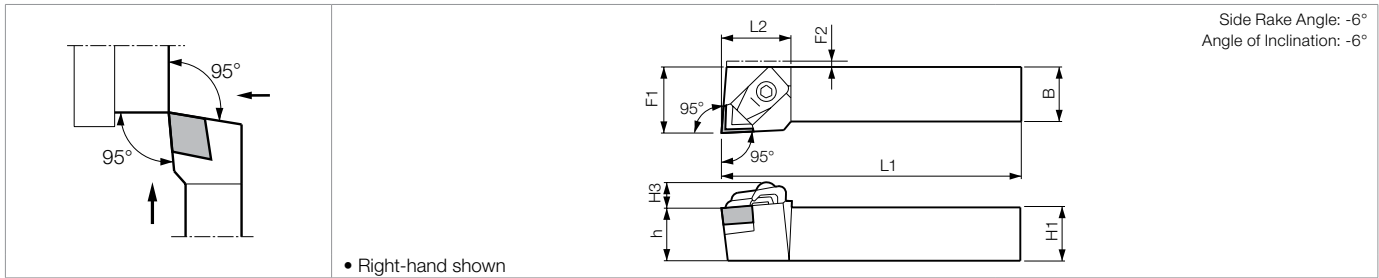


## ■ CCLN / HCLN (External / Facing)



### ● Toolholder Dimensions

Part Number	Stock		Dimensions								Standard Corner-R(°)	Spare Parts								
	R	L	Unit	H1=h	H3	B	L1	L2	F1	F2		Chipbreaker	Clamp Set		Wrench	Shim	Shim Screw		Lock Pin	Wrench
												CE	HCL	SP-441 (SP-443)	M	S	-	-		
<b>CCLN%</b> 2020K-12	○	○		20	14	20	125	32	27	5	0.8	CB-16	CE-010	LW-4	SP-441 (SP-443)	M3X8 (M3X12)	-	-	-	-
2525M-12	○	○	mm	25	14	25	150	32	32	-	0.8	CB-16	CE-010	LW-4	SP-441 (SP-443)	M3X8 (M3X12)	-	-	-	-
<b>CCLN%</b> 3225P-16	○	○		32	14	25	170	35	32	-	0.8	CB-17	CE-220	LW-4	SP-454	M4X10	-	-	-	-
<b>HCLN%</b> 16-4D	●		inch	1.00	0.535	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	● B90	● C19
Shape	Ceramic	CBN (KBN900)
Toolholder		
<b>CCLN%</b> ...-12	CNG45.., (CNG43..) CNM45	(CNM43..)
<b>CCLN%</b> ...-16	CNG55..	-

Application	Cast Iron / Hard Materials	Cast Iron / Hard Materials
Ref. Page	● B90	● B90
Shape	Ceramic	Ceramic
Toolholder		
<b>HCLN%</b> ...-16-4D	CNG 45.. (43..)	CN□A 45.. (43..)

Recommended Cutting Conditions ● D41-D42

### ◆ Ceramic Insert Selection Guide

Select the suitable ceramic specifications (Corner-R(°), Feed Rate, Chamfer, etc.) from the table below.

(No.45, Cutting Edge Angle: 0°~15°)

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