	US735	MC5105 NEW MC5115 NEW MC5125 NEW	MS9025	MP9005	MP9015	MP9025	VP10RT	VP15TF	VP30RT	UP20M	MP3025	AP25N	VP25N	VP45N	NX2525	NX3035	MT9005	RT9010	UT120T	HT105T	HT110	TF15
	CCGT0602V3R-SS	0.03																																	
	CCGT0602V3L-SS	0.03																																	
	CCGT060201R-SS	0.1																																	
	CCGT060201L-SS	0.1																																	
	CCGT060202R-SS	0.2																																	
	CCGT060202L-SS	0.2																																	
	CCGT09T3V3R-SS	0.03																																	
	CCGT09T3V3L-SS	0.03																																	
	CCGT09T301R-SS	0.1																																	
	CCGT09T301L-SS	0.1																																	
	CCGT09T302R-SS	0.2																																	
	CCGT09T302L-SS	0.2																																	
	CCGT060201MR-SS	0.1*	●																																
	CCGT060201ML-SS	0.1*	●																																
	CCGT060202MR-SS	0.2*	●																																
	CCGT060202ML-SS	0.2*	●																																
	CCGT09T301MR-SS	0.1*	●																																
	CCGT09T301ML-SS	0.1*	●																																
	CCGT09T302MR-SS	0.2*	●																																
	CCGT09T302ML-SS	0.2*	●																																
	CCGT09T304MR-SS	0.4*	●																																
	CCGT09T304ML-SS	0.4*	●																																
	CCMT060202-MP	0.2	●●																						●			●							
	CCMT060204-MP	0.4	●●▲▲	▲																				●			●								
	CCMT060208-MP	0.8	●●▲▲	▲																				●			●								
	CCMT09T302-MP	0.2	●●																																
	CCMT09T304-MP	0.4	●●▲▲	▲																					●		●								
	CCMT09T308-MP	0.8	●●▲▲	▲																					●		●								
	CCMT060202-MM	0.2						●●																											
	CCMT060204-MM	0.4						●●●																●											
	CCMT060208-MM	0.8						●●																●											
	CCMT09T302-MM	0.2						●●																											
	CCMT09T304-MM	0.4						●●●																●											
	CCMT09T308-MM	0.8						●●●																●●	●										
	CCMT060202-MK	0.2												●●●																					
	CCMT060204-MK	0.4												●●●																					
	CCMT060208-MK	0.8												●●●																					
	CCMT09T302-MK	0.2												●●●																					
	CCMT09T304-MK	0.4												●●●																					
	CCMT09T308-MK	0.8												●●●																					

* Indicates the maximum value of the corner R.

● = NEW



 80° CC TYPE INSERTS WITH HOLE

● : Stable Cutting (1st recommendation) ● : General Cutting (1st recommendation) ✖ : Unstable Cutting (1st recommendation)
○ : Stable Cutting (2nd recommendation) ○ : General Cutting (2nd recommendation) ✖ : Unstable Cutting (2nd recommendation)

Workpiece Material	P	Steel																																		
	M	Stainless Steel																																		
	K	Cast Iron																																		
	N	Non-ferrous Metal																																		
	S	Heat Resistant Alloy, Titanium Alloy																																		
Shape	Order Number	RE (mm)	Coated																Coated Cermet		Cermet	Carbide														
			MS6015 NEW MC6115 NEW MC6125	MC6015	MC6025	UE6105	UE6110	UE6020	MS7025	MC7015	MC7025	MP7035	US7020	US735	MC5105 NEW MC5115 NEW MC5125	MS9025	MP9005	MP9015	MP9025	VP10RT	VP15TF	VP30RT	UP20M	MP3025	AP25N	VP25N	VP45N	NX2525	NX3035	MT9005	RT9010	UT120T	HT105T	HT110	TF15	
	CCGT0602V3R-SN	0.03																																		
	CCGT060201R-SN	0.1																																		
	CCGT060201L-SN	0.1																																		
	CCGT060202R-SN	0.2																																		
	CCGT060202L-SN	0.2																																		
	CCGT09T3V3R-SN	0.03																																		
	CCGT09T3V3L-SN	0.03																																		
	CCGT09T301R-SN	0.1																																		
	CCGT09T301L-SN	0.1																																		
	CCGT09T302R-SN	0.2																																		
	CCGT09T302L-SN	0.2																																		
	CCGT09T304R-SN	0.4																																		
	CCGT09T304L-SN	0.4																																		
	CCGT060201MR-SN	0.1*			●				●								●																			
	CCGT060201ML-SN	0.1*			●																															
	CCGT060202MR-SN	0.2*			●				●								●																			
	CCGT060202ML-SN	0.2*			●																															
	CCGT09T301MR-SN	0.1*			●				●								●																			
	CCGT09T301ML-SN	0.1*			●																															
	CCGT09T302MR-SN	0.2*			●				●								●																			
	CCGT09T302ML-SN	0.2*			●																															
	CCGT09T304MR-SN	0.4*			●				●								●																			
	CCGT09T304ML-SN	0.4*			●																															
Medium Cutting	CCGT09T304ML-SN	0.4*			●																															
	CCET060200R-SN	0.0*																																		
	CCET060200L-SN	0.0*																																		
	CCET0602V3R-SN	0.03*																																		
	CCET0602V3L-SN	0.03*																																		
	CCET060201R-SN	0.1*																																		
	CCET060201L-SN	0.1*																																		
	CCET060202R-SN	0.2*																																		
	CCET060202L-SN	0.2*																																		
	CCET060204R-SN	0.4*																																		
	CCET060204L-SN	0.4*																																		
	CCET09T300R-SN	0.0*																																		
	CCET09T300L-SN	0.0*																																		
	CCET09T3V3R-SN	0.03*																																		
	CCET09T3V3L-SN	0.03*																																		
	CCET09T301R-SN	0.1*																																		
	CCET09T301L-SN	0.1*																																		
	CCET09T302R-SN	0.2*																																		
	CCET09T302L-SN	0.2*																																		
	CCET09T304R-SN	0.4*																																		
	CCET09T304L-SN	0.4*																																		
	Medium Cutting	CCET09T304L-SN	0.4*																																	

* Indicates the maximum value of the corner R.

● = NEW



**80° CC TYPE INSERTS
WITH HOLE**

[illegible]

● = NEW

80° CP TYPE INSERTS WITH HOLE

● : Stable Cutting (1st recommendation)

●: General Cutting (1st recommendation)

⊕ : Unstable Cutting (1st recommendation)

○: Stable Cutting (2nd recommendation)

Ⓔ: General Cutting (2nd recommendation)

⊕ : Unstable Cutting (2nd recommendation)

[illegible]

● = NEW

 80° CP TYPE INSERTS
WITH HOLE

[illegible]

● : Inventory maintained in Japan.
▲ : Inventory maintained in Japan. To be replaced by new products.
(10 inserts in one case)

●: Stable Cutting (1st recommendation)

C : General Cutting (1st recommendation)

⊕ : Unstable Cutting (1st recommendation)

○: Stable Cutting (2nd recommendation)

Ⓔ: General Cutting (2nd recommendation)

⊕ : Unstable Cutting (2nd recommendation)

Workpiece Material	P	Steel	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
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 = **NEW**

55° DC TYPE INSERTS WITH HOLE

[illegible]

● = NEW

(10 inserts in one case)

● : Stable Cutting (1st recommendation) ● : General Cutting (1st recommendation) ✖ : Unstable Cutting (1st recommendation)
○ : Stable Cutting (2nd recommendation) ○ : General Cutting (2nd recommendation) ✖ : Unstable Cutting (2nd recommendation)

Workpiece Material	P	Steel																																				
	M	Stainless Steel																																				
	K	Cast Iron																																				
	N	Non-ferrous Metal																																				
	S	Heat Resistant Alloy, Titanium Alloy																																				
Shape	Order Number	RE (mm)	Coated													Coated Cermet		Cermet	Carbide																			
			NEW NEW MS6015 MC6115 MC6125	MC6015	MC6025	UE6105	UE6110	UE6020	MS7025	MC7015	MC7025	MP7035	US7020	US735	NEW NEW NEW MC5105 MC5115 MC5125	MS9025	MP9005	MP9015	MP9025	VP10RT	VP15TF	VP30RT	UP20M	MP3025	AP25N	VP25N	VP45N	NX2525	NX3035	MT9005	RT9010	UT120T	HT105T	HT110	TF15			
 Light Cutting	DCMT070202-SV	0.2																																				
	DCMT070204-SV	0.4																																				
	DCMT070208-SV	0.8																																				
	DCMT11T302-SV	0.2																																				
	DCMT11T304-SV	0.4																																				
	DCMT11T308-SV	0.8																																				
 Light Cutting	DCMX070202-SW	0.2																																				
	DCMX070204-SW	0.4																																				
	DCMX070208-SW	0.8																																				
	DCMX11T302-SW	0.2																																				
	DCMX11T304-SW	0.4																																				
	DCMX11T308-SW	0.8																																				
 Light Cutting	DCGT0702V3R-SS	0.03																																				
	DCGT0702V3L-SS	0.03																																				
	DCGT070201R-SS	0.1																																				
	DCGT070201L-SS	0.1																																				
	DCGT070202R-SS	0.2																																				
	DCGT070202L-SS	0.2																																				
	DCGT11T3V3R-SS	0.03																																				
	DCGT11T301R-SS	0.1																																				
	DCGT11T302R-SS	0.2																																				
	DCGT070201MR-SS	0.1*	●																																			
	DCGT070201ML-SS	0.1*	●																																			
	DCGT070202MR-SS	0.2*	●																																			
	DCGT070202ML-SS	0.2*	●																																			
	DCGT11T301MR-SS	0.1*	●																																			
	DCGT11T301ML-SS	0.1*	●																																			
	DCGT11T302MR-SS	0.2*	●																																			
	DCGT11T302ML-SS	0.2*	●																																			
	DCGT11T304MR-SS	0.4*	●																																			
	DCGT11T304ML-SS	0.4*	●																																			
 Medium Cutting	DCMT070202-MP	0.2	●●																																			
	DCMT070204-MP	0.4	●●	▲▲	▲																					●												
	DCMT070208-MP	0.8	●●	▲▲	▲																					●												
	DCMT11T302-MP	0.2	●●																																			
	DCMT11T304-MP	0.4	●●	▲▲	▲																					●												
	DCMT11T308-MP	0.8	●●	▲▲	▲																					●												
	DCMT11T312-MP	1.2	●●																																			
 Medium Cutting	DCMT070202-MM	0.2								●●																●												
	DCMT070204-MM	0.4								●●	●															●	●											
	DCMT070208-MM	0.8								●●	●															●	●											
	DCMT11T302-MM	0.2								●●																												
	DCMT11T304-MM	0.4								●●	●															●	●											
	DCMT11T308-MM	0.8								●●	●															●	●											

* Indicates the maximum value of the corner R.

● = NEW



55° DC TYPE INSERTS WITH HOLE

* Indicates the maximum value of the corner R.

● = NEW

(10 inserts in one case)

● : Stable Cutting (1st recommendation) ● : General Cutting (1st recommendation) ✖ : Unstable Cutting (1st recommendation)
○ : Stable Cutting (2nd recommendation) ○ : General Cutting (2nd recommendation) ✖ : Unstable Cutting (2nd recommendation)

[illegible]

* Indicates the maximum value of the corner R.

● = NEW

55° DC TYPE INSERTS WITH HOLE

[illegible]

● = NEW

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60° TC TYPE INSERTS WITH HOLE

● : Stable Cutting (1st recommendation)

●: General Cutting (1st recommendation)

⊕ : Unstable Cutting (1st recommendation)

○: Stable Cutting (2nd recommendation)

Ⓔ: General Cutting (2nd recommendation)

⊕ : Unstable Cutting (2nd recommendation)

[illegible]

● = NEW

TC TYPE INSERTS WITH HOLE

● : Stable Cutting (1st recommendation) ● : General Cutting (1st recommendation) ✖ : Unstable Cutting (1st recommendation)
 ○ : Stable Cutting (2nd recommendation) Ⓞ : General Cutting (2nd recommendation) ⦿ : Unstable Cutting (2nd recommendation)

● = NEW

▲ : Inventory maintained in Japan. To be replaced by new products.

(10 inserts in one case)

● : Stable Cutting (1st recommendation) ● : General Cutting (1st recommendation) ✖ : Unstable Cutting (1st recommendation)
 ○ : Stable Cutting (2nd recommendation) ○ : General Cutting (2nd recommendation) ✖ : Unstable Cutting (2nd recommendation)

[illegible]

● = NEW



TP TYPE INSERTS WITH HOLE

● = NEW

● : Stable Cutting (1st recommendation) ● : General Cutting (1st recommendation) ✖ : Unstable Cutting (1st recommendation)
 ○ : Stable Cutting (2nd recommendation) ○ : General Cutting (2nd recommendation) ✖ : Unstable Cutting (2nd recommendation)

[illegible]

● = NEW



TP TYPE INSERTS WITH HOLE

● : Stable Cutting (1st recommendation) ● : General Cutting (1st recommendation) ✖ : Unstable Cutting (1st recommendation)
○ : Stable Cutting (2nd recommendation) Ⓒ : General Cutting (2nd recommendation) ⚠ : Unstable Cutting (2nd recommendation)

● = NEW

▲ : Inventory maintained in Japan. To be replaced by new products.

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35° VB TYPE INSERTS WITH HOLE

● : Stable Cutting (1st recommendation) ● : General Cutting (1st recommendation) ✱ : Unstable Cutting (1st recommendation)
 ○ : Stable Cutting (2nd recommendation) ○ : General Cutting (2nd recommendation) ✱ : Unstable Cutting (2nd recommendation)

[illegible]

● = NEW



35° VB TYPE INSERTS WITH HOLE

● : Stable Cutting (1st recommendation) ● : General Cutting (1st recommendation) ✖ : Unstable Cutting (1st recommendation)
○ : Stable Cutting (2nd recommendation) Ⓒ : General Cutting (2nd recommendation) ⚠ : Unstable Cutting (2nd recommendation)

[illegible]

● = NEW

● : Inventory maintained in Japan.

▲ : Inventory maintained in Japan. To be replaced by new products.

(10 inserts in one case)

● : Stable Cutting (1st recommendation) ● : General Cutting (1st recommendation) ✖ : Unstable Cutting (1st recommendation)
○ : Stable Cutting (2nd recommendation) ○ : General Cutting (2nd recommendation) ✖ : Unstable Cutting (2nd recommendation)

Workpiece Material	P	Steel																																			
	M	Stainless Steel																																			
	K	Cast Iron																																			
	N	Non-ferrous Metal																																			
	S	Heat Resistant Alloy, Titanium Alloy																																			
Shape	Order Number	RE (mm)	Coated																Coated Cermet			Cermet	Carbide														
			MS6015 NEW MC6115 NEW MC6125	MC6015	MC6025	UE6105	UE6110	UE6020	MS7025	MC7015	MC7025	MP7035	US7020	US735	MC5105 NEW MC5115 NEW MC5125	MS9025	MP9005	MP9015	MP9025	VP10RT	VP15TF	VP30RT	UP20M	MP3025	AP25N	VP25N	VP45N	NX2525	NX3035	MT9005	RT9010	UT120T	HT105T	HT110	TF15		
 Medium Cutting	VBET1103V3R-SR	0.03*																																			
	VBET1103V3L-SR	0.03*																																			
	VBET110301R-SR	0.1*																																			
	VBET110301L-SR	0.1*																																			
	VBET110302R-SR	0.2*																																			
	VBET110302L-SR	0.2*																																			
	VBET110304R-SR	0.4*																																			
VBET110304L-SR	0.4*																																				
 Medium Cutting	VBET110300R-SN	0.0*																																			
	VBET110300L-SN	0.0*																																			
	VBET1103V3R-SN	0.03*																																			
	VBET1103V3L-SN	0.03*																																			
	VBET110301R-SN	0.1*																																			
	VBET110301L-SN	0.1*																																			
	VBET110302R-SN	0.2*																																			
	VBET110302L-SN	0.2*																																			
	VBET110304R-SN	0.4*																																			
VBET110304L-SN	0.4*																																				
 Medium Cutting (Wiper)	VBET1103V3RW-SN	0.03*																																			
	VBET1103V3LW-SN	0.03*																																			
 Flat Top	VBMW160408	0.8																																			

* Indicates the maximum value of the corner R.

● = NEW



35° VC TYPE INSERTS WITH HOLE

● : Stable Cutting (1st recommendation) ● : General Cutting (1st recommendation) ✖ : Unstable Cutting (1st recommendation)
 ○ : Stable Cutting (2nd recommendation) Ⓞ : General Cutting (2nd recommendation) ⦿ : Unstable Cutting (2nd recommendation)

Workpiece Material	P	Steel	                                																							
	M	Stainless Steel	                                																							
	K	Cast Iron	                                																							
	N	Non-ferrous Metal	                                																							
	S	Heat Resistant Alloy, Titanium Alloy	                 																							

● = NEW

● : Inventory maintained in Japan.

▲ : Inventory maintained in Japan. To be replaced by new products.

(10 inserts in one case)

● : Stable Cutting (1st recommendation) ● : General Cutting (1st recommendation) ✖ : Unstable Cutting (1st recommendation)
 ○ : Stable Cutting (2nd recommendation) ○ : General Cutting (2nd recommendation) ✖ : Unstable Cutting (2nd recommendation)

[illegible]

● = NEW



WC TYPE INSERTS WITH HOLE

● : Stable Cutting (1st recommendation) ● : General Cutting (1st recommendation) ✖ : Unstable Cutting (1st recommendation)
 ○ : Stable Cutting (2nd recommendation) Ⓔ : General Cutting (2nd recommendation) ✖ : Unstable Cutting (2nd recommendation)

● = NEW

● : Inventory maintained in Japan.
▲ : Inventory maintained in Japan. To be replaced by new products.
(10 inserts in one case)

● : Stable Cutting (1st recommendation) ● : General Cutting (1st recommendation) ✖ : Unstable Cutting (1st recommendation)
 ○ : Stable Cutting (2nd recommendation) Ⓔ : General Cutting (2nd recommendation) ✖ : Unstable Cutting (2nd recommendation)

[illegible]

● = NEW

Inserts for other types of boring bar

● : Stable Cutting (1st recommendation) ● : General Cutting (1st recommendation) ✖ : Unstable Cutting (1st recommendation)
 ○ : Stable Cutting (2nd recommendation) Ⓒ : General Cutting (2nd recommendation) ⚡ : Unstable Cutting (2nd recommendation)

Positive without Hole

[illegible]

● = NEW

● : Inventory maintained in Japan.

▲ : Inventory maintained in Japan. To be replaced by new products.

(10 inserts in one case)

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(Tools specifications subject to change without notice.)

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