EXTERNAL TURNING TOOLHOLDERS

D

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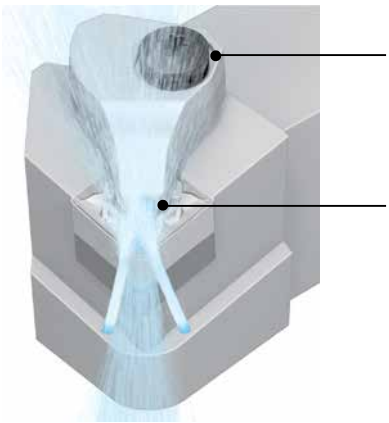
Double-Clamp-JCT

Coolant-Through Turning Holders

Discharges coolant in three directions to improve chip control and lengthen tool life for a wide variety of workpieces including steel, hardened material and difficult-to-cut material

1 Superior Chip Control Performance

Special coolant-through structure designed by careful simulation and analysis technology



Double-Clamp

Firm insert clamp and easy to use in single operations
High-density coolant supply close to the cutting edge

Unique Nozzle Shape

Provides coolant to a wide area of the insert surface

○ : Coolant Hole

Discharges coolant in three directions and the cutting edge stays cool

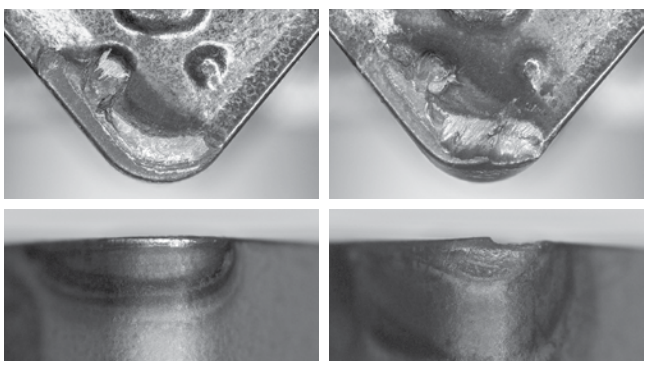
2 Advantages of Internal Coolant

Discharges Coolant towards the Cutting Edge
Internal Coolant Provides Longer Tool Life and Excellent Chip Control

Extended Tool Life

Wear Resistance Comparison (Internal Evaluation)

Internal Coolant (1,015 psi) External Coolant (58 psi)

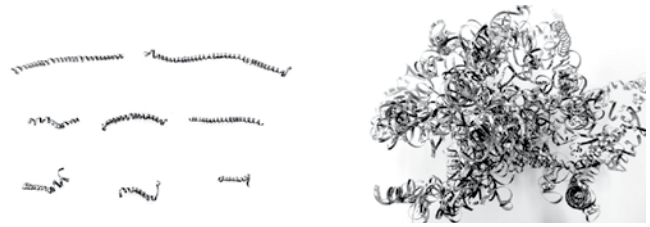


Cutting Conditions: Vc = 820 sfm, f = 0.079 ipr, D.O.C. = 0.079", Wet
CNMG432 Insert Workpiece: 4137
External Turning After Machining 42.2 min

Improved Chip Control

Chip Control Comparison (Internal Evaluation)

Internal Coolant (1,015 psi) External Coolant (58 psi)



Cutting Conditions: Vc = 660 sfm, f = 0.002 ipr, D.O.C. = 0.020", Wet
DNMG432 Insert Workpiece: 4131 External Turning

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EXTERNAL TOOLHOLDER IDENTIFICATION SYSTEM

LENGTH AND WIDTH	LENGTH AND SIDE
A - 4.000 Back and End	M - 4.000 Front and End
B - 4.500 Back and End	N - 4.500 Front and End
C - 5.000 Back and End	P - 5.000 Front and End
D - 6.000 Back and End	R - 6.000 Front and End
E - 7.000 Back and End	S - 7.000 Front and End
F - 8.000 Back and End	T - 8.000 Front and End
G - 5.500 Back and End	U - 5.500 Front and End

* NOTE: All qualified dimensions are given to a tolerance of 0.003" over a master gauge insert radius based on the standard shown.

Insert I.C.	Radius
1/4" - 5/16"	0.015"
3/8" - 1/2"	0.031"
5/8" - 3/4"	0.047"
1"	0.062"

⑧ Qualified Control

Number of 1/8ths on 1/4" I.C. and over.

⑦ Insert Size I.C.

This position shall be a significant number which indicates the holder cross section. For square shanks this number will represent the number of sixteenths of width and height. For rectangular holders the first digit represents the number of eighths of width and the second digit the number of quarters of height, except the following toolholder: 1-1/4 x 1-1/2 which is given the number 91.

⑥ Toolholder Shank Size

R : Round
S : Square
T : Triangle
C : 80° Diamond
D : 55° Diamond
V : 35° Diamond
W : 80° Trigon
R : Round

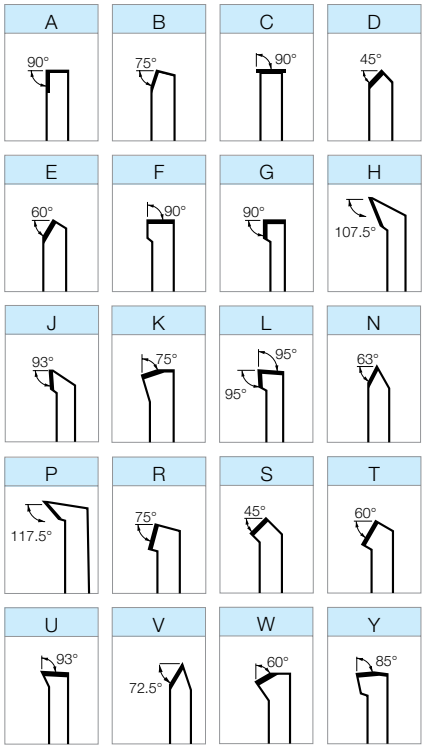
② Insert Shape

A : Anchor Pin Style
C : Clamp Only
D : Double Clamp
M : Clamp and Lock Pin
P : Lock Pin Only (or Lever Lock)
S : Screw Only
W : Wedge Only

① Clamping System

	①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩
ANSI (inch)	D	C	L	N	R	16	4	D		
ISO (metric)	D	C	L	N	R	20	20	K	12	

③ Cutting Edge Angle



④ Insert Relief Angle

B : 5° Positive
C : 7° Positive
D : 15° Positive
E : 20° Positive
N : 0° Negative
P : 11° Positive

⑤ Hand of Tool

R : Right-hand
L : Left-hand
N : Neutral

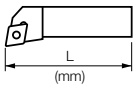
⑥ Shank Height

Shank Height (mm)

⑦ Shank Width

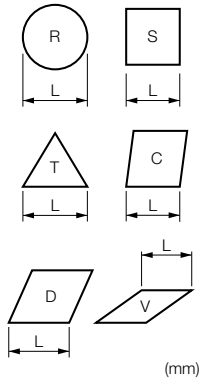
Shank Width (mm)

⑧ Toolholder Length



A : 32	J : 110	S : 250
B : 40	K : 125	T : 300
C : 50	L : 140	U : 350
D : 60	M : 150	V : 400
E : 70	N : 160	W : 450
F : 80	P : 170	Y : 500
G : 90	Q : 180	X : Special
H : 100	R : 200	

⑨ Insert Size



⑩ Others

Optional Code

Optional Mark or Number

- Specifications may change without prior notice.
- Due to the installation size constraints on the machine, the toolholder length of some products may not match with the symbol.

General Purpose Turning Holders

Applicable Insert Shape	CN..	WN..	TN..	DN..	RC..		RN..	VN..
Application	External / Facing		External / Facing / Copying					External / Facing / Copying / Undercutting
Cutting Edge Angle	95°		105°	107.5°	Special			117.5°
Lever Lock (Pin Lock)	PCLN	PWLN		PDHN	PRGC	PRXC	PRGN	PVPN (Pin Lock)
Ref. Page	D9	D25		D13	D23	D23	D23	D22
Wedge Lock		WWLN	WTKN					
Ref. Page		D25	D18					
Double Clamp	DCLN (-JCT)	DWLN		DDHN				DVPN
Ref. Page	D8	D24		D12				D20
Multi-Lock	MCLN	MWLN						
Ref. Page	D8	D24						

Applicable Insert Shape	VN..	DN.. / TN..	SN..	TN..	SN..	SN..	TN..	SN..	TN..
Application	External / Copying		External / Chamfering		External / Facing / Chamfering	External		Facing	
Cutting Edge Angle	72.5°	95°	93°	45°	60°	45°	75°	91°	15°	-1°
Lever Lock (Pin Lock)	PVVN (Pin Lock)	PVLN (Pin Lock)	PDJN	PSDN		PSSN	PSBN	PTGN	PSKN	PTFN
Ref. Page	D22	D22	D13	D15		D15	D15	D17	D15	D17
Wedge Lock			WTJN		WTEN					
Ref. Page			D18		D18					
Double Clamp	DVVN	DVJN / DVLN	DDJN (-JCT)				DSBN	DTGN		
Ref. Page	D20	D20	D12				D14	D16		
Multi-Lock	MVVN	MVJN / MVLN	MDJN			MSSN		MTGN		
Ref. Page	D21	D21	D13			D14		D16		

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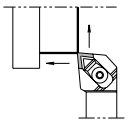
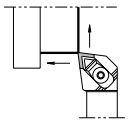
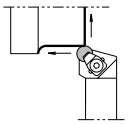
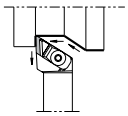
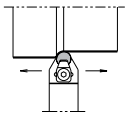
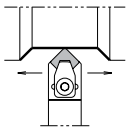
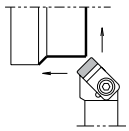
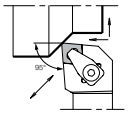
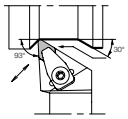
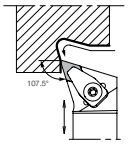
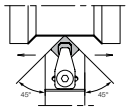
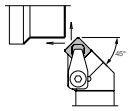
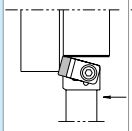
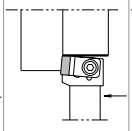
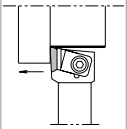
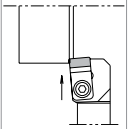
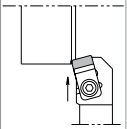
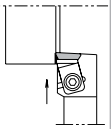
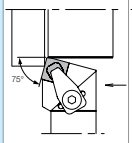
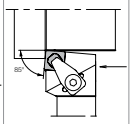
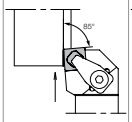
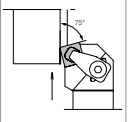
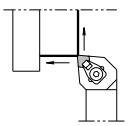
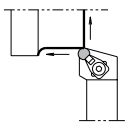
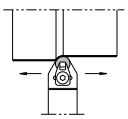
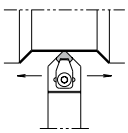
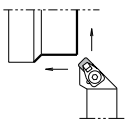
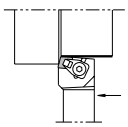
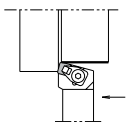
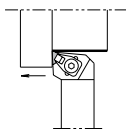
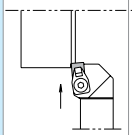
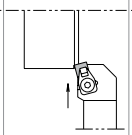
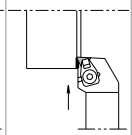
Toolholders for Ceramic Tools

Application	External / Facing			External / Copying			External / Chamfering	External / Facing / Chamfering
Cutting Edge Angle	95°	97.5°	Special	93°	107.5°	Special	45°	45°
Top Clamp	 CCLN / HCLN	 CELN	 CRSN / HRSN	 CDJN		 CRDN / CRDC	 CSDN / HSDN	 CSSN
Ref. Page	D26	D27	D29	D27		D31	D29	D28
Dimpled Clamp	 CCLN-GX			 CDJN-GX	 CDHN-GX		 CSDN-GX	 CSSN-GX
Ref. Page	D32			D33	D33		D34	D34

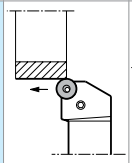
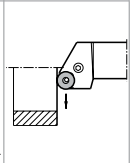
Application	External			Facing		
Cutting Edge Angle	75°	85°	93°	5°	15°	-3°
Top Clamp	 CSRN / HSRN	 CS-N	 CTJN	 CSYN	 CSKN	 CTUN
Ref. Page	D28	D28	D30	D28	D28	D30
Dimpled Clamp	 CSRN-GX	 CS-N-GX		 CSYN-GX	 CSKN-GX	
Ref. Page	D34	D35		D35	D35	

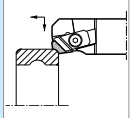
Toolholders for Solid CBN Tools

Application	External / Facing		External / Copying	External / Chamfering	External / Facing / Chamfering	External	
Cutting Edge Angle	95°	Special	Special	45°	45°	75°	93°
Top Clamp	 CCLN-A	 CRSN-A	 CRDN-A	 CSDN-A	 CSSN-A	 CCRN-A	 CSRN-A  CTJN-A
Ref. Page	D36	D37	D37	D39	D39	D36	D38 D40

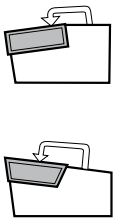
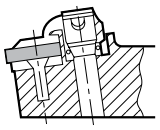
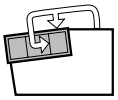
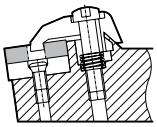
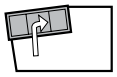
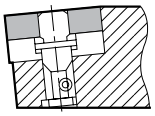
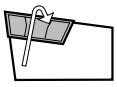
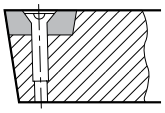
Application	Facing		
Cutting Edge Angle	5°	15°	-3°
Top Clamp	 CSYN-A	 CSKN-A	 CTUN-A
Ref. Page	D38	D38	D40

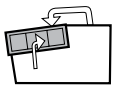
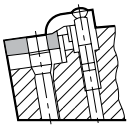
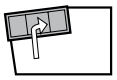
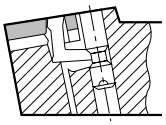
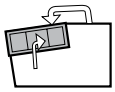
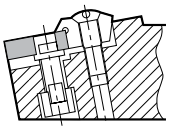
Toolholders for Bearing Machining

Application	External	Facing
Cutting Edge Angle	Special	Special
Lever Lock	 PRGC-BE	 PRGC-BF
Ref. Page	D41	D41

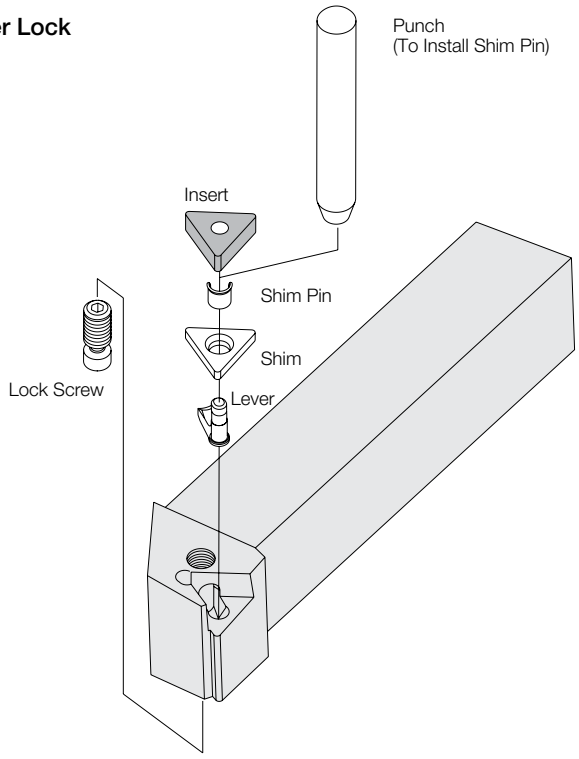
Application	Round Chamfering
Cutting Edge Angle	Special
Top Clamp	 CBSN
Ref. Page	D42

Clamping System

Series	Design		Features
Top Clamp (C)			• Rigid Clamping • Negative Insert : Medium to Heavy Machining (Mainly for Ceramic Insert) • Positive Insert : Low Cutting Force
Double Clamp (D)			• Firmly clamp the insert in two directions with one action.
Pin Lock (P)			• Easy Insert Replacement
Screw Clamp (S)			• Simple Mechanism • Fewer Parts • Finishing to Medium Machining

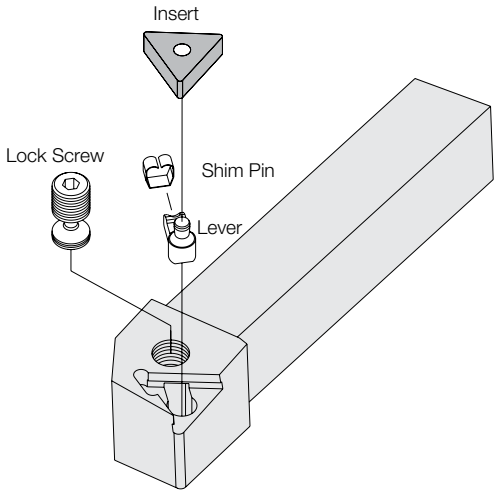
Series	Design		Features
Multi-Lock (M)			• Combination of Top Clamp and Pin Lock • Rigid Clamping • Heavy Machining
Lever Lock (P)			• Easy Insert Replacement • General Use
Wedge Lock (W)			• Rigid Clamping • Heavy Machining

Lever Lock



With Shim

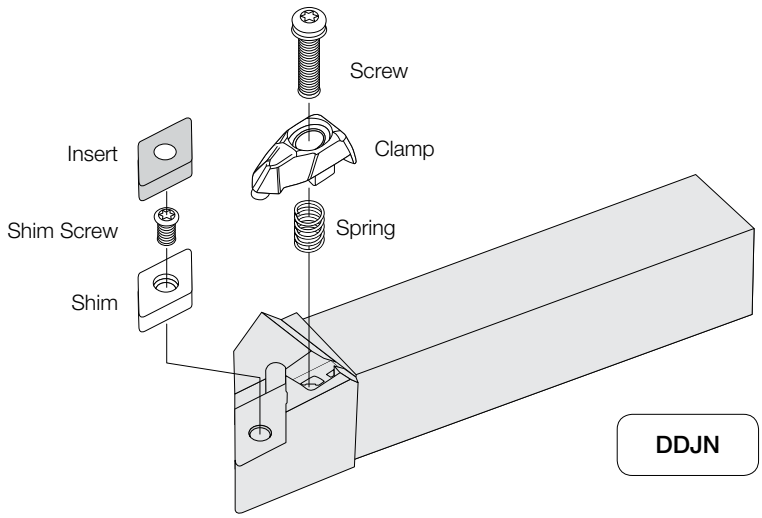
PCLN
PWLN
PTGN / PTFN / PTLN
PDJN / PDHN
PSBN / PSKN / PSSN / PSDN
PRGN
PRGC / PRXC



Without Shim

PTGN-11 / PTFN-11

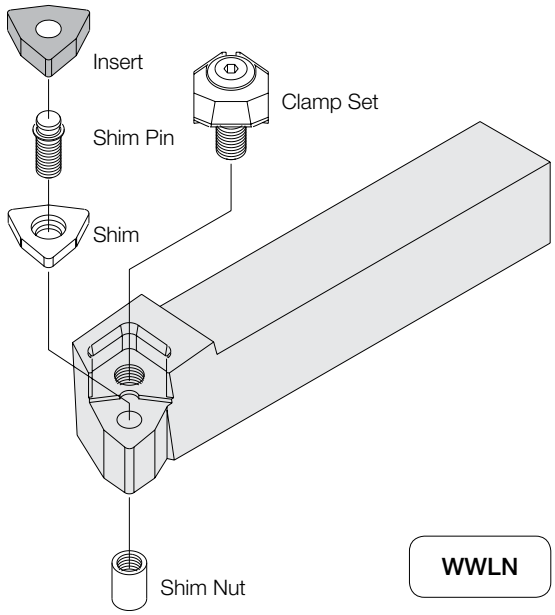
Double Clamp



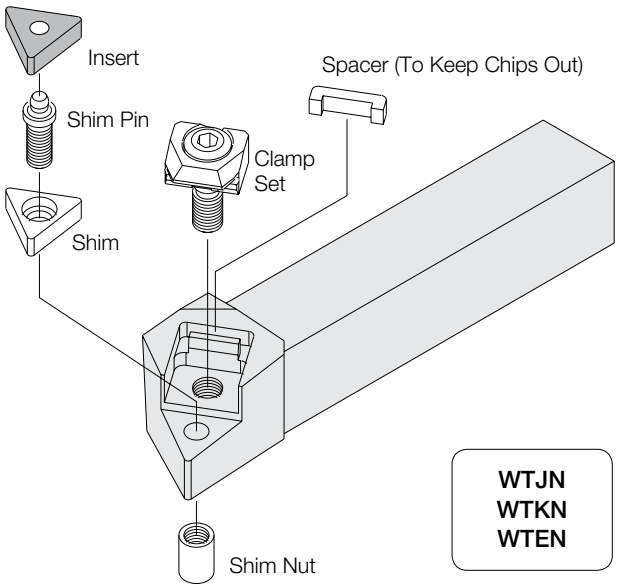
DDJN

DCLN
DDJN / DDHN
DSBN
DTGN
DVLN / DVJN / DVPN / DVVN
DWLN

Wedge Lock

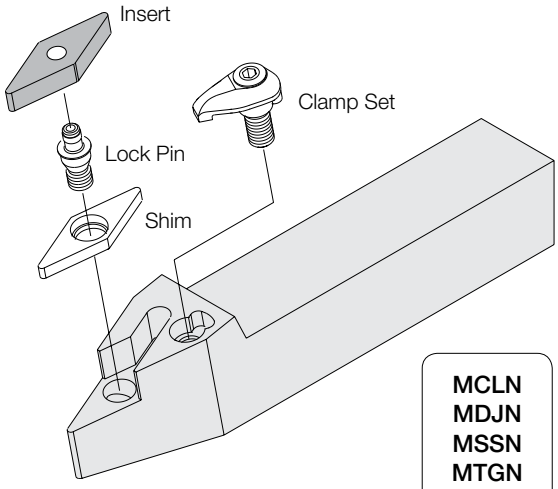


WWLN



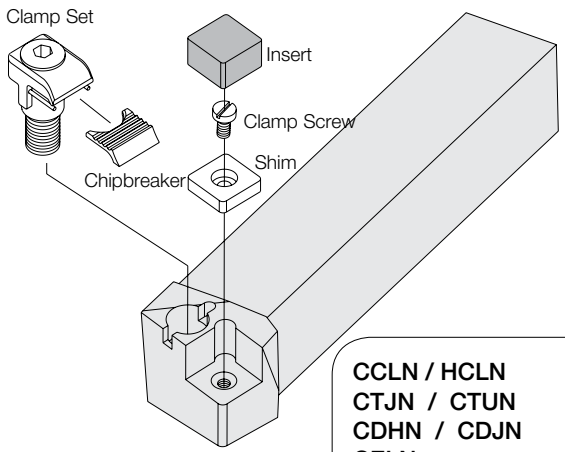
WTJN
WTKN
WTEN

Multi Lock



MCLN
MDJN
MSSN
MTGN
MVJN
MVVN
MWLN

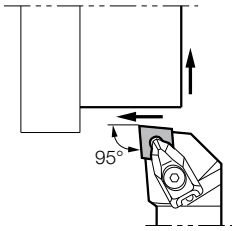
Top Clamp

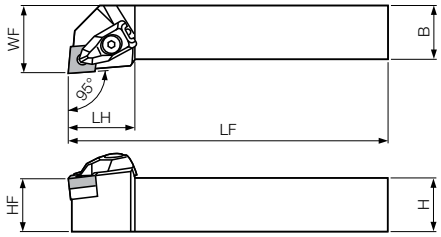


CCLN / HCLN
CTJN / CTUN
CDHN / CDJN
CELN
CSRN / HSRN / CS-N / CSKN
CSYN / CSSN / CSDN / HSDN
***CRSN / HRSN / *CRDN / CRDC**

* Chipbreaker is not included with CRSN / CRDN.

DCLN (External / Facing)





• Right-hand shown

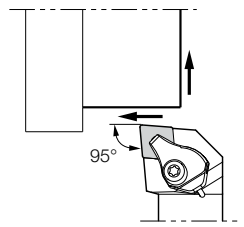
Side Rake Angle: -6°
Angle of Inclination: -6°

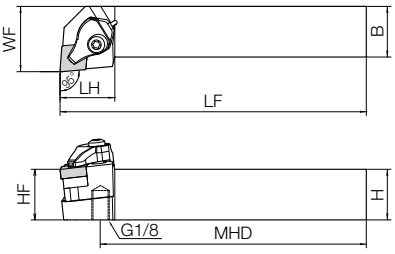
Applicable Inserts

Toolholder	Insert	
DCLN□...12-4B	CN□A CN□G CN□M	43..
DCLN□...16-4D		
DCLN□...-12		

DCLN-JCT (External / Facing, Jet Coolant-Through) NEW

Pressure Resistance: up to 4,350 psi





• Right-hand shown

Side Rake Angle: -6°
Angle of Inclination: -6°

Applicable Inserts

Toolholder	Insert	
DCLN□...-12JCT	CN□A CN□G CN□M	43..

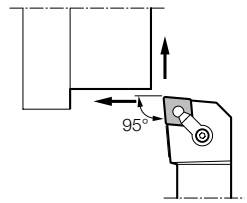
Toolholder Dimensions

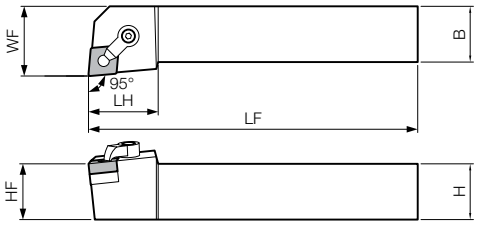
JCT Coolant Connections and Pipe Parts D11

Part Number		Stock R	Stock L	Unit	Dimensions H	HF	B	LF	LH	WF	MHD	Standard Corner-R (RE)	Spare Parts: Clamp	Pipe Connection (*1 with O-Ring)	Screw	Spring	Shim	Shim Screw	Wrench	Wrench (Sold Separately)
													...JCT						For Clamp	For Shim
DCLN□ 12-4B		●	●	Inch	0.75	0.75	0.75	4.50	1.30	1.00	-	1/32	CP-3D	-	CS-3D	SP-3D	*2 DC-44 *3 DC-44-C	SB-4085TR	LW-3	FT-15
	16-4D	●	●		1.00	1.00	1.00	6.00	1.26	1.25										
DCLN□ 2020K-12		●	●	mm	20	20	20	125	33	25	-	0.8	CP-3D	-	CS-3D	SP-3D	*2 DC-44 *3 DC-44-C	SB-4085TR	LW-3	FT-15
	2525M-12	●	●		25	25	25	150	32	32										
NEW **DCLN□ 2525M-12JCT**		●	●	mm	25	25	25	150	27	32	135.2	0.8	CP-3D-□-JCT	FP-12	CS-3D-TR	SP-3D	*2 DC-44 *3 DC-44-C	SB-4085TR	-	FT-15

*1 O-ring (**SS-035**) is available to order separately
*2 When using inserts with a corner-R (RE) greater than 1/16", additional modifications of the shim are necessary in order to prevent workpiece and shim from interfering with each other
*3 This shim is required for SX chipbreaker inserts

MCLN (External / Facing)





• Right-hand shown

Side Rake Angle: -6°
Angle of Inclination: -6°

Applicable Inserts

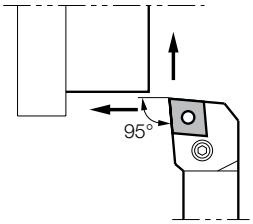
Toolholder	Insert	
MCLN□...-12-4B	CN□A CN□G CN□M	43..
MCLN□...-16-4D		
MCLN□...-16-5D		54..
MCLN□...-20-5D		
MCLN□...-20-6D		64..

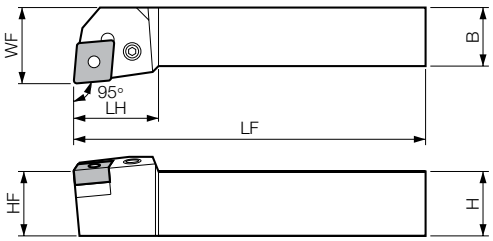
Toolholder Dimensions

Part Number		Stock R	Stock L	Unit	Dimensions H	HF	B	LF	LH	WF	Standard Corner-R (RE)	Spare Parts: Clamp	Clamp Screw	Wrench	Shim	Shim Screw	Lock Pin	Wrench
MCLN□ 12-4B		●	●	inch	0.75	0.75	0.75	4.00	1.190	1.00	1/32	CL-20	XNS-48	LW-125	ICSN433	S-46	NL46	LW-094
	16-4D	●	●		1.00	1.00	1.00	6.00	1.260	1.25								
	16-5D	●	●		1.00	1.00	1.00	6.00	1.375	1.25	1/32	CL-12	XNS-510	LW-156	ICSN533	S-58	NL58	LW-125
	20-5D	●	●		1.25	1.25	1.25	6.00	1.375	1.50								
	20-6D	●	●		1.25	1.25	1.25	6.00	1.500	1.50	1/32	CL-12	XNS-510	LW-156	ICSN633	S-68	NL68	LW-140

Applicable Inserts D9

PCLN (External / Facing)





• Right-hand shown

Side Rake Angle: -6°
Angle of Inclination: -6°

Applicable Inserts

Toolholder	Insert	
PCLNR/L...12-3B	CN□G	33..
PCLNR/L...16-3D		
PCLNR/L...12-4B	CN□A CN□G CN□M	43..
PCLNR/L...16-4D		
PCLNR/L...-09	CN□G	33..
PCLNR/L...-12	CN□A CN□G CN□M	43..
PCLNR/L...-16		54..

Toolholder Dimensions

Part Number		Stock R	Stock L	Unit	H	HF	B	LF	LH	WF	Standard Corner-R(RE)	Spare Parts: Lever	Lock Screw	Shim	Shim Pin	Punch	Wrench
PCLNR/L	12-3B	●		Inch	0.75	0.75	0.75	4.50	0.87	1.00	1/32	LL-1N	LS-1N	LC-32N	LSP-1	PC-1	FH-2.5
PCLNR/L	12-4B	●			0.75	0.75	0.75	4.50	1.06	1.00	1/32	LL-2N	LS-2N	LC-42N *2 LC-42N-20 *3 LC-42N-C	LSP-2	PC-2	LW-3
	16-4D	●			1.00	1.00	1.00	6.00	1.06	1.25							
PCLNR/L	1616H-09	●	●	mm	16	16	16	100	22	20	0.8	LL-1N	LS-1N	LC-32N	LSP-1	PC-1	FH-2.5
	2020K-09	●	●		20	20	20	125	22	25							
	2525M-09	●	●		25	25	25	150	22	32							
PCLNR/L	1616H-12	●			16	16	16	100	27	20	0.8	LL-2N	LS-2N	LC-42N *2 LC-42N-20 *3 LC-42N-C	LSP-2	PC-2	LW-3
	2020H-12*1	●			20	20	20	100	27	25							
	2020K-12	●	●		20	20	20	125	27	25							
	2525M-12	●	●		25	25	25	150	27	32							
	3225P-12	●	●		32	32	25	170	27	32							
PCLNR/L	2525M-16	●	●		25	25	25	150	32	32	0.8	LL-5N	LS-4N	LC-53N *3 LC-53N-C	LSP-3	-	LW-3
	3232P-16	●	●		32	32	32	170	32	40							

*1 Short shank type.
*2 When using inserts whose corner-R(RE) is greater than 1/16", additional modifications of the shim are necessary in order to prevent workpiece and shim from interfering with each other.
*3 This shim is required for SX chipbreaker inserts.

Applicable Inserts

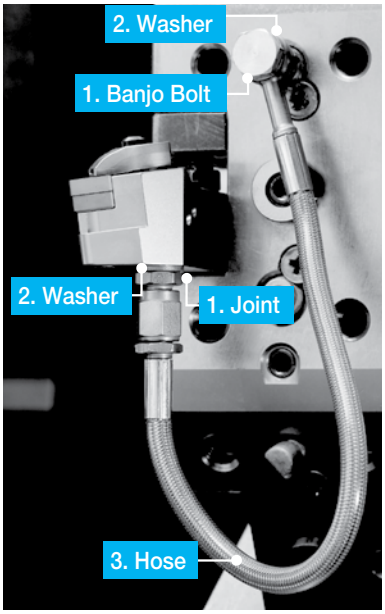
Application	Finishing	Finishing-Medium	Finishing	Finishing-Medium	Finishing-Medium	Finishing-Medium	Medium-Roughing	Medium-Roughing	Medium-Roughing	Medium-Roughing / High Feed Rate
Insert	WF (Wiper)	WE (Wiper)	PP	PQ	CQ	CJ	GS	PG	PS	PT
Size	43..	43..	43..	43..	43.., 54..	43.., 54..	33.., 43..	43..	43.., 54..	43.., 54..
Ref. Page	B16	B16	B16	B16	B17	B17	B17	B17	B17	B18
Application	Roughing	Roughing	Single Sided / Roughing / High Feed Rate	Finishing	Medium	Soft Steel / Small D.O.C.	Soft Steel / Finishing	Soft Steel / Medium	Soft Steel / Roughing	Stainless Steel / Finishing
Insert	Standard	PH	PX	R/L-S	R/L	XF	XP	XQ	XS	MQ
Size	43.., 54.., 64..	43.., 54.., 64..	43.., 54.., 64..	33..	33.., 43..	43..	43..	43..	43..	43..
Ref. Page	B18	B18	B19	B22	B22	B19	B19	B19	B19	B20
Application	Stainless Steel / Medium-Roughing	Stainless Steel / Medium-Roughing	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Cast Iron
Insert	MS	MU	KQ	KG	KH	C	ZS	GC	Without Chipbreaker	Ceramic
Size	43..	43.., 54.., 64..	43..	43..	43..	43..	43..	43..	43..	43..
Ref. Page	B20	B20	B22	B21	B21	B21	B21	B21	B21	B106
Application	Non-ferrous Metals	Non-ferrous Metals	Non-ferrous Metals	Heat-Resistant Alloys	Heat-Resistant Alloy Roughing	Heat-Resistant Alloy Roughing	Hard Materials			
Insert	A3	AH	PCD	SQ	SG	R/L-SX	CBN			
Size	43..	43..	43..	43.., 54.., 64..	43.., 54.., 64..	43.., 54.., 64..	43..			
Ref. Page	B22	B22	C23	B20	B20	B21	C6, C7			

Recommended Cutting Conditions → D43-D44

● : Standard Item △ : Phaseout Item (will be removed from next catalog)
Contact your local Kyocera sales engineer to upgrade old products to new technology

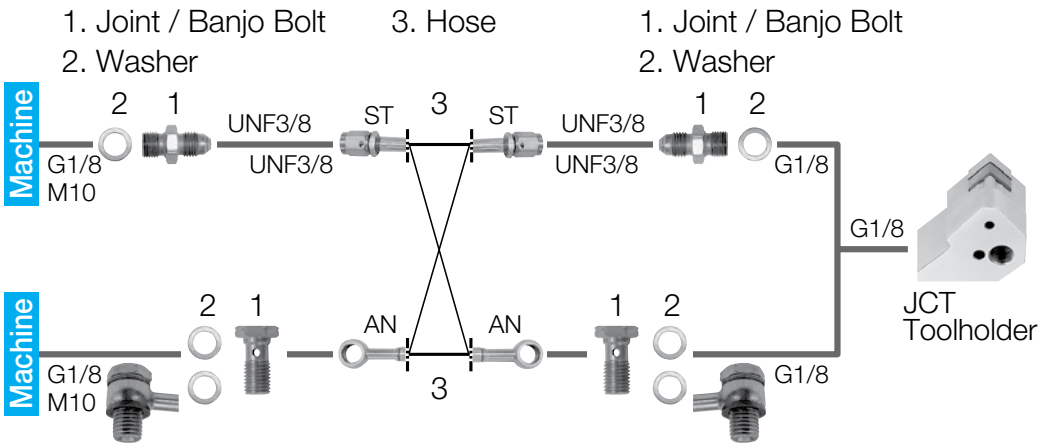
Easy Coolant Connections

Easy Connection with High Pressure Hose and Joint



- Even without a high pressure pump, internal coolant can be used at a normal pressure
- Banjo bolt available for angled hose connection and can be used in a variety of machines

Piping Installation Guide



● **Improved performance and stable machining with internal coolant even with low pressure**

Pressure Range	Tool Life	Chip Control	Notes
~ 290 psi (Low Pressure)	**Good**	Poor	Tool life is improved even when machining with low pressure coolant systems
290 psi ~ 1,015 psi (Medium Pressure)	**Excellent**	**Good**	Improved tool life and chip control performance
1,015 psi ~ 2,175 psi (High Pressure)	**Excellent**	**Excellent**	Chips become smaller and are easily evacuated
2,175 psi ~ 4,350 psi (Extra High Pressure)	**Excellent**	**Excellent**	Chips are smaller and high-speed machining of heat-resistant alloys is possible

(Customer Service) **800.823.7284 - Option 1**
(Technical Support) **800.823.7284 - Option 2**
Visit us online at **KyoceraPrecisionTools.com**

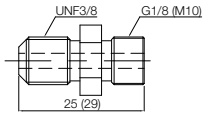
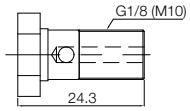
Piping Parts

Optional Piping Parts Available
Choose from parts below to match your machine specifications

1. Joint / Banjo bolt × 2
2. Washer × 2-4
3. Hose × 1

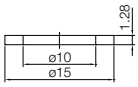
1. Joint / Banjo Bolt

Pressure Resistance: up to 4,350 psi

Shape		Part Number	Stock	Thread Standard Holder / Machine Connection
		**J-G1/8-UNF3/8**	●	G1/8
		J-10X1.5-UNF3/8	●	M10X1.5
Banjo Bolt (for Angle Hose) 		**BB-G1/8**	●	G1/8
		BB-M10X1.5	●	M10X1.5

2. Washer

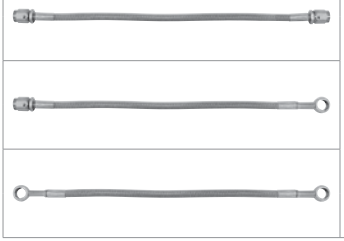
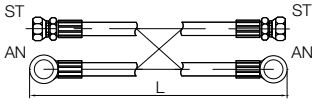
Pressure Resistance: up to 4,350 psi

Shape		Part Number	Stock
		**WS-10**	●

* Use 2 washers for a banjo bolt

3. Hose

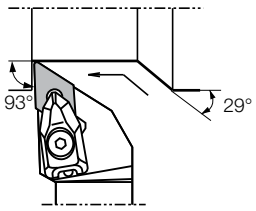
Pressure Resistance: up to 4,350 psi

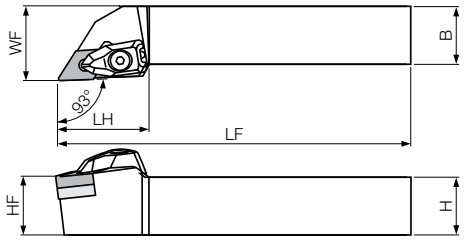
Shape		Part Number	Stock	Thread Standard		Dimensions (mm) L
		**HS-ST-ST-200**	●	UNF3/8	UNF3/8	200
		HS-ST-ST-250	●			250
		HS-ST-AN-200	●	UNF3/8	- (Banjo Bolt)	200
		HS-ST-AN-250	●			250
		HS-AN-AN-200	●	- (Banjo Bolt)	- (Banjo Bolt)	200
		HS-AN-AN-250	●			250

Precautions

1. Make sure machine door is completely closed before use of these parts.
2. Use appropriate seal for the male thread of the piping parts and make sure the connection is secure. Use plugs to seal off unused coolant holes.
3. Connect and fasten the coolant hose firmly.
4. The use of copper washers may cause leakage but will have no effect on the performance.
5. Commercial piping parts can be used if the thread standards are the same. Check the pressure resistance before use.
6. Regularly changing the coolant filter is recommended.

DDJN (External / Copying)





• Right-hand shown

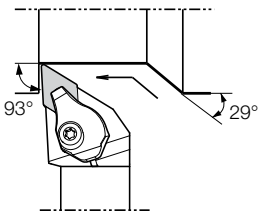
Side Rake Angle: -6°
Angle of Inclination: -7°

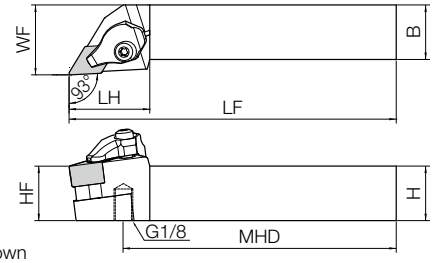
Applicable Inserts

Toolholder	Insert	
DDJNR/L**... 12-4B**	DN□A DN□G DN□M DN□X	43..
DDJNR/L**...16-4D**		43..
DDJNR/L**...-1504**	DN□A DN□G DN□M DN□X	43.. (44..)
DDJNR/L**...-1506**		44.. (43..)

DDJN-JCT (External / Copying, Jet Coolant-Through) NEW

Pressure Resistance: up to 4,350 psi





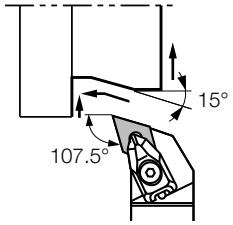
• Right-hand shown

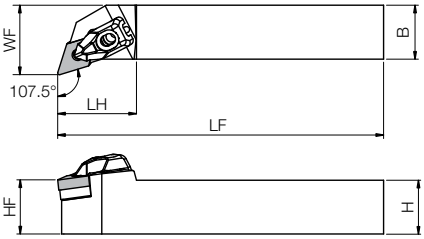
Side Rake Angle: -6°
Angle of Inclination: -7°

Applicable Inserts

Toolholder	Insert	
DDJNR/L**...-15JCT**	DN□A DN□G DN□M DN□X	44.. (43..)

DDHN (External / Face Grooving / Copying)





• Right-hand shown

Side Rake Angle: -6°
Angle of Inclination: -6°

Applicable Inserts

Toolholder	Insert	
DDHNR/L**...-1504**	DN□A DN□G DN□M DN□X	43.. (44..)
DDHNR/L**...-1506**		44.. (43..)

Toolholder Dimensions

JCT Coolant Connections and Pipe Parts ➔ **D11**

Part Number	Stock R	Stock L	Unit	Dimensions H	HF	B	LF	LH	WF	MHD	Standard Corner-R(RE)	Spare Parts: Clamp	Pipe Connection (*1 with O-Ring)	Screw	Spring	Shim	Shim Screw	Wrench	Wrench
DDJNR/L **12-4B**	●	●	inch	0.75	0.75	0.75	4.50	1.54	1.00	-	1/32	CP-3D	-	CS-3D	SP-3D	*DD-44 (DD-43)	SB-4085TR	LW-3	
16-4D	●	●		1.00	1.00	1.00	6.00	1.54	1.25										
DDJNR/L **2020K-1504**	●	●		20	20	20	125	39	25	-	0.8	CP-3D	-	CS-3D	SP-3D	*DD-44 (DD-43)	SB-4085TR	LW-3	FT-15 Sold Separately
2525M-1504	●	●		25	25	25	150	39	32										
DDJNR/L **2020K-1506**	●	●		20	20	20	125	39	25	-	0.8	CP-3D	-	CS-3D	SP-3D	DD-43 (*DD-44)	SB-4085TR	LW-3	
2525M-1506	●	●		25	25	25	150	39	32										
NEW **DDJN**R/L **2525M-15JCT**	●	●	mm	25	25	25	150	37	32	126	0.8	CP-4D-R/L-JCT	FP-12	CS-3D-TR	SP-3D	*DD-44 (DD-43)	SB-4085TR	-	FT-15
DDHNR/L **2020K-1504**	●	●		20	20	20	125	37	25	-	0.8	CP-3D	-	CS-3D	SP-3D	*2DD-44 (DD-43)	SB-4085TR	LW-3	FT-15 Sold Separately
2525M-1504	●	●		25	25	25	150	37	32										
DDHNR/L **2020K-1506**	●	●		20	20	20	125	37	25	-	0.8	CP-3D	-	CS-3D	SP-3D	DD-43 (*2DD-44)	SB-4085TR	LW-3	
2525M-1506	●	●		25	25	25	150	37	32										

Shims indicated within ( ) are not included with the toolholder. To change insert thickness, please purchase it separately.

*1 O-ring (**SS-035**) is available to order separately

*2 When using inserts with a corner-R (RE) greater than 1/16", additional modifications of the shim are necessary in order to prevent workpiece and shim from interfering with each other

Applicable Inserts ➔ **D13**

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(Technical Support) **800.823.7284 - Option 2**
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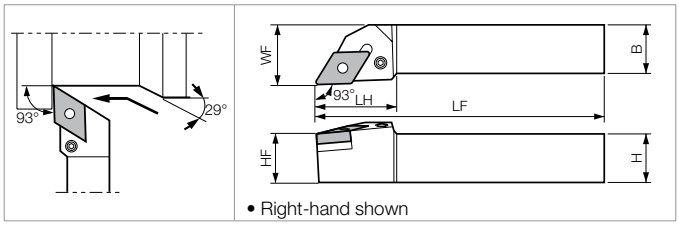
● : Standard Item △ : Phaseout Item (will be removed from next catalog)
Contact your local Kyocera sales engineer to upgrade old products to new technology

PDJN (External / Copying)

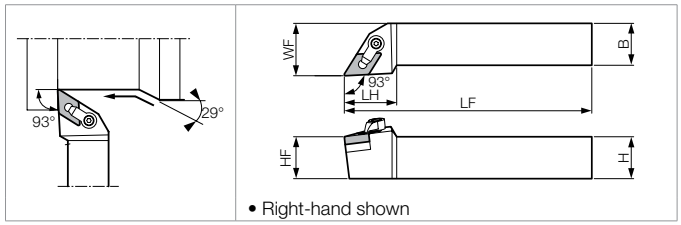
Side Rake Angle: -6°
Angle of Inclination: -7°



• Right-hand shown

MDJN (External / Copying)

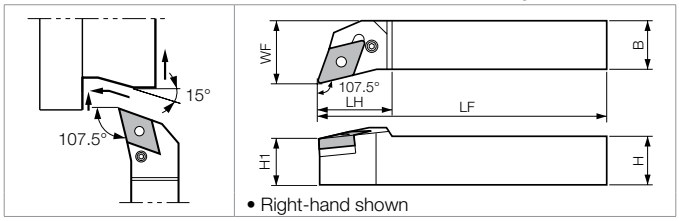
Side Rake Angle: -6°
Angle of Inclination: -6°



• Right-hand shown

PDHN (External / Face Grooving / Copying)

Side Rake Angle: -6°
Angle of Inclination: -6°



• Right-hand shown

PDHN Applicable Inserts

Toolholder	Insert	
PDHN□□...-15	DN□A DN□G DN□M DN□X	43.. (44..)

PDJN / MDJN Applicable Inserts

Toolholder	Insert	
PDJN□□...-3□ PDJN□□...-11	DN□A DN□G	33..
PDJN□□...-4□ PDJN□□...-15	DN□A DN□G DN□M DN□X	43..
PDJN□□...-15U		44.. (43..)
MDJN□□...-4□		43..

Toolholder Dimensions

Part Number		Stock R	Stock L	Unit	Dimensions H	HF	B	LF	LH	WF	Standard Corner-R (RE)	Spare Parts: Lever	Lock Screw	Shim	Shim Pin	Punch	Wrench	Clamp	Clamp Screw	Shim Screw	Lock Pin
PDJN□□	12-3B	●		inch	0.75	0.75	0.75	4.50	0.87	1.00	1/64	LL-1N	LS-1N	LD-32N	LSP-1	PC-1	FH-2.5	-	-	-	-
	16-3D	●	●		1.00	1.00	1.00	6.00	0.87	1.25											
PDJN□□	16-4D	●	●		1.00	1.00	0.75	4.50	1.06	1.00	1/32	LL-3N	LS-2N	LD-42 *2 LD-42-20	LSP-2	PC-2	LW-3	-	-	-	-
PDJN□□	1616H-11	●	●	mm	16	16	16	100	28	20	0.4	LL-1DN	LS-1N	LD-32N	LSP-1	PC-1	FH-2.5	-	-	-	-
	2020K-11	●	●		20	20	20	125	28	25											
	2525M-11	●	●		25	25	25	150	28	32											
PDJN□□	2020H-15*1	●			20	20	20	100	36	25	0.8	LL-3N	LS-2N	LD-32N	LSP-2	PC-2	LW-3	-	-	-	-
	2020K-15	●	●		20	20	20	125	36	25											
	2525M-15	●	●		25	25	25	150	36	32											
	3225P-15	●	●		32	32	25	170	36	32											
PDJN□□	2525M-15U	●	●		25	25	25	150	34	32	0.8	LL-4	LS-3	LD-42 *2 LD-42-20 (LD-43) (*2 LD-43-20)	LSP-2	PC-2	LW-3	-	-	-	-
	3232P-15U	●	●		32	32	32	170	36	40											
PDHN□□	2020K-15	●	●		20	20	20	125	35	25	0.8	LL-4	LS-3	LD-43 *2 LD-43-20 (LD-42) (*2 LD-42-20)	LSP-2	PC-2	LW-3	-	-	-	-
	2525M-15	●	●		25	25	25	150	34	32											
MDJN□□	12-4B	●	●	inch	0.75	0.75	0.75	4.50	1.25	1.00	1/32	-	-	IDSN443	-	-	LW-125, LW-094	CL-20	XNS-48	S-46	NL46
	16-4D	●	●		1.00	1.00	1.00	6.00	1.25	1.25											

*1 Short shank type.

• Shim: PDJN□□-15U...LD-42 is attached to PDJN□□-15U. When using DN□□43 type insert, please purchase LD-43 separately.
PDHN ...LD-43 is attached to PDHN. When using DN□□44 type Insert, please purchase LD-42 separately.

*2 When using inserts whose corner-R(RE) is greater than 1/16", please purchase this shim in order to prevent workpiece and shim from interfering each other.

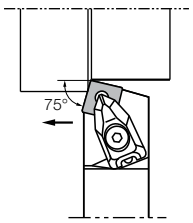
Applicable Inserts

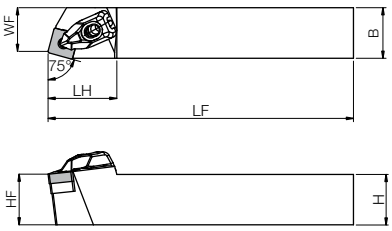
Application	Finishing	Finishing	Finishing-Medium	Finishing-Medium	Finishing-Medium	Medium-Roughing	Medium-Roughing	Medium-Roughing	Medium-Roughing / High Feed Rate	Roughing
Insert	WF (Wiper)	PP	PQ	CQ	CJ	GS	PG	PS	PT	Standard
Size	43.., 44..	43.., 44..	43.., 44..	43.., 44..	43.., 44..	33.., 43.., 44..	43.., 44..	43.., 44..	43.., 44..	43.., 44..
Ref. Page	B23	B23	B23	B24	B24	B24	B25	B25	B25	B26
Application	Roughing	Single Sided Roughing High Feed Rate	Finishing	Medium	Soft Steel / Finishing	Soft Steel / Medium	Soft Steel / Roughing	Stainless Steel / Finishing	Stainless Steel / Medium-Roughing	Stainless Steel / Medium-Roughing
Insert	PH	PX	□-S	□	XP	XQ	XS	MQ	MS	MU
Size	43.., 44..	43.., 44..	33..	33.., 43..	43.., 44..	43.., 44..	43..	43.., 44..	43.., 44..	43.., 44..
Ref. Page	B26	B26	B30	B30	B26	B26	B26	B27	B28	B28
Application	Heat-Resistant Alloy Roughing	Stainless Steel / Medium-Roughing	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Non-ferrous Metals
Insert	SG	TK	C	KQ	KG	KH	ZS	GC	Ceramic	□-A3
Size	43..	43.., 44..	43.., 44..	43.., 44..	43.., 44..	43.., 44..	43.., 44..	43.., 44..	43.., 44..	43..
Ref. Page	B28	B27	B29	B29	B29	B29	B29	B29	B107	B30
Application	Non-ferrous Metals	Non-ferrous Metals	Heat-Resistant Alloys	Hard Materials						
Insert	AH	PCD	SQ	CBN						
Size	43.., 44..	43..	43.., 44..	43.., 44..						
Ref. Page	B30	C23	B28	C8, C9						

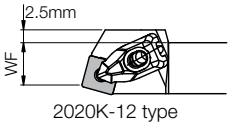
Recommended Cutting Conditions ➔ **D43-D44**

● : Standard Item △ : Phaseout Item (will be removed from next catalog)
Contact your local Kyocera sales engineer to upgrade old products to new technology

DSBN (External)







2020K-12 type

Side Rake Angle: -6°
Angle of Inclination: -6°

• Right-hand shown

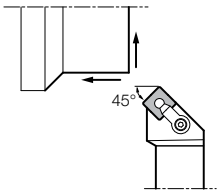
Applicable Inserts

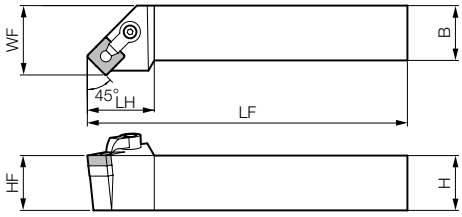
Toolholder	Insert	
DSBNR/L...-12	SN□A SN□G SN□M	43..

Toolholder Dimensions

Part Number		Stock R	Stock L	Unit	H	HF	B	LF	LH	WF	Standard Corner-R (RE)	Spare Parts: Clamp	Screw	Spring	Shim	Shim Screw	Wrench	Wrench (Sold Separately)
DSBNR/L 2020K-12		●	●	mm	20	20	20	125	34	17	0.8	CP-3D	CS-3D	SP-3D	DS-44	SB-4085TR	LW-3	FT-15
DSBNR/L 2525M-12		●	●		25	25	25	150	34	22								

MSSN (External / Facing / Chamfering)





• Right-hand shown

Applicable Inserts

Toolholder	Insert	
MSSNR/L...-12-4B **MSSNR/L...-16-4D**	SN□A SN□G SN□M	43..

Toolholder Dimensions

Part Number		Stock R	Stock L	Unit	H	HF	B	LF	LH	WF	Standard Corner-R (RE)	Spare Parts: Clamp	Clamp Screw	Wrench	Shim	Shim Screw	Lock Pin	Wrench
MSSNR/L 12-4B		●	□	inch	0.75	0.75	0.75	4.50	1.23	0.675	1/32	CL-9	XNS59	LW-156	ISSN433	S-46	NL46	LW-094
16-4D		●	□		1.00	1.00	1.00	6.00	1.23	0.925								

Applicable Inserts ➔ **D15**

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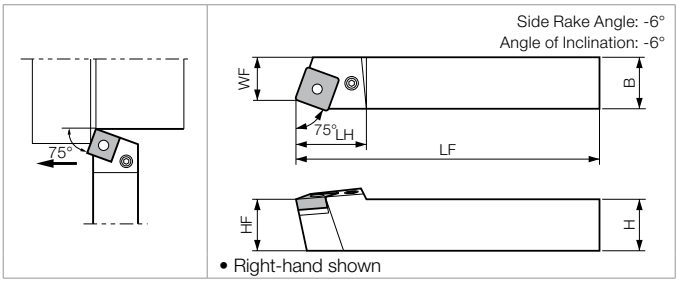
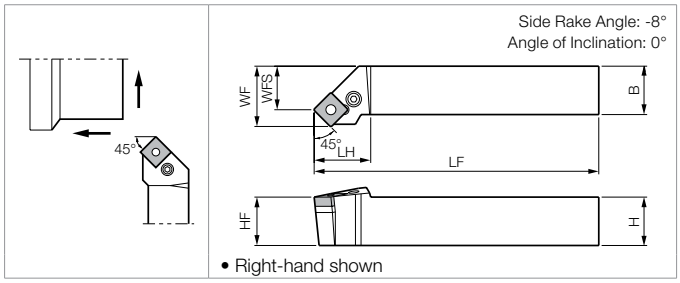
● : Standard Item □ : Made to Order △ : Phaseout Item (will be removed from next catalog)
Contact your local Kyocera sales engineer to upgrade old products to new technology

PSBN (External)



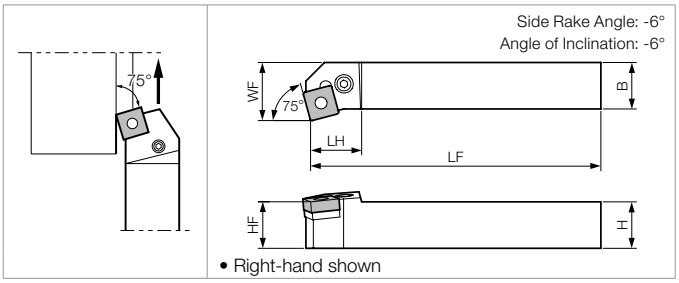
• Right-hand shown

PSSN (External / Facing / Chamfering)



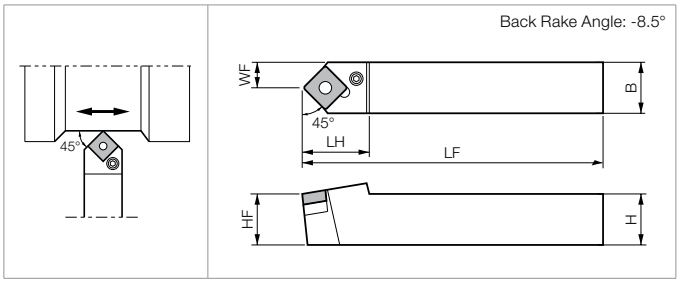
• Right-hand shown

PSKN (Facing)



• Right-hand shown

PSDN (External / Chamfering)



Toolholder Dimensions

Part Number		Stock R	Stock N	Stock L	Unit	Dimensions H	HF	B	LF	LH	WF	WFS	Standard Corner-R (RE)	Spare Parts: Lever	Lock Screw	Shim	Shim Pin	Punch	Wrench
PSBN□L	1616H-09	●		●	mm	16	16	16	100	21.0	13	-	0.8	LL-1N	LS-1N	LS-32	LSP-1	PC-1	FH-2.5
	2020K-12	●		●		20	20	20	125	27.0	17	-	0.8	LL-2N	LS-2N	LS-42	LSP-2	PC-2	LW-3
	2525M-12	●		●		25	25	25	150	24.0	22	-							
PSKN□L	1616H-09	●		●		16	16	16	100	19.0	20	-	0.8	LL-1N	LS-1N	LS-32	LSP-1	PC-1	FH-2.5
	2020K-12	●		●		20	20	20	125	22.5	25	-	0.8	LL-2N	LS-2N	LS-42	LSP-2	PC-2	LW-3
	2525M-12	●		●		25	25	25	150	22.5	32	-							
PSSN□L	1616H-09	●		●		16	16	16	100	22	20	13.6	0.8	LL-1N	LS-1N	LS-32	LSP-1	PC-1	FH-2.5
	2020K-12	●		●		20	20	20	125	29	25	16.4	0.8	LL-2N	LS-2N	LS-42	LSP-2	PC-2	LW-3
	2525M-12	●		●		25	25	25	150	29	32	23.4							
PSDNN	1616H-09		●			16	16	16	100	21	8	-	0.8	LL-1N	LS-1N	LS-32	LSP-1	PC-1	FH-2.5
	2020K-12		●			20	20	20	125	30	10	-	0.8	LL-2N	LS-2N	LS-42	LSP-2	PC-2	LW-3
	2525M-12		●			25	25	25	150	30	12.5	-							

Applicable Inserts

Toolholder	Insert	
PSBN□...-09	SN□G	32..
PSKN□...-09		
PSSN□...-09		
PSDNN...-09		
PSBN□...-12	SN□A SN□G SN□M	43..
PSKN□...-12		
PSSN□...-12		
PSDNN...-12		

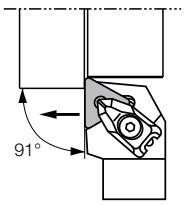
Application	Finishing-Medium	Medium-Roughing	Medium-Roughing	Medium-Roughing	Medium-Roughing / High Feed Rate	Roughing	Roughing	Single Sided Roughing High Feed
Insert	PQ	PG	PS	HS	PT	Standard	PH	PX
Size	43..	43..	43..	43..	43..	32.., 43..	43..	43..
Ref. Page	B32	B32	B32	B32	B32	B32	B33	B33
Application	Finishing-Roughing	Medium-Roughing / Low Cutting Force	Soft Steel / Finishing	Soft Steel / Medium	Soft Steel / Roughing	Stainless Steel / Finishing	Stainless Steel / Medium-Roughing	Heat-Resistant Alloy Roughing
Insert	□-□	□-25R	XP	XQ	XS	MQ	MS	SG
Size	32.., 43..	43..	43..	43..	43..	43..	43..	43..
Ref. Page	B35	B35	B33	B33	B33	B34	B34	B34
Application	Cast Iron	Cast Iron / Roughing	Cast Iron / Roughing	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Hard Materials
Insert	C	KG	KH	ZS	GC	Without Chipbreaker	Ceramic	CBN
Size	43..	43..	43..	43..	43..	43..	43..	43..
Ref. Page	B34	B34	B34	B34	B34	B35	B109	C10

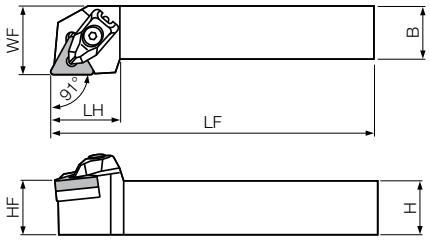
• PSKN□L: Left-hand Insert for Right-hand Toolholder, Right-hand Insert for Left-hand Toolholder.
• PSSN□L: For External Turning, Right-hand Insert for Right-hand Toolholder, Left-hand Insert for Left-hand Toolholder
For Facing, Left-hand Insert for Right-hand Toolholder, Right-hand Insert for Left-hand Toolholder

Recommended Cutting Conditions ➡ D43-D44

● : Standard Item △ : Phaseout Item (will be removed from next catalog)
Contact your local Kyocera sales engineer to upgrade old products to new technology

DTGN (External)





• Right-hand shown

Side Rake Angle: -6°
Angle of Inclination: -6°

Applicable Inserts D17

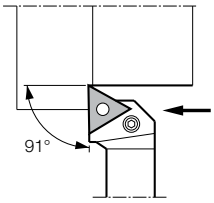
Toolholder	Insert	
DTGN□...-16	TN□A TN□G TN□M TN□X	33..

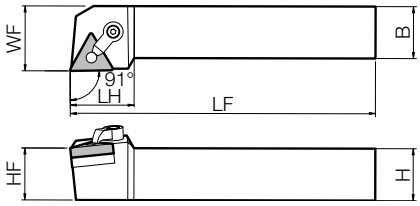
Toolholder Dimensions

Part Number	Stock R	Stock L	Unit	H	HF	B	LF	LH	WF	Standard Corner-R (RE)	Spare Parts: Clamp	Screw	Spring	Shim	Shim Screw	Wrench	Wrench (sold separately)
DTGN□ 2020K-16	●	●	mm	20	20	20	125	25	25	0.8	CP-2D	CS-2D	SP-2D	*DT-32	SB-3080TR	LW-2.5	FT-10
2525M-16	●	●		25	25	25	150	25	32								

* When using inserts whose corner-R(RE) is greater than 1/16", additional modifications of the shim are necessary in order to prevent workpiece and shim from interfering with each other.
• When using WF chipbreaker (wiper insert), tool edge offset or program corrections are required. See R54

MTGN (External)





• Right-hand shown

Side Rake Angle: -5°
Angle of Inclination: -5°

Applicable Inserts D17

Toolholder	Insert	
MTGN□...-12-3B	TN□A TN□G TN□M TN□X	33..
MTGN□...-16-3D		
MTGN□...-16-4D		43..

Toolholder Dimensions

Part Number	Stock R	Stock L	Unit	H	HF	B	LF	LH	WF	Standard Corner-R (RE)	Spare Parts: Clamp	Clamp Screw	Wrench	Shim	Shim Screw	Lock Pin	Wrench
MTGN□ 12-3B	●	●	inch	0.75	0.75	0.75	4.50	0.94	1.00	1/64	CL-6	XNS36	LW-094	ITSN333 (ITSN323)	S-34	NL34L	(5/64 Hex)
16-3D	●	●		1.00	1.00	1.00	6.00	0.94	1.25								
16-4D	●	●		1.00	1.00	1.00	6.00	1.19	1.25	1/32	CL-9	XNS48	LW-156	ITSN432	S-46	NL46	LW0

• Shim: ITSN333 is included with MTGN□12-3B. When using TN__33_ insert, please purchase ITSN323 separately.

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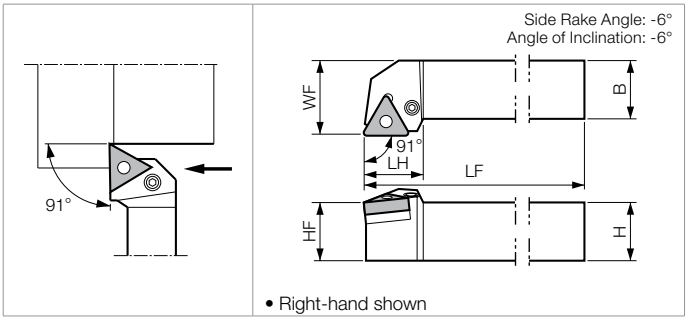
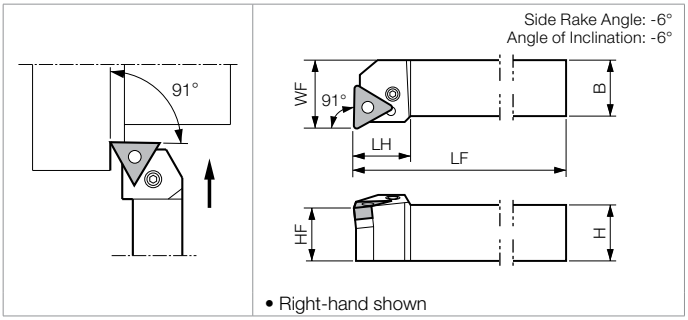
● : Standard Item △ : Phaseout Item (will be removed from next catalog)
Contact your local Kyocera sales engineer to upgrade old products to new technology

PTGN (External)



• Right-hand shown

PTFN (Facing)



• Right-hand shown

Toolholder Dimensions

Part Number	Stock R	Stock L	Unit	Dimensions H	HF	B	LF	LH	WF	Standard Corner-R (RE)	Spare Parts: Lever	Lock Screw	Shim	Shim Pin	Punch	Wrench
PTGN□ 12-3B	●		inch	0.75	0.75	0.75	4.50	0.96	1.00	1/32	LL-1N	LS-1N	LT-32N *LT-32N-20	LSP-1	PC-1	LW-2.5
PTGN□ 1212F-11	●	●	mm	12	12	12	80	18.0	16	0.8	LL-03N	LS-03N	-	P-03	-	FH-2
1616H-11	●	△		16	16	16	100	22.0	20	0.8	LL-03TN	LS-03SN	-	P-03S	-	FH-2.5
2020K-11	●	●		20	20	20	125	22.0	25							
2525M-11	●	●		25	25	25	150	22.0	32							
PTGN□ 1616H-16	●	●		16	16	16	100	24.0	20	0.8	LL-1N	LS-1N	LT-32N *2 LT-32N-20	LSP-1	PC-1	FH-2.5
2020H-16*	●			20	20	20	100	24.0	25							
2020K-16	●	●		20	20	20	125	24.0	25							
2525M-16	●	●		25	25	25	150	24.0	32							
PTGN□ 2525M-22	●	●		25	25	25	150	29.0	32	0.8	LL-2N	LS-2N	LT-42N *2 LT-42N-20	LSP-2	PC-2	LW-3
PTFN□ 12-3C	●	●	inch	0.75	0.75	0.75	5.00	0.88	1.00	1/32	LL-1N	LS-1N	LT-32N *2 LT-32N-20	LSP-1	PC-1	FH-2.5
16-3D	●	●		1.00	1.00	1.00	6.00	0.88	1.25							
16-4D	●			1.00	1.00	1.00	6.00	1.10	1.25	1/32	LL-2N	LS-2N	LT-42N *2 LT-42N-20	LSP-2	PC-2	LW-3
PTFN□ 1212F-11	●	●	mm	12	12	12	80	15.0	16	0.8	LL-03N	LS-03N	-	P-03	-	FH-2
PTFN□ 1616H-11	●	●		16	16	16	100	22.5	20	0.8	LL-03TN	LS-03SN	-	P-03S	-	FH-2.5
2020K-11	●	△		20	20	20	125	22.5	25							
2525M-11	●	●		25	25	25	150	22.5	32							
PTFN□ 2020K-16	●	●		20	20	20	125	22.0	25	0.8	LL-1N	LS-1N	LT-32N *2 LT-32N-20	LSP-1	PC-1	FH-2.5
2525M-16	●	●		25	25	25	150	23.0	32							
PTFN□ 2525M-22	●	●		25	25	25	150	28.0	32	0.8	LL-2N	LS-2N	LT-42N *2 LT-42N-20	LSP-2	PC-2	LW-3

*1 Short shank type.
*2 When using inserts whose corner-R(RE) is greater than 1/16", please purchase this shim in order to prevent workpiece and shim from interfering each other.
• When using WF chipbreaker (wiper insert), tool edge offset or program corrections are required. See R54

Applicable Inserts D17

Toolholder	Insert	
PTGN□...12-3B	TN□A TN□G TN□M TNMX	33..
PTFN□...12-3C	TN□A TN□G TNMX	33..
PTFN□...16-3D		
PTFN□...16-4D		43..
PT□N□12...-11	TN□□	22..
PT□N□...-11		23..
PT□N□...-16	TN□A TN□G	33..
PT□N□...-22	TN□M TNMX*3	43..

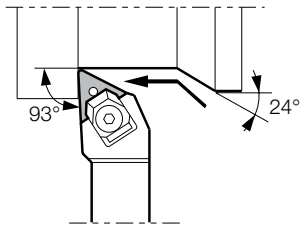
PTGN□1212F-11
PTFN□1212F-11
} Insert applicable for above

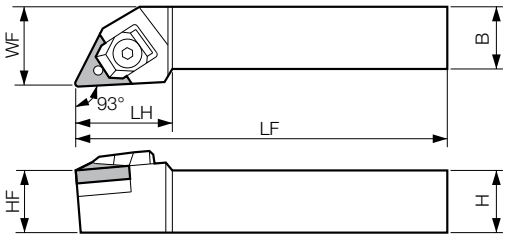
TN□□1103-type Insert is applicable.

• PTFN□: Left-hand Insert for Right-hand Toolholder, Right-hand Insert for Left-hand Toolholder

*3 TNMX insert is **NOT** applicable for PT□N□...-22 type toolholders.

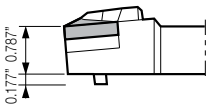
WTJN (External / Copying)





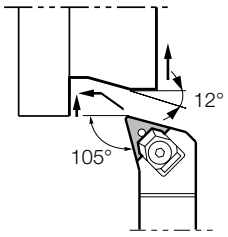
Side Rake Angle: -6°
Angle of Inclination: -6°

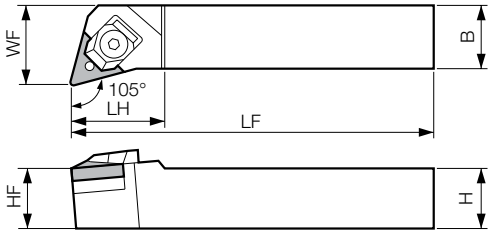
WTJN□2020K type:
Shim Nut sticks out as shown below.



• Right-hand shown

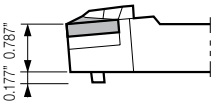
WTKN (External / Facing / Copying)





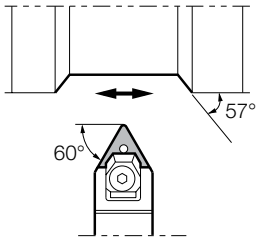
Side Rake Angle: -6°
Angle of Inclination: -6°

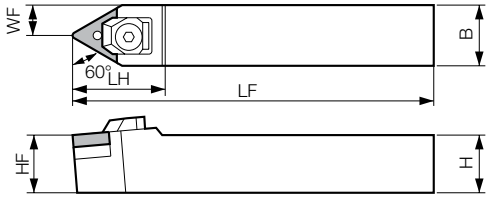
WTKN□2020K type:
Shim Nut sticks out as shown below.



• Right-hand shown

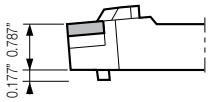
WTEN (External / Chamfering)





Back Rake Angle: -8.5°

WTENN2020K type:
Shim Nut sticks out as shown below.



• Right-hand shown

Toolholder Dimensions

Part Number	Stock			Unit	Dimensions						Standard Corner-R (RE)	Spare Parts					
												Clamp Set	Shim	Shim Pin	Shim Nut	Wrench	Spacer
	R	N	L		H	HF	B	LF	LH	WF							
WTJN□ 12-3C	●		●	inch	0.75	0.75	0.75	5.00	1.26	1.00	1/32	WCS-1N	WTN-33 *WTN-33-20	WP-1S	WN-1	LW-3	WSP-1
16-3D	●		●		1.00	1.00	1.00	6.00	1.26	1.25							
WTJN□ 2020K-16N	●		●	mm	20	20	20	125	32	25.0	0.8	WCS-1N	WTN-33 *WTN-33-20	WP-1S	WN-1	LW-3	WSP-1
2525M-16N	●		●		25	25	25	150	32	32.0							
WTKN□ 12-3C	●		●	inch	0.75	0.75	0.75	5.00	1.26	1.00	1/32	WCS-1N	WTN-33 *WTN-33-20	WP-1S	WN-1	LW-3	WSP-1
WTKN□ 2020K-16N	●		●	mm	20	20	20	125	32	25.0	0.8	WCS-1N	WTN-33 *WTN-33-20	WP-1S	WN-1	LW-3	WSP-1
2525M-16N	●		●		25	25	25	150	32	32.0							
WTENN 2020K-16N		●		mm	20	20	20	125	32	10.0	0.8	WCS-1N	WTN-33 *WTN-33-20	WP-1S	WN-1	LW-3	WSP-1
2525M-16N		●			25	25	25	150	32	12.5							

* When using inserts whose corner-R (RE) is greater than 1/16", please purchase a shim (WTN-33-20) with * mark and use it in order to prevent workpiece and shim from interfering with each other.

Applicable Inserts D19

Toolholder	Insert	
WTJN□...12-3C	TN□A TN□G TN□M	33..
WTJN□...16-3D		
WTJN□...-16N		
WTKN□...12-3C		
WTKN□...16-3D		
WTKN□...-16N		

Toolholder	Insert	
WTENN...-16N	TN□A TN□G TN□M	33..

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● : Standard Item △ : Phaseout Item (will be removed from next catalog)
Contact your local Kyocera sales engineer to upgrade old products to new technology

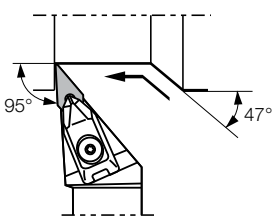
Applicable Inserts

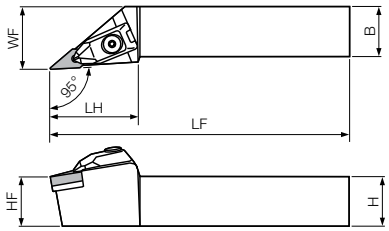
Application	Finishing	Finishing-Medium	Finishing-Medium	Medium-Roughing	Medium-Roughing	Medium-Roughing	Medium-Roughing / High Feed Rate	Medium-Roughing / High Feed Rate	Medium-Roughing	Single Sided / Roughing / High Feed	Roughing
Insert	PP	PQ	CQ	GS	PG	PS	PT	GT	PH	PX	Standard
Size	33..	33..	33.., 43..	23.., 33..	33..	33.., 43..	33..	33..	33.., 43..	33.., 43..	23.., 33..
Ref. Page	B36	B36	B36	B36	B36	B37	B37	B37	B37	B38	B37
Application	Finishing	Finishing-Roughing	Medium-Roughing Low Cutting Force	Soft Steel / Small D.O.C.	Soft Steel / Finishing	Soft Steel / Medium	Soft Steel / Roughing	Stainless Steel / Finishing	Stainless Steel / Medium-Roughing	Stainless Steel / Medium-Roughing	Heat-Resistant Alloy Roughing
Insert	ℝ-S	ℝ-□	ℝ-25R	XF	XP	XQ	XS	MQ	MS	MU	SG
Size	23.., 33..	22.., 23.., 33.., 43..	33..	33..	33..	33..	33..	33..	33..	33..	33.., 43..
Ref. Page	B42	B42, B43	B43	B38	B38	B38	B38	B39	B39	B39	B39
Application	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Non-ferrous Metals	Non-ferrous Metals	Non-ferrous Metals	Hard Materials		
Insert	KQ	KG	KH	ZS	Ceramic	ℝ-A3	AH	PCD	CBN		
Size	33..	33..	33..	33..	33..	33..	33..	33..	33..		
Ref. Page	B40	B40	B40	B40	B111	B41	B41	C23	C10, C11		

• In wedge lock, use of ceramic insert other than silicon nitride insert is not recommended due to strong restrain force.

Recommended Cutting Conditions ➔ **D43-D44**

DVJN / DVLN (External / Copying)





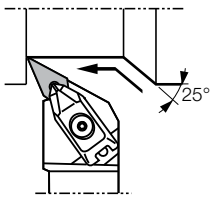
• Right-hand shown

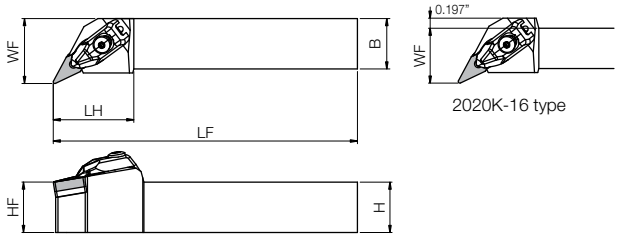
Side Rake Angle: -6°
Angle of Inclination: -9°

Applicable Inserts D21

Toolholder	Insert	
DVJN R/L...12-3B	VN□A VN□G VN□M	33..
DVJN R/L...16-3D		
DVLN R/L...-16		

DVPN (External / Facing / Copying / Undercutting)





2020K-16 type

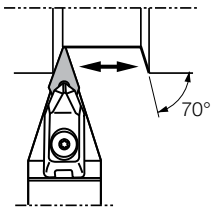
• Right-hand shown

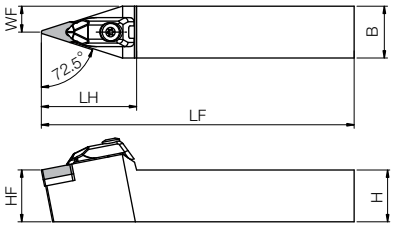
Side Rake Angle: -13°
Angle of Inclination: -10°

Applicable Inserts D21

Toolholder	Insert	
DVPN R/L...12-3B	VN□A VN□G VN□M	33..
DVPN R/L...16-3D		
DVPN R/L...-16		

DVVN (External / Copying)





• Right-hand shown

Back Rake Angle: -11°

Applicable Inserts D21

Toolholder	Insert	
DVVNN...-16	VN□A VN□G VN□M	33..

Toolholder Dimensions

Part Number		Stock R	Stock N	Stock L	Unit	H	HF	B	LF	LH	WF	Standard Corner-R (RE)	Spare Parts: Clamp	Screw	Spring	Shim	Shim Screw	Wrench	Wrench (sold separately)
DVJN R/L	12-3B	●		●	inch	0.75	0.75	0.75	4.50	1.77	1.00	1/32	CP-5D	CS-5D	SP-5D	DV-33	SB-4085TR	LW-3	FT-15
	16-3D	●		●		1.00	1.00	1.00	6.00	1.77	1.25								
DVLN R/L	2020K-16	●		●	mm	20	20	20	125	45	25.0	0.8	CP-5D	CS-5D	SP-5D	DV-33	SB-4085TR	LW-3	FT-15
	2525M-16	●		●		25	25	25	150	45	32.0								
DVPN R/L	12-3B	●		●	inch	0.75	0.75	0.75	4.50	1.58	1.00	1/32	CP-5D	CS-5D	SP-5D	DV-33	SB-4085TR	LW-3	FT-15
	16-3D	●		●		1.00	1.00	1.00	6.00	1.58	1.25								
DVPN R/L	2020K-16	●		●	mm	20	20	20	125	40	27.0	0.8	CP-5D	CS-5D	SP-5D	DV-33	SB-4085TR	LW-3	FT-15
	2525M-16	●		●		25	25	25	150	40	32.0								
DVVNN	12-3B		●		inch	0.75	0.75	0.75	4.50	1.81	0.40	1/32	CP-5D	CS-5D	SP-5D	DV-33	SB-4085TR	LW-3	FT-15
	16-3D		●			1.00	1.00	1.00	6.00	1.81	0.52								
DVVNN	2020K-16		●		mm	20	20	20	125	46	10.0	0.8	CP-5D	CS-5D	SP-5D	DV-33	SB-4085TR	LW-3	FT-15
	2525M-16		●			25	25	25	150	46	12.5								

(Customer Service) **800.823.7284 - Option 1**
(Technical Support) **800.823.7284 - Option 2**
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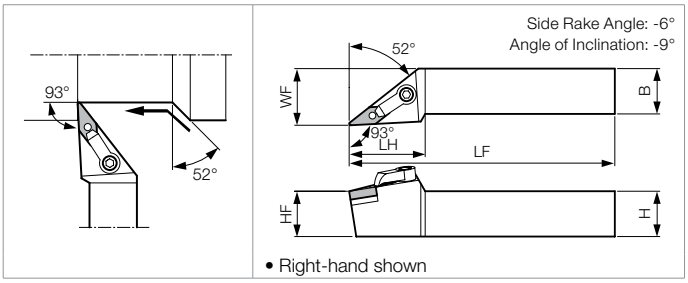
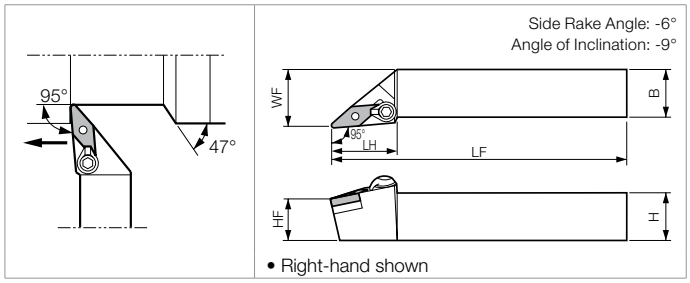
● : Standard Item △ : Phaseout Item (will be removed from next catalog)
Contact your local Kyocera sales engineer to upgrade old products to new technology

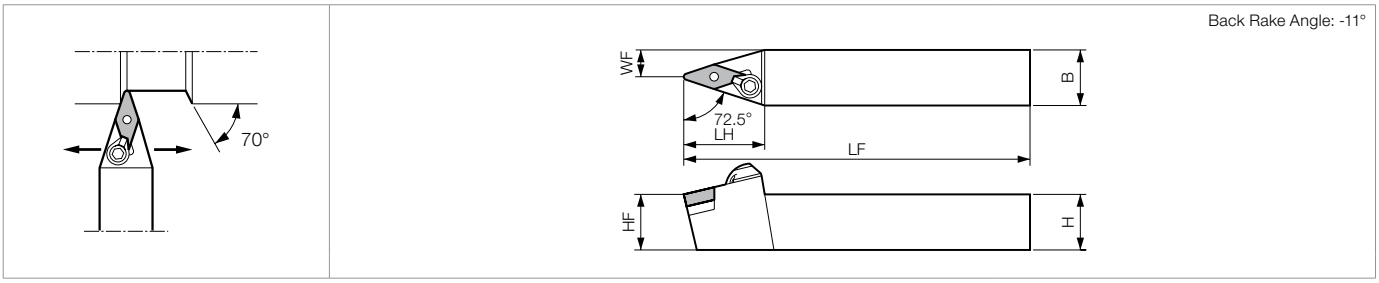
MVJN (External / Copying)



MVLN (External / Copying)



MVVN (External / Copying)



Toolholder Dimensions

Part Number	Stock R	Stock N	Stock L	Unit	Dimensions H	HF	B	LF	LH	WF	Standard Corner-R (RE)	Spare Parts: Clamp Set	Wrench	Shim	Shim Screw	Lock Pin	Wrench	Clamp	Clamp Screw
MVJN□L 12-3B	●		●	inch	0.75	0.75	0.75	4.5	1.69	1.00	1/64	-	(5/64 hex)	IVSN322	S-34	NL34L	LX-156	CL-30	XNS48
16-3C	●		●		1.00	1.00	1.00	5.0	1.69	1.25									
MVLN□L 2020K-16	●		●	mm	20	20	20	125	38	25.0	0.8	CPS-5□L	FH-2.5	MVN-32	-	TS-3S	FH-2	-	-
2525M-16	●		●		25	25	25	150	38	32.0									
MVVNN 12-3B		●		inch	0.75	0.75	0.75	4.50	1.67	0.375	1/32	CPS-5R	(5/64 Hex)	IVNS322	-	NL34L	LW-156	CL-12	XNS48
16-3D		●			1.00	1.00	1.00	6.00	1.67	0.500									
MVVNN 2020K-16		●		mm	20	20	20	125	39	10.0	0.8	CPS-5R	FH-2.5	MVN-32	-	TS-3S	FH-2	-	-
2525M-16		●			25	25	25	150	39	12.5									

• Clamp Set: CPS-5R for Right-hand Toolholder, CPS-5L for Left-hand Toolholder.

Applicable Inserts

Toolholder	Insert	
MVJN□L...12-3B	VN□A VN□G VN□M	33..
MVJN□L...16-3C		
MVLN□L...-16		
MVVNN...12-3B		
MVVNN...16-3D		
MVVNN...-16		

Application	Finishing	Finishing-Medium	Finishing-Medium	Finishing-Medium	Medium	Roughing	Finishing-Medium	Stainless Steel / Finishing	Stainless Steel / Medium-Roughing
Insert	PP	□L -VC	VF	PQ	TN-V	Standard	□L	MQ	MS
Size	33..	33..	33..	33..	33..	33..	33..	33..	33..
Ref. Page	B44	B44	B44	B44	B44	B44	B45	B45	B45

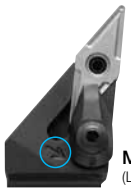
Application	Stainless Steel / Medium-Roughing	Heat-Resistant Alloy Roughing	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Non-ferrous Metals	Hard Materials
Insert	MU	SG	KG	KH	Without Chipbreaker	Ceramic	PCD	CBN
Size	33..	33..	33..	33..	33..	33..	33..	33..
Ref. Page	B45	B45	B45	B45	B45	B112	C23	C12

Rotation Directions of the Clamp Set

Recommended Cutting Conditions ➡ D43-D44

MVVNN type
(Neutral)

MVLNR type
(Right-hand Toolholder)



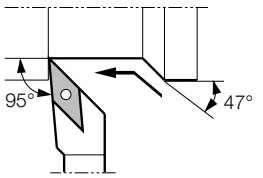
MVLNL type
(Left-hand Toolholder)

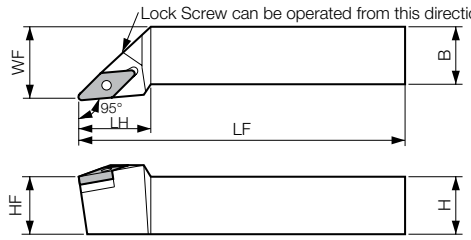
Clamp set: (CPS-5R) has Right-hand thread.
When clamping the insert, turn the screw in the arrow direction (clockwise).
When removing the insert, turn the screw away from the arrow (counterclockwise).

Clamp set: (CPS-5L) has Left-hand thread.
When clamping the insert, turn the screw in the arrow direction (counterclockwise).
When removing the insert, turn the screw away from the arrow (clockwise).

● : Standard Item △ : Phaseout Item (will be removed from next catalog)
Contact your local Kyocera sales engineer to upgrade old products to new technology

PVLN (External / Copying)

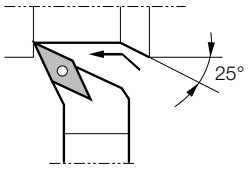


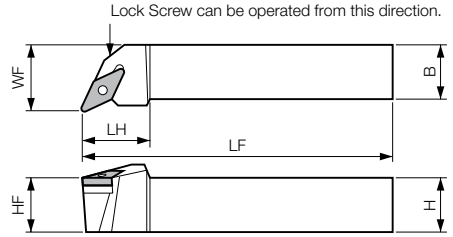


Side Rake Angle: -6°
Angle of Inclination: -9°

• Right-hand shown

PVPN (External / Facing / Copying / Undercutting)

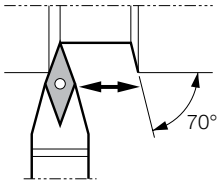


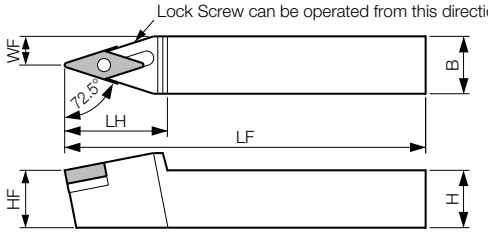


Side Rake Angle: -13°
Angle of Inclination: -10°

• Right-hand shown

PVVN (External / Copying)





Back Rake Angle: -11°

Toolholder Dimensions

Part Number		Stock R	Stock N	Stock L	Unit	Dimensions H	HF	B	LF	LH	WF	Standard Corner-R (RE)	Spare Parts: Lock Pin	Lock Screw	Shim	Wrench
PVLN[R/L]	2525M-16Q	●		●	mm	25	25	25	150	37	32.0	0.8	LP-6S	LS-15	KVN-32	LW-3
PVPN[R/L]	2020K-16Q	●		●		20	20	20	125	30	25.0	0.8	LP-2S	LS-11	KVN-32	LW-3
	2525M-16Q	●		●		25	25	25	150	30	32.0		LP-6S			
PVVNN	2020K-16Q		●			20	20	20	125	35	10.0	0.8	LP-2S	LS-15	KVN-32	LW-3
	2525M-16Q		●			25	25	25	150	40	12.5		LP-6S			

Applicable Inserts

Toolholder	Insert	
PVLN[R/L]...-16Q	VN□A VN□G VN□M	33..
PVPN[R/L]...-16Q		
PVVNN...-16Q		

Application	Finishing	Finishing-Medium	Finishing-Medium	Finishing-Medium	Medium	Roughing	Finishing-Medium	Stainless Steel / Finishing	Stainless Steel / Medium-Roughing
Insert	PP	[R/L] -VC	VF	PQ	TN-V	Standard	[R/L]	MQ	MS
Size	33..	33..	33..	33..	33..	33..	33..	33..	33..
Ref. Page	B44	B44	B44	B44	B44	B44	B45	B45	B45

Application	Stainless Steel / Medium-Roughing	Heat-Resistant Alloy Roughing	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Non-ferrous Metals	Hard Materials
Insert	MU	SG	KG	KH	Without Chipbreaker	Ceramic	PCD	CBN
Size	33..	33..	33..	33..	33..	33..	33..	33..
Ref. Page	B45	B45	B45	B45	B45	B112	C23	C12

Recommended Cutting Conditions ➡ **D43-D44**

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(Technical Support) **800.823.7284 - Option 2**
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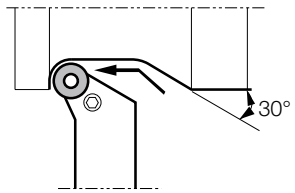
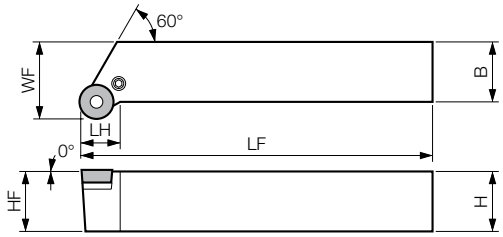
● : Standard Item △ : Phaseout Item (will be removed from next catalog)
Contact your local Kyocera sales engineer to upgrade old products to new technology

PRGC (External / Facing / Undercutting)

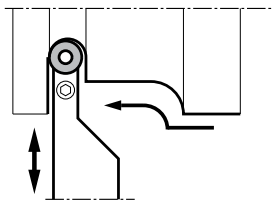


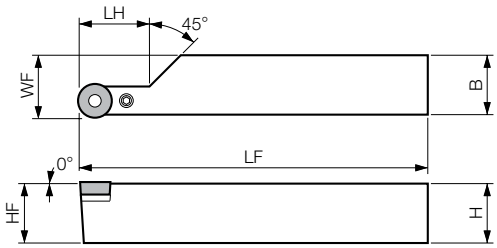


Side Rake Angle: 0°
Angle of Inclination: 0°

• Right-hand shown

PRXC (External / Facing / Undercutting)

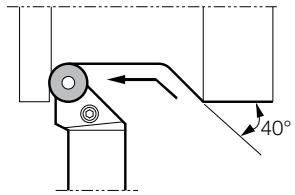


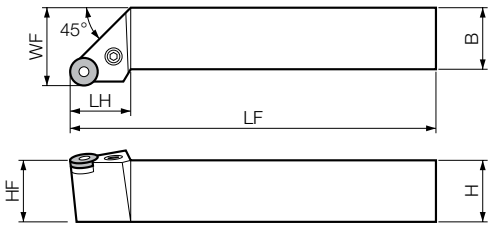


Side Rake Angle: 0°
Angle of Inclination: 0°

• Right-hand shown

PRGN (External / Facing / Undercutting)





Side Rake Angle: -6°
Angle of Inclination: -6°

• Right-hand shown

Toolholder Dimensions

Part Number	Stock R	Stock L	Unit	H	HF	B	LF	LH	WF	Standard Corner-R (RE)	Spare Parts: Lever	Lock Screw	Shim	Shim Pin	Punch	Wrench
PRGC□ 12-10MC	●	●	inch	0.75	0.75	0.75	5.00	0.60	1.00	-	LL-05C	LS-05	LR-10C	LSP-1	PC-1	FH-2
16-10MD	●	●		1.00	1.00	1.00	6.00	0.60	1.25							
PRGC□ 12-12MC	●	●		0.75	0.75	0.75	5.00	0.60	1.00	-	LL-1CN	LS-1N	LR-12C	LSP-1	PC-1	FH-2.5
16-12MD	●	●		1.00	1.00	1.00	6.00	0.60	1.25							
PRGC□ 2020K-10	●	●	mm	20	20	20	125	15	25.0	-	LL-05C	LS-05	LR-10C	LSP-1	PC-1	FH-2
2525M-10	●	●		25	25	25	150	15	32.0							
PRGC□ 2020K-12	●	●		20	20	20	125	14	25.0	-	LL-1CN	LS-1N	LR-12C	LSP-1	PC-1	FH-2.5
2525M-12	●	●		25	25	25	150	17	32.0							
PRXC□ 12-10MC	●	●	inch	0.75	0.75	0.75	5.00	1.00	0.77	-	LL-05C	LX-05	LR-10C	LSP-1	PC-1	FH-2
16-10MD	●	●		1.00	1.00	1.00	6.00	1.00	1.02							
PRXC□ 12-12MC	●	●		0.75	0.75	0.75	5.00	1.00	0.77	-	LL-1CN	LS-1N	LR-12C	LSP-1	PC-1	FH-2.5
16-12MD	●	●		1.00	1.00	1.00	6.00	1.00	1.02							
PRXC□ 2020K-10	●	●	mm	20	20	20	125	25	20.5	-	LL-05C	LS-05	LR-10C	LSP-1	PC-1	FH-2
2525M-10	●	●		25	25	25	150	30	25.5							
2525Q-10	●	●		25	25	25	180	30	25.5							
PRXC□ 2525M-12	●	●		25	25	25	150	30	25.7	-	LL-1CN	LS-1N	LR-12C	LSP-1	PC-1	FH-2.5
PRGN□ 2020K-09	●	●		20	20	20	125	19	25.0	-	LL-1N	LS-1N	LR-80	LSP-1	PC-1	FH-2.5
2525M-12	●	●		25	25	25	150	26	32.0		LL-2N	LS-2N	LR-81	LSP-2	PC-2	LW-3

Applicable Inserts

Toolholder	Insert	
PR□C□...12-10..	RCGX RCMX	1003M0
PR□C□...16-10..		
PR□C□...12-12..	RCGX RCMX	1204M0
PR□C□...16-12..		

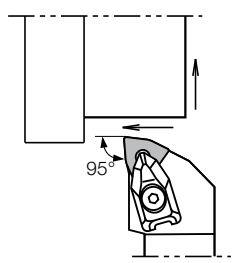
Toolholder	Insert	
PRGC□...-10	RCGX RCMX	1003M0
PRGC□...-12		1204M0
PRXC□...-10		1003M0
PRXC□...-12		1204M0
PRGN□...-09	RNMG	32
PRGN□...-12		43

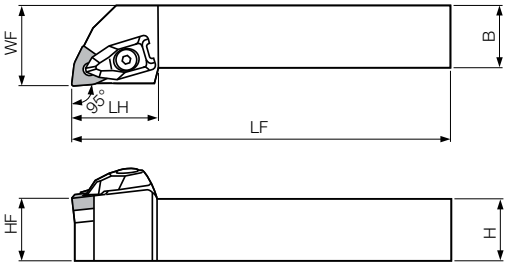
Application	Medium	Non-ferrous Metals	Medium-Roughing
Insert	Standard	AQ	Standard
Size	RC□X10.., RC□X12..	RC□X10..	RNMG32, RNMG43..
Ref. Page	B74	B74	B31

Recommended Cutting Conditions D43-D44

● : Standard Item △ : Phaseout Item (will be removed from next catalog)
Contact your local Kyocera sales engineer to upgrade old products to new technology

DWLN (External / Facing)





• Right-hand shown

Side Rake Angle: -6°
Angle of Inclination: -6°

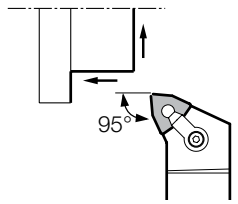
Applicable Inserts D25

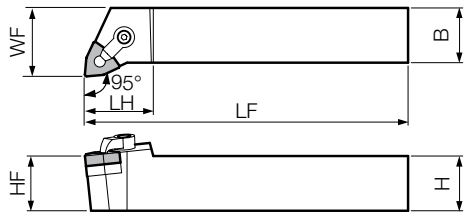
Toolholder	Insert	
DWLNR/L...12-3B	WN□G WN□M	33..
DWLNR/L...16-3D		
DWLNR/L...12-4B	WN□A WN□G WN□M	43..
DWLNR/L...16-4B		
DWLNR/L...-08		

Toolholder Dimensions

Part Number	Stock R	Stock L	Unit	H	HF	B	LF	LH	WF	Standard Corner-R (RE)	Clamp	Screw	Spring	Shim	Shim Screw	Wrench	Wrench (sold separately)
																For Clamp	For Shim
DWLNR/L 12-3B	●	●	inch	0.75	0.75	0.75	4.50	1.06	1.00	1/32	CP-2D	CS-2D	SP-2D	DW-32	SB-3080TR	LW-2.5	FT-10
16-3D	●	●		1.00	1.00	1.00	6.00	1.06	1.25								
DWLNR/L 12-4B	●	●		0.75	0.75	0.75	4.50	1.34	1.25		CP-3D	CS-3D	SP-3D	DW-44	SB-4085TR	LW-3	FT-15
16-4D	●	●		1.00	1.00	1.00	6.00	1.34	1.25								
DWLNR/L 2020K-08	●	●	mm	20	20	20	125	34	25	0.8	CP-3D	CS-3D	SP-3D	DW-44	SB-4085TR	LW-3	FT-15
2525M-08	●	●		25	25	25	150	34	32								

MWLN (External / Facing)





• Right-hand shown

Side Rake Angle:-5°
Angle of Inclination:-5°

Applicable Inserts D25

Toolholder	Insert	
MWLNR/L...-12-4B	WN□A WN□G WN□M	43..
MWLNR/L...-16-4D		

Toolholder Dimensions

Part Number	Stock R	Stock L	Unit	H	HF	B	LF	LH	WF	Standard Corner-R (RE)	Clamp	Clamp Screw	Wrench	Shim	Shim Screw	Lock Pin	Wrench
MWLNR/L 12-4B	□	□	inch	0.75	0.75	0.75	4.50	1.19	1.00	1/32	CL-20	XNS-48	LW-156	IWSN432	S-46	NL46	LW-094
16-4D	●	●		1.00	1.00	1.00	6.00	1.19	1.25								

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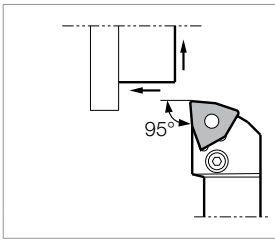
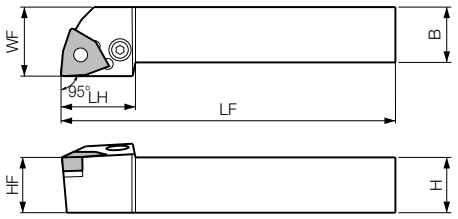
PWLN (External / Facing)





• Right-hand shown

Side Rake Angle: -6°
Angle of Inclination: -6°

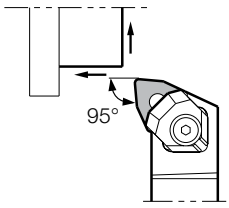
Applicable Inserts

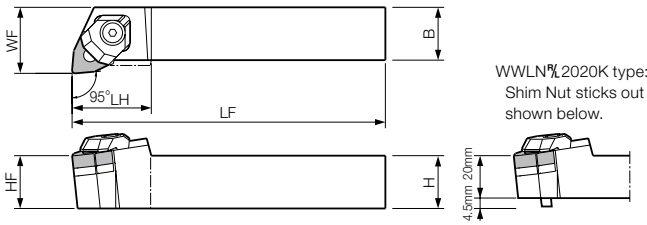
Toolholder	Insert	
PWLN□...12-3B	WN□G	33..
PWLN□...16-3D		
PWLN□...-06	WN□A WN□G WN□M	33..
PWLN□...-08		43..

Toolholder Dimensions

Part Number	Stock R	Stock L	Unit	H	HF	B	LF	LH	WF	Standard Corner-R (RE)	Spare Parts: Lever	Lock Screw	Shim	Shim Pin	Punch	Wrench
PWLN□ 12-3B	●		inch	0.75	0.75	0.75	4.50	0.87	1.00	1/32	LL-1N	LS-1N	LW-32N	LSP-1	PC-1	FH-2.5
16-3D	●			1.00	1.00	1.00	6.00	0.87	1.25							
PWLN□ 1616H-06	●	●	mm	16	16	16	100	22	20	0.8	LL-1N	LS-1N	LW-32N	LSP-1	PC-1	FH-2.5
2020K-06	●	●		20	20	20	125	22	25							
2525M-06	●	●		25	25	25	150	22	32							
2020K-08	●	●		20	20	20	125	26	25	0.8	LL-2N	LS-2N	LW-42N	LSP-2	PC-2	LW-3
2525M-08	●	●		25	25	25	150	26	32							

WWLN (External / Facing)





WWLN□2020K type:
Shim Nut sticks out as shown below.

• Right-hand shown

Side Rake Angle: -6°
Angle of Inclination: -6°

Applicable Inserts

Toolholder	Insert	
WWLN□...-08	WN□A WN□G WN□M	43..

Toolholder Dimensions

Part Number	Stock R	Stock L	Unit	H	HF	B	LF	LH	WF	Standard Corner-R (RE)	Spare Parts: Clamp Set	Shim	Shim Pin	Shim Nut	Wrench
WWLN□ 2020K-08	●	●	mm	20	20	20	125	30	25	1.2	WCS-8	WWN-42	WP5X15	WN-1	LW-3
2525M-08	●	●		25	25	25	150	30	32						

Applicable Inserts

Application	Finishing	Finishing-Medium	Finishing	Finishing-Medium	Finishing-Medium	Finishing-Medium	Medium-Roughing	Medium-Roughing	Medium-Roughing	Medium-Roughing / High Feed Rate
Insert	WF (Wiper)	WE (Wiper)	PP	PQ	CQ	CJ	GS	PG	PS	PT
Size	43..	43..	43..	43..	43..	43..	33.., 43..	43..	43..	43..
Ref. Page	B46	B46	B46	B46	B47	B47	B47	B47	B47	B47
Application	Roughing	Finishing	Medium	Soft Steel / Finishing	Soft Steel / Medium	Soft Steel / Roughing	Stainless Steel / Finishing	Stainless Steel Medium-Roughing	Stainless Steel Medium-Roughing	Heat-Resistant Alloy Roughing
Insert	Standard	□-S	□	XP	XQ	XS	MQ	MS	MU	SG
Size	43..	33..	33..	43..	43..	43..	43..	43..	43..	43..
Ref. Page	B47	B49	B49	B48	B48	B48	B48	B48	B48	B48
Application	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Cast Iron	Non-ferrous Metals	Non-ferrous Metals	Hard Materials		
Insert	KQ	KG	KH	ZS	GC	AH	PCD	CBN		
Size	43..	43..	43..	43..	43..	43..	43..	43..		
Ref. Page	B49	B49	B49	B49	B49	B49	C23	C13		

• In wedge lock, use of ceramic insert other than silicon nitride insert is not recommended due to strong restrain force.

Recommended Cutting Conditions D43-D44

● : Standard Item △ : Phaseout Item (will be removed from next catalog)
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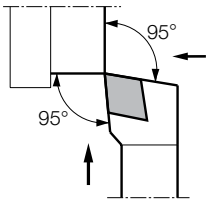
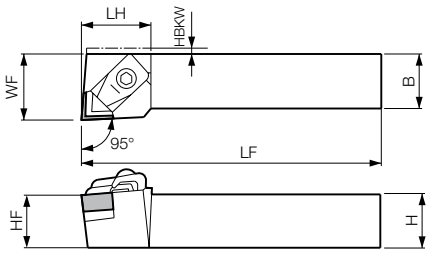
CCLN / HCLN (External / Facing)





Side Rake Angle: -6°
Angle of Inclination: -6°

• Right-hand shown

Toolholder Dimensions

Part Number	Stock R	Stock L	Unit	H	HF	B	LF	LH	WF	HBKW	Standard Corner-R (RE)	Spare Parts: Chipbreaker	Clamp Set (CE / HCL)	Wrench	Shim	Shim Screw (M / S)	Lock Pin	Wrench
CCLN□ 2020K-12	●	●	mm	20	20	20	125	32	27	5	0.8	CB-16	CE-010	LW-4	SP-441 (SP-443)	M3X8 (M3X12)	-	-
2525M-12	●	●		25	25	25	150	32	32	-								
CCLN□ 3225P-16	●	●		32	32	25	170	35	32	-	0.8	CB-17	CE-220	LW-4	SP-454	M4X10	-	-
HCLN□ 16-4D	●	□	inch	1.00	1.00	1.00	6.00	1.26	1.25	-	1/32	HCB318	HCL008	LW-4	ICSN433 (ICSN453)	S-46	NL46L	LW-094

• Shim & Shim Screw: When using CN□□43 Insert, purchase spare parts in ( ) separately.

Applicable Inserts

Application	Cast Iron / Hard Materials	Hard Materials / Cast Iron
Ref. Page	B106	C19
Shape / Toolholder	Ceramic	CBN (KBN900)
CCLN□...-12	CNG45.., (CNG43..) CNM45	(CNM43..)
CCLN□...-16	CNG55..	-

Application	Cast Iron / Hard Materials	Cast Iron / Hard Materials
Ref. Page	B106	B106
Shape / Toolholder	Ceramic	Ceramic
HCLN□...16-4D	CNG 45.. (43..)	CN□A 45.. (43..)

Recommended Cutting Conditions **D43-D44**

Ceramic Insert Selection Guide

Select the suitable ceramic specifications (Corner-R(RE), Feed Rate, Chamfer, etc.) from the table below. (No.45, Cutting Edge Angle: 0°~15)

Insert Shape	Corner-R (RE)	f (ipr) 0.004	0.006	0.008	0.010	0.012	0.014	0.016	0.018	0.020	0.024	D.O.C.
RN	–	→	→	→	→	→	→	→	→	→	→	0.012~0.157
SN	2.0	→	→	→	→	→	→	→	→	→	→	0.012~0.157
	1.6	→	→	→	→	→	→	→	→			
EN	1.2	→	→	→	→	→	→					
CN	0.8	→	→	→	→							
	0.4	→	→									
TN	1.6	→	→	→	→	→	For Finishing					0.012~0.079
DN	1.2	→	→	→	→							
	0.8	→	→	→								
Chamfer		0.002"×20°		(0.004"~0.008")×(20°~25°)				0.012"×30°				–
Insert Thickness		5/16"										

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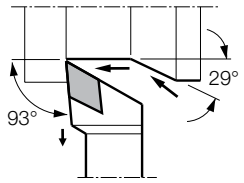
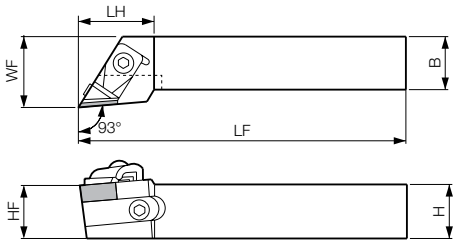
CDJN (External / Copying / Back Turning)





Side Rake Angle: -5°
Angle of Inclination: -8°

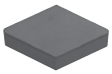
• Right-hand shown

Toolholder Dimensions

Part Number	Stock R	Stock L	Unit	Dimensions H	HF	B	LF	LH	WF	Standard Corner-R (RE)	Spare Parts: Chipbreaker	Clamp Set	Wrench	Shim	Shim Screw
CDJN□ 2525M-15	●	●	mm	25	25	25	150	32	32	0.8	CB-14/15	CE-010	LW-4	556C□	HH5X16
3225P-15	●	●		32	32	25	170	32	32						

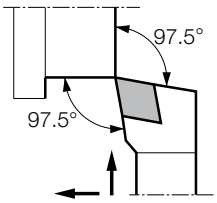
• Chipbreaker: CB-14 for Right-hand Toolholder, and CB-15 for Left-hand Toolholder.
• Shim: 556CR for Right-hand Toolholder, and 556CL for Left-hand Toolholder.

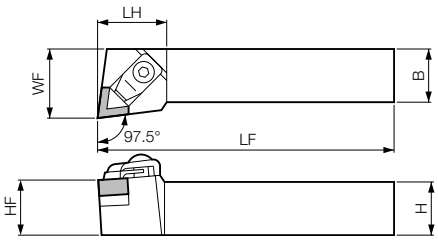
Applicable Inserts

Application	Cast Iron / Hard Materials
Ref. Page	B107
Shape / Toolholder	Ceramic 
CDJN□...-15	DNG45..

Recommended Cutting Conditions **D43-D44**

CELN (External / Facing)





Side Rake Angle: -6°
Angle of Inclination: -6°

• Right-hand shown

Toolholder Dimensions

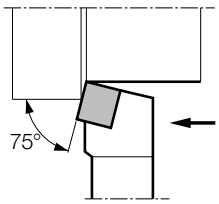
Part Number	Stock R	Stock L	Unit	Dimensions H	HF	B	LF	LH	WF	Standard Corner-R (RE)	Spare Parts: Chipbreaker	Clamp Set	Wrench	Shim	Shim Screw
CELN□ 2525M-13	●	●	mm	25	25	25	150	32	32	0.8	CB-16	CE-010	LW-4	SP-342	M3X8

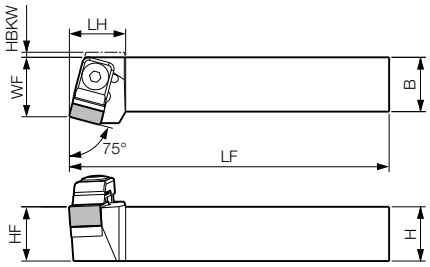
Applicable Inserts

Application	Cast Iron / Hard Materials
Ref. Page	B107
Shape / Toolholder	Ceramic
CELN□...-13	**ENG45..**

Recommended Cutting Conditions **D43-D44**

CSRN / HSRN (External)

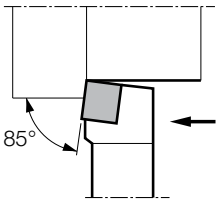


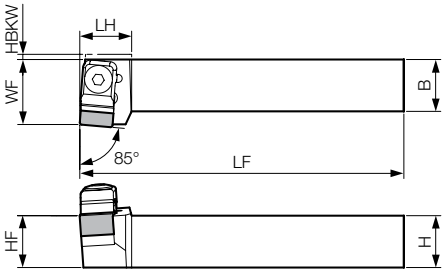


Side Rake Angle: -6°
Angle of Inclination: -4°

• Right-hand shown

CS-N (External)

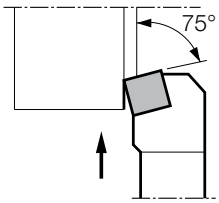


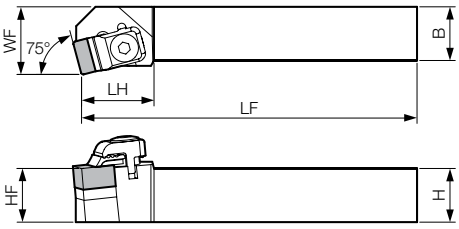


Side Rake Angle: -6°
Angle of Inclination: -4°

• Right-hand shown

CSKN (Facing)

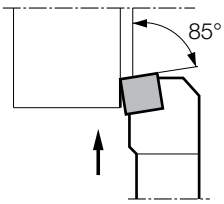


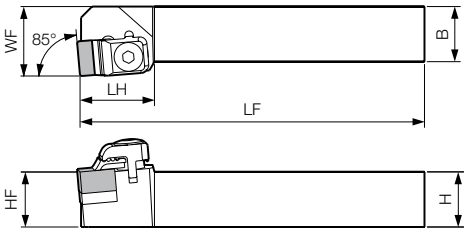


Side Rake Angle: -6°
Angle of Inclination: -4°

• Right-hand shown

CSYN (Facing)

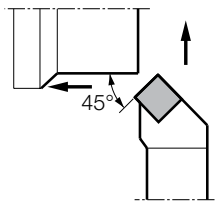


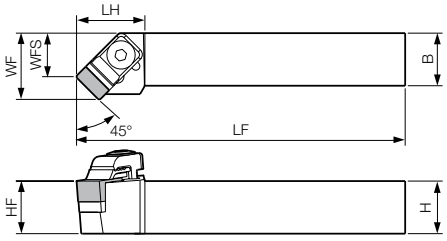


Side Rake Angle: -6°
Angle of Inclination: -4°

• Right-hand shown

CSSN (External / Facing / Chamfering)

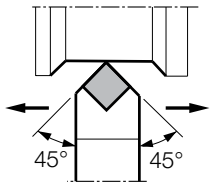


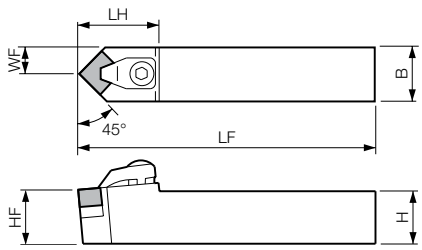


Side Rake Angle: -6°
Angle of Inclination: 0°

• Right-hand shown

CSDN / HSDN (External / Chamfering)





Back Rake Angle: -8.5°

Toolholder Dimensions

Part Number	Stock R	Stock N	Stock L	Unit	Dimensions H	HF	B	LF	LH	WF	HBKW	WFS	Standard Corner-R (RE)	Spare Parts: Chipbreaker	Clamp Set	Wrench	Shim	Shim Screw	Lock Pin	Wrench
															020 220 040 HCL			M3 S		
CSRN□□ 20-4E	●		●	inch	1.25	1.25	1.25	7.00	0.88	1.50	-	-	1/32	CB-11	CE-020	LW-4	SP-141	M3X8	-	-
CSRN□□ 2020K-12	●		●	mm	20	20	20	125	22	22.0	2	-	0.8	CB-11	CE-020	LW-4	SP-141 (SP-143)	M3X8 (M3X12)	-	-
2525M-12	●		●		25	25	25	150	22	27.0	-	-								
3225P-12	●		●		32	32	25	170	22	27.0	-	-								
3225P-15	●				32	32	25	170	30	32.4	-	-	0.8	CB-51	CE-220	LW-4	SP-162	M4X10	-	-
4040R-15	●		●		40	40	40	200	30	43.0	-	-								
CS-N□□ 2525M-12	●		●		25	25	25	150	20	32.0	-	-	0.8	CB-11	CE-020	LW-4	SP-141 (SP-143)	M3X8 (M3X12)	-	-
CSKN□□ 2020K-12	●				20	20	20	125	27	25.0	-	-	0.8	CB-11	CE-020	LW-4	SP-141 (SP-143)	M3X8 (M3X12)	-	-
2525M-12	●		●		25	25	25	150	27	32.0	-	-								
3225P-15	●				32	32	25	170	37	32.0	-	-	0.8	CB-51	CE-220	LW-4	SP-162	M4X10	-	-
CSYN□□ 2525M-12	●		●		25	25	25	150	27	32.0	-	-	0.8	CB-11	CE-020	LW-4	SP-141 (SP-143)	M3X8 (M3X12)	-	-
CSSN□□ 16-4D	●		●	inch	1.00	1.00	1.00	6.00	1.00	1.25	-	-	1/32	CB-11	CE-020	LW-4	SP-141 (SP-143)	M3X8 (M3X12)	-	-
CSSN□□ 2020K-12	●			mm	20	20	20	125	26	25.0	-	16	0.8	CB-11	CE-020	LW-4	SP-141 (SP-143)	M3X8 (M3X12)	-	-
2525M-12	●		●		25	25	25	150	26	32.0	-	23								
CSDNN 2020K-12		●			20	20	20	125	32	10.0	-	-	0.8	-	CE-040	LW-4	SP-141 (SP-143)	M3X8 (M3X12)	-	-
2525M-12		●			25	25	25	150	32	12.5	-	-								
3225P-12		●			32	32	25	170	32	12.5	-	-								
HSRN□□ 16-4D	●		●	inch	1.00	1.00	1.00	6.00	0.87	1.13	-	-	1/32	HCB300	HCL-000 (HCL-001)	LW-4	ISSN433 (ISSN453)	S-46	NL46L	LW-094
HSDNN 16-4D		●			1.00	1.00	1.00	6.00	1.30	0.500	-	-	1/32	-	HCL-002	LW-4	ISSN433 (ISSN453)	S-46	NL46L	LW-094
20-4D		●			1.25	1.25	1.25	6.00	1.30	0.625	-	-								

• Shim & Shim Screw : When using SN□□43 Insert, purchase spare parts in ( ) separately.

Applicable Inserts

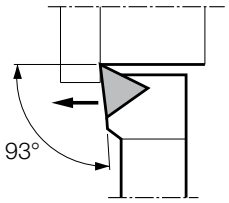
Application	Cast Iron / Hard Materials	Cast Iron / Hard Materials	Cast Iron	Hard Materials / Cast Iron	When using as toolholder for CBN tools (KBN900), prepare spare parts below separately.		
Ref. Page	B109, B110	B109	B35	C19			
Shape / Toolholder	Ceramic	Ceramic	Coated Carbide	CBN (KBN900)	Clamp Set	Shim	Shim Screw M3 S
CSRN□□...-4E CSRN□□...-12	SNG45.. (SNG43..) SNM45..	-	(SNM43..)	(SNM43..)	CE-030A	SP-143	M3X12
CSRN□□...-15	SNG55..	-	-	-	-	-	-
CS-N□□...-12	SNG45.. (SNG43..) SNM45..	-	(SNM43..)	(SNM43..)	CE-030A	SP-143	M3X12
CSKN□□...-12	SNG45.. (SNG43..) SNM45..	-	(SNM43..)	(SNM43..)	CE-030A	SP-143	M3X12
CSKN□□...-15	SNG55..	-	-	-	-	-	-
CSYN□□...-12	SNG45.. (SNG43..) SNM45..	-	(SNM43..)	(SNM43..)	CE-030A	SP-143	M3X12
CSSN□□...-4D CSSN□□...-12	SNG45.. (SNG43..) SNM45..	-	(SNM43..)	(SNM43..)	CE-030A	SP-143	M3X12
CSDNN...-12	SNG45.. (SNG43..) SNM45..	-	(SNM43..)	(SNM43..)	*-	SP-143	M3X12
HSRN□□...-4D	SNG45.. (SNG43..) SNM45..	(SNGA43..) (SNMA43..)	(SNM43..)	(SNM43..)	HCL-001	ISSN453	S-46
HSDNN...-4D	SNG45.. (SNG43..) SNM45..	(SNGA43..) (SNMA43..)	(SNM43..)	(SNM43..)	*-	ISSN453	S-46

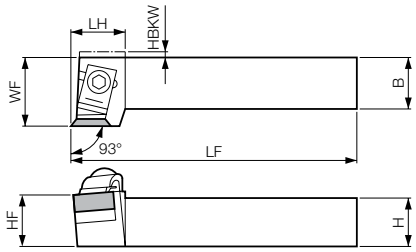
• Shim & Shim Screw : When using SN□□43 Insert, purchase spare parts in ( ) separately.
*CSDNN...-12: Clamp Set CE-040 is used continuously.

Recommended Cutting Conditions ➔ **D43-D44**

● : Standard Item △ : Phaseout Item (will be removed from next catalog)
Contact your local Kyocera sales engineer to upgrade old products to new technology

CTJN (External)

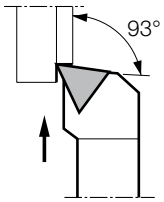


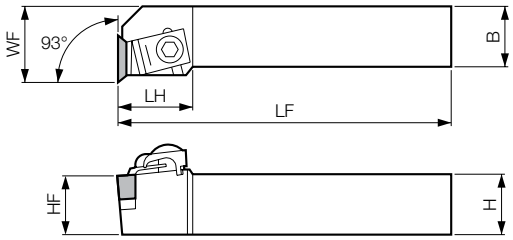


Side Rake Angle: -6°
Angle of Inclination: -4°

• Right-hand shown

CTUN (Facing)





Side Rake Angle: -6°
Angle of Inclination: -4°

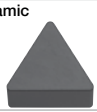
• Right-hand shown

Toolholder Dimensions

Part Number	Stock R	Stock L	Unit	H	HF	B	LF	LH	WF	HBKW	Standard Corner-R (RE)	Spare Parts: Chipbreaker	Clamp Set	Wrench	Shim	Shim Screw
CTJN□□ 16-3D	●	●	inch	1.00	1.00	1.00	6.00	0.88	1.25	-	1/32	CB-12/13	CE-020	LW-4	SP-221 (SP-223)	M3X8 (M3X12)
16-4D	●	●		1.00	1.00	1.00	6.00	0.88	1.25	-						
CTJN□□ 2020K-16	●	●	mm	20	20	20	125	21	25	2	0.8	CB-12/13	CE-020	LW-4	SP-221 (SP-223)	M3X8 (M3X12)
2525M-16	●	●		25	25	25	150	21	32	-						
CTUN□□ 2020K-16	●	●		20	20	20	125	27	25	-	0.8	CB-13/12	CE-020	LW-4	SP-221 (SP-223)	M3X8 (M3X12)
2525M-16	●	●		25	25	25	150	27	32	-						

• CTJN (Chipbreaker): CB-12 for Right-hand Toolholder, CB-13 for Left-hand Toolholder.
CTUN (Chipbreaker): CB-13 for Right-hand Toolholder, CB-12 for Left-hand Toolholder.
• Shim & Shim Screw: When using TN□□33 Insert, purchase spare parts in ( ) separately.

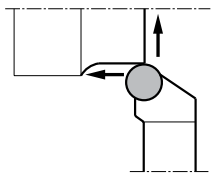
Applicable Inserts

Application	Cast Iron / Hard Materials	Hard Materials / Cast Iron
Ref. Page	B111	C19
Shape / Toolholder	Ceramic 	CBN (KBN900)
CTJN□□...-3D	TNG35.. (TNG33..) (TNM33..)	(TNM33..)
CTJN□□...-4D	TNG45.. (TNG43..) (TNM43..)	(TNM43..)
CTJN□□...-16	TNG35.. (TNG33..) (TNM33..)	(TNM33..)
CTUN□□...-16		

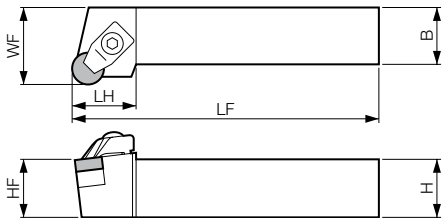
Recommended Cutting Conditions **D43-D44**

(Customer Service) **800.823.7284 - Option 1**
(Technical Support) **800.823.7284 - Option 2**
Visit us online at **KyoceraPrecisionTools.com**
● : Standard Item △ : Phaseout Item (will be removed from next catalog)
Contact your local Kyocera sales engineer to upgrade old products to new technology

CRSN / HRSN (External / Facing)

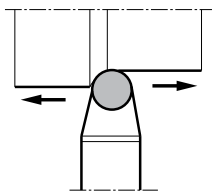


Side Rake Angle: -6°
Angle of Inclination: -6°

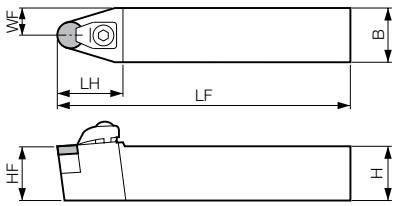


• Right-hand shown

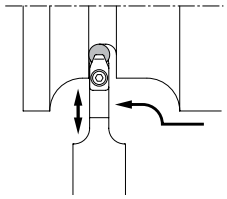
CRDN (External / Copying)

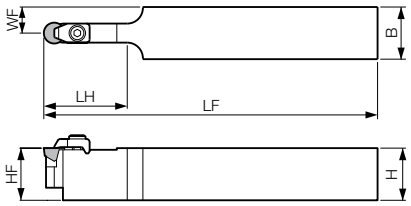


Back Rake Angle: -8.5°



CRDC (External / Copying)





Toolholder Dimensions

Part Number		Stock R	Stock N	Stock L	Unit	Dimensions H	HF	B	LF	LH	WF	Standard Corner-R (RE)	Spare Parts: Clamp Set (CE / HCL)	Wrench	Shim (SP / HSH)	Shim Screw (M / S)	Lock Pin	Wrench
CRSN□	2020K-12	●		●	mm	20	20	20	125	26	25.0	-	CE-030	LW-4	SP-841 (SP-843)	M3X8 (M3X12)	-	-
	2525M-12	●		●		25	25	25	150	26	32.0	-						
	3225P-12	●		●		32	32	25	170	26	32.0	-						
CRDNN	16-4D		●		inch	1.00	1.00	1.00	6.00	1.13	0.500	-	CE-030	LW-4	SP-841 (SP-843)	M3X8	-	-
	20-4E		●			1.25	1.25	1.25	7.00	1.13	0.625	-						
CRDNN	2020K-12		●		mm	20	20	20	125	28	10.0	-	CE-030	LW-4	SP-841 (SP-843)	M3X8 (M3X12)	-	-
	2525M-12		●			25	25	25	150	28	12.5	-						
	3225P-12		●			32	32	25	170	28	12.5	-						
	3232P-15		●			32	32	32	170	35	16.0	-	CE-040	LW-4	SP-861	M4X10	-	-
	4040R-15		●			40	40	40	200	35	20.0	-						
HRSN□	16-4D	●		□	inch	1.00	1.00	1.00	6.00	1.03	1.250	-	HCL-001	LW-4	IRSN43 (IRSN45)	S-46	NL46L	LW-094
	20-4D	●		□		1.25	1.25	1.25	6.00	1.03	1.500	-						
CRDCN	16-2		●		inch	1.00	1.00	1.00	8.00	1.00	0.500	-	HCL-017C	LW-2	HSH665A	-	-	-
	16-3		●			1.00	1.00	1.00	8.00	1.50	0.500	-	HCL-016	LW-3	HSH655			
	20-3		●			1.25	1.25	1.25	8.00	1.50	0.625	-						
	20-4		●			1.25	1.25	1.25	8.00	2.00	0.625	-	HCL-007	LW-4	HSH657			
	20-6		●			1.25	1.25	1.25	8.00	2.00	0.625	-	HCL-013	LW-4	HSH661			

• Shim & Shim Screw : When using RN□43 Insert, purchase spare parts in ( ) separately.

Applicable Inserts

Application	Cast Iron / Hard Materials
Ref. Page	B108
Shape / Toolholder	Ceramic
CRSN□...-12	RNG45.. (RNG43..)
CRDNN...-4D/4E CRDNN...-12	RNG45.. (RNG43..)
CRDNN...-15	RNG55..
HRSN□...-4D	RNG45.. (RNG43..)

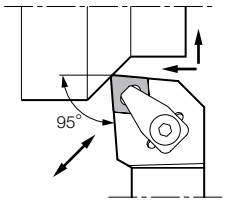
Hard Materials / Cast Iron	When using as toolholder for CBN tools (KBN900), prepare spare parts below separately.		
C19	Clamp Set	Shim	Shim Screw
CBN (KBN900)			M S
(RNM43..)	CE-030A	SP-843	M3X12
(RNM43..)	CE-030A	SP-843	M3X12
-	-	-	-
(RNM43..)	HCL-001	IRSN45	S-46

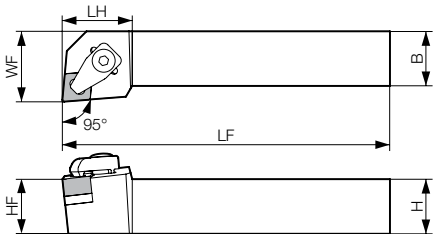
Application	Cast Iron / Hard Materials
Ref. Page	B114
Shape / Toolholder	Ceramic
CRDCN...-2	RCGX 102..
CRDCN...-3	RCGX 35.., 103..
CRDCN...-4	RCGX 45.., 104..
CRDCN...-6	RCGX 106..

Recommended Cutting Conditions D43-D44

● : Standard Item □ : Made to Order △ : Phaseout Item (will be removed from next catalog)
Contact your local Kyocera sales engineer to upgrade old products to new technology

CCLN-GX (External / Facing / Back Turning)





Side Rake Angle: -6°
Angle of Inclination: -6°

• Right-hand shown

Toolholder Dimensions

Part Number	Stock R	Stock L	Unit	H	HF	B	LF	LH	WF	Standard Corner-R (RE)	Spare Parts: Clamp Set	Wrench	Shim	Shim Screw
				Dimensions										
CCLN[R/L] 2525M-12GX	△	△	mm	25	25	25	150	30	32	1.2	CE-410	LW-4	SP-441	M3X8

• CTJN (Chipbreaker): CB-12 for Right-hand Toolholder, CB-13 for Left-hand Toolholder.
CTUN (Chipbreaker): CB-13 for Right-hand Toolholder, CB-12 for Left-hand Toolholder.
• Shim & Shim Screw: When using TN□□33 Insert, purchase spare parts in ( ) separately.

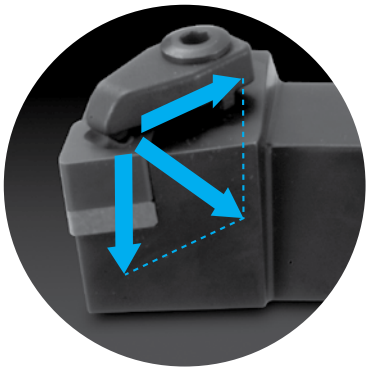
Applicable Inserts

Application	Cast Iron
Ref. Page	B106
Shape / Toolholder	Ceramic
CCLN[R/L]...12GX	CNGX45..

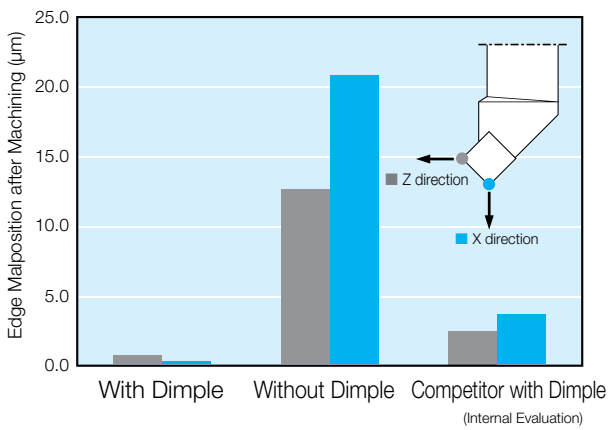
Recommended Cutting Conditions **D43-D44**

Features

- **Improved clamping stability due to the dimple design**
- **Improve machine stability and machinability**

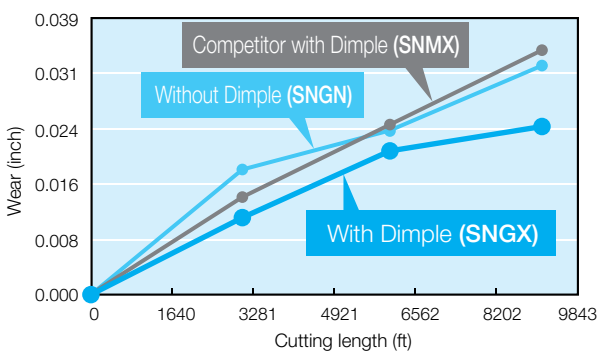


Edge Displacement



(Internal Evaluation)

Cutting Capability



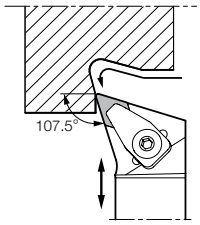
Vc = 2620 sfm, D.O.C. = 0.059"-0.079", f = 0.024 ipr
NO.45 with Scale, Dry

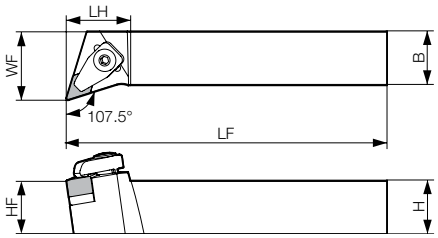
(Internal Evaluation)

(Customer Service) **800.823.7284 - Option 1**
(Technical Support) **800.823.7284 - Option 2**
Visit us online at **KyoceraPrecisionTools.com**

● : Standard Item □ : Made to Order △ : Phaseout Item (will be removed from next catalog)
Contact your local Kyocera sales engineer to upgrade old products to new technology

CDHN-GX (External / Copying / Back Turning)

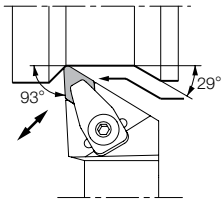


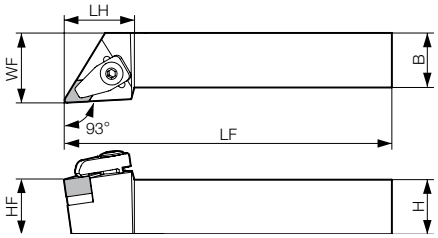


Side Rake Angle: -5°
Angle of Inclination: -8°

• Right-hand shown

CDJN-GX (External / Copying / Back Turning)





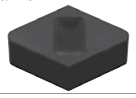
Side Rake Angle: -5°
Angle of Inclination: -8°

• Right-hand shown

Toolholder Dimensions

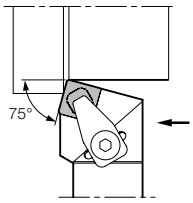
Part Number		Stock		Unit	Dimensions						Standard Corner-R (RE)	Spare Parts			
												Clamp Set	Wrench	Shim	Shim Screw
		R	L		H	HF	B	LF	LH	WF					
CDHN	2525M-12GX	△	△	mm	25	25	25	150	30	32	1.2	CE-410	LW-4	SP-521	M3X8
	2525M-15GX	△	△		25	25	25	150	33	32		CE-430		SP-541	
CDJN	2525M-12GX	△	△		25	25	25	150	32	32	1.2	CE-410	LW-4	SP-521	M3X8
	2525M-15GX	△	△		25	25	25	150	38	32		CE-430		SP-541	

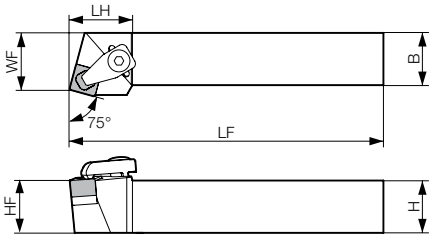
Applicable Inserts

Application		Cast Iron
Ref. Page		B107
Shape		Ceramic 
Toolholder		
CDHN	2525M-12GX	DNGX35 …
	2525M-15GX	DNGX45 …
CDJN	2525M-12GX	DNGX35 …
	2525M-15GX	DNGX45 …

Recommended Cutting Conditions **D43-D44**

CSRN-GX (External)

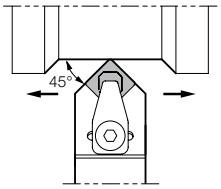


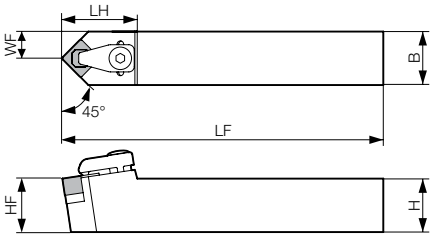


Side Rake Angle: -6°
Angle of Inclination: -4°

• Right-hand shown

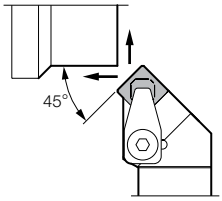
CSDN-GX (External / Chamfering)

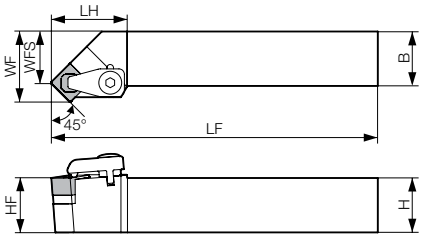




Back Rake Angle: -8.5°

CSSN-GX (External / Facing / Chamfering)





Side Rake Angle: -6°
Angle of Inclination: 0°

• Right-hand shown

Toolholder Dimensions

Part Number		Stock			Unit	Dimensions							Standard Corner-R (RE)	Spare Parts			
														Clamp Set	Wrench	Shim	Shim Screw
		R	N	L		H	HF	B	LF	LH	WF	WFS					
CSRN	2525M-12GX	△		△	mm	25	25	25	150	30	27.0	-	1.2	CE-410	LW-4	SP-141	M3X8
	2525M-15GX	△		△		25	25	25	150	35	27.0	-				SP-162	M4X10
CSDNN	2525M-12GX		△			25	25	25	150	35	12.5	-	1.2	CE-410	LW-4	SP-141	M3X8
	2525M-15GX		△			25	25	25	150	40	12.5	-				SP-162	M4X10
CSSN	2525M-12GX	△		△		25	25	25	150	35	32.0	23.6	1.2	CE-410	LW-4	SP-141	M3X8
	2525M-15GX	△		△		25	25	25	150	40	32.0	21.1				SP-162	M4X10

Applicable Inserts

Application	Cast Iron
Ref. Page	**B110**
Shape / Toolholder	**Ceramic**
CSRN **2525M-12GX**	SNGX45 …
2525M-15GX	SNGX55 …
CSDNN **2525M-12GX**	SNGX45 …
2525M-15GX	SNGX55 …
CSSN **2525M-12GX**	SNGX45 …
2525M-15GX	SNGX55 …

Recommended Cutting Conditions **D43-D44**

(Customer Service) **800.823.7284 - Option 1**
(Technical Support) **800.823.7284 - Option 2**
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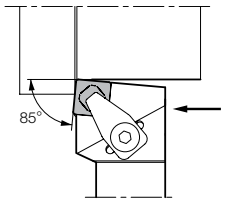
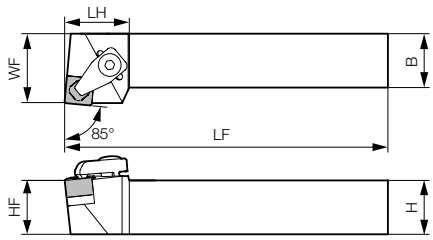
● : Standard Item □ : Made to Order △ : Phaseout Item (will be removed from next catalog)
Contact your local Kyocera sales engineer to upgrade old products to new technology

CS-N-GX (External)

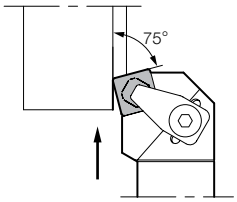


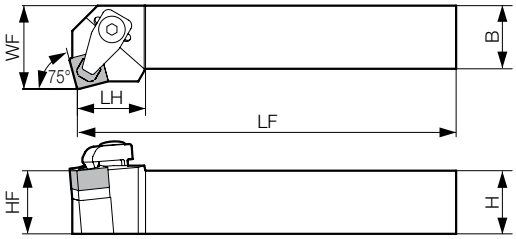


Side Rake Angle: -6°
Angle of Inclination: -4°

• Right-hand shown

CSKN-GX (Facing)

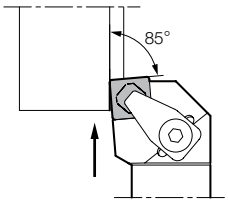


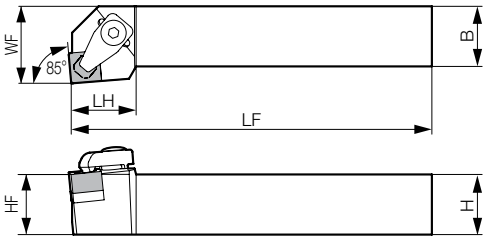


Side Rake Angle: -6°
Angle of Inclination: -4°

• Right-hand shown

CSYN-GX (Facing)





Side Rake Angle: -6°
Angle of Inclination: -4°

• Right-hand shown

Toolholder Dimensions

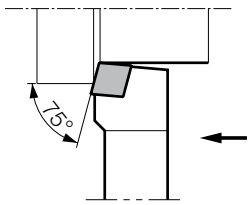
Part Number		Stock R	Stock L	Unit	H	HF	B	LF	LH	WF	Standard Corner-R (RE)	Spare Parts: Clamp Set	Spare Parts: Wrench	Spare Parts: Shim	Spare Parts: Shim Screw
CS-N△	2525M-12GX	△	△	mm	25	25	25	150	30	32	1.2	CE-410	LW-4	SP-141	M3X8
	2525M-15GX	△	△		25	25	25	150	30	32				SP-162	M4X10
CSKN△	2525M-12GX	△	△		25	25	25	150	27	32	1.2	CE-410	LW-4	SP-141	M3X8
	2525M-15GX	△	△		25	25	25	150	26	32				SP-162	M4X10
CSYN△	2525M-12GX	△	△		25	25	25	150	27	32	1.2	CE-410	LW-4	SP-141	M3X8
	2525M-15GX	△	△		25	25	25	150	29	32				SP-162	M4X10

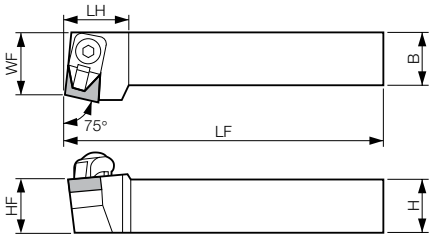
Applicable Inserts

Application	Cast Iron
Ref. Page	B110
Shape / Toolholder	Ceramic
CS-N△ 2525M-12GX	SNGX45 …
2525M-15GX	SNGX55 …
CSKN△ 2525M-12GX	SNGX45 …
2525M-15GX	SNGX55 …
CSYN△ 2525M-12GX	SNGX45 …
2525M-15GX	SNGX55 …

Recommended Cutting Conditions **D43-D44**

CCRN-A (External)

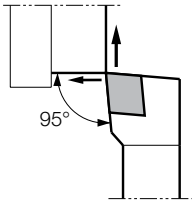


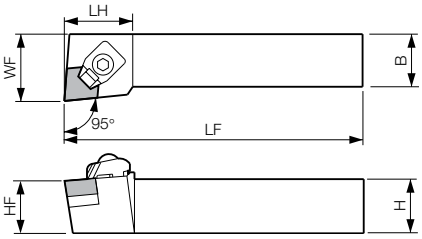


Side Rake Angle: -6°
Angle of Inclination: -6°

• Right-hand shown

CCLN-A (External / Facing)

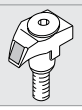




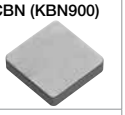
Side Rake Angle: -5°
Angle of Inclination: -5°

• Right-hand shown

Toolholder Dimensions

Part Number	Stock		Unit	Dimensions						Standard Corner-R (RE)	Spare Parts			
											Clamp Set	Wrench	Shim	Shim Screw
	R	L		H	HF	B	LF	LH	WF					
CCRN□ 2525M-09A	●	●	mm	25	25	25	150	27	27	0.8	CE-030A	LW-4	SP-429	HH3X12
CCLN□ 2525M-09A	●	●		25	25	25	150	28	32	0.8	CE-030A	LW-4	SP-429	HH3X12

Applicable Inserts

Application	Hard Materials / Cast Iron
Ref. Page	C19
Shape / Toolholder	CBN (KBN900) 
CCRN□...-09A	CNM32..
CCLN□...-09A	

* For CNM43 Insert toolholder D26

Recommended Cutting Conditions **D43-D44**

(Customer Service) **800.823.7284 - Option 1**
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● : Standard Item △ : Phaseout Item (will be removed from next catalog)
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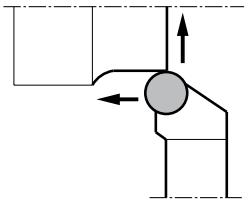
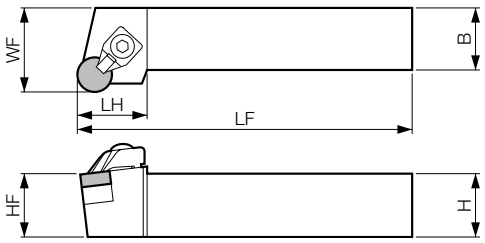
CRSN-A (External / Facing)

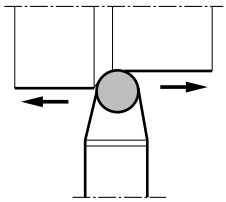


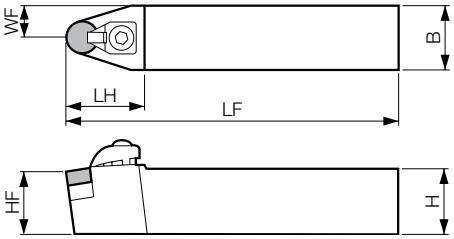


Side Rake Angle: -6°
Angle of Inclination: -6°

• Right-hand shown

CRDN-A (External / Copying))





Back Rake Angle: -8.5°

Toolholder Dimensions

Part Number		Stock R	Stock N	Stock L	Unit	Dimensions H	HF	B	LF	LH	WF	Standard Corner-R (RE)	Spare Parts: Clamp Set	Wrench	Shim		Shim Screw	
																	HH	BH
CRSN/L	2525M-09A	●		●	mm	25	25	25	150	26	32.0	-	CE-030A	LW-4	SP-829	-	HH3X12	
	3225P-09A	●		●		32	32	25	170	26	32.0							
	2525M-12A	●		●		25	25	25	150	26	32.0	-	CE-030A	LW-4	-	SP-849 (SP-843)	BH3X12	
	3225P-12A	●		●		32	32	25	170	26	32.0							
CRDNN	2525M-09A		●			25	25	25	150	29	12.5	-	CE-030A	LW-4	SP-829	-	HH3X12	
	3225P-09A		●			32	32	25	170	29	12.5							
	2525M-12A		●			25	25	25	150	28	12.5	-	CE-030A	LW-4	-	SP-849 (SP-843)	BH3X12	
	3225P-12A		●			32	32	25	170	28	12.5							

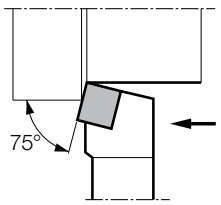
• -12A toolholder Shim: When using RN□□1204 Insert, purchase spare parts: SP-843 in ( ) separately.

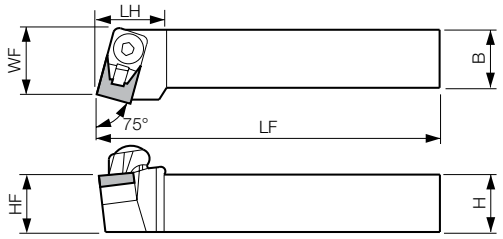
Applicable Inserts

Application	Hard Materials / Cast Iron	Cast Iron / Hard Materials	When using as toolholder for ceramic tools, prepare spare parts below separately.	
Ref. Page	C19	B108		
Shape / Toolholder	CBN (KBN900)	Ceramic	Shim	Shim Screw
CRSN/L...-09A	RNM32	(RNG33)	SP-826	-
CRSN/L...-12A	RNM42 (RNM43)	(RNG43)	SP-843	M3X12
		(RNG45)	SP-841	M3X8
CRDNN...-09A	RNM32	(RNG33)	SP-826	-
CRDNN...-12A	RNM42 (RNM43)	(RNG43)	SP-843	M3X12
		(RNG45)	SP-841	M3X8

Recommended Cutting Conditions **D43-D44**

CSRN-A (External)

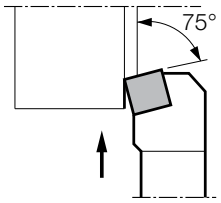


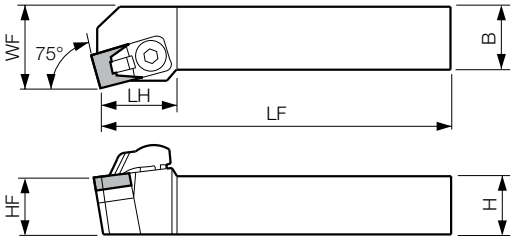


Side Rake Angle: -6°
Angle of Inclination: -4°

• Right-hand shown

CSKN-A (Facing)

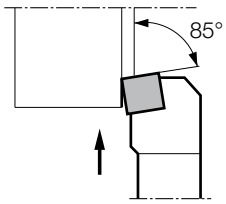


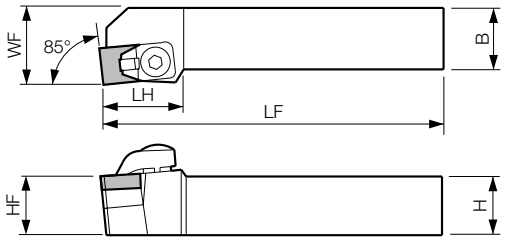


Side Rake Angle: -6°
Angle of Inclination: -4°

• Right-hand shown

CSYN-A (Facing)





Side Rake Angle: -6°
Angle of Inclination: -4°

• Right-hand shown

Toolholder Dimensions

Part Number	Stock R	Stock L	Unit	H	HF	B	LF	LH	WF	Standard Corner-R (RE)	Spare Parts: Clamp Set	Spare Parts: Wrench	Spare Parts: Shim	Spare Parts: Shim	Spare Parts: Shim Screw
CSRN R/L 2525M-09A	●	●	mm	25	25	25	150	22	27	0.8	CE-030A	LW-4	SP-129	-	HH3X12
2525M-12A	●	●		25	25	25	150	22	27				-	SP-148 (SP-143)	BH3X12
CSKNR 2525M-09A	●			25	25	25	150	27	32	0.8	CE-030A	LW-4	SP-129	-	HH3X12
2525M-12A	●			25	25	25	150	29	32				-	SP-148 (SP-143)	BH3X12
CSYN R/L 2525M-09A	●	●		25	25	25	150	27	32	0.8	CE-030A	LW-4	SP-129	-	HH3X12
2525M-12A	●	●		25	25	25	150	27	32				-	SP-148 (SP-143)	BH3X12

• -12A toolholder Shim: When using SN□□43 Insert, purchase spare parts: SP-143 in ( ) separately.

Applicable Inserts

Application	Hard Materials / Cast Iron	Cast Iron
Ref. Page	C19	B35
Shape / Toolholder	CBN (KBN900)	Coated Carbide
CSRN R/L ...-09A	SNM32..	-
CSRN R/L ...-12A	SNM42.. (SNM43..)	(SNM43..)
CSKN R/L ...-09A	SNM32..	-
CSKN R/L ...-12A	SNM42.. (SNM43..)	(SNM43..)
CSYN R/L ...-09A	SNM32..	-
CSYN R/L ...-12A	SNM42.. (SNM43..)	(SNM43..)

Cast Iron / Hard Materials	When using as toolholder for ceramic tools, prepare spare parts below separately. Chipbreaker	Clamp Set	Shim	Shim Screw
B109, B110				
Ceramic				
-	-	-	-	-
(SNG43..) (SNM43..)	CB-11	CE-020	SP-143	M3X12
(SNG45..) (SNM45..)			SP-141	M3X8
-	-	-	-	-
(SNG43..) (SNM43..)	CB-11	CE-020	SP-143	M3X12
(SNG45..) (SNM45..)			SP-141	M3X8
-	-	-	-	-
(SNG43..) (SNM43..)	CB-11	CE-020	SP-143	M3X12
(SNG45..) (SNM45..)			SP-141	M3X8

Recommended Cutting Conditions D43-D44

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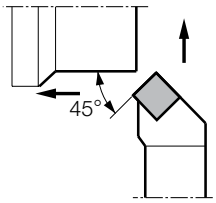
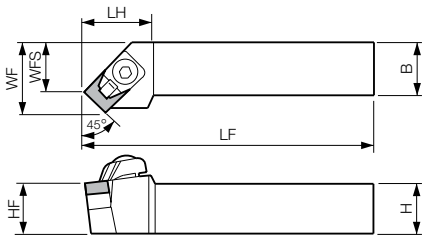
● : Standard Item △ : Phaseout Item (will be removed from next catalog)
Contact your local Kyocera sales engineer to upgrade old products to new technology

CSSN-A (External / Facing / Chamfering)

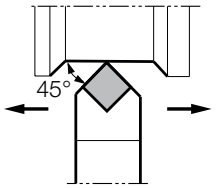


Side Rake Angle: -6°
Angle of Inclination: 0°

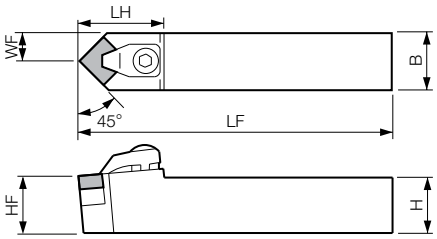


• Right-hand shown

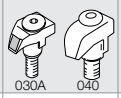
CSDN-A (External / Chamfering)



Back Rake Angle: -8.5°



Toolholder Dimensions

Part Number		Stock R	Stock N	Stock L	Unit	H	HF	B	LF	LH	WF	WFS	Standard Corner-R (RE)	Spare Parts: Clamp Set	Spare Parts: Wrench	Spare Parts: Shim	Spare Parts: Shim	Spare Parts: Shim Screw
														 030A 040				HH BH
CSSN□	2525M-09A	●		●	mm	25	25	25	150	26	32.0	25	0.8	CE-030A	LW-4	SP-129	-	HH3X12
	2525M-12A	●		●		25	25	25	150	26	32.0	23				-	SP-148 (SP-143)	BH3X12
CSDNN	2525M-09A		●			25	25	25	150	32	12.5	-	0.8	CE-040	LW-4	SP-129	-	HH3X12
	3225P-09A		●			32	32	25	170	32	12.5	-						
	2525M-12A		●			25	25	25	150	32	12.5	-				-	SP-148 (SP-143)	BH3X12

• -12A toolholder Shim: When using SN□□43 Insert, purchase spare parts: SP-143 in ( ) separately.

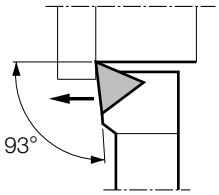
Applicable Inserts

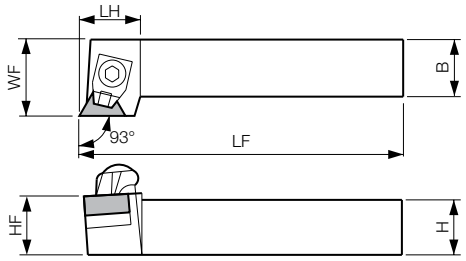
Application	Hard Materials / Cast Iron	Cast Iron
Ref. Page	C19	B35
Shape / Toolholder	CBN (KBN900)	Coated Carbide
CSSN□...-09A	SNM32..	-
CSSN□...-12A	SNM42.. (SNM43..)	(SNM43..)
CSDNN...-09A	SNM32..	-
CSDNN...-12A	SNM42.. (SNM43..)	(SNM43..)

Cast Iron / Hard Materials	When using as toolholder for ceramic tools, prepare spare parts below separately. Chipbreaker	Clamp Set	Shim	Shim Screw
B109, B110				
Ceramic				
-	-	-	-	-
(SNG43..) (SNM43..)	CB-11	CE-020	SP-143	M3X12
(SNG45..) (SNM45..)			SP-141	M3X8
-	-	-	-	-
(SNG43..) (SNM43..)	-	-	SP-143	M3X12
(SNG45..) (SNM45..)			SP-141	M3X8

Recommended Cutting Conditions → **D43-D44**

CTJN-A (External)

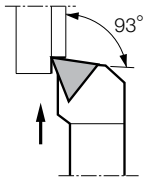


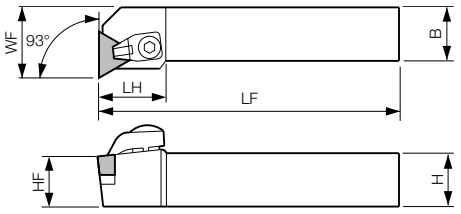


Side Rake Angle: -6°
Angle of Inclination: -4°

• Right-hand shown

CTUN-A (Facing)





Side Rake Angle: -6°
Angle of Inclination: -4°

• Right-hand shown

Toolholder Dimensions

Part Number	Stock		Unit	Dimensions						Standard Corner-R(RE)	Spare Parts			
	R	L		H	HF	B	LF	LH	WF		Clamp Set	Wrench	Shim	Shim Screw
CTJN□ 2525M-11A	●	●	mm	25	25	25	150	22	32	0.8	CE-030A	LW-4	SP-219	HH3X12
CTUN□ 2525M-11A	●	●		25	25	25	150	27	32	0.8	CE-030A	LW-4	SP-219	HH3X12

Applicable Inserts

Application	Hard Materials / Cast Iron	Cast Iron / Hard Materials
Ref. Page	C19	B111
Shape / Toolholder	CBN (KBN900)	Ceramic
CTJN□...-11A	TNM22..	TNG22..
CTUN□...-11A		

* TNM33 Insert toolholder is described in **D30**

Recommended Cutting Conditions **D43-D44**

(Customer Service) **800.823.7284 - Option 1**
(Technical Support) **800.823.7284 - Option 2**
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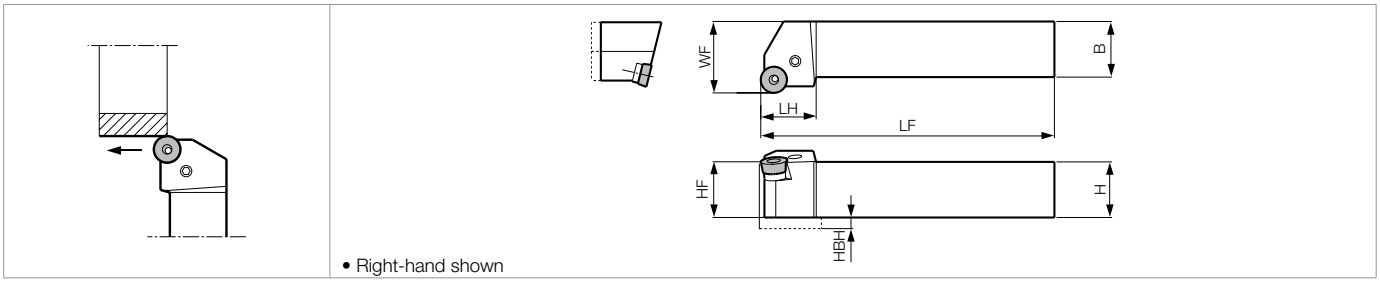
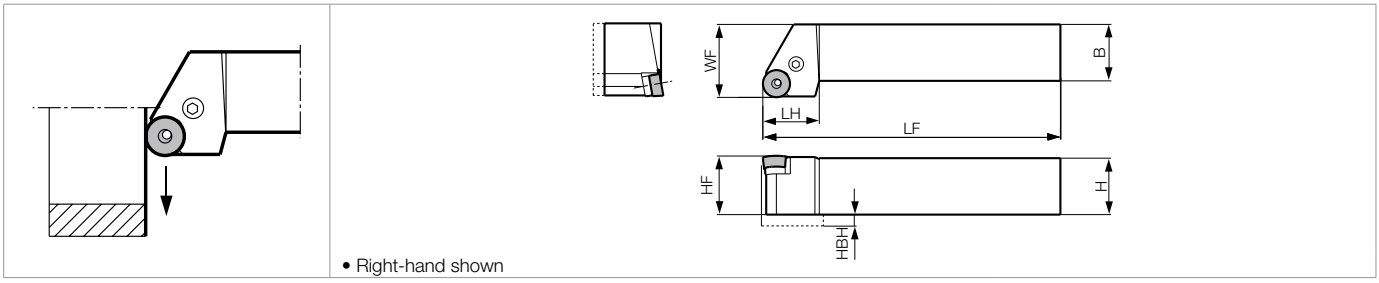
● : Standard Item △ : Phaseout Item (will be removed from next catalog)
Contact your local Kyocera sales engineer to upgrade old products to new technology

PRGC-BE (External)



• Right-hand shown

PRGC-BF (Facing)



• Right-hand shown

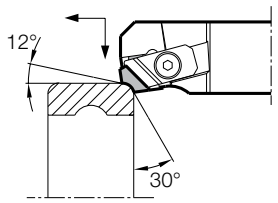
Toolholder Dimensions

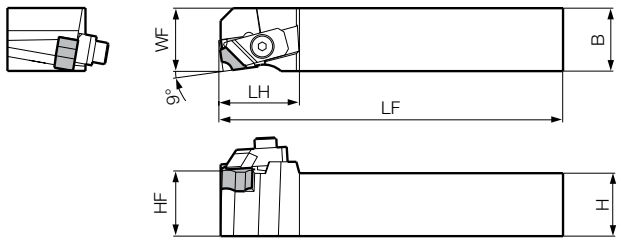
Part Number		Stock	Unit	Dimensions							Spare Parts						Applicable Inserts ➡ B103
				H	HF	HBH	B	LF	LH	WF	Lever	Lock Screw	Shim	Shim Pin	Punch	Wrench	
PRGCR	2020K-12BE	●	mm	20	20	-	20	125	22	25	LL-1CN	LS-1N	LR-12C	LSP-1	PC-1	FH-2.5	RCMT 1204M0-BB
	2525M-12BE	●		25	25	-	25	150	25	32							
	2020K-16BE	●		20	20	5	20	125	27	29	LL-2C	LS-1T	LR-16C	LSP-2	PC-2	FH-2.5	RCMT 1606M0-BB
	2525M-16BE	●		25	25	-	25	150	27	32							
PRGCR	2020K-12BF	●		20	20	-	20	125	22	25	LL-1CN	LS-1N	LR-12C	LSP-1	PC-1	FH-2.5	RCMT 1204M0-BB
	2525M-12BF	●		25	25	-	25	150	25	32							
	2020K-16BF	●		20	20	5	20	125	27	25	LL-2C	LS-1T	LR-16C	LSP-2	PC-2	FH-2.5	RCMT 1606M0-BB
	2525M-16BF	●		25	25	-	25	150	27	32							

Recommended Cutting Conditions ➡ **D43-D44**

● : Standard Item △ : Phaseout Item (will be removed from next catalog)
Contact your local Kyocera sales engineer to upgrade old products to new technology

CBSN (External Corner Filleting)





• Right-hand shown

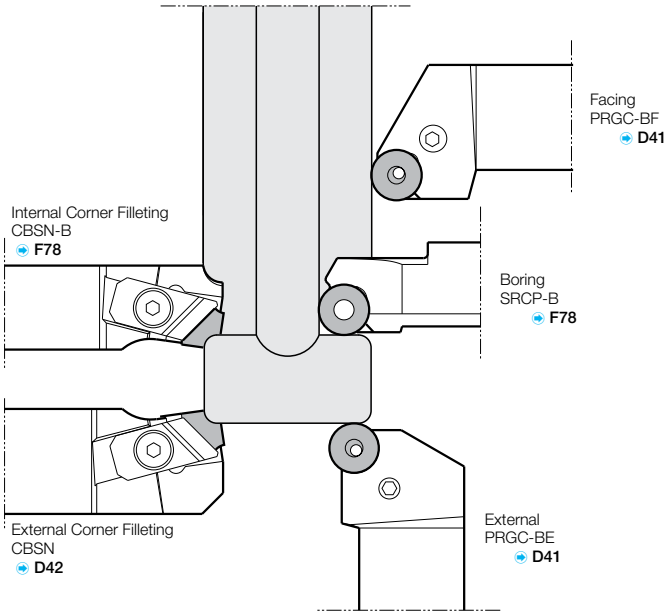
Toolholder Dimensions

Part Number		Stock R	Stock L	Unit	Dimensions H	HF	B	LF	LH	WF	Spare Parts: Clamp Set	Wrench	Shim	Shim Screw	Applicable Inserts
CBSN□	2020K-12	●	●	mm	20	20	20	125	32	20	CP-RC□	LW-5	SP-RC	SP3X8	SNMF1204○○-21
	2525M-12	●	●		25	25	25	150	32	25					

• Clamp Set: CP-RCR for Right-hand Toolholder, and CP-RCL for Left-hand Toolholder.

Recommended Cutting Conditions **D43-D44**

Tooling for Bearing Machining



(Customer Service) **800.823.7284 - Option 1**
(Technical Support) **800.823.7284 - Option 2**
Visit us online at **KyoceraPrecisionTools.com**

● : Standard Item △ : Phaseout Item (will be removed from next catalog)
Contact your local Kyocera sales engineer to upgrade old products to new technology

Recommended Cutting Conditions - External Turning (Negative Insert) [D.O.C. Indicates Radius]

ISO Classification	Workpiece Material	Hardness	Cutting Range	Applications	Recommended Chipbreaker	Recommended Insert Grade	Corner-R (RE)	Lower Limit - **Recommendation** - Upper Limit		
								Vc (sfm)	D.O.C. (in)	Feed Rate (ipr)
P	Low Carbon Steel Low Carbon Alloy	HB ≦ 300	Finishing (Small D.O.C.)	Continuous	XF	PV710	1/64	820 - **1150** - 1710	0.002 - **0.005** - 0.024	0.001 - **0.004** - 0.009
				Interruption		PV720	1/32	790 - **1050** - 1570	0.002 - **0.006** - 0.024	0.002 - **0.005** - 0.010
			Finishing (Gloss Oriented)	Continuous	XP	TN610	1/64	820 - **1050** - 1310	0.008 - **0.020** - 0.028	0.003 - **0.005** - 0.008
				Interruption		TN620	1/32	790 - **1020** - 1210	0.008 - **0.020** - 0.028	0.003 - **0.005** - 0.008
			Finishing (Tool Life Oriented)	Continuous	XP	PV710	1/64	820 - **980** - 1210	0.008 - **0.020** - 0.028	0.003 - **0.005** - 0.008
				Interruption		PV720	1/32	790 - **950** - 1120	0.008 - **0.020** - 0.028	0.003 - **0.005** - 0.008
			Finishing-Medium (Gloss Oriented)	Continuous	XQ	TN610	1/64	820 - **1050** - 1310	0.020 - **0.039** - 0.059	0.007 - **0.010** - 0.012
				Interruption		TN620	1/32	790 - **920** - 1120	0.020 - **0.039** - 0.059	0.007 - **0.010** - 0.012
			Finishing-Medium (Tool Life Oriented)	Continuous	XQ	PV710	1/32	820 - **980** - 1210	0.020 - **0.039** - 0.059	0.007 - **0.010** - 0.012
				Interruption		PV720	1/32	790 - **920** - 1120	0.020 - **0.039** - 0.059	0.007 - **0.010** - 0.012
			Medium-Roughing	Continuous	XS	PV720	1/32	720 - **850** - 1050	0.031 - **0.059** - 0.079	0.010 - **0.012** - 0.016
				Interruption		CA515	1/32	520 - **690** - 850	0.031 - **0.059** - 0.079	0.010 - **0.012** - 0.016
			Roughing	Continuous	PG	CA515	1/32	590 - **720** - 850	0.039 - **0.098** - 0.138	0.008 - **0.012** - 0.016
				Interruption		CA025P	3/64	490 - **660** - 790	0.039 - **0.098** - 0.138	0.008 - **0.012** - 0.016
			Medium-Roughing High Feed Rate	Continuous	PT	CA515	1/32	490 - **660** - 790	0.059 - **0.118** - 0.177	0.010 - **0.014** - 0.018
				Interruption		CA025P	3/64	390 - **590** - 720	0.059 - **0.118** - 0.177	0.010 - **0.014** - 0.018
			Roughing High Feed Rate	Continuous	PH	CA515	3/64	490 - **660** - 790	0.079 - **0.197** - 0.315	0.016 - **0.024** - 0.031
				Interruption		CA025P	1/16	390 - **590** - 720	0.079 - **0.197** - 0.315	0.012 - **0.020** - 0.028
			Roughing (Low Cutting Force)	Continuous	PX (Single Side)	CA515	3/64	490 - **660** - 790	0.079 - **0.197** - 0.315	0.016 - **0.024** - 0.031
				Interruption		CA025P	1/16	390 - **590** - 720	0.079 - **0.197** - 0.315	0.012 - **0.020** - 0.028
	Medium Carbon Steel Medium Carbon Alloy	HB ≦ 300	Finishing (Time Oriented)	Continuous	WF (Wiper)	PV710	1/32	660 - **820** - 1050	0.012 - **0.020** - 0.039	0.008 - **0.012** - 0.016
				Interruption		CA515	1/32	520 - **720** - 920	0.012 - **0.020** - 0.039	0.008 - **0.012** - 0.016
			Finishing-Medium (Time Oriented)	Continuous	WE (Wiper)	PV710	1/32	590 - **720** - 920	0.039 - **0.079** - 0.118	0.008 - **0.012** - 0.016
				Interruption		CA025P	1/32	430 - **590** - 790	0.039 - **0.079** - 0.118	0.008 - **0.012** - 0.016
			Finishing (Gloss Oriented)	Continuous	PP	TN610	1/64	660 - **820** - 1050	0.008 - **0.020** - 0.059	0.002 - **0.006** - 0.011
				Interruption			1/32	590 - **750** - 980	0.008 - **0.020** - 0.059	0.002 - **0.008** - 0.014
			Finishing (Tool Life Oriented)	Continuous	PP	PV710	1/64	660 - **820** - 1050	0.008 - **0.020** - 0.059	0.002 - **0.006** - 0.011
				Interruption		PV720	1/32	660 - **790** - 950	0.008 - **0.020** - 0.059	0.002 - **0.008** - 0.014
			Finishing-Medium (Gloss Oriented)	Continuous	PQ	TN610	1/32	590 - **750** - 980	0.020 - **0.059** - 0.098	0.004 - **0.008** - 0.012
				Interruption		TN620	3/64	520 - **720** - 850	0.020 - **0.059** - 0.098	0.004 - **0.007** - 0.010
			Finishing-Medium (Tool Life Oriented)	Continuous	PQ	PV710	1/32	520 - **690** - 920	0.020 - **0.059** - 0.098	0.004 - **0.008** - 0.012
				Interruption		CA025P	1/32	460 - **660** - 790	0.020 - **0.059** - 0.098	0.004 - **0.007** - 0.010
			Medium-Roughing	Continuous	PG	CA515	1/32	490 - **660** - 790	0.039 - **0.098** - 0.138	0.008 - **0.012** - 0.016
				Interruption		CA025P	3/64	390 - **530** - 660	0.039 - **0.098** - 0.138	0.008 - **0.012** - 0.016
			Medium-Roughing High Feed Rate	Continuous	PT	CA515	1/32	390 - **590** - 750	0.059 - **0.118** - 0.177	0.010 - **0.014** - 0.018
				Interruption		CA025P	3/64	330 - **490** - 660	0.059 - **0.118** - 0.177	0.010 - **0.014** - 0.018
			Roughing High Feed Rate	Continuous	PH	CA515	3/64	390 - **590** - 750	0.079 - **0.197** - 0.315	0.016 - **0.024** - 0.031
				Interruption		CA025P	1/16	330 - **490** - 660	0.079 - **0.197** - 0.315	0.012 - **0.020** - 0.028
			Roughing (Low Cutting Force)	Continuous	PX (Single Side)	CA515	3/64	390 - **590** - 750	0.079 - **0.197** - 0.315	0.016 - **0.024** - 0.031
				Interruption		CA025P	1/16	330 - **490** - 660	0.079 - **0.197** - 0.315	0.012 - **0.020** - 0.028
	High Carbon Alloy	HB ≦ 280	Finishing (Gloss Oriented)	Continuous	PP	TN610	1/64	490 - **660** - 920	0.008 - **0.020** - 0.059	0.002 - **0.006** - 0.011
				Interruption		TN620	1/32	460 - **590** - 790	0.008 - **0.020** - 0.059	0.002 - **0.008** - 0.014
			Finishing (Tool Life Oriented)	Continuous	PP	PV710	1/64	390 - **590** - 850	0.008 - **0.020** - 0.059	0.002 - **0.006** - 0.011
				Interruption		CA515	1/32	330 - **490** - 660	0.008 - **0.020** - 0.059	0.002 - **0.008** - 0.014
			Finishing-Medium	Continuous	PQ	CA515	1/32	390 - **520** - 720	0.020 - **0.059** - 0.098	0.006 - **0.010** - 0.012
				Interruption		CA025P	1/32	330 - **460** - 590	0.020 - **0.059** - 0.098	0.006 - **0.008** - 0.010
			Medium-Roughing	Continuous	PG	CA515	1/32	390 - **490** - 660	0.039 - **0.079** - 0.118	0.008 - **0.012** - 0.020
				Interruption		CA025P	1/32	330 - **430** - 590	0.039 - **0.079** - 0.118	0.006 - **0.008** - 0.012
			Medium-Roughing High Feed Rate	Continuous	PT	CA515	1/32	330 - **460** - 590	0.059 - **0.118** - 0.177	0.010 - **0.014** - 0.018
				Interruption		CA025P	3/64	260 - **390** - 520	0.059 - **0.118** - 0.177	0.010 - **0.014** - 0.018
			Roughing High Feed Rate	Continuous	PH	CA515	3/64	330 - **460** - 590	0.079 - **0.197** - 0.315	0.016 - **0.024** - 0.031
				Interruption		CA025P	1/16	260 - **390** - 520	0.079 - **0.197** - 0.315	0.012 - **0.020** - 0.028
			Roughing (Low Cutting Force)	Continuous	PX (Single Side)	CA515	3/64	330 - **460** - 590	0.079 - **0.197** - 0.315	0.016 - **0.024** - 0.031
				Interruption		CA025P	1/16	260 - **390** - 520	0.079 - **0.197** - 0.315	0.012 - **0.020** - 0.028

Recommended Cutting Conditions - External Turning (Negative Insert) [D.O.C. Indicates Radius]

ISO Classification	Workpiece Material	Hardness	Cutting Range	Applications	Recommended Chipbreaker	Recommended Insert Grade	Corner-R (RE)	Lower Limit - **Recommendation** - Upper Limit		
								Vc (sfm)	D.O.C. (in)	Feed Rate (ipr)
M	Stainless Steel (Austenitic)	HB ≦ 220	Finishing (Gloss Oriented)	Continuous	PQ	TN620	1/32	390 - **520** - 660	0.020 - **0.039** - 0.059	0.003 - **0.006** - 0.008
				Interruption			1/32	330 - **390** - 490	0.020 - **0.039** - 0.059	0.002 - **0.004** - 0.006
			Finishing	Continuous	MQ	CA6515	1/64	390 - **590** - 790	0.020 - **0.039** - 0.059	0.003 - **0.006** - 0.008
				Interruption		CA6525	1/32	330 - **520** - 720	0.020 - **0.039** - 0.059	0.002 - **0.004** - 0.006
			Medium-Roughing (Chip Control Oriented)	Continuous	MS	CA6515	1/64	390 - **520** - 660	0.039 - **0.079** - 0.118	0.004 - **0.008** - 0.012
				Interruption		CA6525	1/32	260 - **460** - 590	0.039 - **0.079** - 0.118	0.008 - **0.012** - 0.016
			Medium-Roughing (Sharpness Oriented)	Continuous	MU	CA6515	1/64	390 - **520** - 660	0.039 - **0.079** - 0.118	0.006 - **0.010** - 0.014
				Interruption		CA6525	1/32	260 - **460** - 590	0.039 - **0.079** - 0.118	0.006 - **0.010** - 0.012
			Roughing	Continuous	Standard	CA6515	1/32	330 - **460** - 590	0.039 - **0.079** - 0.157	0.008 - **0.012** - 0.016
				Interruption		CA6525	3/64	260 - **390** - 490	0.039 - **0.079** - 0.157	0.008 - **0.012** - 0.016
	Stainless Steel (Precipitation Hardened)	HB ≦ 300	Finishing (Gloss Oriented)	Continuous	PQ	TN620	1/32	330 - **390** - 490	0.020 - **0.039** - 0.059	0.002 - **0.004** - 0.006
				Interruption			1/32	260 - **330** - 390	0.020 - **0.039** - 0.059	0.002 - **0.003** - 0.004
			Finishing	Continuous	MQ	CA6515	1/64	330 - **390** - 490	0.020 - **0.039** - 0.059	0.003 - **0.006** - 0.008
				Interruption		CA6525	1/32	260 - **330** - 390	0.020 - **0.039** - 0.059	0.002 - **0.004** - 0.006
			Medium-Roughing (Chip Control Oriented)	Continuous	MS	CA6515	1/64	330 - **390** - 490	0.039 - **0.059** - 0.079	0.004 - **0.006** - 0.010
				Interruption		CA6525	1/32	260 - **330** - 390	0.039 - **0.079** - 0.118	0.004 - **0.006** - 0.008
			Medium-Roughing (Sharpness Oriented)	Continuous	MU	CA6515	1/64	330 - **390** - 490	0.039 - **0.059** - 0.079	0.004 - **0.006** - 0.010
				Interruption		CA6525	1/32	260 - **330** - 390	0.039 - **0.079** - 0.118	0.004 - **0.006** - 0.008
			Roughing	Continuous	Standard	CA6515	1/32	260 - **330** - 390	0.039 - **0.079** - 0.118	0.008 - **0.012** - 0.016
				Interruption		CA6525	3/64	200 - **260** - 330	0.039 - **0.079** - 0.157	0.008 - **0.012** - 0.016
K	Gray Cast Iron	HB ≦ 250	High Speed Machining	Continuous	Without Chipbreaker	KBN475	1/32	1310 - **2620** - 3940	0.002 - **0.008** - 0.020	0.004 - **0.008** - 0.012
				Continuous		KBN900	3/64	1640 - **2950** - 3940	0.004 - **0.020** - 0.039	0.002 - **0.004** - 0.008
				Interruption		KBN900	3/64	1640 - **2300** - 2950	0.020 - **0.039** - 0.059	0.002 - **0.004** - 0.008
			Finishing (Gloss Oriented)	Continuous	Standard	PV7005	1/32	980 - **1150** - 1310	0.020 - **0.039** - 0.059	0.004 - **0.008** - 0.012
				Interruption		PV720	1/32	490 - **660** - 980	0.020 - **0.039** - 0.059	0.003 - **0.006** - 0.008
			Finishing (Ceramic)	Continuous	Without Chipbreaker	KA30	3/64	980 - **1640** - 2300	0.012 - **0.020** - 0.039	0.004 - **0.008** - 0.012
				Continuous		PT600M	1/32	980 - **1480** - 1970	0.012 - **0.020** - 0.039	0.004 - **0.008** - 0.012
			Medium (Ceramic)	Continuous		CS7050	3/64	980 - **1480** - 1800	0.039 - **0.079** - 0.118	0.006 - **0.010** - 0.014
				Interruption		KS6050	3/64	820 - **1310** - 1640	0.039 - **0.079** - 0.118	0.006 - **0.008** - 0.012
			Medium	Continuous	KH	CA310	1/32	660 - **820** - 980	0.020 - **0.079** - 0.098	0.004 - **0.008** - 0.012
				Interruption		CA315	3/64	490 - **660** - 820	0.020 - **0.079** - 0.098	0.003 - **0.006** - 0.008
			Roughing	Continuous	KH	CA310	1/32	660 - **820** - 980	0.039 - **0.079** - 0.157	0.008 - **0.012** - 0.016
				Interruption		CA315	3/64	490 - **660** - 820	0.039 - **0.079** - 0.157	0.008 - **0.012** - 0.016
	Nodular Cast Iron	HB ≦ 270	High Speed Machining	Continuous	Without Chipbreaker	KBN60M	1/64	660 - **980** - 1310	0.004 - **0.012** - 0.020	0.004 - **0.006** - 0.008
				Continuous		PT600M	1/32	660 - **820** - 1150	0.004 - **0.020** - 0.039	0.004 - **0.008** - 0.016
			Finishing (Gloss Oriented)	Continuous	Standard	PV7005	1/32	490 - **820** - 980	0.020 - **0.039** - 0.059	0.004 - **0.008** - 0.012
				Interruption		PV720	1/32	390 - **660** - 820	0.020 - **0.039** - 0.059	0.003 - **0.006** - 0.008
			Medium	Continuous	KG	CA310	1/32	490 - **660** - 820	0.020 - **0.079** - 0.098	0.004 - **0.008** - 0.012
				Interruption		CA315	3/64	390 - **590** - 720	0.020 - **0.079** - 0.098	0.003 - **0.006** - 0.008
			Roughing	Continuous	KG	CA315	1/32	490 - **660** - 820	0.039 - **0.079** - 0.157	0.008 - **0.012** - 0.016
				Interruption	KH	CA320	3/64	390 - **590** - 720	0.039 - **0.079** - 0.157	0.008 - **0.012** - 0.016
N	Non-ferrous Metals Copper Alloy Aluminum Aluminum Alloys	HB ≦ 100	High Speed Machining (Glossy Surface)	Continuous	Without Chipbreaker	KPD001	1/64	980 - **2620** - 6560	0.002 - **0.020** - 0.039	0.002 - **0.004** - 0.006
			Finishing (Long Tool Life)	Continuous	A3	PDL025	1/64	1310 - **1640** - 2300	0.020 - **0.039** - 0.079	0.004 - **0.008** - 0.010
				Interruption			1/32	1310 - **1640** - 2300	0.020 - **0.039** - 0.079	0.004 - **0.008** - 0.010
			Finishing	Continuous	A3	KW10	1/32	1310 - **1640** - 2300	0.020 - **0.039** - 0.079	0.004 - **0.008** - 0.010
				Interruption			1/32	1310 - **1640** - 2300	0.020 - **0.039** - 0.079	0.004 - **0.008** - 0.010
			Medium	Continuous	AH	KW10	1/32	660 - **980** - 1640	0.039 - **0.079** - 0.138	0.004 - **0.012** - 0.016
				Interruption			1/32	660 - **980** - 1640	0.039 - **0.079** - 0.138	0.004 - **0.012** - 0.016
S	Titanium Alloys	HB ≦ 400	Precision Finishing (Glossy Surface)	Continuous	Without Chipbreaker	KPD001	1/64	330 - **490** - 590	0.002 - **0.012** - 0.020	0.001 - **0.004** - 0.006
				Interruption			1/64	230 - **390** - 490	0.002 - **0.012** - 0.020	0.001 - **0.003** - 0.004
			Finishing	Continuous	MQ	SW05	1/64	130 - **230** - 330	0.008 - **0.020** - 0.039	0.002 - **0.008** - 0.012
				Interruption			1/64	130 - **230** - 330	0.008 - **0.020** - 0.039	0.002 - **0.006** - 0.008
			Medium	Continuous	MU	SW05	1/32	130 - **200** - 260	0.020 - **0.039** - 0.118	0.004 - **0.010** - 0.014
				Interruption			1/32	130 - **200** - 260	0.020 - **0.039** - 0.118	0.004 - **0.008** - 0.012
	Heat-resistant Alloys	HB ≦ 350	Finishing	Continuous	MQ	PR005S	1/64	100 - **180** - 300	0.008 - **0.012** - 0.039	0.002 - **0.003** - 0.006
				Interruption		PR015S	1/32	80 - **150** - 230	0.008 - **0.020** - 0.039	0.002 - **0.004** - 0.008
			Medium	Continuous	SQ	PR005S	1/32	100 - **180** - 300	0.012 - **0.020** - 0.059	0.004 - **0.007** - 0.014
				Interruption		PR015S	1/32	80 - **150** - 230	0.012 - **0.020** - 0.059	0.004 - **0.007** - 0.014
			Roughing	Continuous	SG	PR005S	1/32	100 - **180** - 300	0.020 - **0.079** - 0.157	0.004 - **0.012** - 0.016
				Interruption		PR015S	1/32	80 - **150** - 230	0.020 - **0.079** - 0.157	0.004 - **0.012** - 0.016
				Continuous	SX	PR005S	-	100 - **180** - 300	0.020 - **0.079** - 0.157	0.006 - **0.012** - 0.018
				Interruption		PR015S	-	80 - **150** - 230	0.020 - **0.079** - 0.157	0.006 - **0.012** - 0.018
H	Hardened Steel Hard Materials	40~50 HRC	Finishing	Continuous	PQ Standard	CA515	1/32	200 - **330** - 390	0.004 - **0.012** - 0.020	0.002 - **0.003** - 0.004
				Interruption			1/32	100 - **160** - 230	0.004 - **0.012** - 0.020	0.002 - **0.003** - 0.004
		40~50 HRC	Finishing	Continuous	Without Chipbreaker	PT600M	1/32	200 - **250** - 325	0.008 - **0.020** - 0.028	0.002 - **0.004** - 0.006
		50~65 HRC		Continuous			3/64	100 - **125** - 200	0.008 - **0.020** - 0.028	0.002 - **0.004** - 0.006
		50~68 HRC	Finishing	Continuous	ME MET	KBN05M	1/32	325 - **500** - 650	0.002 - **0.012** - 0.020	0.002 - **0.003** - 0.004
				Interruption			3/64	300 - **450** - 600	0.002 - **0.012** - 0.020	0.002 - **0.003** - 0.004
			Medium	Continuous	Without Chipbreaker	KBN900	3/64	250 - **325** - 400	0.020 - **0.039** - 0.079	0.002 - **0.004** - 0.008
				Interruption			Radius	225 - **300** - 350	0.012 - **0.028** - 0.039	0.002 - **0.004** - 0.006