

# GUIDE TO SMALL TOOLS

## ● Section organization

- ① Organized according to cutting mode of small tools.  
(Refer to the index on the next page.)
- ② In order of Turning→External Grooving→External Cutting Off→Threading→Boring.

**TYPE OF TOOL HOLDER**  
indicates the first four letters of the order number,  
as well as cutting applications.

**APPLICATION**  
**PRODUCT SECTION**

**FIGURE SHOWING TOOLING APPLICATION**  
uses illustrations and arrows to depict the available  
machining applications such as external turning,  
copying, facing, and chamfering together with  
cutting edge lead angles.

**GEOMETRY**  
**CHIP BREAKER BY CUTTING APPLICATION**

**SMALL TOOLS**  
**FRONT TURNING TOOLS (FOR GANG TYPE TOOL POSTS)**

**INCH STANDARD**

**SCAC-SM** Without off set

Order Number	Stock	Insert Number	Dimensions (inch)										Insert Screw	Wrench
			H	B	LF	LH	HBKW	HF	S4	R	L	SN		
SCACR/L-062SM	R/L	CCET CCGT CCGW	21.5	375	375	4.921	—	—	375	0	TS254	TKY08R		
SCACR/L-083SM	R/L	CCMT CCMT CCMW	32.5	375	375	4.921	630	156	375	0	TS43	TKY15R		
SCACR/L-103SM	R/L	NP-CCGT NP-CCGW	32.5	500	500	5.906	504	031	500	0	TS43	TKY15R		
			32.5	625	625	5.906	—	—	625	0	TS43	TKY15R		

\* Clamp Torque (lbf-in) : TS254=8.9, TS43=31

**SCLC-SM** Without off set

Order Number	Stock	Insert Number	Dimensions (inch)										Insert Screw	Wrench
			H	B	LF	LH	HBKW	HF	S4	R	L	SN		
SCLCR/L-062SM	R/L	CCET CCGT CCGW	21.5	375	375	4.921	—	—	375	0	TS254	TKY08R		
SCLCR/L-083SM	R/L	CCMT CCMT CCMW	32.5	375	375	4.921	630	176	375	0	TS43	TKY15R		
SCLCR/L-103SM	R/L	NP-CCGT NP-CCGW	32.5	500	500	5.906	504	051	500	0	TS43	TKY15R		
			32.5	625	625	5.906	—	—	625	0	TS43	TKY15R		

\* Clamp Torque (lbf-in) : TS254=8.9, TS43=31

(Note) Insert photo is an example. Letters show chip breaker style, figures show inscribed circle.

D008 ● -Inventory maintained.

SCAC-SM type Inserts > A138-A141  
SCLC-SM type Inserts > A138-A141  
SN & PCD Inserts > B018, B017, B065

**INCH STANDARD**

**SDJC-SM** Without off set

Order Number	Stock	Insert Number	Dimensions (inch)										Insert Screw	Wrench
			H	B	LF	LH	HBKW	HF	S4	R	L	SN		
SDJCR/L-062SM	R/L	DCET DCGT DCMT	21.5	375	375	4.921	—	—	375	0	TS254	TKY08R		
SDJCR/L-083SM	R/L	DCMT DCMT DCMW	32.5	375	375	4.921	965	176	375	0	TS43	TKY15R		
SDJCR/L-103SM	R/L	NP-DCGT NP-DCMT NP-DCMW	32.5	500	500	5.906	443	051	500	0	TS43	TKY15R		
			32.5	625	625	5.906	—	—	625	0	TS43	TKY15R		

\* Clamp Torque (lbf-in) : TS254=8.9, TS43=31

**SDNC-SM** Neutral edge with handed holder Without off set

Order Number	Stock	Insert Number	Dimensions (inch)										Insert Screw	Wrench
			H	B	LF	LH	HBKW	HF	S4	R	L	SN		
SDNCR/L-062SM	R/L	DCET DCGT DCMT	21.5	375	375	4.921	—	—	375	118	TS254	TKY08R		
SDNCR/L-083SM	R/L	DCMT DCMT DCMW	32.5	375	375	4.921	965	097	375	197	TS43	TKY15R		
SDNCR/L-083SM	R/L	NP-DCGT NP-DCMT NP-DCMW	32.5	500	500	5.906	—	—	500	197	TS43	TKY15R		
SDNCR/L-103SM	R/L	NP-DCGT NP-DCMT NP-DCMW	32.5	625	625	5.906	—	—	625	197	TS43	TKY15R		

\* Clamp Torque (lbf-in) : TS254=8.9, TS43=31

**RECOMMENDED CUTTING CONDITIONS**

Work Material	Grade	Cutting Speed (SFM)	Feed (IPR)
P Carbon Steel - Alloy Steel	VP15TFUE6020	165-480	.0004-.006
	VP15TF	100-590	.0004-.006
Free Cutting Carbon Steel	AP25N	165-820	.0004-.006
	VP15TF	165-395	.0008-.004
M Stainless Steel	HT108TR9005	230-755	.0012-.006

D009 ● -Inventory maintained.

SDJC-SM type Inserts > A144-A149  
SDNC-SM type Inserts > A144-A149  
SN & PCD Inserts > B018, B040, B065

SPARE PARTS > N001  
TECHNICAL DATA > N001

**LEGEND FOR STOCK STATUS MARK**  
is shown on the left hand page of  
each double-page spread.

**REFERENCE PAGE FOR APPLICABLE INSERTS**  
indicates reference pages giving details of  
inserts that are applicable to the product.

**PAGE REFERENCE**  
- SPARE PARTS  
- TECHNICAL DATA  
indicates reference pages,  
including the above, on the right hand  
page of each double-page spread.

**PRODUCT STANDARDS**  
indicates order numbers,  
stock status (per right/left hand),  
applicable inserts, dimensions,  
and spare parts.

**RECOMMENDED CUTTING CONDITIONS**  
for each work material classification, indicates recommended cutting  
conditions according to the ISO categories for cutting grades, P, M and N.

●To Order : Please specify order number and hand of tool (right/left).

# TURNING

# SMALL TOOLS

\*Arranged by Alphabetical order

D016	<b>BT</b> AH (INCH STANDARD)
D019	<b>BT</b> AH (METRIC STANDARD)
D016	<b>BT</b> AT INSERTS
D017	<b>BT</b> BT INSERTS
D018	<b>BT</b> VH (INCH STANDARD)
D021	<b>BT</b> VH (METRIC STANDARD)
D018	<b>BT</b> VT INSERTS
D041	<b>CS</b> VH (INCH STANDARD)
D044	<b>CS</b> VH (METRIC STANDARD)
D042	<b>CS</b> VTB INSERTS
D042	<b>CS</b> VTBXL INSERTS
D042	<b>CS</b> VTC INSERTS
D041	<b>CS</b> VTF INSERTS
D041	<b>CS</b> VTFXL INSERTS
D043	<b>CS</b> VTG INSERTS
D043	<b>CS</b> VTT INSERTS
D026	<b>CT</b> AH (INCH STANDARD)
D028	<b>CT</b> AH (METRIC STANDARD)
D026	<b>CT</b> AH-S (INCH STANDARD)
D028	<b>CT</b> AH-S (METRIC STANDARD)
D027	<b>CT</b> AT INSERTS
D017	<b>CT</b> BH (INCH STANDARD)
D030	<b>CT</b> BH (INCH STANDARD)
D020	<b>CT</b> BH (METRIC STANDARD)
D031	<b>CT</b> BH (METRIC STANDARD)
D030	<b>CT</b> BT INSERTS
D032	<b>CT</b> CH (METRIC STANDARD)
D032	<b>CT</b> CT INSERTS
D033	<b>CT</b> DH (METRIC STANDARD)
D033	<b>CT</b> DT INSERTS
D034	<b>CT</b> EH (METRIC STANDARD)
D034	<b>CT</b> ET INSERTS
D022	<b>GT</b> AH/GTBH/GTCH (INCH STANDARD)
D024	<b>GT</b> AH/GTBH/GTCH (METRIC STANDARD)
D022	<b>GT</b> AT/GTBT/GTCT INSERTS
D038	<b>MM</b> TE (INCH STANDARD)
D047	<b>S</b> BAH (METRIC STANDARD)
D047	<b>S</b> BAT INSERTS
D008	<b>SC</b> AC-SM (INCH STANDARD)
D012	<b>SC</b> AC-SM (METRIC STANDARD)
D008	<b>S</b> CLC-SM (INCH STANDARD)
D012	<b>S</b> CLC-SM (METRIC STANDARD)
D009	<b>S</b> DJC-SM (INCH STANDARD)
D013	<b>S</b> DJC-SM (METRIC STANDARD)
D009	<b>S</b> DNC-SM (INCH STANDARD)
D013	<b>S</b> DNC-SM (METRIC STANDARD)
D039	<b>S</b> H (INCH STANDARD)
D040	<b>S</b> H (METRIC STANDARD)
D010	<b>S</b> VJB-SM (INCH STANDARD)
D014	<b>S</b> VJB-SM (METRIC STANDARD)
D010	<b>S</b> VLP-SM (INCH STANDARD)
D014	<b>S</b> VLP-SM (METRIC STANDARD)
D015	<b>S</b> VPP-SM (METRIC STANDARD)
D011	<b>S</b> VVB-SM (INCH STANDARD)
D015	<b>S</b> VVB-SM (METRIC STANDARD)
D035	<b>T</b> AH (INCH STANDARD)
D036	<b>T</b> AH (METRIC STANDARD)
D035	<b>T</b> TAT INSERTS

<b>OUTLINE OF SMALL TOOLS</b> .....	D002
<b>CLASSIFICATION</b> .....	D004

## STANDARD

### GANG TYPE TOOL POSTS

	INCH	METRIC
<b>FRONT TURNING TOOLS</b>		
<b>SC</b> AC-SM .....	D008	D012
<b>S</b> CLC-SM .....	D008	D012
<b>S</b> DJC-SM .....	D009	D013
<b>S</b> DNC-SM .....	D009	D013
<b>S</b> VLP-SM .....	D010	D014
<b>S</b> VJB-SM .....	D010	D014
<b>S</b> VVB-SM .....	D011	D015
<b>S</b> VPP-SM .....	—	D015

### BACK TURNING TOOLS

<b>BT</b> AH .....	D016	D019
<b>CT</b> BH .....	D017	D020
<b>BT</b> VH .....	D018	D021

### GROOVING TOOLS

<b>GT</b> AH / <b>GT</b> BH / <b>GT</b> CH .....	D022	D024
<b>G</b> YS (For Swiss style lathes).....	F038	F062

### CUTTING OFF TOOLS

<b>CT</b> AH / <b>CT</b> AH-S .....	D026	D028
<b>CT</b> BH .....	D030	D031
<b>CT</b> CH .....		D032
<b>CT</b> DH .....		D033
<b>CT</b> EH .....		D034

### THREADING TOOLS

<b>T</b> AH .....	D035	D036
<b>MM</b> TE .....	D038	—

### BORING TOOLS

<b>S</b> BAH .....		D047
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### OPPOSITE TOOL POSTS

#### DIMPLE SLEEVE HOLDER

<b>S</b> H .....	D039	D040
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### RADIAL TYPE TOOL POSTS

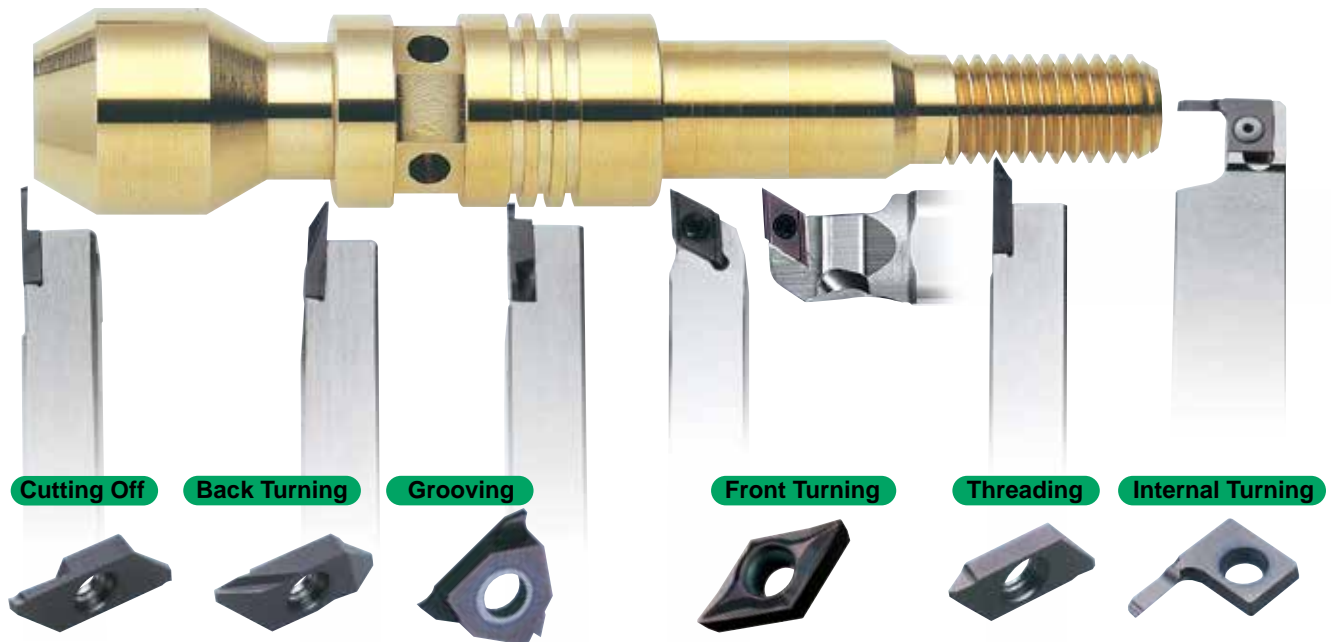
<b>CS</b> VH .....	D041	D044
<b>CS</b> VTF .....	D041	D044
<b>CS</b> VTFXL .....	D041	D044
<b>CS</b> VTC .....	D042	D045
<b>CS</b> VTB .....	D042	D045
<b>CS</b> VTBXL .....	D042	D045
<b>CS</b> VTG .....	D043	D046
<b>CS</b> VTT .....	D043	D046

\*For GY Swiss please refer to section F Grooving tools.

# OUTLINE OF SMALL TOOLS

## TOOLS FOR GANG TYPE TOOL POSTS

SMALL TOOLS

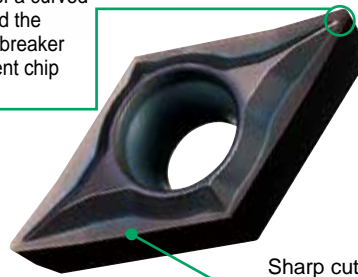


● SMG Breaker Insert

Corner radii designed with minus tolerance

- Suitable for precision parts applications that often require minus tolerance dimensions.
- The order number is shown with the letter "M" that indicates minus tolerance. ex) DCGT21.51MSMG
- The radius value is printed on the side of the insert label for easy recognition.

A combination of a curved cutting edge and the protrusion type breaker promotes efficient chip breaking.



Sharp cutting edge

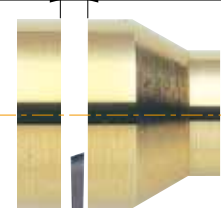
● Tolerance Corner R



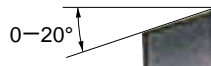
SMG breaker insert RE $_{-0}^{0}$ .002 inch (Conventional G class) RE $\pm$ .004 inch	E class RE $_{-0}^{0}$ .0008 inch
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● Cutting Off

Cutting edge width  
.028 – .118 inch (0.7 – 3.0 mm)



Max. Cutting Off diameter  $\phi$  1.378 inch ( $\phi$  35 mm)



● Back Turning

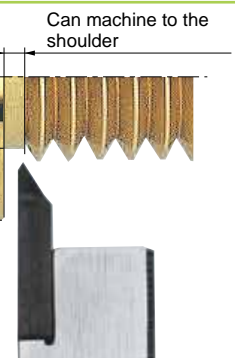
Effective cutting edge length — .236 inch (6.0 mm)



● Threading

Over hang — .295 inch (7.5 mm)

Step difference .256 inch (6.5 mm)



Can machine to the shoulder

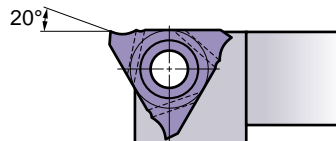
● Back Clamping Mechanism



The screw designed for common use of front and back enables back clamping.

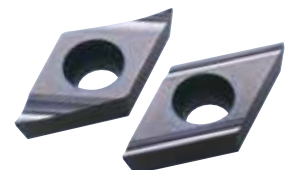
● Grooving

- 3-cornered
- Groove width .012 – .118 inch (0.3 – 3.0 mm)
- Profiling possible



● Front Turning

- ISO E class insert
- A wide variety of small corner R
- Rake angle 30°



## Tools responding to a wide range of small parts machining operations

<b>External Turning</b>	Tools for front turning, back turning, grooving, threading, and cutting off
<b>Internal Turning</b>	Tools for boring, internal grooving, and internal threading
<b>Drilling</b>	Drills
<b>End Milling</b>	End mills

## Tools for front turning, back turning, grooving, threading, and cutting off

<b>Tool Post Type</b>	Gang type, Turret type Radial type
<b>Tool Size</b>	Square holder : .375— .625 inch (8 – 16 mm) Round holder : $\leq \phi 1$ inch ( $\phi 25.4$ mm)

## Indexable inserts developed under the concept of "high quality, high efficiency, and long tool life."

<b>High Quality</b>	E class tolerance, sharp cutting edge, high accuracy small corner R, smooth surface finish.
<b>Long Tool Life</b>	Miracle Coating (VP15TF), cermet (NX2525), cemented carbide (HTi10).
<b>High Efficiency</b>	Regrinding not necessary due to the employment of indexable inserts. A wide variety of top cutting edge geometries.

## INTERNAL TURNING TOOLS

**MICRO-MINI TWIN** Boring bars  
Min. cutting diameter  $\phi 2.2$  mm –

Boring  
Grooving  
Threading



Round holder

Square holder

**MICRO-DEX** Boring bars  
Min. cutting diameter  $\phi 5.0$  mm –



**DIMPLE BAR**

Min. cutting diameter  
 $\phi .39$  inch –

## TOOLS FOR SWISS STYLE LATHES WITH RADIAL TOOL POSTS

- The most suitable for swiss style lathes with radial tool posts.
- The most suitable for machining of small parts with work diameter  $\phi 5$  mm (.197 inch) or smaller.
- Single holder responds to front turning, back turning, grooving, threading, and cutting off operations.



Front Turning    Back Turning    Grooving    Threading    Cutting Off

## DRILLING TOOLS

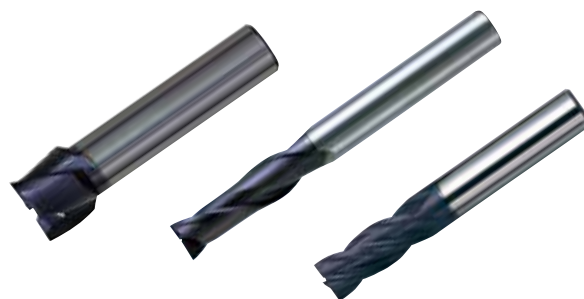
- Solid Carbide Drills



**TAF Drill**  
Min. cutting diameter  
 $\phi .468$  inch –

## END MILLING TOOLS

- Solid Carbide End Mills





# CLASSIFICATION (EXTERNAL TURNING)

## GANG TYPE TOOL POSTS

### FRONT TURNING

Name of Tool Holder	Tool Size (H x B x LF)		Geometry
	Inch	Metric	
<b>SCAC-SM</b>	.375 x .375 x 4.921	8 x 8 x 125	
	.500 x .500 x 5.906	10 x 10 x 125	
	.625 x .625 x 5.906	12 x 12 x 150	
Inch → D008 Metric → D012			90°
<b>SCLC-SM</b>	.375 x .375 x 4.921	8 x 8 x 125	
	.500 x .500 x 5.906	10 x 10 x 125	
	.625 x .625 x 5.906	12 x 12 x 150	
Inch → D008 Metric → D012			95°
<b>SDJC-SM</b>	.375 x .375 x 4.921	8 x 8 x 125	
	.500 x .500 x 5.906	10 x 10 x 125	
	.625 x .625 x 5.906	12 x 12 x 150	
Inch → D009 Metric → D013			93°
<b>SDNC-SM</b>	.375 x .375 x 4.921	8 x 8 x 125	
	.500 x .500 x 5.906	10 x 10 x 125	
	.625 x .625 x 5.906	12 x 12 x 150	
Inch → D009 Metric → D013			62° 30°
<b>SVLP-SM</b>	.375 x .375 x 5.000	10 x 10 x 125	
	.500 x .500 x 6.000	12 x 12 x 150	
	.625 x .625 x 6.000	16 x 16 x 150	
Inch → D010 Metric → D014			95°
<b>SVJB-SM</b>	.375 x .375 x 4.921	10 x 10 x 125	
	.500 x .500 x 5.906	12 x 12 x 150	
	.625 x .625 x 5.906	16 x 16 x 150	
Inch → D010 Metric → D014			93°
<b>SVPP-SM</b>		10 x 10 x 125	
		12 x 12 x 150	
Metric → D015		16 x 16 x 150	117° 30°
<b>SVVB-SM</b>	.375 x .375 x 4.921	10 x 10 x 125	
	.500 x .500 x 5.906	12 x 12 x 150	
	.625 x .625 x 5.906	16 x 16 x 150	
Inch → D011 Metric → D015			72° 30°

### BACK TURNING

Name of Tool Holder	Tool Size (H x B x LF)		Geometry
	Inch	Metric	
<b>BTAH</b> (Edge Length)	.375 x .375 x 4.724	8 x 10 x 120	
	.500 x .500 x 4.724	10 x 10 x 120	
	.625 x .625 x 4.724	12 x 12 x 120	
Inch → D016 Metric → D019		16 x 16 x 120	
<b>CTBH</b> (Edge Length)	.375 x .375 x 4.724	10 x 10 x 120	
	.500 x .500 x 4.724	12 x 12 x 120	
	.625 x .625 x 4.724	16 x 16 x 120	
Inch → D017 Metric → D020			
<b>BTVH</b> (Edge Length)	.375 x .375 x 4.724	10 x 10 x 120	
	.500 x .500 x 4.724	12 x 12 x 120	
	.625 x .625 x 4.724	16 x 16 x 120	
Inch → D018 Metric → D021			53°

### THREADING

Name of Tool Holder	Tool Size (H x B x LF)		Geometry
	Inch	Metric	
<b>TTAH</b>	.375 x .375 x 4.724	8 x 10 x 120	
	.500 x .500 x 4.724	10 x 10 x 120	
	.625 x .625 x 4.724	12 x 12 x 120	
Inch → D035 Metric → D036		16 x 16 x 120	
<b>MMTE</b>	.375 x .375 x 4.724		
	.500 x .500 x 4.724		
Inch → D038			

### GROOVING

Name of Tool Holder	Tool Size (H x B x LF)		Geometry
	Inch	Metric	
<b>GTAH</b> (Grooving Width)	.375 x .375 x 3.150	8 x 8 x 80	
	.500 x .500 x 3.150	8 x 8 x 120	
	.500 x .500 x 4.724	10 x 10 x 80	
	.625 x .625 x 4.724	10 x 10 x 120	
Inch → D022 Metric → D024		12 x 12 x 80	U Type E Type
<b>GTBH</b> (Grooving Width)	.375 x .375 x 3.150	10 x 10 x 80	
	.375 x .375 x 4.724	10 x 10 x 120	
	.500 x .500 x 4.724	12 x 12 x 120	
	.625 x .625 x 4.724	16 x 16 x 120	
Inch → D022 Metric → D024			U Type E Type
<b>GTCH</b> (Grooving Width)	.375 x .375 x 3.150	10 x 10 x 80	
	.375 x .375 x 4.724	10 x 10 x 120	
Inch → D022 Metric → D024			U Type E Type

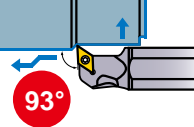
(Note) For GY style lathes please refer page F038 or F062.

### CUTTING OFF

Name of Tool Holder	Tool Size (H x B x LF)		Geometry
	Inch	Metric	
<b>CTAH</b> (Max. Cut Off Diameter)	.375 x .375 x 4.724	8 x 10 x 120	
	.500 x .500 x 4.724	10 x 10 x 120	
	.625 x .625 x 4.724	12 x 12 x 120	
Inch → D026 Metric → D028		16 x 16 x 120	
<b>CTAH-S</b> (Max. Cut Off Diameter)	.375 x .375 x 3.150	10 x 10 x 80	
	.500 x .500 x 3.150		
Inch → D026 Metric → D028			
<b>CTBH</b> (Max. Cut Off Diameter)	.375 x .375 x 4.724	10 x 10 x 120	
	.500 x .500 x 4.724	12 x 12 x 120	
	.625 x .625 x 4.724	16 x 16 x 120	
Inch → D030 Metric → D031			
<b>CTCH</b> (Max. Cut Off Diameter)		10 x 10 x 120	
		12 x 12 x 120	
Metric → D032			
<b>CTDH</b> (Max. Cut Off Diameter)		16 x 16 x 120	
		16 x 16 x 125	
Metric → D033			
<b>CTEH</b> (Max. Cut Off Diameter)		16 x 16 x 120	
		16 x 16 x 125	
Metric → D034			

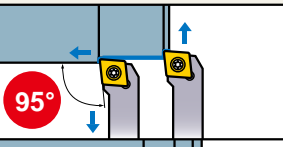



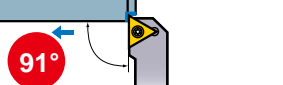
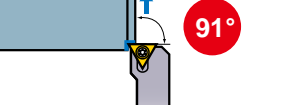
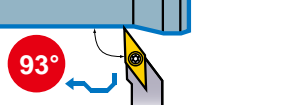


## OPPOSITE TOOL POSTS


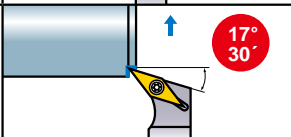
### ● DIMPLE SLEEVE HOLDER

Name of Tool Holder	Shank Size (DCON x LF)		Geometry
	Inch	Metric	
<b>SH</b>	.625 x 3.937	φ15.875 x 100	
	.750 x 4.921	φ19.05 x 125	
	.787 x 4.921	φ20 x 125	
	.866 x 4.921	φ22 x 125	
	1.000 x 5.906	φ25.4 x 150	
Inch → <b>D039</b>			
Metric → <b>D040</b>			

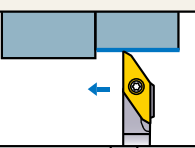
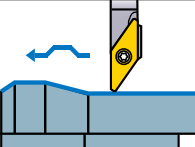
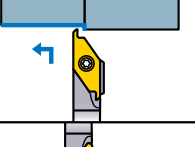
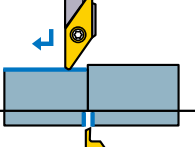
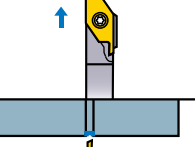
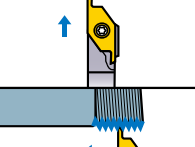
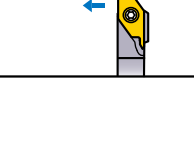
## TURRET TYPE TOOL POSTS

### ● FRONT TURNING

Name of Tool Holder	Shank Size (inch) (H x B x LF)	Geometry
<b>SCLC</b>	.375 x .375 x 2.500 .500 x .500 x 3.500 .625 x .625 x 4.000	
Inch → <b>C030</b>		
<b>SDJC</b>	.375 x .375 x 2.500 .500 x .500 x 3.500 .625 x .625 x 4.000	
Inch → <b>C031</b>		
<b>SDNC</b>	.375 x .375 x 2.500 .500 x .500 x 3.500 .625 x .625 x 4.000	
Inch → <b>C031</b>		
<b>SSSC</b>	.500 x .500 x 3.500 .625 x .625 x 4.000	
Inch → <b>C034</b>		
<b>STGC</b>	.375 x .375 x 2.500 .500 x .500 x 3.500 .625 x .625 x 4.000	
Inch → <b>C035</b>		
<b>STFC</b>	.375 x .375 x 2.500 .500 x .500 x 3.500 .625 x .625 x 4.000	
Inch → <b>C035</b>		
<b>SVJC</b>	.375 x .375 x 2.500 .500 x .500 x 3.500 .625 x .625 x 4.000	
Inch → <b>C036</b>		
<b>SVPC</b>	.500 x .500 x 3.500 .625 x .625 x 4.000	
Inch → <b>C036</b>		
<b>SVJB</b>	.375 x .375 x 2.500 .500 x .500 x 3.500 .625 x .625 x 4.000	
Inch → <b>C028</b>		


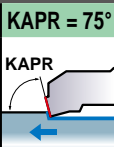

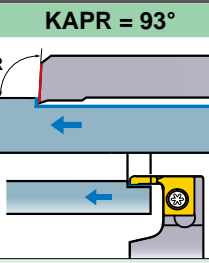






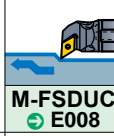
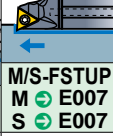
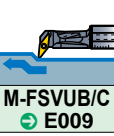
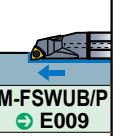




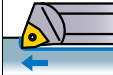





Name of Tool Holder	Shank Size (inch) (H x B x LF)	Geometry
<b>SVVB</b>	.375 x .375 x 2.500 .500 x .500 x 3.000 .625 x .625 x 4.000	
Inch → <b>C028</b>		
<b>SVHB</b>	.375 x .375 x 2.500 .500 x .500 x 3.500 .625 x .625 x 4.000	
Inch → <b>C029</b>		

## RADIAL TYPE TOOL POSTS

Name of Tool Holder	Tool Size (H x B x LF)		Geometry
	Inch	Metric	
<b>CSVH</b> (Front Turning)	.375 x .375 x 5.512	7 x 7 x 140	
	.500 x .500 x 5.512	8 x 8 x 140	
		9.5 x 9.5 x 140	
		10 x 10 x 140	
		12 x 12 x 140	
Inch → <b>D041</b>			
Metric → <b>D044</b>			
<b>CSVH</b> (Front Copying)	.375 x .375 x 5.512	7 x 7 x 140	
	.500 x .500 x 5.512	8 x 8 x 140	
		9.5 x 9.5 x 140	
		10 x 10 x 140	
		12 x 12 x 140	
Inch → <b>D041</b>			
Metric → <b>D044</b>			
<b>CSVH</b> (Back Turning)	.375 x .375 x 5.512	7 x 7 x 140	
	.500 x .500 x 5.512	8 x 8 x 140	
		9.5 x 9.5 x 140	
		10 x 10 x 140	
		12 x 12 x 140	
Inch → <b>D042</b>			
Metric → <b>D045</b>			
<b>CSVH</b> (Back Turning)	.375 x .375 x 5.512	7 x 7 x 140	
	.500 x .500 x 5.512	8 x 8 x 140	
		9.5 x 9.5 x 140	
		10 x 10 x 140	
		12 x 12 x 140	
Inch → <b>D042</b>			
Metric → <b>D045</b>			
<b>CSVH</b> (Cutting Off)	.375 x .375 x 5.512	7 x 7 x 140	
	.500 x .500 x 5.512	8 x 8 x 140	
		9.5 x 9.5 x 140	
		10 x 10 x 140	
		12 x 12 x 140	
Inch → <b>D042</b>			
Metric → <b>D045</b>			
<b>CSVH</b> (Grooving)	.375 x .375 x 5.512	7 x 7 x 140	
	.500 x .500 x 5.512	8 x 8 x 140	
		9.5 x 9.5 x 140	
		10 x 10 x 140	
		12 x 12 x 140	
Inch → <b>D043</b>			
Metric → <b>D046</b>			
<b>CSVH</b> (Threading)	.375 x .375 x 5.512	7 x 7 x 140	
	.500 x .500 x 5.512	8 x 8 x 140	
		9.5 x 9.5 x 140	
		10 x 10 x 140	
		12 x 12 x 140	
Inch → <b>D043</b>			
Metric → <b>D046</b>			

# CLASSIFICATION (INTERNAL TURNING)

SMALL TOOLS

Min. Cutting Dia.	Name of Tool Holder	Features	KAPR = 75°		KAPR = 93°	
			KAPR	KAPR		
φ3.0mm (φ .118 inch)	<b>For Gang Type Tool Posts SBAH</b> 	<ul style="list-style-type: none"> <li>The minimum cutting diameter is φ3mm (.118inch).</li> <li>Tools for Gang type Swiss type lathes.</li> </ul>				<b>SBAH</b> ↻ E047
φ2.2mm φ7.2mm (φ .087 inch) (φ .283 inch)	<b>MICRO-MINI TWIN Boring Bars (Solid Carbide)</b> 	<ul style="list-style-type: none"> <li>The minimum cutting diameter is φ2.2mm (.087inch).</li> <li>Two cutting edges type.</li> <li>Continuous cutting from boring to facing.</li> <li>With or without a chip breaker.</li> </ul>				
φ3.2mm φ5.2mm (φ .126 inch) (φ .205 inch)	<b>MICRO-MINI Boring Bars (Solid Carbide)</b> 	<ul style="list-style-type: none"> <li>The minimum cutting diameter is from φ3.2mm (.126inch).</li> <li>Single cutting edge type.</li> <li>l/d is 5 times the diameter.</li> <li>Cutting edge can be shaped according to the application. Thus, it covers a wide cutting range. (threading, grooving, copying, etc.)</li> </ul>				<b>FR-BLS</b> ↻ E031
φ5.0mm φ8.0mm (φ .197 inch) (φ .315 inch)	<b>MICRO-DEX Boring Bars</b> 	<ul style="list-style-type: none"> <li>The minimum cutting diameter is from φ5mm (.197inch).</li> <li>7° positive insert.</li> <li>Carbide shank type.</li> <li>Easy-to-use tool geometries.</li> <li>Suitable for small workpiece.</li> <li>l/d is 5 times the diameter.</li> </ul>				<b>SWUB</b> ↻ E029
φ .390 inch   φ .977 inch	<b>SCREW CLAMP DIMPLE BAR (Heavy Metal Shank) (Steel Shank)</b> 	<ul style="list-style-type: none"> <li>The minimum cutting diameter is φ .390inch.</li> <li>7°, 11° positive insert.</li> <li>Excellent vibration resistance due to light dimple head.</li> <li>Coolant thru type.</li> </ul>				
φ .228 inch   φ .937 inch	<b>Screw Clamp Type Boring Bars (Steel Shank)</b> 	<ul style="list-style-type: none"> <li>Two wall pocket.</li> <li>7° positive insert, low cutting force.</li> <li>Screw clamp type.</li> <li>Steel, heavy metal and carbide shanks are available in various diameters.</li> </ul>				
φ .200 inch   φ .750 inch	<b>Screw Clamp Type Boring Bars (Heavy Metal Shank)</b> 					
φ .228 inch   φ .797 inch	<b>Screw Clamp Type Boring Bars (Carbide Shank)</b> 					<b>C-STUC</b> ↻ E016
φ .390 inch   φ .790 inch	<b>SL5 Type Boring Bars</b> 	<ul style="list-style-type: none"> <li>Multi-functional bar for threading, grooving and boring.</li> <li>Minimum bore φ .390inch.</li> <li>Rigid insert retention.</li> </ul>				
φ10mm φ20mm (φ .394 inch) (φ .787 inch)	<b>F Type Boring Bars (FSL51,52)</b> 	<ul style="list-style-type: none"> <li>The minimum cutting diameter is φ10mm (.394inch).</li> <li>Single holder can be equipped with grooving inserts and threading inserts.</li> </ul>				

(Note 1) Products with blue color symbol have carbide shank.

	KAPR = 95°	KAPR = 107°30' - 117°30'	KAPR = 142°	Grooving	Threading	Selection Standard					
						Economical	Low Cutting Resistance	Vibration Resistance	Coolant Thru	Specialized	Small Diameter Cutting
										○	○
						○	○	○			○
							○	○			○
							○	○	○		
						○	○	○			
							○	○			
							○	○			
							○	○			○
							○	○			○

(Note 2) ○: 1st recommendation. ○: 2nd recommendation.

SMALL TOOLS



# FRONT TURNING TOOLS (FOR GANG TYPE) TOOL POSTS

## INCH STANDARD

SMALL TOOLS

### SCAC-SM

Without off set

Right hand tool holder shown.

Finish	Finish	Light	Medium
SMG  (2)	R/L-F  (2)	R/L-SS  (2,3)	R/L-SN  (2,3)
Medium R/L-SR  (2,3)	Flat Top  (2,3)	Non-Ferrous Metal AZ  (2,3)	CBN/PCD  (2,3)

Order Number	Stock		Insert Number	Dimensions (inch)								Insert Screw *	Wrench
	R	L		H	B	LF	LH	HBKW	HF	S4			
SCACR/L-062SM	●	●	CCET CCGT	21.5	.375	.375	4.921	—	—	.375	0	TS254	TKY08R
SCACR/L-063SM	●	●	CCGW	32.5	.375	.375	4.921	.630	.156	.375	0	TS43	TKY15R
SCACR/L-083SM	●	●	CCMT CCMW	32.5	.500	.500	5.906	.504	.031	.500	0	TS43	TKY15R
SCACR/L-103SM	●	●	NP-CCGW	32.5	.625	.625	5.906	—	—	.625	0	TS43	TKY15R

\* Clamp Torque (lbf-in) : TS254=8.9, TS43=31

### SCLC-SM

Without off set

Right hand tool holder shown.

Finish	Finish	Light	Medium
SMG  (2)	R/L-F  (2)	R/L-SS  (2,3)	R/L-SN  (2,3)
Medium R/L-SR  (2,3)	Flat Top  (2,3)	Non-Ferrous Metal AZ  (2,3)	CBN/PCD  (2,3)

Order Number	Stock		Insert Number	Dimensions (inch)								Insert Screw *	Wrench
	R	L		H	B	LF	LH	HBKW	HF	S4			
SCLCR/L-062SM	●	●	CCET CCGT	21.5	.375	.375	4.921	—	—	.375	0	TS254	TKY08R
SCLCR/L-063SM	●	●	CCGW	32.5	.375	.375	4.921	.807	.176	.375	0	TS43	TKY15R
SCLCR/L-083SM	●	●	CCMT CCMW	32.5	.500	.500	5.906	.685	.051	.500	0	TS43	TKY15R
SCLCR/L-103SM	●	●	NP-CCGW	32.5	.625	.625	5.906	—	—	.625	0	TS43	TKY15R

\* Clamp Torque (lbf-in) : TS254=8.9, TS43=31

(Note) Insert photo is an example. Letters show chip breaker style, figures show inscribed circle.

SCAC-SM type inserts > A136-A141  
 SCLC-SM type inserts > A136-A141  
 CBN & PCD inserts > B036, B037, B055

## INCH STANDARD

<b>SDJC-SM</b>				Without off set								Finish		Light		Medium	
												SMG	R-F	R-SS	R-SN	Medium	Flat Top
				(2,3)		(2,3)		(2,3)		(2,3)		(2,3)		(2,3)			
				(2,3)		(2,3)		AZ		(2,3)		(2,3)		(2,3)		(2,3)	
Order Number	Stock		Insert Number	Dimensions (inch)								Insert Screw *	Wrench				
	R	L		H	B	LF	LH	HBKW	HF	S4							
<b>SDJCR/L-062SM</b>	●	●	DCET DCGT	21.5	.375	.375	4.921	—	—	.375	0	TS254	TKY08R				
<b>SDJCR/L-063SM</b>	●	●	DCGW DCMT	32.5	.375	.375	4.921	.965	.176	.375	0	TS43	TKY15R				
<b>SDJCR/L-083SM</b>	●	●	DCMW NP-DCGW NP-DCMT	32.5	.500	.500	5.906	.843	.051	.500	0	TS43	TKY15R				
<b>SDJCR/L-103SM</b>	●	●	NP-DCMW	32.5	.625	.625	5.906	—	—	.625	0	TS43	TKY15R				

\* Clamp Torque (lbf-in) : TS254=8.9, TS43=31

<b>SDNC-SM</b>				Neutral edge with handed holder Without off set								Finish		Light		Medium	
												SMG	R-F	R-SS	R-SN	Medium	Flat Top
				(2,3)		(2,3)		(2,3)		(2,3)		(2,3)		(2,3)			
				(2,3)		(2,3)		AZ		(2,3)		(2,3)		(2,3)		(2,3)	
Order Number	Stock		Insert Number	Dimensions (inch)								Insert Screw *	Wrench				
	R	L		H	B	LF	LH	HBKW	HF	S4							
<b>SDNCR/L-062SM</b>	●	●	DCET DCGT	21.5	.375	.375	4.921	—	—	.375	.118	TS254	TKY08R				
<b>SDNCR/L-063SM</b>	●	●	DCGW DCMT	32.5	.375	.375	4.921	.965	.097	.375	.197	TS43	TKY15R				
<b>SDNCR/L-083SM</b>	●	●	DCMW NP-DCGW NP-DCMT	32.5	.500	.500	5.906	—	—	.500	.197	TS43	TKY15R				
<b>SDNCR/L-103SM</b>	●	●	NP-DCMW	32.5	.625	.625	5.906	—	—	.625	.197	TS43	TKY15R				

\* Clamp Torque (lbf-in) : TS254=8.9, TS43=31

## RECOMMENDED CUTTING CONDITIONS

	Work Material	Grade	Cutting Speed (SFM)	Feed (IPR)
<b>P</b>	Carbon Steel · Alloy Steel	<b>VP15TF/UE6020</b>	165—490	.0004— .006
	Free Cutting Carbon Steel	<b>VP15TF</b>	100—590	.0004— .006
		<b>AP25N</b>	165—820	.0004— .006
<b>M</b>	Stainless Steel	<b>VP15TF</b>	165—395	.0008— .004
<b>N</b>	Non-Ferrous Metal	<b>HTi10/RT9005</b>	230—755	.0012— .006

SDJC-SM type inserts > A144—A149

SDNC-SM type inserts > A144—A149

CBN & PCD inserts > B039, B040, B056

SPARE PARTS > M001

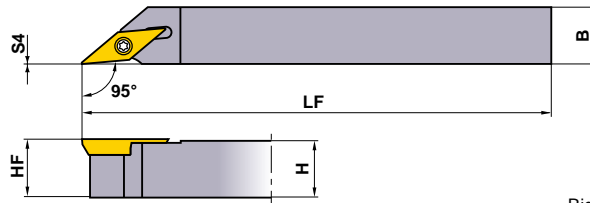
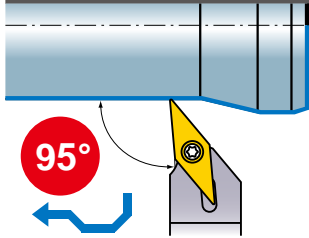
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# FRONT TURNING TOOLS (FOR GANG TYPE) TOOL POSTS

## INCH STANDARD

### SVLP-SM

Without off set



Right hand tool holder shown.

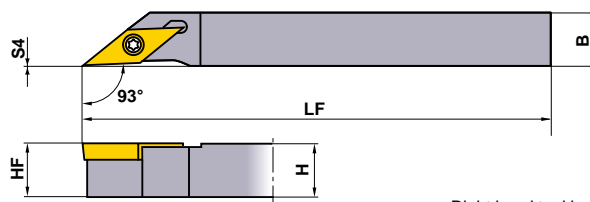
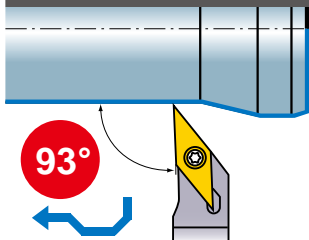


Order Number	Stock		Insert Number	Dimensions (inch)					Insert Screw *	Wrench	
	R	L		H	B	LF	HF	S4			
SVLPR-061.5SM	●		VPET VPGT	1.51.5	.375	.375	5.000	.375	0	TS202	TKY06R
SVLPR-081.5SM	●			1.51.5	.500	.500	6.000	.500	0	TS202	TKY06R
SVLPR/L-062SM	●	●		22	.375	.375	5.000	.375	0	TS255	TKY08R
SVLPR/L-082SM	●	●		22	.500	.500	6.000	.500	0	TS255	TKY08R
SVLPR/L-102SM	●	●		22	.625	.625	6.000	.625	0	TS255	TKY08R

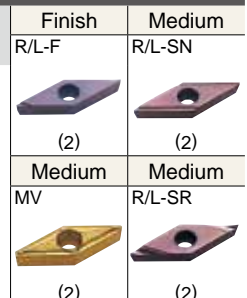
\* Clamp Torque (lbf-in) : TS202=5.3, TS255=8.9

### SVJB-SM

Without off set



Right hand tool holder shown.



Order Number	Stock		Insert Number	Dimensions (inch)					Insert Screw *	Wrench	
	R	L		H	B	LF	HF	S4			
SVJBR/L-062SM	●	●	VBET VBGT VBMT	22	.375	.375	4.921	.375	0	TS255	TKY08R
SVJBR/L-082SM	●	●		22	.500	.500	5.906	.500	0	TS255	TKY08R
SVJBR/L-102SM	●	●		22	.625	.625	5.906	.625	0	TS255	TKY08R

\* Clamp Torque (lbf-in) : TS255=8.9

(Note) Insert photo is an example. Letters show chip breaker style, figures show inscribed circle.

SVLP-SM type inserts > A169  
SVJB-SM type inserts > A162-A165  
CBN & PCD inserts > B044, B060

## INCH STANDARD

<b>SVVB-SM</b>		Neutral edge with handed holder					Finish		Medium		
							R/L-F	R/L-SN	Medium	Medium	
							 (2)	 (2)	 (2)	 (2)	
							MV	R/L-SR			
Order Number	Stock		Insert Number		Dimensions (inch)					*	
	R	L			H	B	LF	HF	S4	Insert Screw	Wrench
<b>SVVBR/L-062SM</b>	●	●	VBET VBGT VBMT	22	.375	.375	4.921	.375	.118	TS255	TKY08R
<b>SVVBR/L-082SM</b>	●	●		22	.500	.500	5.906	.500	.118	TS255	TKY08R
<b>SVVBR/L-102SM</b>	●	●		22	.625	.625	5.906	.625	.118	TS255	TKY08R

\* Clamp Torque (lbf-in) : TS255=8.9

SMALL TOOLS

## RECOMMENDED CUTTING CONDITIONS

	Work Material	Grade	Cutting Speed (SFM)	Feed (IPR)
<b>P</b>	Carbon Steel · Alloy Steel	<b>VP15TF/UE6020</b>	165–490	.0004–.006
		<b>VP15TF</b>	100–590	.0004–.006
	Free Cutting Carbon Steel	<b>AP25N</b>	165–820	.0004–.006
<b>M</b>	Stainless Steel	<b>VP15TF</b>	165–395	.0008–.004
<b>N</b>	Non-Ferrous Metal	<b>HTi10/RT9005</b>	230–755	.0012–.006

SVVB-SM type inserts > A162–A165  
CBN & PCD inserts > B044, B060

SPARE PARTS > M001  
TECHNICAL DATA > N001

# FRONT TURNING TOOLS (FOR GANG TYPE) TOOL POSTS

## METRIC STANDARD

### SCAC-SM

Without off set

Order Number	Stock		Insert Number	Dimensions (mm)							Insert Screw *	Wrench	
	R	L		H	B	LF	LH	HBKW	HF	S4			
SCACR/L0808K06-SM	●	●	CCET CCGT CCGW CCMT CCMW NP-CCGW	21.5	8	8	125	11	1.6	8	0	TS254	TKY08R
SCACR/L1010K06-SM	●	●		21.5	10	10	125	—	—	10	0	TS254	TKY08R
SCACR/L1010K09-SM	●	●		32.5	10	10	125	16	3.5	10	0	TS43	TKY15R
SCACR/L1212M09-SM	●	●		32.5	12	12	150	14	1.5	12	0	TS43	TKY15R
SCACR/L1616M09-SM	●	●		32.5	16	16	150	—	—	16	0	TS43	TKY15R

Finish options: SMG (2), R/L-F (2), R/L-SS (2,3), R/L-SN (2,3), Medium, Flat Top, Non-Ferrous Metal AZ, R/L-SR (2,3), (2,3), (2,3), (2,3).

\* Clamp Torque (lbf-in) : TS254=8.9, TS43=31

### SCLC-SM

Without off set

Order Number	Stock		Insert Number	Dimensions (mm)							Insert Screw *	Wrench	
	R	L		H	B	LF	LH	HBKW	HF	S4			
SCLCR/L0808K06-SM	●	●	CCET CCGT CCGW CCMT CCMW NP-CCGW	21.5	8	8	125	11	2.1	8	0	TS254	TKY08R
SCLCR/L1010K06-SM	●	●		21.5	10	10	125	—	—	10	0	TS254	TKY08R
SCLCR/L1010K09-SM	●	●		32.5	10	10	125	20	4	10	0	TS43	TKY15R
SCLCR/L1212M09-SM	●	●		32.5	12	12	150	18	2	12	0	TS43	TKY15R
SCLCR/L1616M09-SM	●	●		32.5	16	16	150	—	—	16	0	TS43	TKY15R

Finish options: SMG (2), R/L-F (2), R/L-SS (2,3), R/L-SN (2,3), Medium, Flat Top, Non-Ferrous Metal AZ, R/L-SR (2,3), (2,3), (2,3), (2,3).

\* Clamp Torque (lbf-in) : TS254=8.9, TS43=31

(Note) Insert photo is an example. Letters show chip breaker style, figures show inscribed circle.

SCAC-SM type inserts > A136–A141  
 SCLC-SM type inserts > A136–A141  
 CBN & PCD inserts > B036, B037, B055



## METRIC STANDARD

<b>SDJC-SM</b>				Without off set								Finish		Finish		Light		Medium	
												SMG	R-F	R-SS	R-SN	Medium	Flat Top	Non-Ferrous Metal	CBN/PCD
				 (2,3)		 (2,3)		 (2,3)		 (2,3)		 (2,3)		 (2,3)		 (2,3)		 (2,3)	
				R-SR				AZ											
Order Number	Stock		Insert Number		Dimensions (mm)						*								
	R	L			H	B	LF	LH	HBKW	HF	S4	Insert Screw	Wrench						
SDJCR/L0808K07-SM	●	●	DCET	21.5	8	8	125	15	2	8	0	TS254	TKY08R						
SDJCR/L1010K07-SM	●	●	DCGT	21.5	10	10	125	—	—	10	0	TS254	TKY08R						
SDJCR/L1010K11-SM	●	●	DCGW	32.5	10	10	125	24	4	10	0	TS43	TKY15R						
SDJCR/L1212M11-SM	●	●	DCMT	32.5	12	12	150	22	2	12	0	TS43	TKY15R						
SDJCR/L1616M11-SM	●	●	DCMW	32.5	16	16	150	—	—	16	0	TS43	TKY15R						
			NP-DCGW																
			NP-DCMT																
			NP-DCMW																

\* Clamp Torque (lbf-in) : TS254=8.9, TS43=31

<b>SDNC-SM</b>				Neutral edge with handed holder Without off set								Finish		Finish		Light		Medium	
												SMG	R-F	R-SS	R-SN	Medium	Flat Top	Non-Ferrous Metal	CBN/PCD
				 (2,3)		 (2,3)		 (2,3)		 (2,3)		 (2,3)		 (2,3)		 (2,3)		 (2,3)	
				R-SR				AZ											
Order Number	Stock		Insert Number		Dimensions (mm)						*								
	R	L			H	B	LF	LH	HBKW	HF	S4	Insert Screw	Wrench						
SDNCR/L0808K07-SM	●	●	DCET	21.5	8	8	125	—	—	8	3	TS254	TKY08R						
SDNCR/L1010K07-SM	●	●	DCGT	21.5	10	10	125	—	—	10	3	TS254	TKY08R						
SDNCR/L1010K11-SM	●	●	DCGW	32.5	10	10	125	24	2	10	5	TS43	TKY15R						
SDNCR/L1212M11-SM	●	●	DCMT	32.5	12	12	150	—	—	12	5	TS43	TKY15R						
SDNCR/L1616M11-SM	●	●	DCMW	32.5	16	16	150	—	—	16	5	TS43	TKY15R						
			NP-DCGW																
			NP-DCMT																
			NP-DCMW																

\* Clamp Torque (lbf-in) : TS254=8.9, TS43=31

## RECOMMENDED CUTTING CONDITIONS

	Work Material	Grade	Cutting Speed (SFM)	Feed (IPR)
<b>P</b>	Carbon Steel · Alloy Steel	VP15TF/UE6020	165—490	.0004—.006
		VP15TF	100—590	.0004—.006
	Free Cutting Carbon Steel	AP25N	165—820	.0004—.006
<b>M</b>	Stainless Steel	VP15TF	165—395	.0008—.004
<b>N</b>	Non-Ferrous Metal	HTi10/RT9005	230—755	.0012—.006

SDJC-SM type inserts > A144—A149

SDNC-SM type inserts > A144—A149

CBN & PCD inserts > B039, B040, B056

SPARE PARTS > M001

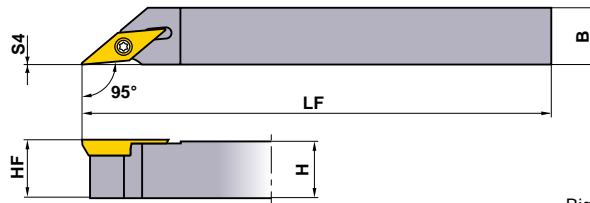
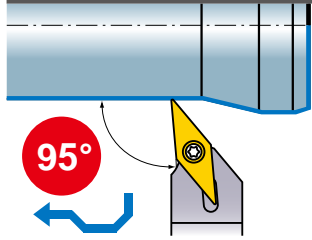
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# FRONT TURNING TOOLS (FOR GANG TYPE) TOOL POSTS

## METRIC STANDARD

### SVLP-SM

Without off set



Right hand tool holder shown.

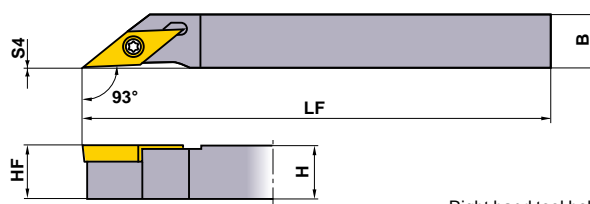
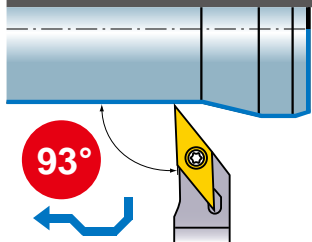


Order Number	Stock		Insert Number	Dimensions (mm)					Insert Screw *	Wrench	
	R	L		H	B	LF	HF	S4			
SVLPR/L1010K08-SM	●	●	VPET VPGT	1.51.5	10	10	125	10	0	TS202	TKY06R
SVLPR/L1212M08-SM	●	●		1.51.5	12	12	150	12	0	TS202	TKY06R
SVLPR/L1010K11-SM	●	●		22	10	10	125	10	0	TS255	TKY08R
SVLPR/L1212M11-SM	●	●		22	12	12	150	12	0	TS255	TKY08R
SVLPR/L1616M11-SM	●	●		22	16	16	150	16	0	TS255	TKY08R

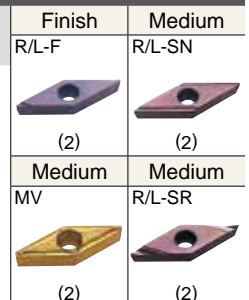
\* Clamp Torque (lbf-in) : TS202=5.3, TS255=8.9

### SVJB-SM

Without off set



Right hand tool holder shown.




Order Number	Stock		Insert Number	Dimensions (mm)					Insert Screw *	Wrench	
	R	L		H	B	LF	HF	S4			
SVJBR/L1010K11-SM	●	●	VBET VBGT VBMT	22	10	10	125	10	0	TS255	TKY08R
SVJBR/L1212M11-SM	●	●		22	12	12	150	12	0	TS255	TKY08R
SVJBR/L1616M11-SM	●	●		22	16	16	150	16	0	TS255	TKY08R

\* Clamp Torque (lbf-in) : TS255=8.9

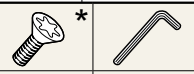
(Note) Insert photo is an example. Letters show chip breaker style, figures show inscribed circle.

SVLP-SM type inserts > A169  
 SVJB-SM type inserts > A162-A165  
 CBN & PCD inserts > B044, B060

## METRIC STANDARD

Order Number		Stock		Insert Number		Dimensions (mm)					* 	
		R	L			H	B	LF	HF	S4	Insert Screw	Wrench
<b>SVVBR/L1010K11-SM</b>		●	●	VBET VBGT VBMT	22	10	10	125	10	3	TS255	TKY08R
<b>SVVBR/L1212M11-SM</b>		●	●		22	12	12	150	12	3	TS255	TKY08R
<b>SVVBR/L1616M11-SM</b>		●	●		22	16	16	150	16	3	TS255	TKY08R

\* Clamp Torque (lbf-in) : TS255=8.9

Order Number		Stock		Insert Number		Dimensions (mm)					* 			
		R	L			H	B	LF	LH	HBKW	HF	S4	Insert Screw	Wrench
<b>SVPPR/L1010K11-SM</b>		●	●	VPET VPGT	22	10	10	125	20	8	10	0	TS255	TKY08R
<b>SVPPR/L1212M11-SM</b>		●	●		22	12	12	150	20	6	12	0	TS255	TKY08R
<b>SVPPR/L1616M11-SM</b>		●	●		22	16	16	150	17	-	16	0	TS255	TKY08R

\* Clamp Torque (lbf-in) : TS255=8.9

## RECOMMENDED CUTTING CONDITIONS

	Work Material	Grade	Cutting Speed (SFM)	Feed (IPR)
<b>P</b>	Carbon Steel · Alloy Steel	<b>VP15TF/UE6020</b>	165-490	.0004-.006
		<b>VP15TF</b>	100-590	.0004-.006
	Free Cutting Carbon Steel	<b>AP25N</b>	165-820	.0004-.006
<b>M</b>	Stainless Steel	<b>VP15TF</b>	165-395	.0008-.004
<b>N</b>	Non-Ferrous Metal	<b>HTi10/RT9005</b>	230-755	.0012-.006

SVVB-SM type inserts > A162-A165

SVPP-SM type inserts > A169

CBN & PCD inserts > B044, B060

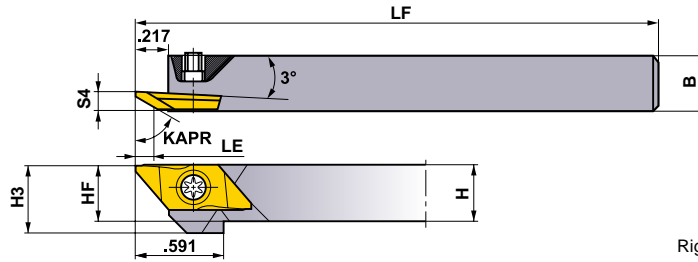
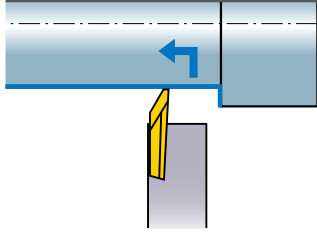
SPARE PARTS > M001

TECHNICAL DATA > N001

# BACK TURNING TOOLS (FOR GANG TYPE) TOOL POSTS

## INCH STANDARD

### BTAH



Right hand tool holder shown.

Order Number	Stock		Insert Number	Dimensions (inch)						Insert Screw *	Wrench
	R	L		H	B	LF	HF	H3	S4		
<b>BTAHR/L-062</b>	●	●	BTAT 5528○○R/L-B 6035○○R/L-B 605000RX	.375	.375	4.724	.375	.500	.138	NS402W	NKY15R
<b>BTAHR/L-082</b>	●	●		.500	.500	4.724	.500	—	.138	NS403W	NKY15R
<b>BTAHR/L-102</b>	●			.625	.625	4.724	.625	—	.138	NS403W	NKY15R

(Note 1) Please use right hand insert for right hand holder and left hand insert for left hand holder.

(Note 2) Set the maximum depth of cut at under 60% of the effective cutting edge length (LE).

\* Clamp Torque (lbf-in) : NS402W=6.2, NS403W=6.2

## INSERTS

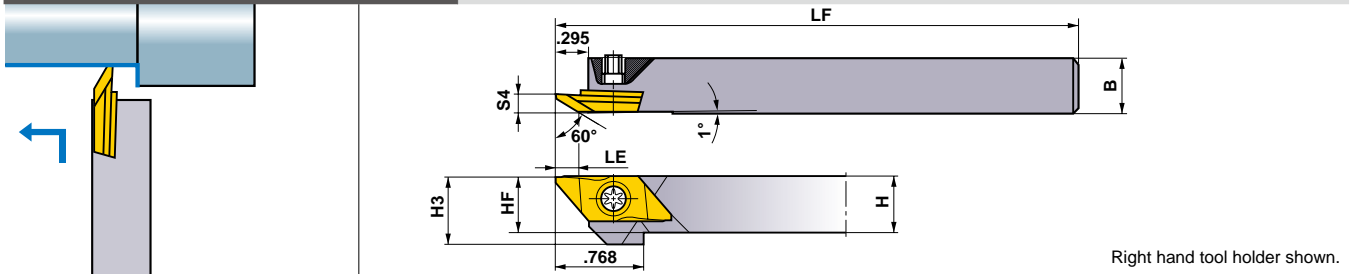
Order Number	Hand	Coated	Dimensions (inch)			Geometry
		VP15TF	KAPR *	RE	LE *	
<b>BTAT552800R-B</b>	R	●	55°	0	.110	With Breaker 
<b>BTA 552800L-B</b>	L	●	55°	0	.110	
<b>BTAT552801R-B</b>	R	●	55°	.004	.110	
<b>BTA 552801L-B</b>	L	●	55°	.004	.110	
<b>BTAT603500R-B</b>	R	●	60°	0	.138	Without Breaker 
<b>BTA 603500L-B</b>	L	●	60°	0	.138	
<b>BTAT603501R-B</b>	R	●	60°	.004	.138	
<b>BTA 603501L-B</b>	L	●	60°	.004	.138	
<b>BTAT605000RX</b>	R	●	60°	0	.197	

Right hand insert shown.

\* Numeric value set insert on holder.

## INCH STANDARD

# CTBH



Right hand tool holder shown.

Order Number	Stock		Insert Number	Dimensions (inch)						Insert Screw *	Wrench	
	R	L		H	B	LF	HF	H3	S4			
CTBHR/L-062	●	●	BTBT	60450R/L-B 606000R/L	.375	.375	4.724	.375	.500	.133	NS402W	NKY15R
CTBHR/L-082	●	●			.500	.500	4.724	.500	—	.133	NS403W	NKY15R
CTBHR/L-102	●	●			.625	.625	4.724	.625	—	.133	NS403W	NKY15R

(Note 1) Please use right hand insert for right hand holder and left hand insert for left hand holder.

(Note 2) Set the maximum depth of cut at under 60% of the effective cutting edge length (LE).

\* Clamp Torque (lbf-in) : NS402W=6.2, NS403W=6.2

SMALL TOOLS

## INSERTS

Order Number	Hand	Coated	Dimensions (inch)		LE * (inch)	Geometry
		VP15TF	RE *	CF		
BTBT604500R-B	R	●	0	.008	.177	<p>Right hand insert shown.</p>
BTBT604500L-B	L	●	0	.008	.177	
BTBT604501R-B	R	●	.004	.012	.177	
BTBT604501L-B	L	●	.004	.012	.177	
BTBT606000R	R	●	0	.008	.236	<p>Right hand insert shown.</p>
BTBT606000L	L	●	0	.008	.236	

\* Numeric value set insert on holder.

## RECOMMENDED CUTTING CONDITIONS

	Work Material	Grade	Cutting Speed (SFM)	Feed (IPR)
P	Carbon Steel · Alloy Steel	VP15TF	165–490	.0004–.006
	Free Cutting Carbon Steel	VP15TF	100–590	.0004–.006
M	Stainless Steel	VP15TF	165–395	.0008–.004
N	Non-Ferrous Metal	VP15TF	230–755	.0012–.006

SPARE PARTS > M001  
TECHNICAL DATA > N001

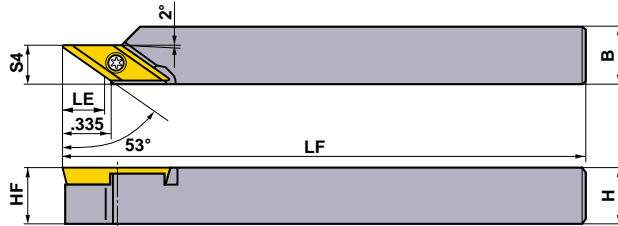
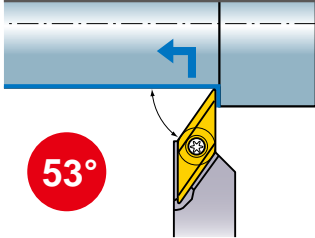
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# BACK TURNING TOOLS (FOR GANG TYPE) TOOL POSTS

## INCH STANDARD

### BTVH



Right hand tool holder only.

Order Number	Stock	Insert Number	Dimensions (inch)					Insert Screw *	Wrench	
	R		H	B	LF	HF	S4			
<b>BTVHR-062</b>	●	BTVT	5375○R-B	.375	.375	4.724	.375	.295	NS251	NKY15R
<b>BTVHR-082</b>	●			.500	.500	4.724	.500	.295	NS251	NKY15R
<b>BTVHR-102</b>	●			.625	.625	4.724	.625	.295	NS251	NKY15R

(Note) Set the maximum depth of cut at under 30% of the effective cutting edge length (LE).

\* Clamp Torque (lbf-in) : NS251=6.2

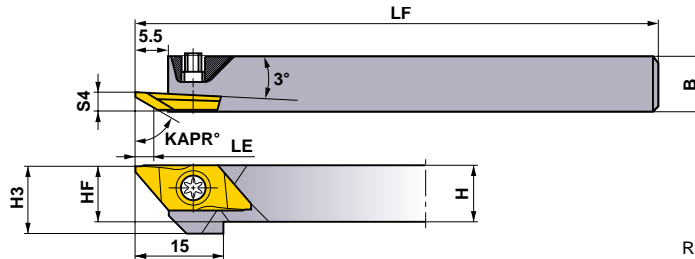
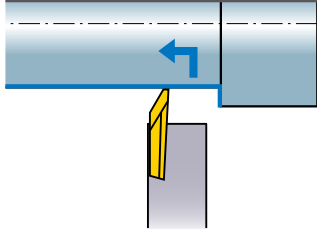
## INSERTS

Order Number	Hand	Coated	Dimensions (inch)			LE (inch)	Geometry
		VP15TF	IC	S	RE		
<b>BTVT5375V5R-B</b>	R	●	.250	.125	.002	.295	With Breaker 
<b>BTVT537501R-B</b>	R	●	.250	.125	.004	.295	

\* Numeric value set insert on holder.

## METRIC STANDARD

# BTAH



Right hand tool holder shown.

Order Number	Stock		Insert Number	Dimensions (mm)						Insert Screw *	Wrench
	R	L		H	B	LF	HF	H3	S4		
<b>BTAHR/L0810-50</b>	●	●	BTAT 5528○R/L-B 6035○R/L-B 605000RX	8	10	120	8	12	3.5	NS402W	NKY15R
<b>BTAHR/L1010-50</b>	●	●		10	10	120	10	12	3.5	NS402W	NKY15R
<b>BTAHR/L1212-50</b>	●	●		12	12	120	12	—	3.5	NS403W	NKY15R
<b>BTAHR/L1616-50</b>	●	●		16	16	120	16	—	3.5	NS403W	NKY15R

(Note 1) Please use right hand insert for right hand holder and left hand insert for left hand holder.

(Note 2) Set the maximum depth of cut at under 60% of the effective cutting edge length (LE).

\* Clamp Torque (lbf-in) : NS402W=6.2, NS403W=6.2

## INSERTS

Order Number	Hand	Coated	Dimensions (mm)			Geometry
		VP15TF	KAPR *	RE	LE *	
<b>BTAT552800R-B</b>	R	●	55°	0	2.8	With Breaker 
<b>BTAT552800L-B</b>	L	●	55°	0	2.8	
<b>BTAT552801R-B</b>	R	●	55°	0.1	2.8	
<b>BTAT552801L-B</b>	L	●	55°	0.1	2.8	
<b>BTAT603500R-B</b>	R	●	60°	0	3.5	Without Breaker 
<b>BTAT603500L-B</b>	L	●	60°	0	3.5	
<b>BTAT603501R-B</b>	R	●	60°	0.1	3.5	
<b>BTAT603501L-B</b>	L	●	60°	0.1	3.5	
<b>BTAT605000RX</b>	R	●	60°	0	5.0	

\* Numeric value set insert on holder.

## RECOMMENDED CUTTING CONDITIONS

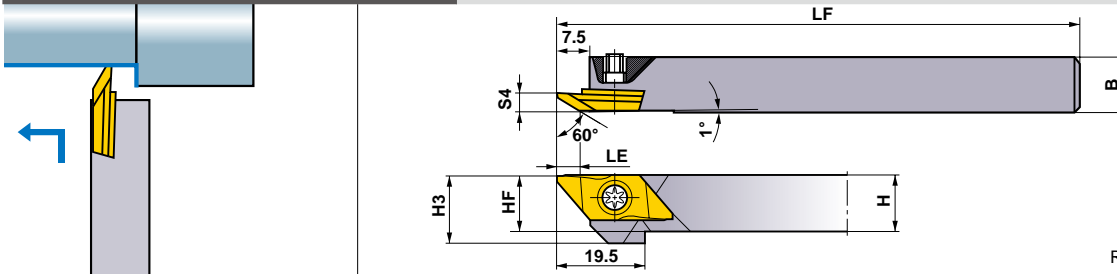
	Work Material	Grade	Cutting Speed (SFM)	Feed (IPR)
<b>P</b>	Carbon Steel · Alloy Steel	VP15TF	165–490	.0004–.006
	Free Cutting Carbon Steel	VP15TF	100–590	.0004–.006
<b>M</b>	Stainless Steel	VP15TF	165–395	.0008–.004
<b>N</b>	Non-Ferrous Metal	VP15TF	230–755	.0012–.006

SPARE PARTS > M001  
TECHNICAL DATA > N001

# BACK TURNING TOOLS (FOR GANG TYPE) TOOL POSTS

## METRIC STANDARD

# CTBH



Right hand tool holder shown.

Order Number	Stock		Insert Number	Dimensions (mm)						Insert Screw *	Wrench
	R	L		H	B	LF	HF	H3	S4		
CTBHR/L1010-160	●	●	BTBT 60450R/L-B 606000R/L	10	10	120	10	12	3.4	NS402W	NKY15R
CTBHR/L1212-160	●	●		12	12	120	12	—	3.4	NS403W	NKY15R
CTBHR/L1616-160	●	●		16	16	120	16	—	3.4	NS403W	NKY15R

(Note 1) Please use right hand insert for right hand holder and left hand insert for left hand holder.

(Note 2) Set the maximum depth of cut at under 60% of the effective cutting edge length (LE).

\* Clamp Torque (lbf-in) : NS402W=6.2, NS403W=6.2

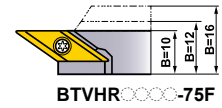
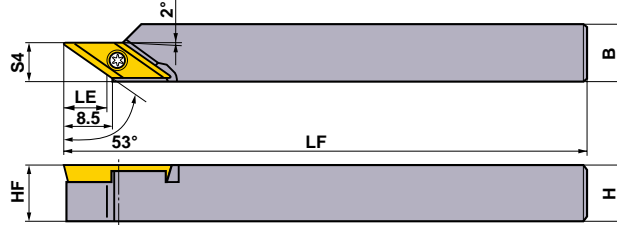
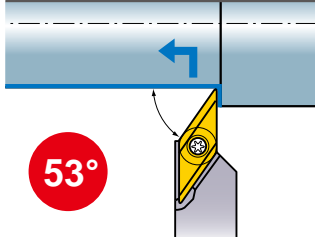
## INSERTS

Order Number	Hand	Coated	Dimensions (mm)		LE * (mm)	Geometry
		VP15TF	RE *	CF		
BTBT604500R-B	R	●	0	0.2	4.5	With Breaker  Right hand insert shown.
BTBT604500L-B	L	●	0	0.2	4.5	
BTBT604501R-B	R	●	0.1	0.3	4.5	
BTBT604501L-B	L	●	0.1	0.3	4.5	
BTBT606000R	R	●	0	0.2	6.0	Without Breaker  Right hand insert shown.
BTBT606000L	L	●	0	0.2	6.0	

\* Numeric value set insert on holder.

## METRIC STANDARD

# BTVH



Right hand tool holder only.

Order Number	Stock	Insert Number	Dimensions (mm)					Insert Screw *	Wrench
	R		H	B	LF	HF	S4		
<b>BTVHR1010-75</b>	●	BTVT 5375○○R-B	10	10	120	10	7.5	NS251	NKY15R
<b>BTVHR1212-75</b>	●		12	12	120	12	7.5	NS251	NKY15R
<b>BTVHR1616-75</b>	●		16	16	120	16	7.5	NS251	NKY15R
<b>BTVHR1010-75F</b>	●		10	10	120	10	10.0	NS251	NKY15R
<b>BTVHR1212-75F</b>	●		12	12	120	12	10.0	NS251	NKY15R
<b>BTVHR1616-75F</b>	●		16	16	120	16	10.0	NS251	NKY15R

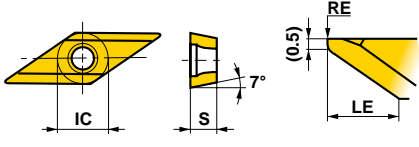
(Note 1) Set the maximum depth of cut at under 30% of the effective cutting edge length (LE).

(Note 2) For high load machining, F type is recommended.

\* Clamp Torque (lbf-in) : NS251=6.2

SMALL TOOLS

## INSERTS

Order Number	Hand	Coated	Dimensions (mm)			LE (mm)	Geometry
		VP15TF	IC	S	RE		
<b>BTVT5375V5R-B</b>	R	●	6.35	3.18	0.05	7.5	With Breaker 
<b>BTVT537501R-B</b>	R	●	6.35	3.18	0.1	7.5	

\* Numeric value set insert on holder.

## RECOMMENDED CUTTING CONDITIONS

	Work Material	Grade	Cutting Speed (SFM)	Feed (IPR)
<b>P</b>	Carbon Steel · Alloy Steel	VP15TF	165-490	.0004-.006
	Free Cutting Carbon Steel	VP15TF	100-590	.0004-.006
<b>M</b>	Stainless Steel	VP15TF	165-395	.0008-.004
<b>N</b>	Non-Ferrous Metal	VP15TF	230-755	.0012-.006

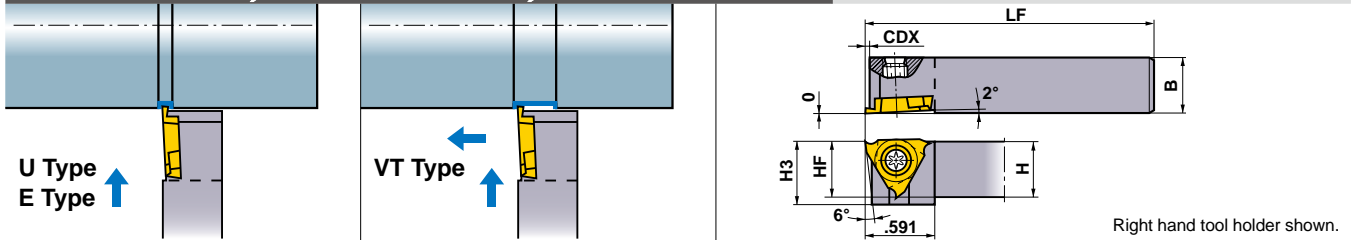
SPARE PARTS > M001  
TECHNICAL DATA > N001

D021

# GROOVING TOOLS (FOR GANG TYPE) TOOL POSTS

## INCH STANDARD

### GTAH, GTBH, GTCH



Right hand tool holder shown.

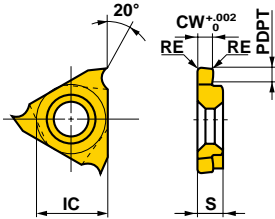
Order Number	Stock		Insert Number	Dimensions (inch)						Cutting Width (inch)	Insert Screw *2	Wrench	
	R	L		H	B	HF	LF	CDX*1	H3				
Long Shank GTBHR/L-063	●	●	GTAT	○○○○	.375	.375	.375	4.724	.118	.531	.057-.118	NS404W	NKY15R
GTBHR/L-083	●	●	GTBT	○○○○	.500	.500	.500	4.724	.118	.520	.057-.118	NS404W	NKY15R
GTBHR/L-103	●	●	GTCT	○○○○	.625	.625	.625	4.724	.118	—	.057-.118	NS404W	NKY15R

(Note) Please use right hand insert for right hand holder and left hand insert for left hand holder.

\*1 If the insert dimension PDPT exceeds the holder dimension CDX, it is impossible to machine the depths over CDX.

\*2 Clamp Torque (lbf-in) : NS404W=6.2

## INSERTS

Order Number	Hand	Coated	Dimensions (inch)					Geometry (inch)
		VP15TF	CW	PDPT*1	RE	IC	S	
GTAT03006V3R-U	R	●	.012	.024	.001	.375	.125	U Type Breaker (Grooving) For general use 
GTAT03006V3L-U	L	●	.012	.024	.001	.375	.125	
GTAT05012V5R-U	R	●	.020	.047	.002	.375	.125	
GTAT05012V5L-U	L	●	.020	.047	.002	.375	.125	
GTAT07520V5R-U	R	●	.030	.079	.002	.375	.125	
GTAT07520V5L-U	L	●	.030	.079	.002	.375	.125	
GTAT09520V5R-U	R	●	.037	.079	.002	.375	.125	
GTAT09520V5L-U	L	●	.037	.079	.002	.375	.125	
GTAT10020V5R-U	R	●	.039	.079	.002	.375	.125	
GTAT10020V5L-U	L	●	.039	.079	.002	.375	.125	
GTAT10320V5R-U	R	●	.041	.079	.002	.375	.125	
GTAT12520V5R-U	R	●	.049	.079	.002	.375	.125	
GTAT12520V5L-U	L	●	.049	.079	.002	.375	.125	
GTBT14530V5R-U	R	●	.057	.118	.002	.375	.125	
GTBT14530V5L-U	L	●	.057	.118	.002	.375	.125	
GTBT15030V5R-U	R	●	.059	.118	.002	.375	.125	
GTBT15030V5L-U	L	●	.059	.118	.002	.375	.125	
GTBT17530V5R-U	R	●	.069	.118	.002	.375	.125	
GTBT17530V5L-U	L	●	.069	.118	.002	.375	.125	
GTBT20030V5R-U	R	●	.079	.118	.002	.375	.125	
GTBT20030V5L-U	L	●	.079	.118	.002	.375	.125	
GTCT25030V5R-U	R	●	.098	.118	.002	.375	.125	
GTCT25030V5L-U	L	●	.098	.118	.002	.375	.125	

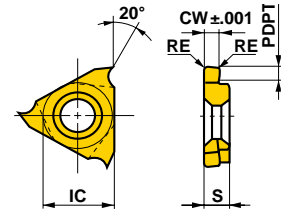
Right hand insert shown.

● : Inventory maintained. □ : Non stock, produced to order only.  
(5 inserts in one case)



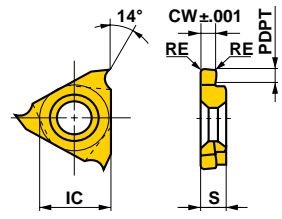
# INSERTS

Order Number	Hand	Coated		Dimensions (inch)					Geometry
		VP15TF	VP15KZ	CW	PDPT	RE	IC	S	
GTAT03306V3R-E	R	●		.013	.024	.001	.375	.125	E Type Breaker (Grooving) For precision cutting
GTAT03306V3L-E	L	●		.013	.024	.001	.375	.125	
GTAT04312V3R-E	R	●		.017	.047	.001	.375	.125	
GTAT04312V3L-E	L	●		.017	.047	.001	.375	.125	
GTAT05312V5R-E	R	●		.021	.047	.002	.375	.125	
GTAT05312V5L-E	L	●		.021	.047	.002	.375	.125	
GTAT07520V5R-E	R	●		.030	.079	.002	.375	.125	
GTAT07520V5L-E	L	●		.030	.079	.002	.375	.125	
GTAT09520V5R-E	R	●		.037	.079	.002	.375	.125	
GTAT09520V5L-E	L	●		.037	.079	.002	.375	.125	
GTAT10020V5R-E	R	●		.039	.079	.002	.375	.125	
GTAT10020V5L-E	L	●		.039	.079	.002	.375	.125	
GTAT1002001R-E	R	●		.039	.079	.004	.375	.125	
GTAT1002001L-E	L	●		.039	.079	.004	.375	.125	
GTAT12020V5R-E	R	●		.047	.079	.002	.375	.125	
GTAT12020V5L-E	L	●		.047	.079	.002	.375	.125	
GTAT1202001R-E	R	●		.047	.079	.004	.375	.125	
GTAT1202001L-E	L	●		.047	.079	.004	.375	.125	
GTAT14020V5R-E	R	●		.055	.079	.002	.375	.125	
GTAT14020V5L-E	L	●		.055	.079	.002	.375	.125	
GTBT15030V5R-E	R	●		.059	.118	.002	.375	.125	
GTBT15030V5L-E	L	●		.059	.118	.002	.375	.125	
GTBT1503001R-E	R	●		.059	.118	.004	.375	.125	
GTBT1503001L-E	L	●		.059	.118	.004	.375	.125	
GTBT18030V5R-E	R	●		.071	.118	.002	.375	.125	
GTBT18030V5L-E	L	●		.071	.118	.002	.375	.125	
GTBT20030V5R-E	R	●		.079	.118	.002	.375	.125	
GTBT20030V5L-E	L	●		.079	.118	.002	.375	.125	
GTBT2003001R-E	R	●		.079	.118	.004	.375	.125	
GTBT2003001L-E	L	●		.079	.118	.004	.375	.125	
GTBT22530V5R-E	R	●		.089	.118	.002	.375	.125	
GTBT22530V5L-E	L	●		.089	.118	.002	.375	.125	
GTCT25030V5R-E	R	●		.098	.118	.002	.375	.125	
GTCT25030V5L-E	L	●		.098	.118	.002	.375	.125	
GTCT27530V5R-E	R	●		.108	.118	.002	.375	.125	
GTCT27530V5L-E	L	●		.108	.118	.002	.375	.125	
GTCT30030V5R-E	R	●		.118	.118	.002	.375	.125	
GTCT30030V5L-E	L	●		.118	.118	.002	.375	.125	
GTAT0330600R-VT	R		●	.013	.024	0	.375	.125	VT Type Breaker (Grooving, Profiling)
GTAT0431200R-VT	R		●	.017	.047	0	.375	.125	
GTAT0532000R-VT	R		●	.021	.079	0	.375	.125	
GTAT0652000R-VT	R		●	.026	.079	0	.375	.125	
GTAT0752000R-VT	R		●	.030	.079	0	.375	.125	
GTAT0802000R-VT	R		●	.031	.079	0	.375	.125	
GTAT0852000R-VT	R		●	.033	.079	0	.375	.125	
GTAT0952000R-VT	R		●	.037	.079	0	.375	.125	
GTAT1002000R-VT	R		●	.039	.079	0	.375	.125	
GTAT1102000R-VT	R		●	.043	.079	0	.375	.125	
GTAT1202000R-VT	R		●	.047	.079	0	.375	.125	
GTAT1302000R-VT	R		●	.051	.079	0	.375	.125	
GTAT1402000R-VT	R		●	.055	.079	0	.375	.125	
GTBT1503000R-VT	R		●	.059	.118	0	.375	.125	
GTBT2003000R-VT	R		●	.079	.118	0	.375	.125	



Right hand insert shown.

Max. Depth of Cut (inch)



## RECOMMENDED CUTTING CONDITIONS

	Work Material	Grade	Cutting Speed (SFM)	Feed (IPR)
P	Carbon Steel · Alloy Steel	VP15TF/VP15KZ	165—490	.0004—.0035
	Free Cutting Carbon Steel	VP15TF/VP15KZ	100—590	.0004—.0035
M	Stainless Steel	VP15TF/VP15KZ	165—395	.0008—.002
N	Non-Ferrous Metal	VP15TF/VP15KZ	230—755	.0012—.004

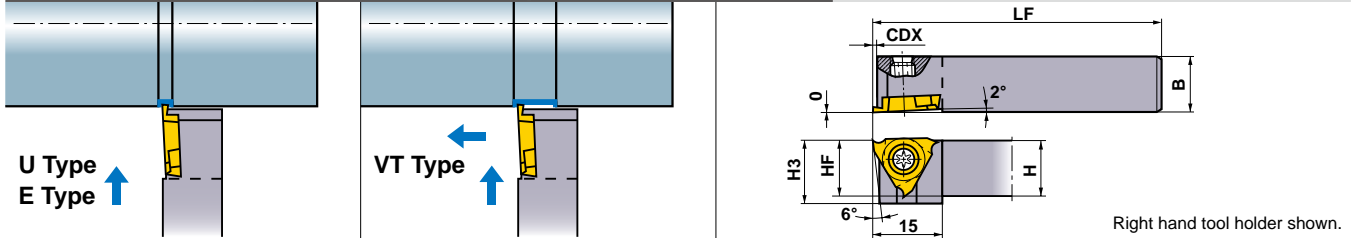
SPARE PARTS > M001  
TECHNICAL DATA > N001

SMALL TOOLS

# GROOVING TOOLS (FOR GANG TYPE) TOOL POSTS

## METRIC STANDARD

### GTAH, GTBH, GTCH



Right hand tool holder shown.

SMALL TOOLS

	Order Number	Stock		Insert Number	Dimensions (mm)						Cutting Width (mm)	*2	
		R	L		H	B	HF	LF	CDX*1	H3		Insert Screw	Wrench
Standard Shank	GTAHR/L0808-20S	★	★	GTAT	8	8	8	80	2	13	0.3—3.0	NS404W	NKY15R
	GTAHR/L 1010-20S	★	★	GTBT*1	10	10	10	80	2	13	0.3—3.0	NS404W	NKY15R
	GTAHR/L 1212-20S	★	★	GTCT*1	12	12	12	80	2	13	0.3—3.0	NS404W	NKY15R
	GTBHR/L1010-30S	★	★	GTBT, GTCT	10	10	10	80	3	13	1.45—3.0	NS404W	NKY15R
	GTCHR/L1010-30S	★	★	GTCT	10	10	10	80	3	13	2.5—3.0	NS404W	NKY15R
Long Shank	GTAHR/L0808-20	★	★	GTAT	8	8	8	120	2	13	0.3—3.0	NS404W	NKY15R
	GTAHR/L 1010-20	★	★	GTBT*1	10	10	10	120	2	13	0.3—3.0	NS404W	NKY15R
	GTAHR/L 1212-20	★	★	GTCT*1	12	12	12	120	2	13	0.3—3.0	NS404W	NKY15R
	GTAHR/L1616-20	★	★	GTCT*1	16	16	16	120	2	—	0.3—3.0	NS404W	NKY15R
	GTBHR/L1010-30	●	●	GTBT, GTCT	10	10	10	120	3	13	1.45—3.0	NS404W	NKY15R
	GTBHR/L 1212-30	●	●	GTBT, GTCT	12	12	12	120	3	13	1.45—3.0	NS404W	NKY15R
	GTBHR/L 1616-30	●	●	GTBT, GTCT	16	16	16	120	3	16	1.45—3.0	NS404W	NKY15R
GTCHR/L1010-30	★	★	GTCT	10	10	10	120	3	13	2.5—3.0	NS404W	NKY15R	

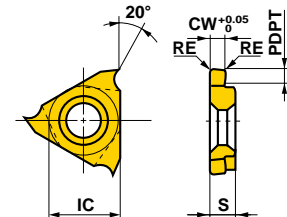
(Note) Please use right hand insert for right hand holder and left hand insert for left hand holder.

\*1 If the insert dimension PDPT exceeds the holder dimension CDX, it is impossible to machine the depths over CDX.

\*2 Clamp Torque (lbf-in) : NS404W=6.2

## INSERTS

Order Number	Hand	Coated	Dimensions (mm)					Geometry (mm)
		VP15TF	CW	PDPT*1	RE	IC	S	
GTAT03006V3R-U	R	●	0.3	0.6	0.03	9.525	3.18	U Type Breaker (Grooving) For general use
GTAT03006V3L-U	L	●	0.3	0.6	0.03	9.525	3.18	
GTAT05012V5R-U	R	●	0.5	1.2	0.05	9.525	3.18	
GTAT05012V5L-U	L	●	0.5	1.2	0.05	9.525	3.18	
GTAT07520V5R-U	R	●	0.75	2.0	0.05	9.525	3.18	
GTAT07520V5L-U	L	●	0.75	2.0	0.05	9.525	3.18	
GTAT09520V5R-U	R	●	0.95	2.0	0.05	9.525	3.18	
GTAT09520V5L-U	L	●	0.95	2.0	0.05	9.525	3.18	
GTAT10020V5R-U	R	●	1.0	2.0	0.05	9.525	3.18	
GTAT10020V5L-U	L	●	1.0	2.0	0.05	9.525	3.18	
GTAT10320V5R-U	R	●	1.03	2.0	0.05	9.525	3.18	
GTAT12520V5R-U	R	●	1.25	2.0	0.05	9.525	3.18	
GTAT12520V5L-U	L	●	1.25	2.0	0.05	9.525	3.18	
GTBT14530V5R-U	R	●	1.45	3.0	0.05	9.525	3.18	
GTBT14530V5L-U	L	●	1.45	3.0	0.05	9.525	3.18	
GTBT15030V5R-U	R	●	1.5	3.0	0.05	9.525	3.18	
GTBT15030V5L-U	L	●	1.5	3.0	0.05	9.525	3.18	
GTBT17530V5R-U	R	●	1.75	3.0	0.05	9.525	3.18	
GTBT17530V5L-U	L	●	1.75	3.0	0.05	9.525	3.18	
GTBT20030V5R-U	R	●	2.0	3.0	0.05	9.525	3.18	
GTBT20030V5L-U	L	●	2.0	3.0	0.05	9.525	3.18	
GTCT25030V5R-U	R	●	2.5	3.0	0.05	9.525	3.18	
GTCT25030V5L-U	L	●	2.5	3.0	0.05	9.525	3.18	



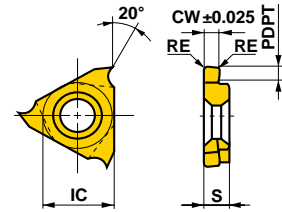
Right hand insert shown.

● : Inventory maintained. ★ : Inventory maintained in Japan.

(5 inserts in one case)

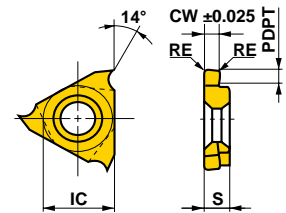
# INSERTS

Order Number	Hand	Coated		Dimensions (mm)					Geometry
		VP15TF	VP15KZ	CW	PDPT	RE	IC	S	
GTAT03306V3R-E	R	●		0.33	0.6	0.03	9.525	3.18	E Type Breaker (Grooving) For precision cutting
GTAT03306V3L-E	L	●		0.33	0.6	0.03	9.525	3.18	
GTAT04312V3R-E	R	●		0.43	1.2	0.03	9.525	3.18	
GTAT04312V3L-E	L	●		0.43	1.2	0.03	9.525	3.18	
GTAT05312V5R-E	R	●		0.53	1.2	0.05	9.525	3.18	
GTAT05312V5L-E	L	●		0.53	1.2	0.05	9.525	3.18	
GTAT07520V5R-E	R	●		0.75	2.0	0.05	9.525	3.18	
GTAT07520V5L-E	L	●		0.75	2.0	0.05	9.525	3.18	
GTAT09520V5R-E	R	●		0.95	2.0	0.05	9.525	3.18	
GTAT09520V5L-E	L	●		0.95	2.0	0.05	9.525	3.18	
GTAT10020V5R-E	R	●		1.0	2.0	0.05	9.525	3.18	
GTAT10020V5L-E	L	●		1.0	2.0	0.05	9.525	3.18	
GTAT1002001R-E	R	●		1.0	2.0	0.1	9.525	3.18	
GTAT1002001L-E	L	●		1.0	2.0	0.1	9.525	3.18	
GTAT12020V5R-E	R	●		1.2	2.0	0.05	9.525	3.18	
GTAT12020V5L-E	L	●		1.2	2.0	0.05	9.525	3.18	
GTAT1202001R-E	R	●		1.2	2.0	0.1	9.525	3.18	
GTAT1202001L-E	L	●		1.2	2.0	0.1	9.525	3.18	
GTAT14020V5R-E	R	●		1.4	2.0	0.05	9.525	3.18	
GTAT14020V5L-E	L	●		1.4	2.0	0.05	9.525	3.18	
GTBT15030V5R-E	R	●		1.5	3.0	0.05	9.525	3.18	
GTBT15030V5L-E	L	●		1.5	3.0	0.05	9.525	3.18	
GTBT1503001R-E	R	●		1.5	3.0	0.1	9.525	3.18	
GTBT1503001L-E	L	●		1.5	3.0	0.1	9.525	3.18	
GTBT18030V5R-E	R	●		1.8	3.0	0.05	9.525	3.18	
GTBT18030V5L-E	L	●		1.8	3.0	0.05	9.525	3.18	
GTBT20030V5R-E	R	●		2.0	3.0	0.05	9.525	3.18	
GTBT20030V5L-E	L	●		2.0	3.0	0.05	9.525	3.18	
GTBT2003001R-E	R	●		2.0	3.0	0.1	9.525	3.18	
GTBT2003001L-E	L	●		2.0	3.0	0.1	9.525	3.18	
GTBT22530V5R-E	R	●		2.25	3.0	0.05	9.525	3.18	
GTBT22530V5L-E	L	●		2.25	3.0	0.05	9.525	3.18	
GTCT25030V5R-E	R	●		2.5	3.0	0.05	9.525	3.18	
GTCT25030V5L-E	L	●		2.5	3.0	0.05	9.525	3.18	
GTCT27530V5R-E	R	●		2.75	3.0	0.05	9.525	3.18	
GTCT27530V5L-E	L	●		2.75	3.0	0.05	9.525	3.18	
GTCT30030V5R-E	R	●		3.0	3.0	0.05	9.525	3.18	
GTCT30030V5L-E	L	●		3.0	3.0	0.05	9.525	3.18	
GTAT0330600R-VT	R		●	0.33	0.6	0	9.525	3.18	VT Type Breaker (Grooving, Profiling)
GTAT0431200R-VT	R		●	0.43	1.2	0	9.525	3.18	
GTAT0532000R-VT	R		●	0.53	2.0	0	9.525	3.18	
GTAT0652000R-VT	R		●	0.65	2.0	0	9.525	3.18	
GTAT0752000R-VT	R		●	0.75	2.0	0	9.525	3.18	
GTAT0802000R-VT	R		●	0.8	2.0	0	9.525	3.18	
GTAT0852000R-VT	R		●	0.85	2.0	0	9.525	3.18	
GTAT0952000R-VT	R		●	0.95	2.0	0	9.525	3.18	
GTAT1002000R-VT	R		●	1.0	2.0	0	9.525	3.18	
GTAT1102000R-VT	R		●	1.1	2.0	0	9.525	3.18	
GTAT1202000R-VT	R		●	1.2	2.0	0	9.525	3.18	
GTAT1302000R-VT	R		●	1.3	2.0	0	9.525	3.18	
GTAT1402000R-VT	R		●	1.4	2.0	0	9.525	3.18	
GTBT1503000R-VT	R		●	1.5	3.0	0	9.525	3.18	
GTBT2003000R-VT	R		●	2.0	3.0	0	9.525	3.18	



Right hand insert shown.

Max. Depth of Cut (mm)



SMALL TOOLS

## RECOMMENDED CUTTING CONDITIONS

	Work Material	Grade	Cutting Speed (SFM)	Feed (IPR)
P	Carbon Steel · Alloy Steel	VP15TF/VP15KZ	165—490	.0004—.0035
	Free Cutting Carbon Steel	VP15TF/VP15KZ	100—590	.0004—.0035
M	Stainless Steel	VP15TF/VP15KZ	165—395	.0008—.002
N	Non-Ferrous Metal	VP15TF/VP15KZ	230—755	.0012—.004

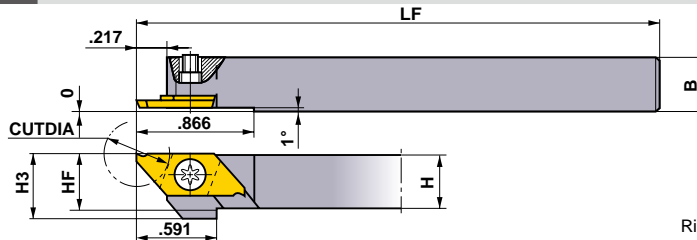
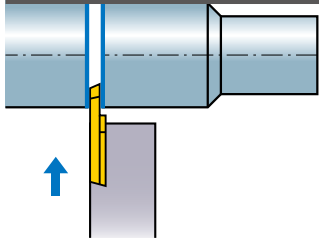
SPARE PARTS > M001  
TECHNICAL DATA > N001

D025

# CUTTING OFF TOOLS (FOR GANG TYPE) TOOL POSTS

## INCH STANDARD

### CTAH

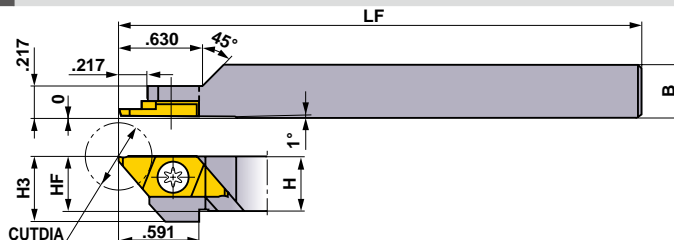
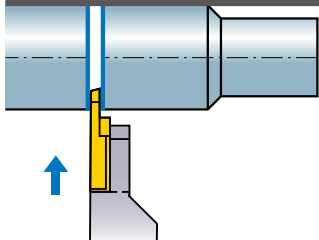


Right hand tool holder shown.

Order Number	Stock		Insert Number	Dimensions (inch)					CUTDIA (inch)	Insert Screw *2	Wrench	
	R	L		H	B	HF	LF	H3				
CTAHR/L-062	●	●	CTAT	○ ○ ○ ○	.375	.375	.375	4.724	.500	.472 (.315)*1	NS402W	NKY15R
CTAHR/L-082	●	●		○ ○ ○ ○	.500	.500	.500	4.724	—		NS403W	NKY15R
CTAHR/L-102	●	●		○ ○ ○ ○	.625	.625	.625	4.724	—		NS403W	NKY15R

\*1 When the width of cutting off (CW) is .028inch.  
\*2 Clamp Torque (lbf-in) : NS402W=6.2, NS403W=6.2

### CTAH-S



Right hand tool holder only.

Order Number	Stock	Insert Number	Dimensions (inch)					CUTDIA (inch)	Insert Screw *2	Wrench	
	R		H	B	HF	LF	H3				
CTAHR-062S	●	CTAT	○ ○ ○ ○	.375	.375	.375	3.150	.500	.472 (.315)*1	NS401	NKY25R
CTAHR-082S	●		○ ○ ○ ○	.500	.500	.500	3.150	—		NS401	NKY25R

\*1 When the width of cutting off (CW) is .028inch.  
\*2 Clamp Torque (lbf-in) : NS401=31

## RECOMMENDED CUTTING CONDITIONS

	Work Material	Grade	Cutting Speed (SFM)	Feed (IPR)
P	Carbon Steel · Alloy Steel	VP15TF	165—490	.0008— .0035
	Free Cutting Carbon Steel	VP15TF	100—590	.0004— .0035
M	Stainless Steel	VP15TF	165—395	.0008— .0019
N	Non-Ferrous Metal	VP15TF	230—755	.0012— .0043

# INSERTS

Holder	Setting Geometry	Breaker	Geometry	Insert Geometry	Order Number	Hand	Coated	Dimensions (inch)			CUTDIA* (inch)
							VP15TF	CW	PDPT	RE	
Right Hand (R)	16°	With Breaker			CTAT07080V5RR-B	R	●	.028	.177	.002	.315
					CTAT10120V5RR-B	R	●	.039	.264	.002	.472
					CTAT15120V5RR-B	R	●	.059	.264	.002	.472
					CTAT20120V5RR-B	R	●	.079	.264	.002	.472
	16°				CTAT15120V5RR-BX	R	●	.059	.264	.002	.472
					CTAT20120V5RR-BX	R	●	.079	.264	.002	.472
	0°				CTAT10120V5RN-B	N	●	.039	.264	.002	.472
					CTAT15120V5RN-B	N	●	.059	.264	.002	.472
	0°				CTAT20120V5RN-B	N	●	.079	.264	.002	.472
					CTAT15120V5RN-BX	N	●	.059	.264	.002	.472
0°		CTAT20120V5RN-BX	N	●	.079	.264	.002	.472			
	16°		CTAT10110V5RL-B	L	●	.039	.264	.002	.433		
		CTAT15110V5RL-B	L	●	.059	.264	.002	.433			
		CTAT20110V5RL-B	L	●	.079	.264	.002	.433			
20°	Without Breaker		CTAT1012000RR	R	●	.039	.264	0	.472		
			CTAT1512000RR	R	●	.059	.264	0	.472		
			CTAT2012000RR	R	●	.079	.264	0	.472		
			CTAT07080V5LL-B	L	●	.028	.177	.002	.315		
Left Hand (L)	16°	With Breaker			CTAT10120V5LL-B	L	●	.039	.264	.002	.472
					CTAT15120V5LL-B	L	●	.059	.264	.002	.472
					CTAT20120V5LL-B	L	●	.079	.264	.002	.472
					CTAT10120V5LN-B	N	●	.039	.264	.002	.472
	0°				CTAT15120V5LN-B	N	●	.059	.264	.002	.472
					CTAT20120V5LN-B	N	●	.079	.264	.002	.472
	16°				CTAT10110V5LR-B	R	●	.039	.264	.002	.433
					CTAT15110V5LR-B	R	●	.059	.264	.002	.433
	16°				CTAT20110V5LR-B	R	●	.079	.264	.002	.433
				20°		CTAT1012000LL	L	●	.039	.264	0
	CTAT1512000LL	L	●		.059	.264	0	.472			
	CTAT2012000LL	L	●		.079	.264	0	.472			

\*CUTDIA : Max. Cut Off Diameter

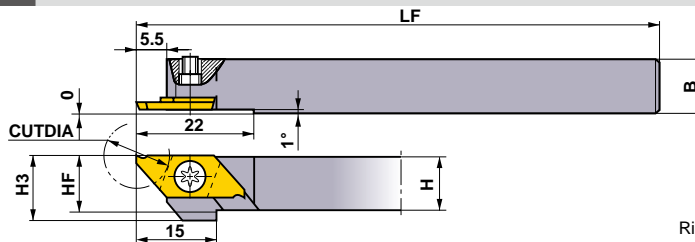
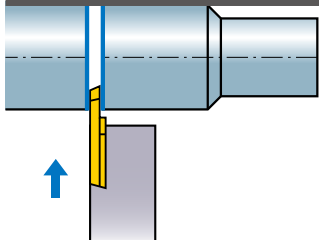
SMALL TOOLS



# CUTTING OFF TOOLS (FOR GANG TYPE) TOOL POSTS

## METRIC STANDARD

### CTAH



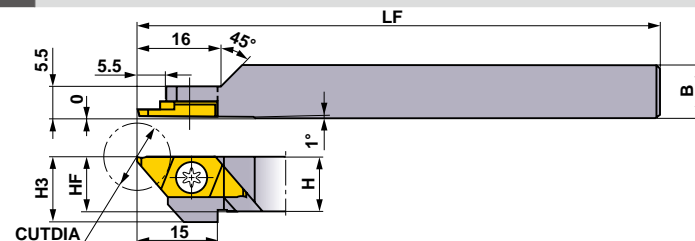
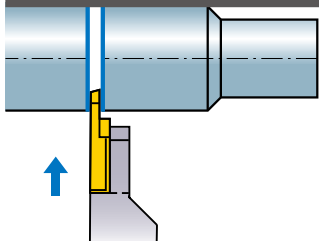
Right hand tool holder shown.

Order Number	Stock		Insert Number	Dimensions (mm)					CUTDIA (mm)	*2	Wrench
	R	L		H	B	HF	LF	H3			
CTAHR/L0810-120	●	●	CTAT	○	○	○	○	○	12 (8)*1	NS402W	NKY15R
CTAHR/L 1010-120	●	●		○	○	○	○	○			
CTAHR/L 1212-120	●	●		○	○	○	○	○			
CTAHR/L 1616-120	●	●		○	○	○	○	○			

\*1 When the width of cutting off (CW) is 0.7mm.

\*2 Clamp Torque (lbf-in) : NS402W=6.2, NS403W=6.2

### CTAH-S



Right hand tool holder only.

Order Number	Stock	Insert Number	Dimensions (mm)					CUTDIA (mm)	*2	Wrench
	R		H	B	HF	LF	H3			
CTAHR1010-120S	★	CTAT	○	○	○	○	○	12 (8)*1	NS401	NKY25R

\*1 When the width of cutting off (CW) is 0.7mm.

\*2 Clamp Torque (lbf-in) : NS401=31

## RECOMMENDED CUTTING CONDITIONS

	Work Material	Grade	Cutting Speed (SFM)	Feed (IPR)
P	Carbon Steel · Alloy Steel	VP15TF	165-490	.0008-.0035
	Free Cutting Carbon Steel	VP15TF	100-590	.0004-.0035
M	Stainless Steel	VP15TF	165-395	.0008-.0019
N	Non-Ferrous Metal	VP15TF	230-755	.0012-.0043

● : Inventory maintained. ★ : Inventory maintained in Japan.  
(5 inserts in one case)

# INSERTS

Holder	Setting Geometry	Breaker	Geometry	Insert Geometry	Order Number	Hand	Coated	Dimensions (mm)			CUTDIA* (mm)
							VP15TF	CW	PDPT	RE	
Right Hand (R)	16°	With Breaker			CTAT07080V5RR-B	R	●	0.7	4.5	0.05	8
					CTAT10120V5RR-B	R	●	1.0	6.7	0.05	12
					CTAT15120V5RR-B	R	●	1.5	6.7	0.05	12
					CTAT20120V5RR-B	R	●	2.0	6.7	0.05	12
	16°				CTAT15120V5RR-BX	R	●	1.5	6.7	0.05	12
					CTAT20120V5RR-BX	R	●	2.0	6.7	0.05	12
	0°				CTAT10120V5RN-B	N	●	1.0	6.7	0.05	12
					CTAT15120V5RN-B	N	●	1.5	6.7	0.05	12
	0°				CTAT20120V5RN-B	N	●	2.0	6.7	0.05	12
					CTAT15120V5RN-BX	N	●	1.5	6.7	0.05	12
0°		CTAT20120V5RN-BX	N	●	2.0	6.7	0.05	12			
	16°		CTAT10110V5RL-B	L	●	1.0	6.7	0.05	11		
		CTAT15110V5RL-B	L	●	1.5	6.7	0.05	11			
		CTAT20110V5RL-B	L	●	2.0	6.7	0.05	11			
20°	Without Breaker		CTAT1012000RR	R	●	1.0	6.7	0	12		
			CTAT1512000RR	R	●	1.5	6.7	0	12		
			CTAT2012000RR	R	●	2.0	6.7	0	12		
			CTAT07080V5LL-B	L	●	0.7	4.5	0.05	8		
Left Hand (L)	16°	With Breaker			CTAT10120V5LL-B	L	●	1.0	6.7	0.05	12
					CTAT15120V5LL-B	L	●	1.5	6.7	0.05	12
					CTAT20120V5LL-B	L	●	2.0	6.7	0.05	12
					CTAT10120V5LN-B	N	●	1.0	6.7	0.05	12
	0°				CTAT15120V5LN-B	N	●	1.5	6.7	0.05	12
					CTAT20120V5LN-B	N	●	2.0	6.7	0.05	12
	16°				CTAT10110V5LR-B	R	●	1.0	6.7	0.05	11
					CTAT15110V5LR-B	R	●	1.5	6.7	0.05	11
					CTAT20110V5LR-B	R	●	2.0	6.7	0.05	11
	20°			Without Breaker		CTAT1012000LL	L	●	1.0	6.7	0
		CTAT1512000LL	L		●	1.5	6.7	0	12		
		CTAT2012000LL	L		●	2.0	6.7	0	12		

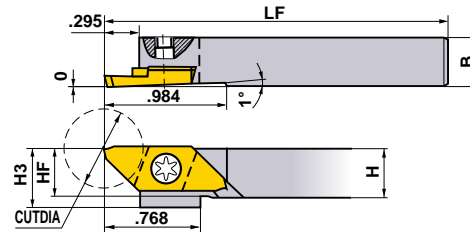
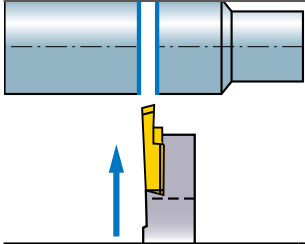
\*CUTDIA : Max. Cut Off Diameter

SMALL TOOLS

# CUTTING OFF TOOLS (FOR GANG TYPE) TOOL POSTS

## INCH STANDARD

# CTBH



Right hand tool holder shown.

Order Number	Stock		Insert Number	Dimensions (inch)					CUTDIA (inch)	Insert Screw *	Wrench	
	R	L		H	B	HF	LF	H3				
<b>CTBHR/L-062</b>	●	●	CTBT	○ ○ ○ ○	.375	.375	.375	4.724	.500	.630	NS402W	NKY15R
<b>CTBHR/L-082</b>	●	●		○ ○ ○ ○	.500	.500	.500	4.724	—	.630	NS403W	NKY15R
<b>CTBHR/L-102</b>	●	●		○ ○ ○ ○	.625	.625	.625	4.724	—	.630	NS403W	NKY15R

\* Clamp Torque (lbf-in) : NS402W=6.2, NS403W=6.2

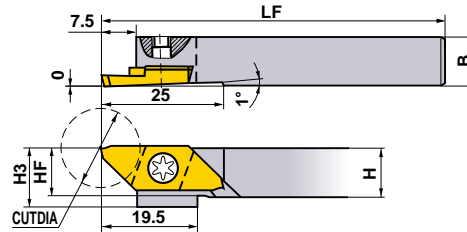
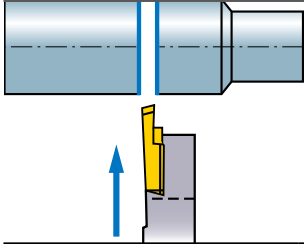
## INSERTS

Holder	Setting Geometry	Breaker	Geometry	Insert Geometry	Order Number	Hand	Coated	Dimensions (inch)		CUTDIA (inch)
							VP15TF	CW	RE	
Right Hand (R)		With Breaker			<b>CTBT15160V5RR-B</b>	R	●	.059	.002	.630
					<b>CTBT20160V5RR-B</b>	R	●	.079	.002	.630
					<b>CTBT20160V5RN-B</b>	N	●	.079	.002	.630
Left Hand (L)					<b>CTBT20160V5LL-B</b>	L	●	.079	.002	.630
					<b>CTBT20160V5LN-B</b>	N	●	.079	.002	.630
					<b>CTBT20145V5LR-B</b>	R	●	.079	.002	.571

Right hand insert shown.

# METRIC STANDARD

## CTBH



Right hand tool holder shown.

Order Number	Stock		Insert Number	Dimensions (mm)					CUTDIA (mm)	*		
	R	L		H	B	HF	LF	H3				Insert Screw
CTBHR/L1010-160	●	●	CTBT		10	10	10	120	12	16	NS402W	NKY15R
CTBHR/L1212-160	●	●			12	12	12	120	—	16	NS403W	NKY15R
CTBHR/L1616-160	●	●			16	16	16	120	—	16	NS403W	NKY15R

\* Clamp Torque (lbf-in) : NS402W=6.2, NS403W=6.2

SMALL TOOLS

## INSERTS

Holder	Setting Geometry	Breaker	Geometry	Insert Geometry	Order Number	Hand	Coated	Dimensions (mm)		CUTDIA (mm)
							VP15TF	CW	RE	
Right Hand (R)					CTBT15160V5RR-B	R	●	1.5	0.05	16
					CTBT20160V5RR-B	R	●	2.0	0.05	16
Left Hand (L)					CTBT20160V5LL-B	L	●	2.0	0.05	16
					CTBT20160V5LN-B	N	●	2.0	0.05	16
					CTBT20145V5LR-B	R	●	2.0	0.05	14.5

Right hand insert shown.

## RECOMMENDED CUTTING CONDITIONS

	Work Material	Grade	Cutting Speed (SFM)	Feed (IPR)
P	Carbon Steel · Alloy Steel	VP15TF	165—490	.0008— .0035
	Free Cutting Carbon Steel	VP15TF	100—590	.0004— .0035
M	Stainless Steel	VP15TF	165—395	.0008— .0019
N	Non-Ferrous Metal	VP15TF	230—755	.0012— .0043

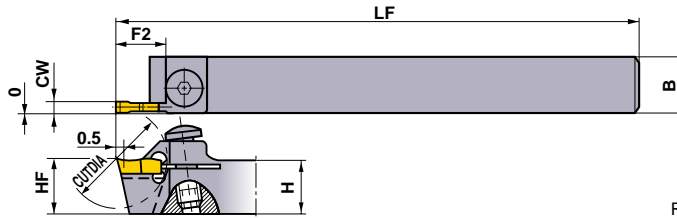
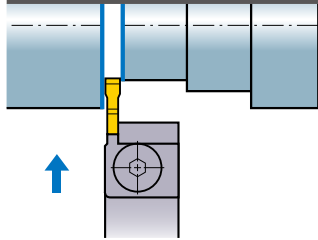
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D031



# CUTTING OFF TOOLS (FOR GANG TYPE) TOOL POSTS

## METRIC STANDARD

# CTCH

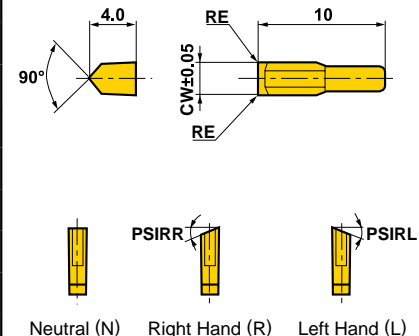


Right hand tool holder shown.

Order Number	Stock		Insert Number	Dimensions (mm)					CUTDIA (mm)	* 			
	R	L		H	B	HF	LF	F2				Clamp Screw	Wrench
<b>CTCHR/L1010-200</b>	●	●	CTCT	2	○	○	○	○	○	○	○	NS501W	HKY25RS
<b>CTCHR/L1212-200</b>	●	●		2	○	○	○	○	○	○	○	○	NS501W

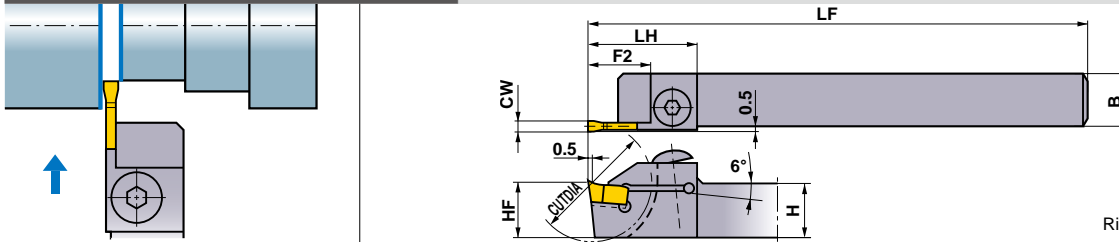
\* Clamp Torque (lbf-in) : NS501W=19

## INSERTS

Breaker	Order Number	Hand	Coated	Dimensions (mm)			CUTDIA (mm)	Geometry
			VP15TF	CW	PSIRR/L	RE		
With Breaker	<b>CTCT22200V5N-B</b>	N	●	2.2	0°	0.05	20	
	<b>CTCT2220001N-B</b>	N	●	2.2	0°	0.1	20	
	<b>CTCT25200V5N-B</b>	N	●	2.5	0°	0.05	20	
	<b>CTCT2520001N-B</b>	N	●	2.5	0°	0.1	20	
	<b>CTCT22200V5R-B</b>	R	●	2.2	17°	0.05	20	
	<b>CTCT2220001R-B</b>	R	●	2.2	17°	0.1	20	
	<b>CTCT25200V5R-B</b>	R	●	2.5	17°	0.05	20	
	<b>CTCT2520001R-B</b>	R	●	2.5	17°	0.1	20	
	<b>CTCT22200V5L-B</b>	L	●	2.2	17°	0.05	20	
	<b>CTCT2220001L-B</b>	L	●	2.2	17°	0.1	20	
	<b>CTCT25200V5L-B</b>	L	●	2.5	17°	0.05	20	
	<b>CTCT2520001L-B</b>	L	●	2.5	17°	0.1	20	

## METRIC STANDARD

# CTDH



Right hand tool holder shown.

Order Number	Stock		Insert Number	Dimensions (mm)						CUTDIA (mm)	* Clamp Screw	Wrench	
	R	L		H	B	HF	LF	LH	F2				
<b>CTDHR/L1616-230</b>	●		CTDT	2535	16	16	16	125	24	12.2	23	HBH06020	HKY40R
<b>CTDHR/L 1616-280</b>	●			2535	16	16	16	120	25	15	28	NS502W	HKY25R
<b>CTDHR/L1616-350</b>	●	●		2535	16	16	16	125	32	18.5	35	HBH06020	HKY40R

\* Clamp Torque (lbf-in) : HBH06020=62, NS502W=19

SMALL TOOLS

## INSERTS

Breaker	Order Number	Hand	Coated	Dimensions (mm)			CUTDIA (mm)	Geometry
			VP15TF	CW	PSIRR	RE		
With Breaker	<b>CTDT2535002N-B</b>	N	●	2.5	0°	0.2	23-35	
	<b>CTDT25350V5R-B</b>	R	●	2.5	8°	≤ 0.05	23-35	
	<b>CTDT25350V5R-BS</b>	R	●	2.5	17°	≤ 0.05	23-35	
	<b>CTDT2535002R-B</b>	R	●	2.5	8°	0.2	23-35	

## RECOMMENDED CUTTING CONDITIONS

	Work Material	Grade	Cutting Speed (SFM)	Feed (IPR)
<b>P</b>	Carbon Steel · Alloy Steel	VP15TF	165-490	.0008-.0035
	Free Cutting Carbon Steel	VP15TF	100-590	.0004-.0035
<b>M</b>	Stainless Steel	VP15TF	165-395	.0008-.0019
<b>N</b>	Non-Ferrous Metal	VP15TF	230-755	.0012-.0043

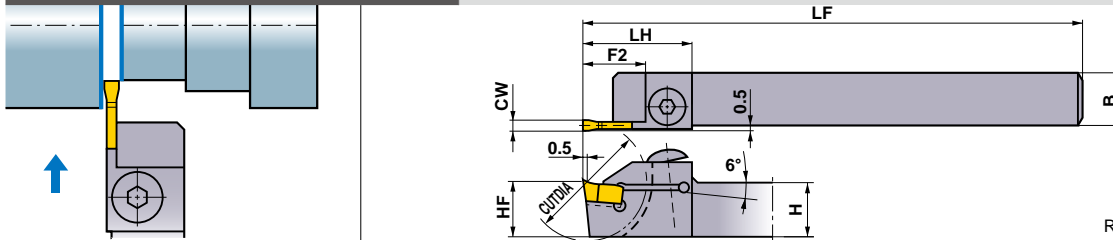
SPARE PARTS > M001  
TECHNICAL DATA > N001

D033

# CUTTING OFF TOOLS (FOR GANG TYPE) TOOL POSTS

## METRIC STANDARD

### CTEH



Right hand tool holder shown.

Order Number	Stock		Insert Number	Dimensions (mm)						CUTDIA (mm)	* Clamp Screw	Wrench	
	R	L		H	B	HF	LF	LH	F2				
<b>CTEHR/L1616-230</b>	●		CTET	3035	16	16	16	125	24	12.2	23	HBH06020	HKY40R
<b>CTEHR/L 1616-280</b>	●			3035	16	16	16	120	25	15	28	NS502W	HKY25R
<b>CTEHR/L1616-350</b>	●	●		3035	16	16	16	125	32	18.5	35	HBH06020	HKY40R

\* Clamp Torque (lbf-in) : HBH06020=62, NS502W=19

## INSERTS

Breaker	Order Number	Hand	Coated	Dimensions (mm)			CUTDIA (mm)	Geometry
			VP15TF	CW	PSIRR/L	RE		
With Breaker	<b>CTET30350V5R-B</b>	R	●	3	8°	≤ 0.05	23-35	
	<b>CTET30350V5R-BS</b>	R	●	3	17°	≤ 0.05	23-35	
	<b>CTET3035002N-B</b>	N	●	3	0°	0.2	23-35	
	<b>CTET3035002R-B</b>	R	●	3	8°	0.2	23-35	
	<b>CTET3035002L-B</b>	L	●	3	8°	0.2	23-35	

## RECOMMENDED CUTTING CONDITIONS

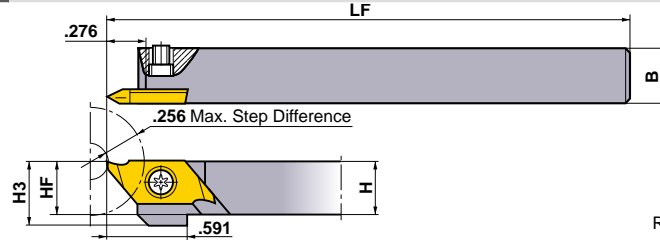
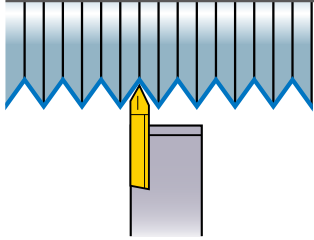
	Work Material	Grade	Cutting Speed (SFM)	Feed (IPR)
<b>P</b>	Carbon Steel · Alloy Steel	VP15TF	165-490	.0008-.0035
	Free Cutting Carbon Steel	VP15TF	100-590	.0004-.0035
<b>M</b>	Stainless Steel	VP15TF	165-395	.0008-.0019
<b>N</b>	Non-Ferrous Metal	VP15TF	230-755	.0012-.0043



# THREADING TOOLS (FOR GANG TYPE) TOOL POSTS

## INCH STANDARD

# TTAH



Right hand tool holder shown.

Order Number	Stock		Insert Number	Dimensions (inch)					Insert Screw *	Wrench	
	R	L		H	B	HF	LF	H3			
TTAHR/L-062	●	●	TTAT		.375	.375	.375	4.724	.500	NS402W	NKY15R
TTAHR/L-082	●	●			.500	.500	.500	4.724	—	NS402W	NKY15R
TTAHR/L-102	●	●			.625	.625	.625	4.724	—	NS402W	NKY15R

\* Clamp Torque (lbf-in) : NS402W=6.2

## INSERTS

Holder	Setting Geometry	Breaker	Geometry	Insert Geometry	Order Number	Hand	Coated	Dimensions (inch)			Pitch of Thread (inch) (thread/inch)
							VP15TF	PDX	RE		
Right Hand (R)			General Purpose (60°)		TTAT60075F5RR-B	R	●	.016	.002 Flat	.008— .030	
					TTAT60125V5RR-B	R	●	.031	.002	.020— .049	
					TTAT60075F5RL-B	L	●	.016	.002 Flat	.008— .030	
					TTAT60125V5RL-B	L	●	.031	.002	.020— .049	
Left Hand (L)		With Breaker	General Purpose (60°)		TTAT6015001RN-B	N	●	.049	.004	.039— .059	
					TTAT60075F5LR-B	R	●	.016	.002 Flat	.008— .030	
					TTAT60125V5LR-B	R	●	.031	.002	.020— .049	
					TTAT60075F5LL-B	L	●	.016	.002 Flat	.008— .030	
Left Hand (L)		With Breaker	General Purpose (60°)		TTAT60125V5LL-B	L	●	.031	.002	.020— .049	
					TTAT6015001LN-B	N	●	.049	.004	.039— .059	
					TTAT55158V5RR-B	R	●	.031	.002	(40—16)	
					TTAT55158V5RL-B	L	●	.031	.002	(40—16)	
Right Hand (R)			General Purpose (55°)		TTAT55158V5LR-B	R	●	.031	.002	(40—16)	
					TTAT55158V5LL-B	L	●	.031	.002	(40—16)	

Refer to page D037 for the thread diameter range.

## RECOMMENDED CUTTING CONDITIONS

Work Material	Cutting Speed (SFM)	Work Material	Cutting Speed (SFM)
<b>P</b> Carbon Steel · Alloy Steel	165—490	<b>M</b> Stainless Steel	165—395
Free Cutting Carbon Steel	100—590	<b>N</b> Non-Ferrous Metal	230—755

● : Inventory maintained. (5 inserts in one case)

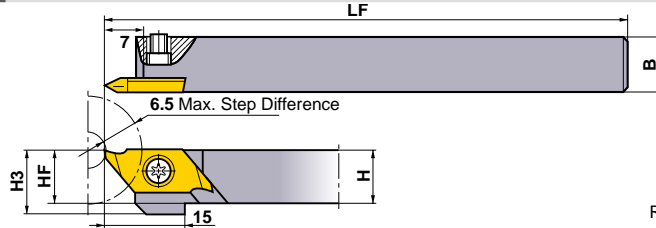
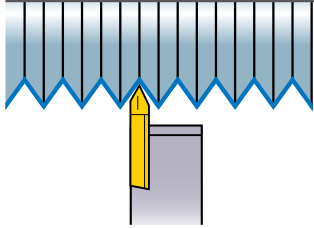
SPARE PARTS > M001  
TECHNICAL DATA > N001

SMALL TOOLS

# THREADING TOOLS (FOR GANG TYPE) TOOL POSTS

## METRIC STANDARD

# TTAH



Right hand tool holder shown.

Order Number	Stock		Insert Number	Dimensions (mm)					Insert Screw *	Wrench
	R	L		H	B	HF	LF	H3		
TTAHR/L0810	●	●	TTAT	8	10	8	120	12	NS402W	NKY15R
TTAHR/L1010	●	●		10	10	10	120	12	NS402W	NKY15R
TTAHR/L1212	●	●		12	12	12	120	—	NS403W	NKY15R
TTAHR/L1616	●	●		16	16	16	120	—	NS403W	NKY15R

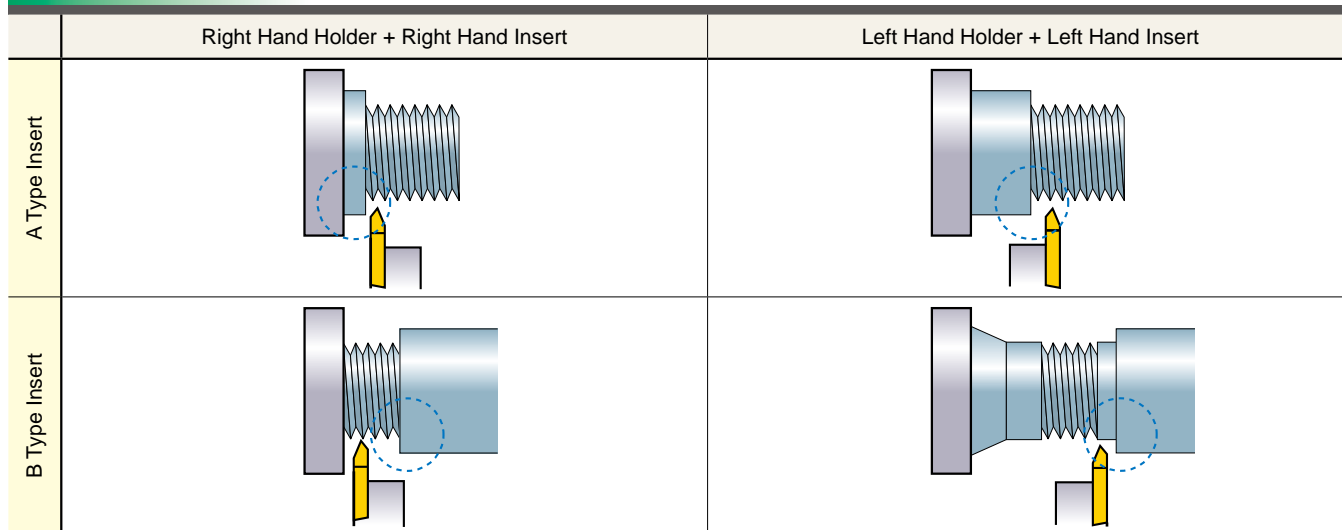
\* Clamp Torque (lbf-in) : NS402W=6.2, NS403W=6.2

## INSERTS

Holder	Setting Geometry	Breaker	Geometry	Insert Geometry	Order Number	Hand	Coated	Dimensions (mm)		Pitch of Thread (mm) (thread/inch)
							VP15TF	PDX	RE	
Right Hand (R)		With Breaker	General Purpose (60°)		TTAT60075F5RR-B	R	●	0.4	0.05 Flat	0.2—0.75 (80—36)
					TTAT60125V5RR-B	R	●	0.8	0.05	0.5—1.25 (40—16)
					TTAT60075F5RL-B	L	●	0.4	0.05 Flat	0.2—0.75 (80—36)
					TTAT60125V5RL-B	L	●	0.8	0.05	0.5—1.25 (40—16)
Left Hand (L)			General Purpose (60°)		TTAT6015001RN-B	N	●	1.25	0.1	1.0—1.5 (24—18)
					TTAT60075F5LR-B	R	●	0.4	0.05 Flat	0.2—0.75 (80—36)
					TTAT60125V5LR-B	R	●	0.8	0.05	0.5—1.25 (40—16)
					TTAT60075F5LL-B	L	●	0.4	0.05 Flat	0.2—0.75 (80—36)
Right Hand (R)		General Purpose (55°)		TTAT60125V5LL-B	L	●	0.8	0.05	0.5—1.25 (40—16)	
				TTAT6015001LN-B	N	●	1.25	0.1	1.0—1.5 (24—18)	
				TTAT55158V5RR-B	R	●	0.8	0.05	(40—16)	
				TTAT55158V5RL-B	L	●	0.8	0.05	(40—16)	
Left Hand (L)		General Purpose (55°)		TTAT55158V5LR-B	R	●	0.8	0.05	(40—16)	
				TTAT55158V5LL-B	L	●	0.8	0.05	(40—16)	

Refer to page D037 for the thread diameter range.

## HOLDER APPLICATION



\* Above 4 combinations enable machining at the areas shown by

## THREAD DIAMETER RANGE

Application Range

Pitch (mm)	Thread Diameter (mm)										Number of Passes
	$\geq \phi 1.0$	$\geq \phi 1.2$	$\geq \phi 1.6$	$\geq \phi 2.0$	$\geq \phi 2.5$	$\geq \phi 3.0$	$\geq \phi 4.0$	$\geq \phi 5.0$	$\geq \phi 6.0$	$\geq \phi 7.0$	
0.2											2-4
0.25											
0.3											3-5
0.35											
0.4											4-6
0.45											
0.5											
0.6											
0.7											
0.75											5-7
0.8											
1											
1.25											6-8
1.5											

Machining Impossible

\*Metric Thread (60°)

Pitch (thread/inch)	Thread Diameter									Number of Passes	
	Inch	$\geq \phi 0.060$	$\geq \phi 0.073$	$\geq \phi 0.086$	$\geq \phi 0.099$	$\geq \phi 0.112$	$\geq \phi 0.164$	$\geq \phi 0.190$	$\geq \phi 0.250$		$\geq \phi 0.313$
mm		$\geq \phi 1.524$	$\geq \phi 1.854$	$\geq \phi 2.184$	$\geq \phi 2.515$	$\geq \phi 2.845$	$\geq \phi 4.166$	$\geq \phi 4.826$	$\geq \phi 6.350$	$\geq \phi 7.938$	
80											3-5
72											
64											4-6
56											
48											
44											
40											5-7
32											
28											
26											
24											
20											6-8
18											
16											

Machining Impossible

\*American UN, Whitworth Thread

## RECOMMENDED CUTTING CONDITIONS

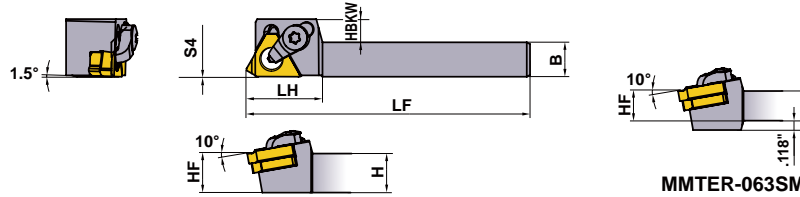
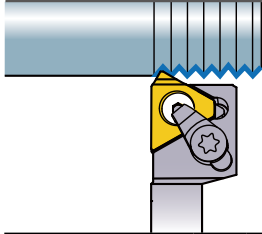
Work Material		Cutting Speed (SFM)	
<b>P</b>	Carbon Steel · Alloy Steel	165-490	
	Free Cutting Carbon Steel	100-590	
<b>M</b>	Stainless Steel	165-395	
	Non-Ferrous Metal	230-755	

SPARE PARTS > M001  
TECHNICAL DATA > N001

# THREADING TOOLS (FOR GANG TYPE) TOOL POSTS

**INCH STANDARD**

**MMTE**



**MMTER-063SM**

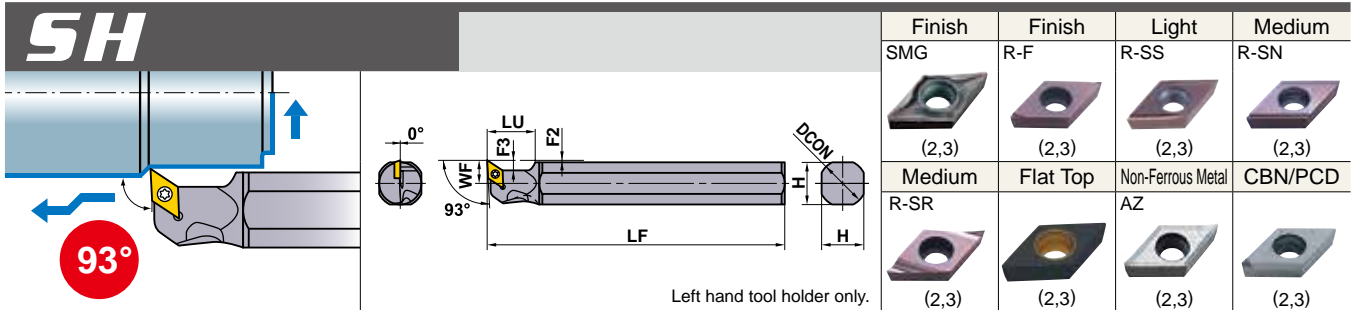
Order Number	Stock R	Insert Number	Dimensions (inch)							S4						
			H	B	LF	LH	HF	HBKW								
<b>MMTER-063SM</b>	●	TTAT	MMT16ER	.375	.375	4.724	.875	.375	.250	0	SETK51	SETS51	CR4	HFC03008	CTE32TP15	①TKY15F ②HKY20R
<b>MMTER-083SM</b>	●			.500	.500	4.724	.875	.500	.125	0	SETK51	SETS51	CR4	HFC03008	CTE32TP15	①TKY15F ②HKY20R

\* Clamp Torque (lbf-in) : SETS51=31, HFC03008=18

SMALL TOOLS

# DIMPLE SLEEVE HOLDER (FOR OPPOSITE TOOL POSTS)

## INCH STANDARD



Order Number	Stock L	Insert Number	Dimensions (inch)									Insert Screw *	Wrench
			DCON	LF	LU	H	WF	F2	F3				
SH16H-FSDUCL07	●	DCET DCGT DCGW DCMT DCMW NP-DCGW NP-DCMT NP-DCMW	21.5	.625	3.937	.787	.551	.305	.030	.165	TS254	TKY08R	
SH19K-FSDUCL07	●			.750	4.921	.787	.669	.364	.030	.165			
SH25M-FSDUCL07	●			1.000	5.906	.787	.906	.482	.030	.165			
SH16H-FSDUCL11	●	DCET DCGT DCGW DCMT DCMW NP-DCGW NP-DCMT NP-DCMW	32.5	.625	3.937	.787	.551	.305	.030	.252	TS43	TKY15R	
SH19K-FSDUCL11	●			.750	4.921	.787	.669	.364	.030	.252			
SH25M-FSDUCL11	●			1.000	5.906	.787	.906	.482	.030	.252			

(Note 1) When using insert with right and left hand chip breaker, please use right hand insert.

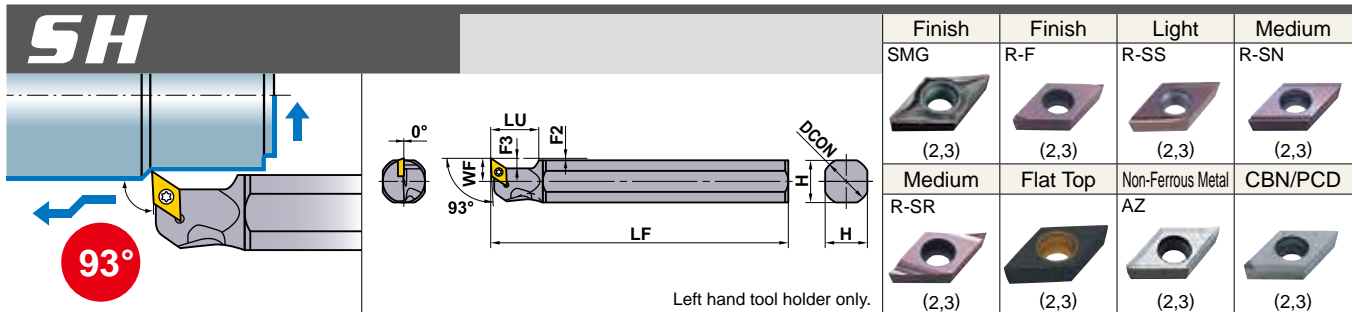
(Note 2) Insert photo is an example. Letters show chip breaker style, figures show inscribed circle.

\* Clamp Torque (lbf-in) : TS254=8.9, TS43=31

SMALL TOOLS

# DIMPLE SLEEVE HOLDER (FOR OPPOSITE TOOL POSTS)

## METRIC STANDARD



Order Number	Stock L	Insert Number	Dimensions (mm)									Insert Screw *	Wrench
			DCON	LF	LU	H	WF	F3	F2				
SH20K-FSDUCL07	●	DCET DCGT DCGW DCMT DCMW	21.5	20	125	20	18	9.75	4.2	0.75	TS254	TKY08R	
SH22K-FSDUCL07	●	NP-DCGW NP-DCMT NP-DCMW		22	125	20	20	10.75	4.2	0.75			
SH20K-FSDUCL11	●	DCET DCGT DCGW DCMT DCMW	32.5	20	125	20	18	9.75	6.4	0.75	TS43	TKY15R	
SH22K-FSDUCL11	●	NP-DCGW NP-DCMT NP-DCMW		22	125	20	20	10.75	6.4	0.75			

(Note 1) When using insert with right and left hand chip breaker, please use right hand insert.

(Note 2) Insert photo is an example. Letters show chip breaker style, figures show inscribed circle.

\* Clamp Torque (lbf-in) : TS254=8.9, TS43=31

## RECOMMENDED CUTTING CONDITIONS

	Work Material	Grade	Cutting Speed (SFM)	Feed (IPR)
P	Carbon Steel · Alloy Steel	VP15TF	165-490	.0004-.006
		VP15TF	100-590	.0004-.006
	Free Cutting Steel	AP25N	165-820	.0004-.006
M	Stainless Steel	VP15TF	165-395	.0008-.004
N	Non-Ferrous Metal	HTi10	230-755	.0012-.006

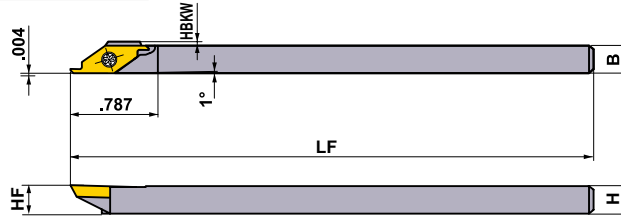
SH○○○ type inserts > A144-A149

CBN & PCD inserts > B039, B040, B056

# FOR RADIAL TYPE TOOL POSTS

INCH STANDARD

## CSVH



Right hand tool holder shown.

Order Number	Stock		Insert Number	Dimensions (inch)					APMX (inch)	*1	*2	
	R	L		H	B	HF	LF	HBKW		Insert Screw	Wrench	
CSVHR/L-062	●	●	CSVT	○ ○ ○ ○	.375	.375	.375	5.512	0	.118	NS251	NKY15R
CSVHR/L-082	●	●		○ ○ ○ ○	.500	.500	.500	5.512	0	.118	NS251	NKY15R

(Note 1) Please use right hand insert for right hand holder and left hand insert for left hand holder.

(Note 2) Each insert has own depth of cut.

\*1 APMX : Max. Depth of Cut

\*2 Clamp Torque (lbf-in) : NS251=6.2

SMALL TOOLS

## INSERTS

### CSVTF

(Front turning)

Order Number	Hand	Coated	Dimensions (inch)					APMX (inch)	Geometry
		VP15KZ	IC	S	RE	CF	PSIRR/L		
CSVTF30AR	R	●	.250	.094	0	.012	5°	.118	Without Breaker 
CSVTF30AL	L	●	.250	.094	0	.012	5°	.118	
CSVTF30BR	R	●	.250	.094	0	.012	2°	.118	
CSVTF30CR	R	●	.250	.094	0	.006	2°	.118	
CSVTF30DR	R	●	.250	.094	0	.006	5°	.118	
CSVTF30AR-B	R	●	.250	.094	0	.012	5°	.118	With Breaker 
CSVTF30AL-B	L	●	.250	.094	0	.012	5°	.118	
CSVTF30BR-B	R	●	.250	.094	0	.012	2°	.118	
CSVTF30CR-B	R	●	.250	.094	0	.006	2°	.118	
CSVTF30DR-B	R	●	.250	.094	0	.006	5°	.118	

\* APMX : Max. Depth of Cut

### CSVTFXL

(Front turning, Copying)

Order Number	Hand	Coated	Dimensions (inch)			APMX (inch)	Geometry
		VP15KZ	IC	S	RE		
CSVTFXL	L	●	.250	.094	0	.118	Without Breaker 

\* APMX : Max. Depth of Cut

● : Inventory maintained. (5 inserts in one case)

SPARE PARTS > M001  
TECHNICAL DATA > N001

D041



# FOR RADIAL TYPE TOOL POSTS

## INSERTS

### CSVTC

(Cutting off)

Order Number	Hand	Coated	Dimensions (inch)					APMX* (inch)	Geometry
		VP15KZ	IC	S	RE	PDPT	CW		
CSVTC0640R	R	●	.250	.094	0	.079	.024	.059	<p>Without Breaker</p> <p>With Breaker</p> <p>Right hand insert shown.</p>
CSVTC0750R	R	●	.250	.094	0	.098	.028	.079	
CSVTC0750L	L	●	.250	.094	0	.098	.028	.079	
CSVTC0850R	R	●	.250	.094	0	.098	.031	.079	
CSVTC0850L	L	●	.250	.094	0	.098	.031	.079	
CSVTC0950R	R	●	.250	.094	0	.098	.035	.079	
CSVTC1060R	R	●	.250	.094	0	.118	.039	.098	
CSVTC1060L	L	●	.250	.094	0	.118	.039	.098	
CSVTC1360R	R	●	.250	.094	0	.118	.051	.098	
CSVTC1360L	L	●	.250	.094	0	.118	.051	.098	
CSVTC1560R	R	●	.250	.094	0	.118	.059	.098	
CSVTC1560L	L	●	.250	.094	0	.118	.059	.098	
CSVTC0640R-B	R	●	.250	.094	0	.079	.024	.059	
CSVTC0750R-B	R	●	.250	.094	0	.098	.028	.079	
CSVTC0850R-B	R	●	.250	.094	0	.098	.031	.079	
CSVTC0950R-B	R	●	.250	.094	0	.098	.035	.079	
CSVTC1060R-B	R	●	.250	.094	0	.118	.039	.098	
CSVTC1360R-B	R	●	.250	.094	0	.118	.051	.098	
CSVTC1560R-B	R	●	.250	.094	0	.118	.059	.098	

\* APMX : Max. Depth of Cut

### CSVTB

(Back turning)

Order Number	Hand	Coated	Dimensions (inch)						APMX* (inch)	Geometry	
		VP15KZ	IC	S	RE	PDPT	CW	CF			PSIRR/L
CSVTB10AR	R	●	.250	.094	0	.098	.039	.012	5°	.079	<p>Without Breaker</p> <p>With Breaker</p> <p>Right hand insert shown.</p>
CSVTB10AL	L	●	.250	.094	0	.098	.039	.012	5°	.079	
CSVTB10BR	R	●	.250	.094	0	.098	.039	.012	2°	.079	
CSVTB10CR	R	●	.250	.094	0	.098	.039	.006	2°	.079	
CSVTB10DR	R	●	.250	.094	0	.098	.039	.006	5°	.079	
CSVTB12AR	R	●	.250	.094	0	.098	.047	.012	5°	.079	
CSVTB14AR	R	●	.250	.094	0	.098	.055	.012	5°	.079	
CSVTB10AR-B	R	●	.250	.094	0	.098	.039	.012	5°	.079	
CSVTB10BR-B	R	●	.250	.094	0	.098	.039	.012	2°	.079	
CSVTB10CR-B	R	●	.250	.094	0	.098	.039	.006	2°	.079	
CSVTB10DR-B	R	●	.250	.094	0	.098	.039	.006	5°	.079	
CSVTB12AR-B	R	●	.250	.094	0	.098	.047	.012	5°	.079	
CSVTB14AR-B	R	●	.250	.094	0	.098	.055	.012	5°	.079	

\* APMX : Max. Depth of Cut

### CSVTBXL

(Back turning, Copying)

Order Number	Hand	Coated	Dimensions (inch)			APMX* (inch)	Geometry
		VP15KZ	IC	S	RE		
CSVTBXL	L	●	.250	.094	0	.118	<p>Without Breaker</p> <p>Left hand insert shown.</p>

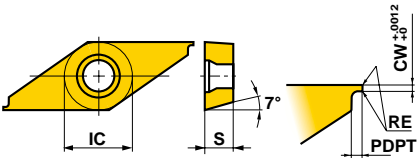
\* APMX : Max. Depth of Cut

SMALL TOOLS

# INSERTS

## CSVTG

### (Grooving)

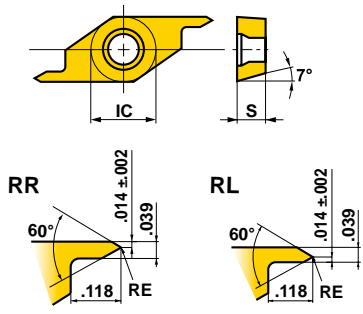
Order Number	Hand	Coated	Dimensions (inch)					APMX* (inch)	Geometry
		VP15KZ	IC	S	RE	PDPT	CW		
CSVTG02505R	R	●	.250	.094	0	.020	.010	.006	Without Breaker  
CSVTG03005R	R	●	.250	.094	0	.020	.012	.006	
CSVTG03505R	R	●	.250	.094	0	.020	.014	.006	
CSVTG04005R	R	●	.250	.094	0	.020	.016	.006	
CSVTG04510R	R	●	.250	.094	0	.039	.018	.018	
CSVTG05010R	R	●	.250	.094	0	.039	.020	.018	
CSVTG05510R	R	●	.250	.094	0	.039	.022	.018	
CSVTG06010R	R	●	.250	.094	0	.039	.024	.018	
CSVTG06510R	R	●	.250	.094	0	.039	.026	.018	
CSVTG07010R	R	●	.250	.094	0	.039	.028	.018	
CSVTG07520R	R	●	.250	.094	0	.079	.030	.055	
CSVTG07520L	L	●	.250	.094	0	.079	.030	.055	
CSVTG08020R	R	●	.250	.094	0	.079	.031	.055	
CSVTG08520R	R	●	.250	.094	0	.079	.033	.055	
CSVTG09020R	R	●	.250	.094	0	.079	.035	.055	
CSVTG09520R	R	●	.250	.094	0	.079	.037	.055	
CSVTG09520L	L	●	.250	.094	0	.079	.037	.055	
CSVTG10020R	R	●	.250	.094	0	.079	.039	.055	
CSVTG11030R	R	●	.250	.094	0	.118	.043	.102	
CSVTG12030R	R	●	.250	.094	0	.118	.047	.102	
CSVTG12030L	L	●	.250	.094	0	.118	.047	.102	
CSVTG13030R	R	●	.250	.094	0	.118	.051	.102	
CSVTG14030R	R	●	.250	.094	0	.118	.055	.102	
CSVTG15030R	R	●	.250	.094	0	.118	.059	.102	

Right hand insert shown.

\* APMX : Max. Depth of Cut

## CSVTT

### (Threading)

Order Number	Hand	Coated	Pitch (inch)	Dimensions (inch)			Geometry
		VP15KZ		IC	S	RE	
CSVTT60050RR	R	●	.008-.020	.250	.094	.001	Without Breaker General Purpose (60°)  
CSVTT60050RL	R	●	.008-.020	.250	.094	.001	

Right hand insert shown.

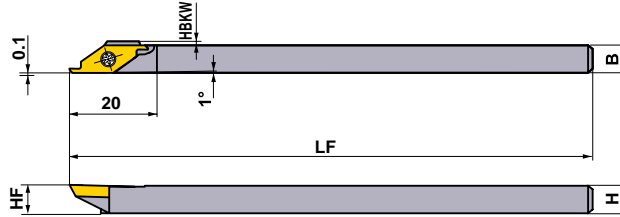
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TECHNICAL DATA > N001

SMALL TOOLS








# FOR RADIAL TYPE TOOL POSTS

METRIC STANDARD

## CSVH



Right hand tool holder shown.

Order Number	Stock		Insert Number	Dimensions (mm)					APMX (mm)	*1 	*2 	
	R	L		H	B	HF	LF	HBKW				Insert Screw
CSVHR/L0707	●	●	CSVT		7	7	7	140	0.5	3.0	NS251	NKY15R
CSVHR/L0808	●	●			8	8	8	140	0	3.0	NS251	NKY15R
CSVHR/L0909	●	●			9.5	9.5	9.5	140	0	3.0	NS251	NKY15R
CSVHR/L1010	●	●			10	10	10	140	0	3.0	NS251	NKY15R
CSVHR/L1212	●	●			12	12	12	140	0	3.0	NS251	NKY15R

(Note 1) Please use right hand insert for right hand holder and left hand insert for left hand holder.

(Note 2) Each insert has own depth of cut.

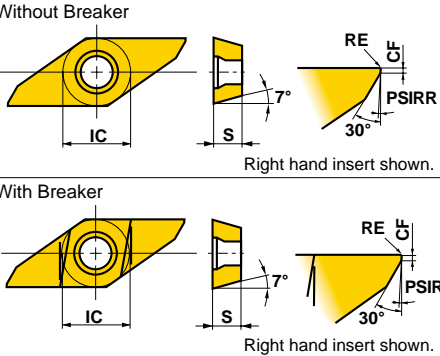
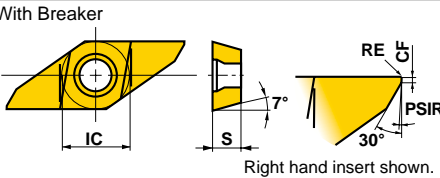
\*1 APMX : Max. Depth of Cut

\*2 Clamp Torque (lbf-in) : NS251=6.2

## INSERTS

### CSVTF

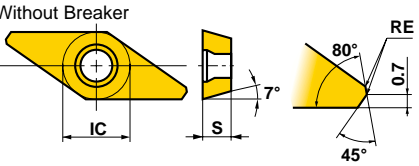
(Front turning)

Order Number	Hand	Coated	Dimensions (mm)					APMX (mm)	* Geometry
		VP15KZ	IC	S	RE	CF	PSIRR/L		
CSVTF30AR	R	●	6.35	2.38	0	0.3	5°	3.0	 <p>Right hand insert shown.</p>
CSVTF30AL	L	●	6.35	2.38	0	0.3	5°	3.0	
CSVTF30BR	R	●	6.35	2.38	0	0.3	2°	3.0	
CSVTF30CR	R	●	6.35	2.38	0	0.15	2°	3.0	
CSVTF30DR	R	●	6.35	2.38	0	0.15	5°	3.0	
CSVTF30AR-B	R	●	6.35	2.38	0	0.3	5°	3.0	 <p>Right hand insert shown.</p>
CSVTF30AL-B	L	●	6.35	2.38	0	0.3	5°	3.0	
CSVTF30BR-B	R	●	6.35	2.38	0	0.3	2°	3.0	
CSVTF30CR-B	R	●	6.35	2.38	0	0.15	2°	3.0	
CSVTF30DR-B	R	●	6.35	2.38	0	0.15	5°	3.0	

\* APMX : Max. Depth of Cut

### CSVTFXL

(Front turning, Copying)

Order Number	Hand	Coated	Dimensions (mm)			APMX (mm)	* Geometry
		VP15KZ	IC	S	RE		
CSVTFXL	L	●	6.35	2.38	0	3.0	

\* APMX : Max. Depth of Cut

SMALL TOOLS

# INSERTS

## CSVTC (Cutting off)

Order Number	Hand	Coated	Dimensions (mm)					APMX* (mm)	Geometry
		VP15KZ	IC	S	RE	PDPT	CW		
CSVTC0640R	R	●	6.35	2.38	0	2.0	0.6	1.5	<p style="text-align: right;">Right hand insert shown.</p>
CSVTC0750R	R	●	6.35	2.38	0	2.5	0.7	2.0	
CSVTC0750L	L	●	6.35	2.38	0	2.5	0.7	2.0	
CSVTC0850R	R	●	6.35	2.38	0	2.5	0.8	2.0	
CSVTC0850L	L	●	6.35	2.38	0	2.5	0.8	2.0	
CSVTC0950R	R	●	6.35	2.38	0	2.5	0.9	2.0	
CSVTC1060R	R	●	6.35	2.38	0	3.0	1.0	2.5	
CSVTC1060L	L	●	6.35	2.38	0	3.0	1.0	2.5	
CSVTC1360R	R	●	6.35	2.38	0	3.0	1.3	2.5	
CSVTC1360L	L	●	6.35	2.38	0	3.0	1.3	2.5	
CSVTC1560R	R	●	6.35	2.38	0	3.0	1.5	2.5	
CSVTC1560L	L	●	6.35	2.38	0	3.0	1.5	2.5	
CSVTC0640R-B	R	●	6.35	2.38	0	2.0	0.6	1.5	
CSVTC0750R-B	R	●	6.35	2.38	0	2.5	0.7	2.0	
CSVTC0850R-B	R	●	6.35	2.38	0	2.5	0.8	2.0	
CSVTC0950R-B	R	●	6.35	2.38	0	2.5	0.9	0.9	
CSVTC1060R-B	R	●	6.35	2.38	0	3.0	1.0	2.5	
CSVTC1360R-B	R	●	6.35	2.38	0	3.0	1.3	2.5	
CSVTC1560R-B	R	●	6.35	2.38	0	3.0	1.5	2.5	

\* APMX : Max. Depth of Cut

## CSVTB (Back turning)

Order Number	Hand	Coated	Dimensions (mm)							APMX* (mm)	Geometry
		VP15KZ	IC	S	RE	PDPT	CW	CF	PSIRR/L		
CSVTB10AR	R	●	6.35	2.38	0	2.5	1	0.3	5°	2.0	<p style="text-align: right;">Right hand insert shown.</p>
CSVTB10AL	L	●	6.35	2.38	0	2.5	1	0.3	5°	2.0	
CSVTB10BR	R	●	6.35	2.38	0	2.5	1	0.3	2°	2.0	
CSVTB10CR	R	●	6.35	2.38	0	2.5	1	0.15	2°	2.0	
CSVTB10DR	R	●	6.35	2.38	0	2.5	1	0.15	5°	2.0	
CSVTB12AR	R	●	6.35	2.38	0	2.5	1.2	0.3	5°	2.0	
CSVTB14AR	R	●	6.35	2.38	0	2.5	1.4	0.3	5°	2.0	
CSVTB10AR-B	R	●	6.35	2.38	0	2.5	1	0.3	5°	2.0	
CSVTB10BR-B	R	●	6.35	2.38	0	2.5	1	0.3	2°	2.0	
CSVTB10CR-B	R	●	6.35	2.38	0	2.5	1	0.15	2°	2.0	
CSVTB10DR-B	R	●	6.35	2.38	0	2.5	1	0.15	5°	2.0	
CSVTB12AR-B	R	●	6.35	2.38	0	2.5	1.2	0.3	5°	2.0	
CSVTB14AR-B	R	●	6.35	2.38	0	2.5	1.4	0.3	5°	2.0	

\* APMX : Max. Depth of Cut

## CSVTBXL (Back turning, Copying)

Order Number	Hand	Coated	Dimensions (mm)			APMX* (mm)	Geometry
		VP15KZ	IC	S	RE		
CSVTBXL	L	●	6.35	2.38	0	3.0	<p style="text-align: right;">Left hand insert shown.</p>

\* APMX : Max. Depth of Cut

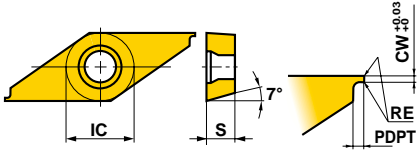
SPARE PARTS > M001  
TECHNICAL DATA > N001

# FOR RADIAL TYPE TOOL POSTS

## INSERTS

### CSVTG

#### (Grooving)

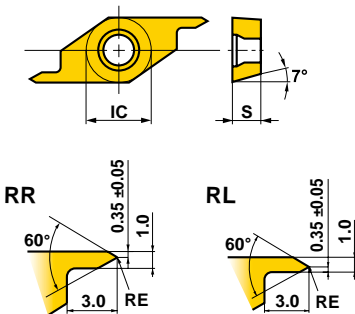
Order Number	Hand	Coated	Dimensions (mm)					APMX* (mm)	Geometry
		VP15KZ	IC	S	RE	PDPT	CW		
CSVTG02505R	R	●	6.35	2.38	0	0.5	0.25	0.15	Without Breaker 
CSVTG03005R	R	●	6.35	2.38	0	0.5	0.3	0.15	
CSVTG03505R	R	●	6.35	2.38	0	0.5	0.35	0.15	
CSVTG04005R	R	●	6.35	2.38	0	0.5	0.4	0.15	
CSVTG04510R	R	●	6.35	2.38	0	1.0	0.45	0.45	
CSVTG05010R	R	●	6.35	2.38	0	1.0	0.5	0.45	
CSVTG05510R	R	●	6.35	2.38	0	1.0	0.55	0.45	
CSVTG06010R	R	●	6.35	2.38	0	1.0	0.6	0.45	
CSVTG06510R	R	●	6.35	2.38	0	1.0	0.65	0.45	
CSVTG07010R	R	●	6.35	2.38	0	1.0	0.7	0.45	
CSVTG07520R	R	●	6.35	2.38	0	2.0	0.75	1.4	
CSVTG07520L	L	●	6.35	2.38	0	2.0	0.75	1.4	
CSVTG08020R	R	●	6.35	2.38	0	2.0	0.8	1.4	
CSVTG08520R	R	●	6.35	2.38	0	2.0	0.85	1.4	
CSVTG09020R	R	●	6.35	2.38	0	2.0	0.9	1.4	
CSVTG09520R	R	●	6.35	2.38	0	2.0	0.95	1.4	
CSVTG09520L	L	●	6.35	2.38	0	2.0	0.95	1.4	
CSVTG10020R	R	●	6.35	2.38	0	2.0	1.0	1.4	
CSVTG11030R	R	●	6.35	2.38	0	3.0	1.1	2.6	
CSVTG12030R	R	●	6.35	2.38	0	3.0	1.2	2.6	
CSVTG12030L	L	●	6.35	2.38	0	3.0	1.2	2.6	
CSVTG13030R	R	●	6.35	2.38	0	3.0	1.3	2.6	
CSVTG14030R	R	●	6.35	2.38	0	3.0	1.4	2.6	
CSVTG15030R	R	●	6.35	2.38	0	3.0	1.5	2.6	

Right hand insert shown.

\* APMX : Max. Depth of Cut

### CSVTT

#### (Threading)

Order Number	Hand	Coated	Pitch (mm)	Dimensions (mm)			Geometry
		VP15KZ		IC	S	RE	
CSVTT60050RR	R	●	0.2—0.5	6.35	2.38	0.03	Without Breaker General Purpose (60°) 
CSVTT60050RL	R	●	0.2—0.5	6.35	2.38	0.03	

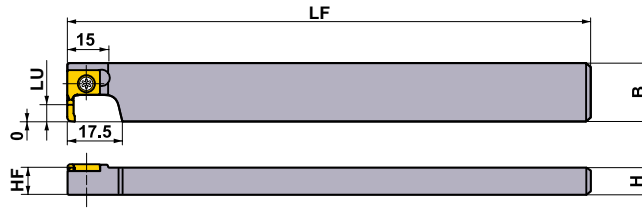
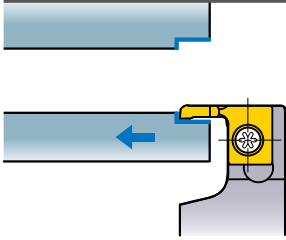
Right hand insert shown.

# BORING TOOLS (FOR GANG TYPE) TOOL POSTS

## METRIC STANDARD

### SBAH

Without off set



Right hand tool holder only.

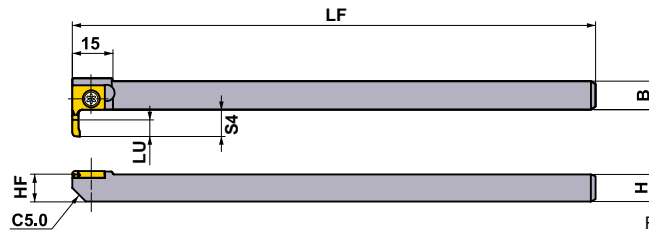
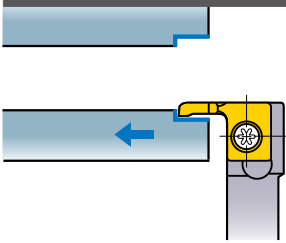
Order Number	Stock R	Insert Number	Dimensions (mm)				LU (mm)	DMIN (mm)	*1	*2	
			H	B	LF	HF					
<b>SBAHR1022</b>	●	SBAT	3080	10	21.5	120	10	8	3	NS402W	NKY15R
<b>SBAHR1222</b>	●		3080	12	21.5	120	12	8	3	NS403W	NKY15R

\*1 DMIN : Min. Cutting Diameter

\*2 Clamp Torque (lbf-in) : NS402W=6.2, NS403W=6.2

### SBAH

With off set



Right hand tool holder only.

Order Number	Stock R	Insert Number	Dimensions (mm)					LU (mm)	DMIN (mm)	*1	*2	
			H	B	LF	HF	S4					
<b>SBAHR1010</b>	●	SBAT	3080	10	10	120	10	10	8	3	NS402W	NKY15R

\*1 DMIN : Min. Cutting Diameter

\*2 Clamp Torque (lbf-in) : NS402W=0.7

## INSERTS

Breaker	Order Number	Coated	Dimensions (mm)			DMIN (mm)	Geometry
		VP15KZ	KAPR	RE	L19		
Without Breaker	<b>SBAT308000L</b>	●	95°	0	8.0	3	
	<b>SBAT3080V5L</b>	●	95°	0.05	8.0	3	
With Breaker	<b>SBAT308000L-B</b>	●	95°	0	8.0	3	
	<b>SBAT3080V5L-B</b>	●	95°	0.05	8.0	3	

\* DMIN : Min. Cutting Diameter

SPARE PARTS > M001  
TECHNICAL DATA > N001

SMALL TOOLS

D047