MITSUBISHI MATERIALS

C010A

CUTTING TOOLS 2024

DIA EDGE

HOW TO READ THE STANDARD OF SMALL TOOLS

●How this section page is organized

①Organized according to the cutting mode of small tools.
(Refer to the inside title on the next page.)
②Shown as 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.

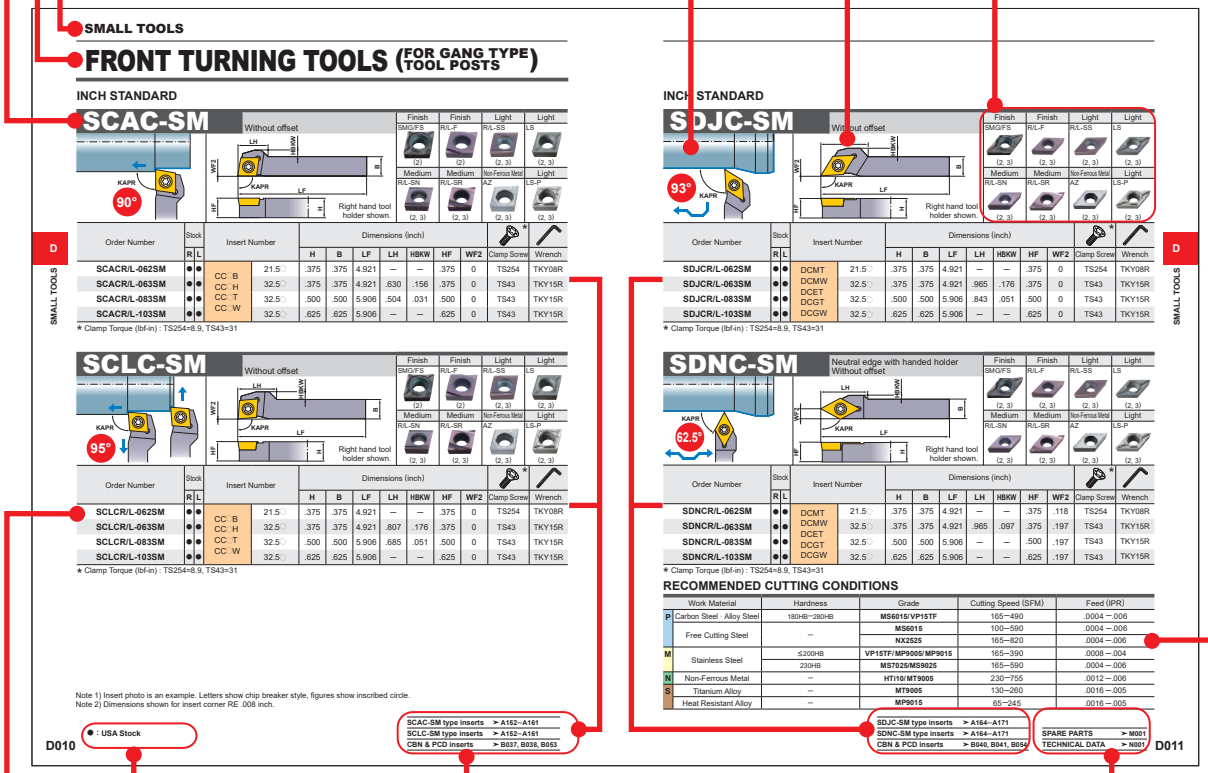
APPLICATION

PRODUCT SECTION

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

GEOMETRY

CHIP BREAKER BY CUTTING APPLICATION



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

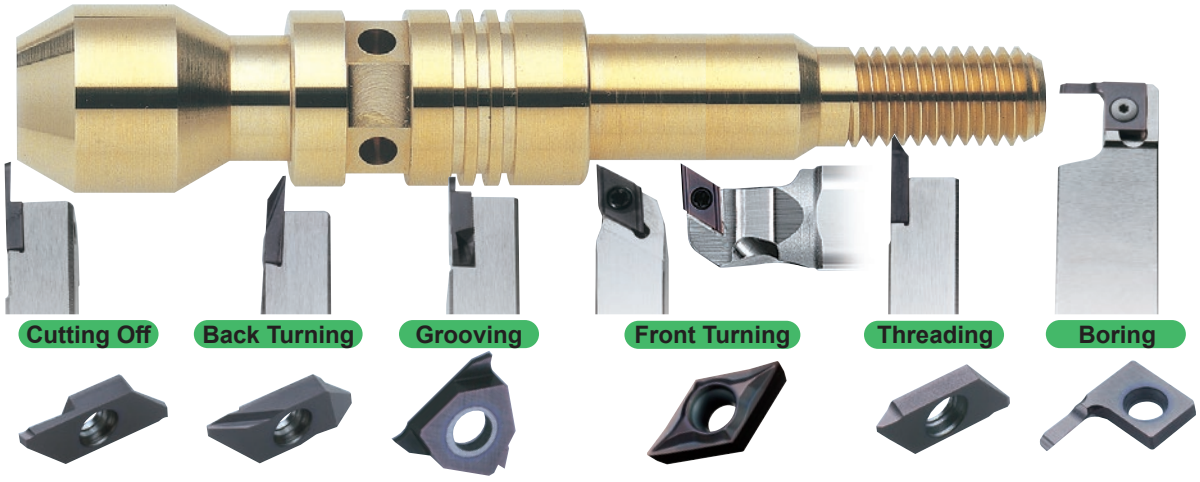
SMALL TOOLS

*Arranged by Alphabetical order

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

OUTLINE OF SMALL TOOLS

TOOLS FOR GANG TYPE AUTOMATIC LATHES (FOR EXTERNAL TURNING AND BORING)



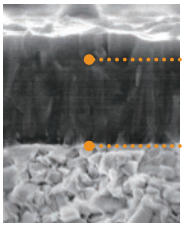
MS Series - PVD Coated Grades for High Precision and Small Parts Machining

MS6015

Skilled at pure iron, carbon steel and free cutting steel turning and achieving implemented stable finished surfaces and excellent dimensional accuracy.

	MS6015	Conventional
Coating	TiCN multilayer	TiAlN
Hardness (HV)	3,000	2,800
Wear Coefficient (Carbon Steel)	Low	High
Base Material Hardness (HRA)	92.0	92.0
T.R.S (GPa)	2.0	2.0

Ti-C-N Multilayer Coating



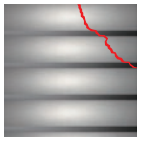
Superior wear and welding resistance and demonstrating the best possible results for carbon steel.

Minute multilayers remarkably improve welding.

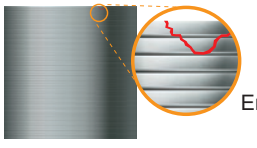
MS7025 NEW

Dramatically improved welding and wear resistance in low feed machining with a more precise nano-multilayer coating

By combining the high lubrication layer with excellent welding resistance, and the high hardness layer with a greater wear resistance that suppresses the progress of wear at the nano-level, the film damage is significantly reduced and the welding and wear resistance are dramatically improved.



Conventional Multilayer Coating



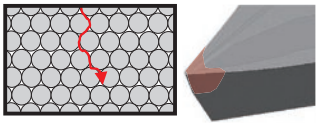
Nano-multilayer Coating

MS9025 NEW

Effective reduction of notch wear of stainless steel with a balance of wear and fracture resistance

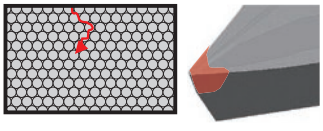
Thermal conductivity has been improved by optimizing the grain size and therefore reducing the boundary contact between the WC particles. This optimization reduces the temperature of the cutting edge during machining.

MS9025



Reducing the cutting edge temperature by improved thermal conductivity.

Conventional



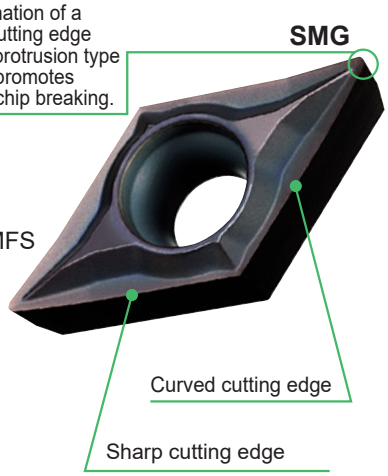
Higher cutting edge temperatures due to more particle boundary contact.

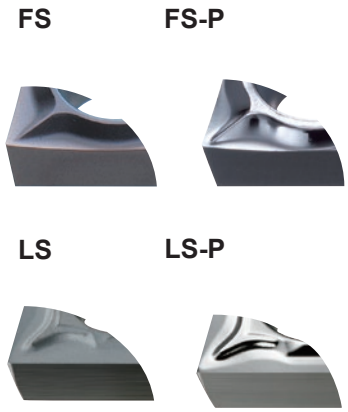
●Molded Breaker Insert

Nose radii designed with minus tolerance

- Suitable for small parts applications that often require minus tolerance dimensions.
- The order number is shown with the letter “M” that indicates minus tolerance. ex) DCGT32.50.2MFS
- 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.



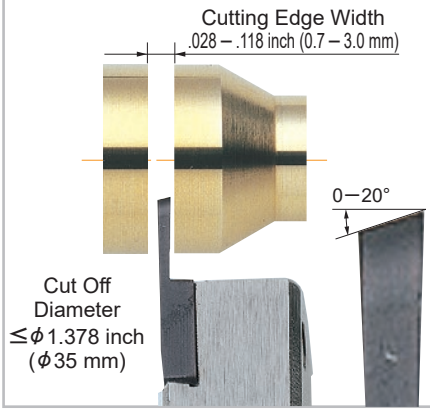


●Tolerance Corner R

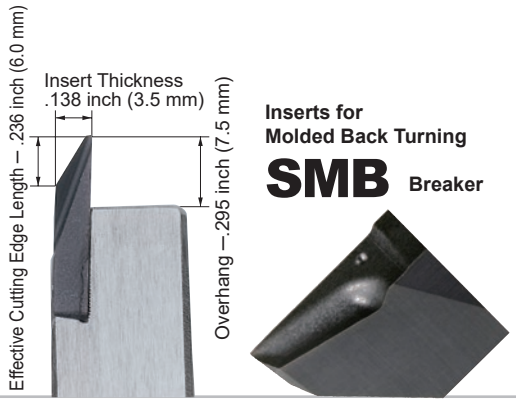
E class
RE $^{0}_{-.0008}$ inch

The letter “M” insert
RE $^{0}_{-.002}$ inch
(Conventional G-class insert
RE ± .004 inch)

●Cutting Off

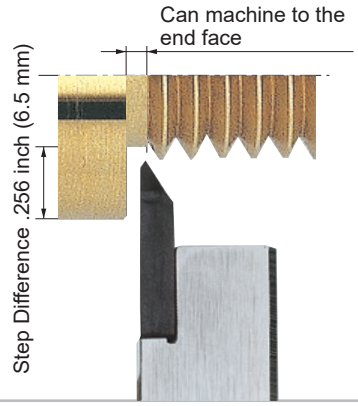


●Back Turning

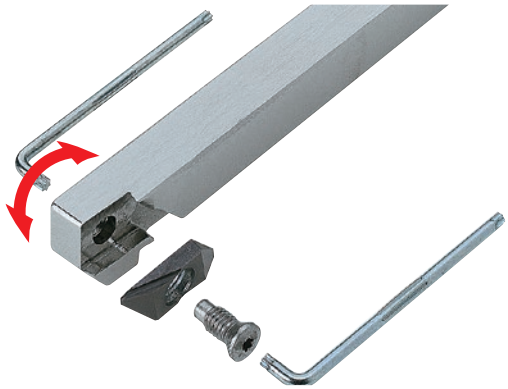


Inserts for Molded Back Turning
SMB Breaker

●Threading



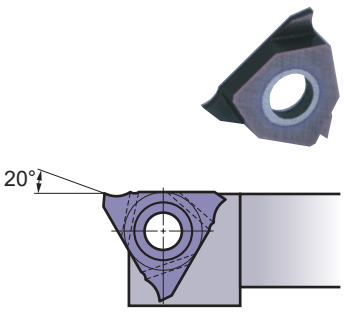
●Back Clamping Mechanism



Screw designed for front and back clamping.

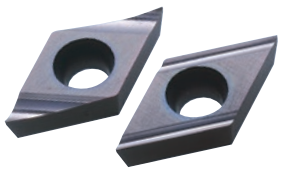
●Grooving

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



●Front Turning

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



OUTLINE OF SMALL TOOLS

Grooving System

GY series

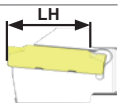
Max. Cut Off Diameter : 1.339 inch (34mm)

Monoblock Holder for Swiss-type Automatic Lathe

The new geometry with greatly improved rigidity suppresses vibrations and dimensional changes thereby solving problems during cut off.

Overhang Length Compatible with Swiss-type Automatic Lathes

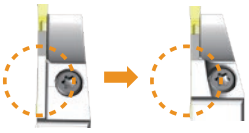
Head length corresponding to the maximum machining diameter of CNC Swiss-type automatic lathes and turret machines.



Features of High Rigidity Holder

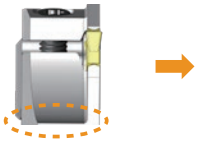
Strong Clamp Bridge

The strong design of the clamp bridge suppresses chatter and vibration.



Thicker Tool Base

Tool deflection caused by cutting resistance is greatly reduced.

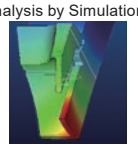


Analysis by Simulation

Deflection Measurement : .0017 inch (0.044 mm)

Analysis by Simulation

Deflection Measurement : .0005 inch (0.013 mm)



Analysis by Simulation

Tools for a very wide range of small parts machining

External Turning	Tools for front turning, back turning, grooving, threading, and cutting off
Internal Turning	Tools for boring, internal grooving and internal threading
Drilling	Drills
End Milling	End Mills

Tools for CNC automatic and small lathes

Types of Tool Posts	Gang type, turret type, cam type (radial pattern type)
Tool Sizes	Square shank: .375—.625 inch (8 — 16 mm) Round shank : less than ϕ1 inch (ϕ25.4 mm)

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

High-Quality	E class tolerance, sharp cutting edge, high accuracy small corner R, smooth surface finish
Long Tool Life	PVD coating MS6015 / MS7025 / MS9025 / VP15TF
High Efficiency	Regrinding not necessary due to the employment of indexable inserts. A wide variety of top cutting edge geometries

Cutting Off & Grooving System

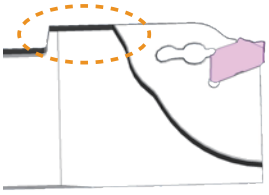
GW series

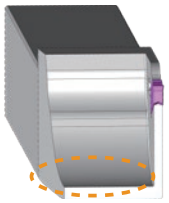
Monoblock Holder for Swiss-type Automatic Lathe

Max. Cut Off
2.992 inch (76mm)

High Rigidity Holder

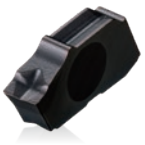
Tool deflection caused by cutting resistance and the remaining material pip in the center are greatly reduced.



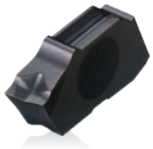


New Low Resistance and High Lead Angle Insert

New inserts with a lead angle of 8° have been added to the range to reduce burrs and the remaining material pip in the center.



Lead Angle 5°



Lead Angle 8°

TOOLS FOR CAM TYPE AUTOMATIC LATHES

- The most suitable for the use with cam type automatic lathes (radial pattern tool posts)
- The most suitable for machining of small parts with work diameter .197 inch (5mm) or smaller
- Single holder for front turning, back turning, grooving, threading and cutting off operations

Front Turning | Back Turning | Grooving | Threading | Cutting Off

INTERNAL TURNING TOOLS

Solid type

MICRO-MINI TWIN Boring Bars

Boring
Grooving
Threading

Minimum cutting diameter
ϕ.087 inch
(2.2 mm) -

Round Shank

Square Shank

MICRO-DEX Boring Bars

Minimum cutting diameter
ϕ.197 inch (5.0 mm) -

Minimum cutting diameter
ϕ.39 inch (10mm) -

DIMPLE BAR

DRILLING TOOLS

Leading Drill Series
DLE

Leading Drill Series
GKCD NEW

Solid Carbide Drills for Swiss-type Automatic & Small CNC Lathes
WSTAR Drill Series
DWAE NEW

TRISTAR Drill Series
DVAS Mini Size

END MILLING TOOLS

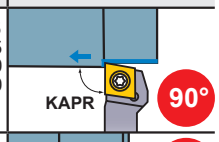
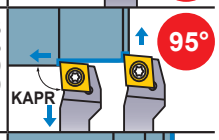
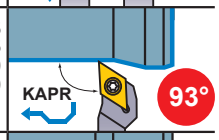
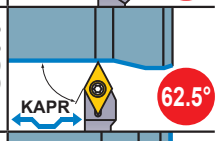
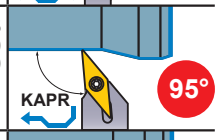
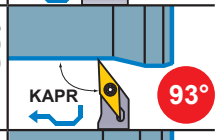
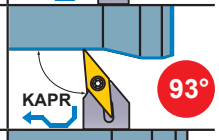
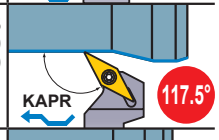
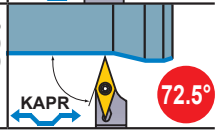
For Swiss-type Automatic Lathes

MS Plus End Mill Series
MP2ES/MP3ES/MP4EC NEW

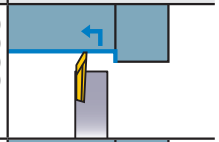
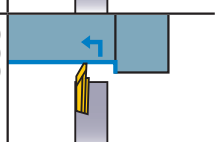
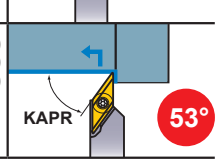
CLASSIFICATION (EXTERNAL TURNING)

GANG TYPE TOOL POSTS

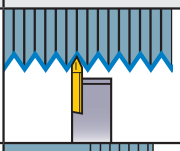
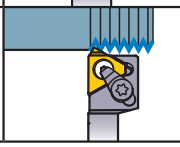
●FRONT TURNING

Name of Tool Holder	Tool Size (H x B x LF) Inch	Tool Size (H x B x LF) Metric	Geometry
SCAC-SM Inch ➲ D010 Metric ➲ D014	.375 x .375 x 4.921 .500 x .500 x 5.906 .625 x .625 x 5.906	8 x 8 x 125 10 x 10 x 125 12 x 12 x 150 16 x 16 x 150	
SCLC-SM Inch ➲ D010 Metric ➲ D014	.375 x .375 x 4.921 .500 x .500 x 5.906 .625 x .625 x 5.906	8 x 8 x 125 10 x 10 x 125 12 x 12 x 150 16 x 16 x 150	
SDJC-SM Inch ➲ D011 Metric ➲ D015	.375 x .375 x 4.921 .500 x .500 x 5.906 .625 x .625 x 5.906	8 x 8 x 125 10 x 10 x 125 12 x 12 x 150 16 x 16 x 150	
SDNC-SM Inch ➲ D011 Metric ➲ D015	.375 x .375 x 4.921 .500 x .500 x 5.906 .625 x .625 x 5.906	8 x 8 x 125 10 x 10 x 125 12 x 12 x 150 16 x 16 x 150	
SVLP-SM Inch ➲ D012 Metric ➲ D016	.375 x .375 x 5.000 .500 x .500 x 6.000 .625 x .625 x 6.000	10 x 10 x 125 12 x 12 x 150 16 x 16 x 150	
SVJB-SM Inch ➲ D012 Metric ➲ D016	.375 x .375 x 4.921 .500 x .500 x 5.906 .625 x .625 x 5.906	10 x 10 x 125 12 x 12 x 150 16 x 16 x 150	
SVJC-SM Inch ➲ D013 Metric ➲ D017	.375 x .375 x 4.500 .500 x .500 x 4.500 .625 x .625 x 4.500	10x10x120 12x12x120 16x16x120	
SVPP-SM Metric ➲ D017	—	10 x 10 x 125 12 x 12 x 150 16 x 16 x 150	
SVVB-SM Inch ➲ D013 Metric ➲ D017	.375 x .375 x 4.921 .500 x .500 x 5.906 .625 x .625 x 5.906	10 x 10 x 125 12 x 12 x 150 16 x 16 x 150	

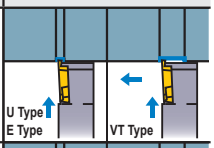
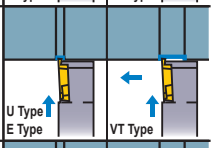
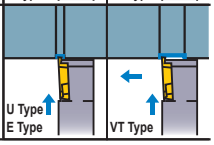
●BACK TURNING

Name of Tool Holder	Tool Size (H x B x LF) Inch	Tool Size (H x B x LF) Metric	Geometry
BTAH (Edge Length) .110, .138, .197 inch 2.8, 3.5, 5.0 mm Inch ➲ D018 Metric ➲ D021	.375 x .375 x 4.724 .500 x .500 x 4.724 .625 x .625 x 4.724	8 x 10 x 120 10 x 10 x 120 12 x 12 x 120 16 x 16 x 120	
CTBH (Edge Length) .177, .236 inch 4.5, 6.0 mm Inch ➲ D019 Metric ➲ D022	.375 x .375 x 4.724 .500 x .500 x 4.724 .625 x .625 x 4.724	10 x 10 x 120 12 x 12 x 120 16 x 16 x 120	
BTVH (Edge Length) .295 inch 7.5 mm Inch ➲ D020 Metric ➲ D023	.375 x .375 x 4.724 .500 x .500 x 4.724 .625 x .625 x 4.724	10 x 10 x 120 12 x 12 x 120 16 x 16 x 120	

●THREADING

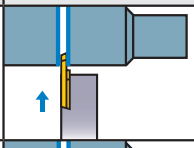
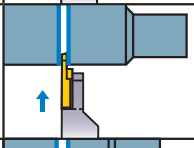
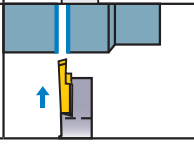
Name of Tool Holder	Tool Size (H x B x LF) Inch	Tool Size (H x B x LF) Metric	Geometry
TTAH Inch ➲ D034 Metric ➲ D035	.375 x .375 x 4.724 .500 x .500 x 4.724 .625 x .625 x 4.724	8 x 10 x 120 10 x 10 x 120 12 x 12 x 120 16 x 16 x 120	
MMTE Inch ➲ D037	.375 x .375 x 4.724 .500 x .500 x 4.724	—	

●GROOVING

Name of Tool Holder	Tool Size (H x B x LF) Inch	Tool Size (H x B x LF) Metric	Geometry
GTAH (Grooving Width) .012-.055 inch 0.3-3.0 mm Inch ➲ D024 Metric ➲ D026	.375 x .375 x 3.150 .500 x .500 x 3.150 .500 x .500 x 4.724 .625 x .625 x 4.724	8 x 8 x 80 8 x 8 x 120 10 x 10 x 80 10 x 10 x 120 12 x 12 x 80 12 x 12 x 120 16 x 16 x 120	
GTBH (Grooving Width) .057-.089 inch 1.45-3.0 mm Inch ➲ D024 Metric ➲ D026	.375 x .375 x 3.150 .375 x .375 x 4.724 .500 x .500 x 4.724 .625 x .625 x 4.724	10 x 10 x 80 10 x 10 x 120 12 x 12 x 120 16 x 16 x 120	
GTCH (Grooving Width) .098-.118 inch 2.5-3.0 mm Inch ➲ D024 Metric ➲ D026	.375 x .375 x 3.150 .375 x .375 x 4.724	10 x 10 x 80 10 x 10 x 120	

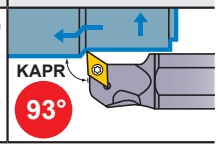
Note 1) For GY style lathes please refer page F016.

●CUTTING OFF

Name of Tool Holder	Tool Size (H x B x LF) Inch	Tool Size (H x B x LF) Metric	Geometry
CTAH (Max.Cut Off Diameter) .472 inch 12 mm Inch ➲ D028 Metric ➲ D030	.375 x .375 x 4.724 .500 x .500 x 4.724 .625 x .625 x 4.724	8 x 10 x 120 10 x 10 x 120 12 x 12 x 120 16 x 16 x 120	
CTAH-S (Max.Cut Off Diameter) .472 inch 12 mm Inch ➲ D028 Metric ➲ D030	.375 x .375 x 3.150 .500 x .500 x 3.150	10 x 10 x 80	
CTBH (Max.Cut Off Diameter) .630 inch 16 mm Inch ➲ D032 Metric ➲ D033	.375 x .375 x 4.724 .500 x .500 x 4.724 .625 x .625 x 4.724	10 x 10 x 120 12 x 12 x 120 16 x 16 x 120	

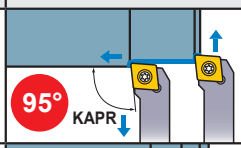
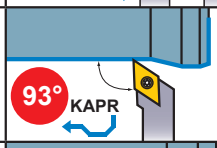
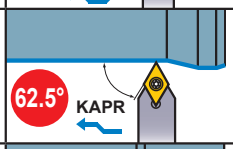
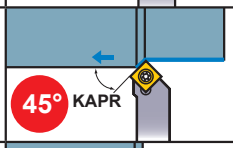
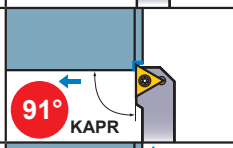
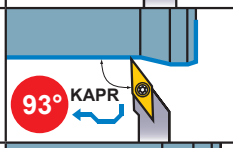
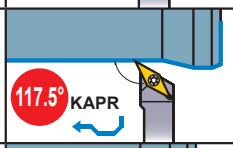
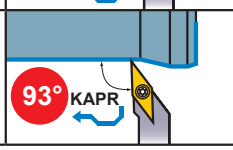
OPPOSITE TOOL POSTS

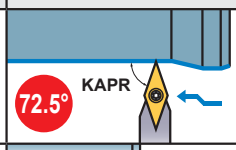
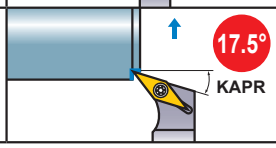
● DIMPLE SLEEVE HOLDER

Name of Tool Holder	Shank Size (DCON x LF) Inch	Shank Size (DCON x LF) Metric	Geometry
SH Inch ➔ **D038** Metric ➔ **D039**	.625 x 3.937 .750 x 4.921 .787 x 4.921 .866 x 4.921 1.000 x 5.906	ϕ15.875 x 100 ϕ19.05 x 125 ϕ20 x 125 ϕ22 x 125 ϕ25.4 x 150	

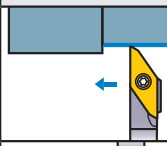
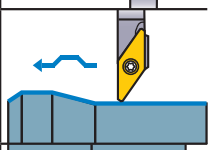
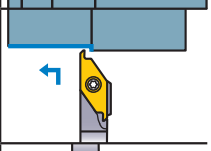
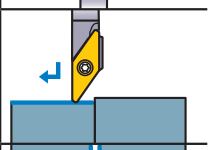
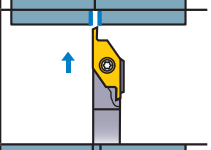
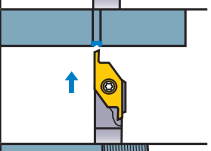
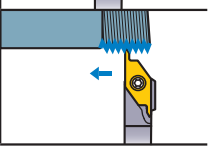
TURRET TYPE TOOL POSTS

● FRONT TURNING

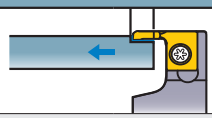
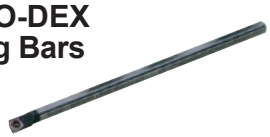
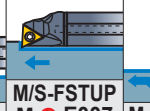
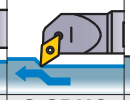
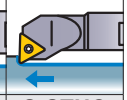
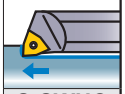
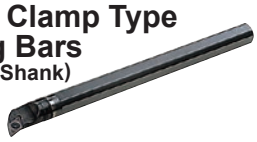
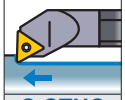
Name of Tool Holder	Shank Size (inch) (H x B x LF)	Geometry
SCLC Inch ➔ **C030**	.375 x .375 x 2.500 .500 x .500 x 3.500 .625 x .625 x 4.000	
SDJC Inch ➔ **C031**	.375 x .375 x 2.500 .500 x .500 x 3.500 .625 x .625 x 4.000	
SDNC Inch ➔ **C031**	.375 x .375 x 2.500 .500 x .500 x 3.500 .625 x .625 x 4.000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

Name of Tool Holder	Shank Size (inch) (H x B x LF)	Geometry
SVVB Inch ➔ **C028**	.375 x .375 x 2.500 .500 x .500 x 3.000 .625 x .625 x 4.000	
SVHB Inch ➔ **C029**	.375 x .375 x 2.500 .500 x .500 x 3.500 .625 x .625 x 4.000	

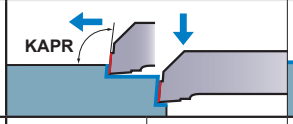
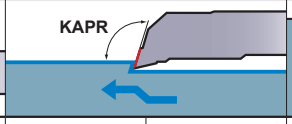
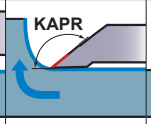
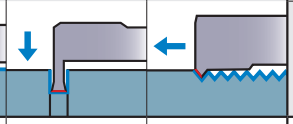
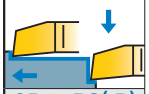
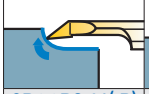
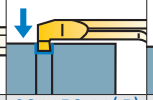
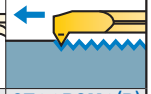
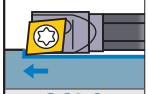
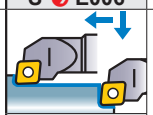
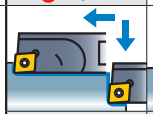
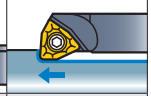
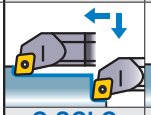
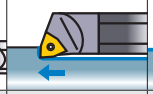
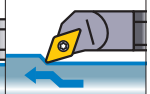
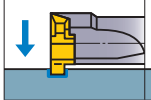
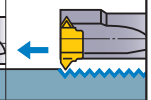
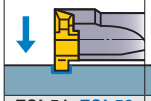
RADIAL TYPE TOOL POSTS

Name of Tool Holder	Tool Size (H x B x LF) Inch	Tool Size (H x B x LF) Metric	Geometry
CSVH (Front Turning) Inch ➔ **D040** Metric ➔ **D043**	.375 x .375 x 5.512 .500 x .500 x 5.512	7 x 7 x 140 8 x 8 x 140 9.5 x 9.5 x 140 10 x10 x 140 12 x12 x 140	
CSVH (Front Turning Copying) Inch ➔ **D040** Metric ➔ **D043**	.375 x .375 x 5.512 .500 x .500 x 5.512	7 x 7 x 140 8 x 8 x 140 9.5 x 9.5 x 140 10 x10 x 140 12 x12 x 140	
CSVH (Back Turning) Inch ➔ **D041** Metric ➔ **D044**	.375 x .375 x 5.512 .500 x .500 x 5.512	7 x 7 x 140 8 x 8 x 140 9.5 x 9.5 x 140 10 x10 x 140 12 x12 x 140	
CSVH (Back Turning Copying) Inch ➔ **D041** Metric ➔ **D044**	.375 x .375 x 5.512 .500 x .500 x 5.512	7 x 7 x 140 8 x 8 x 140 9.5 x 9.5 x 140 10 x10 x 140 12 x12 x 140	
CSVH (Cutting Off) Inch ➔ **D041** Metric ➔ **D044**	.375 x .375 x 5.512 .500 x .500 x 5.512	7 x 7 x 140 8 x 8 x 140 9.5 x 9.5 x 140 10 x10 x 140 12 x12 x 140	
CSVH (Grooving) Inch ➔ **D042** Metric ➔ **D045**	.375 x .375 x 5.512 .500 x .500 x 5.512	7 x 7 x 140 8 x 8 x 140 9.5 x 9.5 x 140 10 x10 x 140 12 x12 x 140	
CSVH (Threading) Inch ➔ **D042** Metric ➔ **D045**	.375 x .375 x 5.512 .500 x .500 x 5.512	7 x 7 x 140 8 x 8 x 140 9.5 x 9.5 x 140 10 x10 x 140 12 x12 x 140	

CLASSIFICATION (INTERNAL TURNING)

Min. Cutting Dia.	Name of Tool Holder	Features	KAPR = 75°	KAPR = 93°			
			KAPR	KAPR			
ϕ3.0 mm (ϕ.118 inch)	**For Gang Type Tool Posts SBAH** 	● The minimum cutting diameter is ϕ3 mm (.118 inch). ● Tools for Gang type Swiss-type lathes.		 SBAH ➔ D046			
ϕ2.2 mm – ϕ7.2 mm (ϕ.087 – ϕ.283 inch)	**MICRO-MINI TWIN Boring Bars (Solid Carbide)** 	● The minimum cutting diameter is ϕ2.2 mm (.087 inch). ● Two cutting edges type. ● Continuous cutting from boring to facing. ● With or without a chip breaker.					
ϕ3.2 mm – ϕ5.2 mm (ϕ.126 – ϕ.205 inch)	**MICRO-MINI Boring Bars (Solid Carbide)** 	● The minimum cutting diameter is from ϕ3.2 mm (.126 inch). ● Single cutting edge type. ● l/d is 5 times the diameter. ● Cutting edge can be shaped according to the application. Thus, it covers a wide cutting range. (threading, grooving, copying, etc.)		 C□□FR-BLS ➔ E031			
ϕ5.0 mm – ϕ8.0 mm (ϕ.197 – ϕ.315 inch)	**MICRO-DEX Boring Bars** 	● The minimum cutting diameter is from ϕ5 mm (.197 inch). ● 7°positive insert. ● Carbide shank type. ● Easy-to-use tool geometries. ● Suitable for small workpiece. ● l/d is 5 times the diameter.					 SWUB ➔ E029
ϕ.390 inch – ϕ.977 inch	**SCREW CLAMP DIMPLE BAR (Heavy Metal Shank) (Steel Shank)** 	● The minimum cutting diameter is ϕ.390 inch. ● 7°, 11° positive insert. ● Excellent vibration resistance due to light dimple head. ● Coolant thru type.		 M-FSDUC ➔ E008	 M/S-FSTUP M ➔ E007 S ➔ E007	 M-FSVUB/C ➔ E009	 M-FSWUB/P ➔ E009
ϕ.228 inch – ϕ.937 inch	**Screw Clamp Type Boring Bars (Steel Shank)** 	● Two wall pocket. ● 7° positive insert, low cutting force. ● Screw clamp type. ● Steel, heavy metal and carbide shanks are available in various diameters.	 S-SSKC ➔ E015	 S-SDUC ➔ E014	 S-STUC ➔ E015		 S-SWUC ➔ E019
ϕ.200 inch – ϕ.750 inch	**Screw Clamp Type Boring Bars (Heavy Metal Shank)** 						
ϕ.228 inch – ϕ.797 inch	**Screw Clamp Type Boring Bars (Carbide Shank)** 				 C-STUC ➔ E016		
ϕ.390 inch – ϕ.790 inch	**SL5 Type Boring Bars** 	● Multi-functional bar for threading, grooving and boring. ● Minimum bore ϕ.390 inch. ● Rigid insert retention.					
ϕ10 mm – ϕ20 mm (ϕ.394 – ϕ.787 inch)	**F Type Boring Bars (FSL51,52)** 	● The minimum cutting diameter is ϕ10 mm (.394 inch). ● Single holder can be equipped with grooving inserts and threading inserts.					

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

	KAPR = 95°		KAPR = 107.5°–117.5°		KAPR = 142°	Grooving	Threading	Selection Standard					
								Economical	Low Cutting Resistance	Vibration Resistance	Coolant Thru	Specialized	Small Diameter Cutting
												◎	◎
	 CB□□RS(-B) ➔ E032				 CR□□RS-01(-B) ➔ E033	 CG□□RS-□□(-B) ➔ F237	 CT□□RSM□(B) ➔ G034	◎	◎	◎			◎
									◎	◎			◎
	 SCLC ➔ E029								◎	◎			◎
	 M/S-FSCLC/P M ➔ E006 S ➔ E006		 M-FSDQC ➔ E008	 M-FSVPB/C ➔ E010	 M-FSVJC ➔ E010				◎	◎	◎		
	 S-SCLC ➔ E012		 S-SDQC ➔ E013	 S-SVQC ➔ E016				◎	○	○			
	 M-SCLC ➔ E012	 M-SWLO ➔ E020							○	○			
	 C-SCLC ➔ E013	 C-SWLO ➔ E019	 C-SDQC ➔ E014						○	◎			
						 S-SL5N ➔ F235	 S-SL5N ➔ G032		○	○			○
						 FSL51, FSL52 ➔ F234	 FSL51, FSL52 ➔ G031		○	○			○

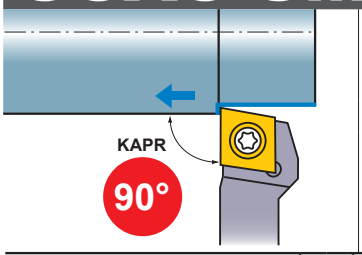
Note 2) ◎: 1st recommendation. ○: 2nd recommendation.

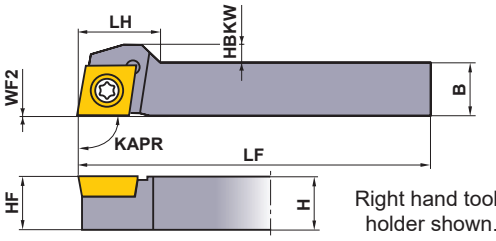
FRONT TURNING TOOLS (FOR GANG TYPE TOOL POSTS)

INCH STANDARD

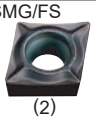
SCAC-SM

Without offset





Right hand tool holder shown.

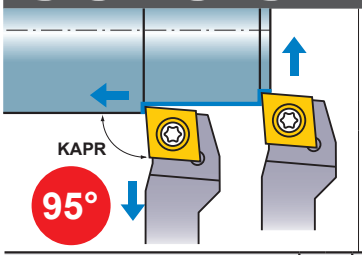
Finish	Finish	Light	Light
SMG/FS	R/L-F	R/L-SS	LS
			
(2)	(2)	(2, 3)	(2, 3)
Medium	**Medium**	**Non-Ferrous Metal**	**Light**
R/L-SN	R/L-SR	AZ	LS-P
			
(2, 3)	(2, 3)	(2, 3)	(2, 3)

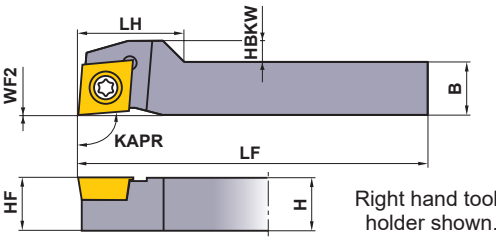
Order Number	Stock		Insert Number		Dimensions (inch)							*	
	R	L			H	B	LF	LH	HBKW	HF	WF2	Clamp Screw	Wrench
SCACR/L-062SM	●	●	CC○B	21.5○	.375	.375	4.921	—	—	.375	0	TS254	TKY08R
SCACR/L-063SM	●	●	CC○H	32.5○	.375	.375	4.921	.630	.156	.375	0	TS43	TKY15R
SCACR/L-083SM	●	●	CC○T	32.5○	.500	.500	5.906	.504	.031	.500	0	TS43	TKY15R
SCACR/L-103SM	●	●	CC○W	32.5○	.625	.625	5.906	—	—	.625	0	TS43	TKY15R

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

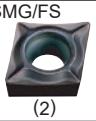
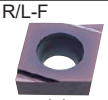
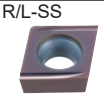
SCLC-SM

Without offset





Right hand tool holder shown.

Finish	Finish	Light	Light
SMG/FS	R/L-F	R/L-SS	LS
			
(2)	(2)	(2, 3)	(2, 3)
Medium	**Medium**	**Non-Ferrous Metal**	**Light**
R/L-SN	R/L-SR	AZ	LS-P
			
(2, 3)	(2, 3)	(2, 3)	(2, 3)

Order Number	Stock		Insert Number		Dimensions (inch)							*	
	R	L			H	B	LF	LH	HBKW	HF	WF2	Clamp Screw	Wrench
SCLCR/L-062SM	●	●	CC○B	21.5○	.375	.375	4.921	—	—	.375	0	TS254	TKY08R
SCLCR/L-063SM	●	●	CC○H	32.5○	.375	.375	4.921	.807	.176	.375	0	TS43	TKY15R
SCLCR/L-083SM	●	●	CC○T	32.5○	.500	.500	5.906	.685	.051	.500	0	TS43	TKY15R
SCLCR/L-103SM	●	●	CC○W	32.5○	.625	.625	5.906	—	—	.625	0	TS43	TKY15R

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

Note 1) Insert photo is an example. Letters show chip breaker style, figures show inscribed circle.
Note 2) Dimensions shown for insert corner RE .008 inch.

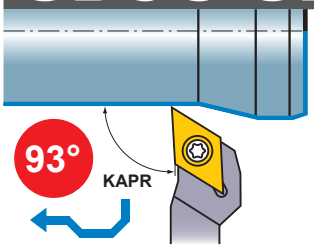
● : USA Stock

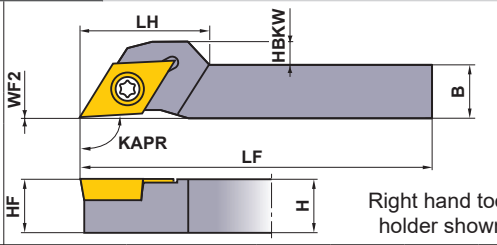
SCAC-SM type inserts	➤ A152–A161
SCLC-SM type inserts	➤ A152–A161
CBN & PCD inserts	➤ B037, B038, B053

INCH STANDARD

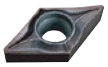
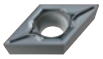
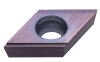
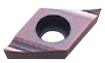
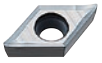
SDJC-SM

Without offset





Right hand tool holder shown.

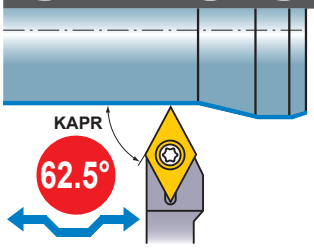
Finish	Finish	Light	Light
SMG/FS	R/L-F	R/L-SS	LS
			
(2, 3)	(2, 3)	(2, 3)	(2, 3)
Medium	**Medium**	**Non-Ferrous Metal**	**Light**
R/L-SN	R/L-SR	AZ	LS-P
			
(2, 3)	(2, 3)	(2, 3)	(2, 3)

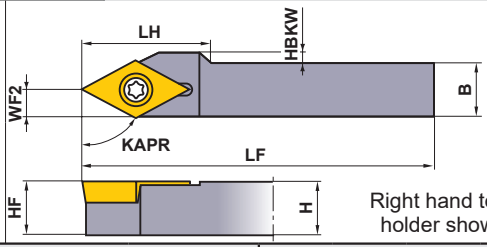
Order Number	Stock		Insert Number		Dimensions (inch)							*	
	R	L			H	B	LF	LH	HBKW	HF	WF2	Clamp Screw	Wrench
SDJCR/L-062SM	●	●	DCMT DCMW DCET DCGT DCGW	21.5°	.375	.375	4.921	—	—	.375	0	TS254	TKY08R
SDJCR/L-063SM	●	●		32.5°	.375	.375	4.921	.965	.176	.375	0	TS43	TKY15R
SDJCR/L-083SM	●	●		32.5°	.500	.500	5.906	.843	.051	.500	0	TS43	TKY15R
SDJCR/L-103SM	●	●		32.5°	.625	.625	5.906	—	—	.625	0	TS43	TKY15R

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

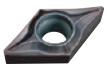
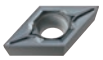
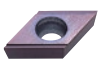
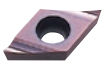
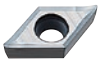
SDNC-SM

Neutral edge with handed holder
Without offset





Right hand tool holder shown.

Finish	Finish	Light	Light
SMG/FS	R/L-F	R/L-SS	LS
			
(2, 3)	(2, 3)	(2, 3)	(2, 3)
Medium	**Medium**	**Non-Ferrous Metal**	**Light**
R/L-SN	R/L-SR	AZ	LS-P
			
(2, 3)	(2, 3)	(2, 3)	(2, 3)

Order Number	Stock		Insert Number		Dimensions (inch)							*	
	R	L			H	B	LF	LH	HBKW	HF	WF2	Clamp Screw	Wrench
SDNCR/L-062SM	●	●	DCMT DCMW DCET DCGT DCGW	21.5°	.375	.375	4.921	—	—	.375	.118	TS254	TKY08R
SDNCR/L-063SM	●	●		32.5°	.375	.375	4.921	.965	.097	.375	.197	TS43	TKY15R
SDNCR/L-083SM	●	●		32.5°	.500	.500	5.906	—	—	.500	.197	TS43	TKY15R
SDNCR/L-103SM	●	●		32.5°	.625	.625	5.906	—	—	.625	.197	TS43	TKY15R

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

RECOMMENDED CUTTING CONDITIONS

	Work Material	Hardness	Grade	Cutting Speed (SFM)	Feed (IPR)
P	Carbon Steel · Alloy Steel	180HB–280HB	**MS6015/ VP15TF**	165–490	.0004 –.006
P	Free Cutting Steel	–	**MS6015**	100–590	.0004 –.006
P	Free Cutting Steel	–	**NX2525**	165–820	.0004 –.006
M	Stainless Steel	≤200HB	**VP15TF/ MP9005/ MP9015**	165–390	.0008 –.004
M	Stainless Steel	230HB	**MS7025/MS9025**	165–590	.0004 –.006
N	Non-Ferrous Metal	–	**HTi10/ MT9005**	230–755	.0012 –.006
S	Titanium Alloy	–	**MT9005**	130–260	.0016 –.005
S	Heat Resistant Alloy	–	**MP9015**	65–245	.0016 –.005

SDJC-SM type inserts ➤ **A164–A171**
SDNC-SM type inserts ➤ **A164–A171**
CBN & PCD inserts ➤ **B040, B041, B054**

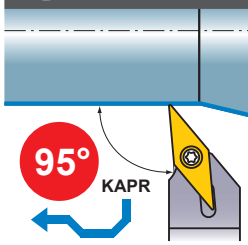
SPARE PARTS ➤ **M001**
TECHNICAL DATA ➤ **N001**

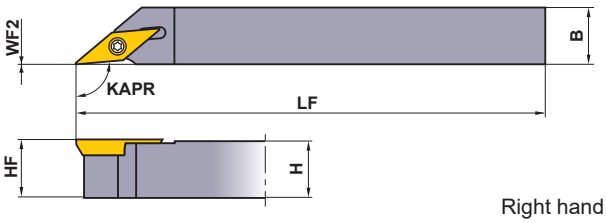
FRONT TURNING TOOLS (FOR GANG TYPE TOOL POSTS)

INCH STANDARD

SVLP-SM

Without offset





Right hand tool holder shown.

Finish
R/L-SRF

(1.5, 2)

Finish
SMG

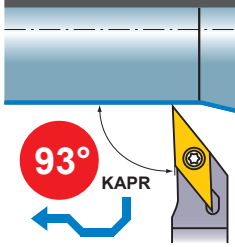
(1.5, 2)

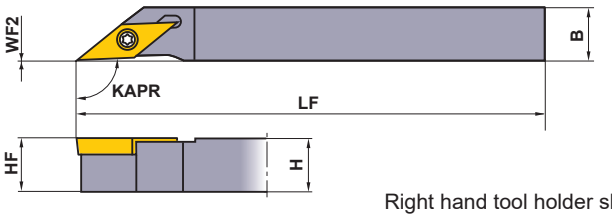
Order Number	Stock R	Stock L	Insert Number		H	B	LF	HF	WF2	* Clamp Screw	Wrench
SVLPR-061.5SM	●		VPET VPGT	1.51.5○	.375	.375	5.000	.375	0	TS202	TKY06R
SVLPR-081.5SM	●			1.51.5○	.500	.500	6.000	.500	0	TS202	TKY06R
SVLPR/L-062SM	●	●		22○	.375	.375	5.000	.375	0	TS255	TKY08R
SVLPR/L-082SM	●	●		22○	.500	.500	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 offset





Right hand tool holder shown.

Finish
R/L-F

(2)

Medium
R/L-SN

(2)

Medium
R/L-SR

(2)

Order Number	Stock R	Stock L	Insert Number		H	B	LF	HF	WF2	* Clamp Screw	Wrench
SVJBR/L-062SM	●	●	VBMT VBET VBGT VBGW	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 1) Insert photo is an example. Letters show chip breaker style, figures show inscribed circle.
Note 2) Dimensions shown for insert corner RE .008 inch.

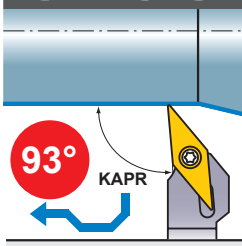
● : USA Stock

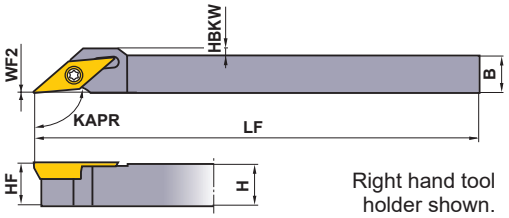
SVLP-SM type inserts	➢ A194
SVJB-SM type inserts	➢ A186–A189
CBN & PCD inserts	➢ B045, B058

INCH STANDARD

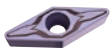
SVJC-SM

Without offset





Right hand tool holder shown.

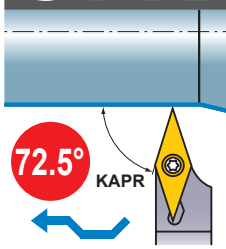
Finish	Finish	Light	Light
FP	FM	LS	LS-P
			
(2)	(2)	(2)	(2)
Light	**Light**	**Light**	
LP	LM	LS	
			
(2)	(2)	(2)	

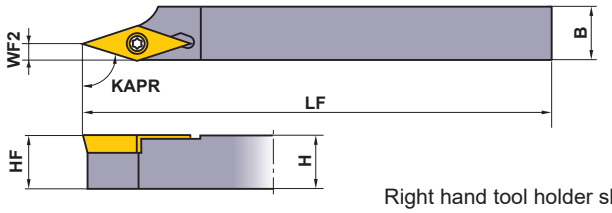
Order Number	Stock		Insert Number		Dimensions (inch)						*	
	R	L			H	B	LF	HBKW	HF	WF2	Clamp Screw	Wrench
SVJCR/L-062B-SM	●	●	VCMW VCMT VCGT	22◌	.375	.375	4.500	—	.375	0	TS255	TKY08R
SVJCR/L-062.5B-SM	●	●		2.52◌	.375	.375	4.500	.079	.375	0	TS32	TKY08R
SVJCR/L-082B-SM	●	●		22◌	.500	.500	4.500	—	.500	0	TS255	TKY08R
SVJCR/L-082.5B-SM	●	●		2.52◌	.500	.500	4.500	—	.500	0	TS32	TKY08R
SVJCR/L-102B-SM	●	●		22◌	.625	.625	4.500	—	.625	0	TS255	TKY08R
SVJCR/L-102.5B-SM	●	●		2.52◌	.625	.625	4.500	—	.625	0	TS32	TKY08R

* Clamp Torque (lbf-in) : TS255=8.9, TS32=8.9

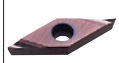
SVVB-SM

Neutral edge with handed holder





Right hand tool holder shown.

Finish	Medium
R/L-F	R/L-SN
	
(2)	(2)
Medium	
R/L-SR	
	
(2)	

Order Number	Stock		Insert Number		Dimensions (inch)					*	
	R	L			H	B	LF	HF	WF2	Clamp Screw	Wrench
SVVBR/L-062SM	●	●	VBET VBGT VBMT VBGW	22◌	.375	.375	4.921	.375	.118	TS255	TKY08R
SVVBR/L-082SM	●	●		22◌	.500	.500	5.906	.500	.118	TS255	TKY08R
SVVBR/L-102SM	●	●		22◌	.625	.625	5.906	.625	.118	TS255	TKY08R

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

RECOMMENDED CUTTING CONDITIONS

	Work Material	Hardness	Grade	Cutting Speed (SFM)	Feed (IPR)
P	Carbon Steel · Alloy Steel	180HB–280HB	**MS6015/VP15TF**	165–490	.0004 –.006
	Free Cutting Steel	–	**MS6015**	100–590	.0004 –.006
			NX2525	165–820	.0004 –.006
M	Stainless Steel	≤200HB	**VP15TF/MP9005/MP9015**	165–390	.0008 –.004
		230HB	**MS7025/MS9025**	165–590	.0004 –.006
N	Non-Ferrous Metal	–	**HTi10/MT9005**	230–755	.0012 –.006
S	Titanium Alloy	–	**MT9005**	130–260	.0016 –.005
	Heat Resistant Alloy	–	**MP9015**	65–245	.0016 –.005

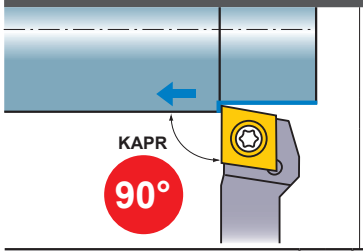
SVJC-SM type inserts ➤ **A190–A192**
SVVB-SM type inserts ➤ **A186–A189**
CBN & PCD inserts ➤ **B045, B058**
SPARE PARTS ➤ **M001**
TECHNICAL DATA ➤ **N001**

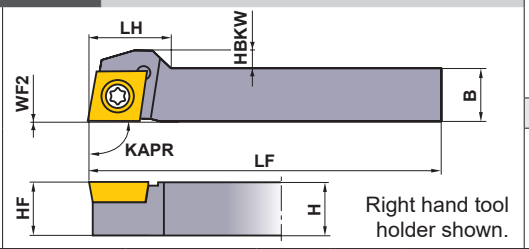
FRONT TURNING TOOLS (FOR GANG TYPE TOOL POSTS)

METRIC STANDARD

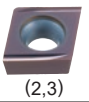
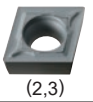
SCAC-SM

Without offset





Right hand tool holder shown.

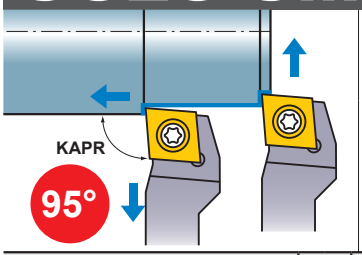
Finish	Finish	Light	Light
SMG/FS	R/L-F	R/L-SS	LS
			
(2)	(2)	(2,3)	(2,3)
Medium	**Medium**	**Non-Ferrous Metal**	**Light**
R/L-SN	R/L-SR	AZ	LS-P
			
(2,3)	(2,3)	(2,3)	(2,3)

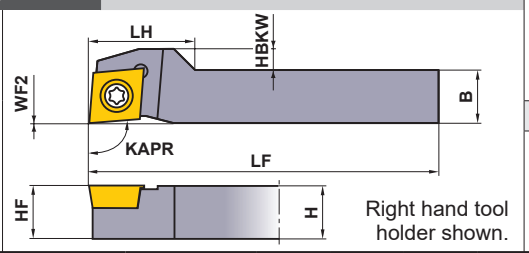
Order Number	Stock		Insert Number		Dimensions (mm)							*	
	R	L			H	B	LF	LH	HBKW	HF	WF2	Clamp Screw	Wrench
SCACR/L0808K06-SM	●	●	CC□B CC□H CC□T CC□W	21.5□	8	8	125	11	1.6	8	0	TS254	TKY08R
SCACR/L1010K06-SM	●	●		21.5□	10	10	125	—	—	10	0	TS254	TKY08R
SCACR/L1010K09-SM	●	●		32.5□	10	10	125	16	3.5	10	0	TS43	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

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

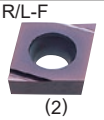
SCLC-SM

Without offset





Right hand tool holder shown.

Finish	Finish	Light	Light
SMG/FS	R/L-F	R/L-SS	LS
			
(2)	(2)	(2,3)	(2,3)
Medium	**Medium**	**Non-Ferrous Metal**	**Light**
R/L-SN	R/L-SR	AZ	LS-P
			
(2,3)	(2,3)	(2,3)	(2,3)

Order Number	Stock		Insert Number		Dimensions (mm)							*	
	R	L			H	B	LF	LH	HBKW	HF	WF2	Clamp Screw	Wrench
SCLCR/L0808K06-SM	●	●	CC□B CC□H CC□T CC□W	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

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

Note 1) Insert photo is an example. Letters show chip breaker style, figures show inscribed circle.
Note 2) Dimensions shown for insert corner RE .008 inch.

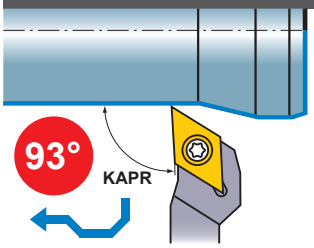
● : USA Stock

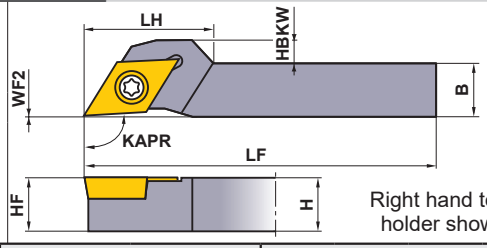
SCAC-SM type inserts	➤ A152–A161
SCLC-SM type inserts	➤ A152–A161
CBN & PCD inserts	➤ B037, B038, B053

METRIC STANDARD

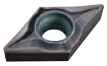
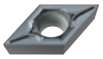
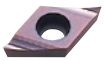
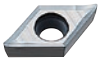
SDJC-SM

Without offset





Right hand tool holder shown.

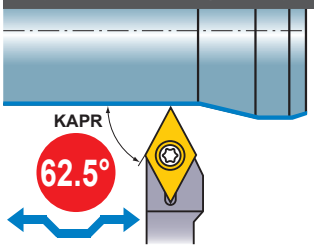
Finish	Finish	Light	Light
SMG/FS	R/L-F	R/L-SS	LS
			
(2,3)	(2,3)	(2,3)	(2,3)
Medium	**Medium**	**Non-Ferrous Metal**	**Light**
R/L-SN	R/L-SR	AZ	LS-P
			
(2,3)	(2,3)	(2,3)	(2,3)

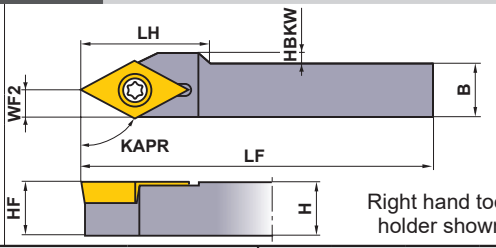
Order Number	Stock		Insert Number		Dimensions (mm)							*	
	R	L			H	B	LF	LH	HBKW	HF	WF2	Clamp Screw	Wrench
SDJCR/L0808K07-SM	●	●	DCMT DCMW DCET DCGT DCGW	21.5○	8	8	125	15	2	8	0	TS254	TKY08R
SDJCR/L1010K07-SM	●	●		21.5○	10	10	125	—	—	10	0	TS254	TKY08R
SDJCR/L1010K11-SM	●	●		32.5○	10	10	125	24	4	10	0	TS43	TKY15R
SDJCR/L1212M11-SM	●	●		32.5○	12	12	150	22	2	12	0	TS43	TKY15R
SDJCR/L1616M11-SM	●	●		32.5○	16	16	150	—	—	16	0	TS43	TKY15R

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

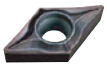
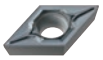
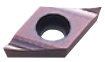
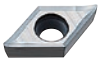
SDNC-SM

Neutral edge with handed holder
Without offset





Right hand tool holder shown.

Finish	Finish	Light	Light
SMG/FS	R/L-F	R/L-SS	LS
			
(2,3)	(2,3)	(2,3)	(2,3)
Medium	**Medium**	**Non-Ferrous Metal**	**Light**
R/L-SN	R/L-SR	AZ	LS-P
			
(2,3)	(2,3)	(2,3)	(2,3)

Order Number	Stock		Insert Number		Dimensions (mm)							*	
	R	L			H	B	LF	LH	HBKW	HF	WF2	Clamp Screw	Wrench
SDNCR/L0808K07-SM	●	●	DCMT DCMW DCET DCGT DCGW	21.5○	8	8	125	—	—	8	3	TS254	TKY08R
SDNCR/L1010K07-SM	●	●		21.5○	10	10	125	—	—	10	3	TS254	TKY08R
SDNCR/L1010K11-SM	●	●		32.5○	10	10	125	24	2	10	5	TS43	TKY15R
SDNCR/L1212M11-SM	●	●		32.5○	12	12	150	—	—	12	5	TS43	TKY15R
SDNCR/L1616M11-SM	●	●		32.5○	16	16	150	—	—	16	5	TS43	TKY15R

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

RECOMMENDED CUTTING CONDITIONS

	Work Material	Hardness	Grade	Cutting Speed (SFM)	Feed (IPR)
P	Carbon Steel · Alloy Steel	180HB–280HB	**MS6015/VP15TF**	165–490	.0004 –.006
P	Free Cutting Steel	–	**MS6015**	100–590	.0004 –.006
P			**NX2525**	165–820	.0004 –.006
M	Stainless Steel	≤200HB	**VP15TF/MP9005/MP9015**	165–390	.0008 –.004
M		230HB	**MS7025/MS9025**	165–590	.0004 –.006
N	Non-Ferrous Metal	–	**HTi10/MT9005**	230–755	.0012 –.006
S	Titanium Alloy	–	**MT9005**	130–260	.0016 –.005
S	Heat Resistant Alloy	–	**MP9015**	65–245	.0016 –.005

SDJC-SM type inserts ➤ **A164–A171**
SDNC-SM type inserts ➤ **A164–A171**
CBN & PCD inserts ➤ **B040, B041, B054**

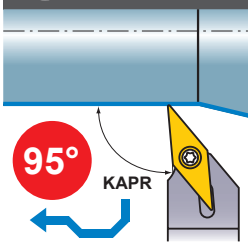
SPARE PARTS ➤ **M001**
TECHNICAL DATA ➤ **N001**

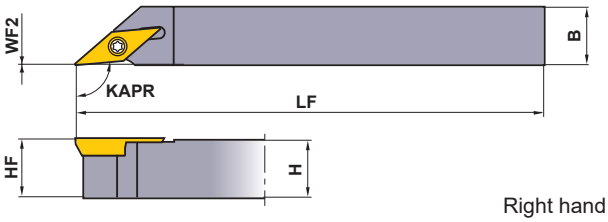
FRONT TURNING TOOLS (FOR GANG TYPE TOOL POSTS)

METRIC STANDARD

SVLP-SM

Without offset





Right hand tool holder shown.

Finish
R/L-SRF

(1.5,2)

Finish
SMG

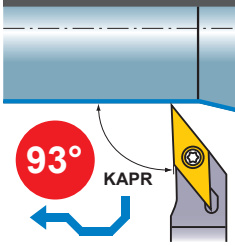
(1.5,2)

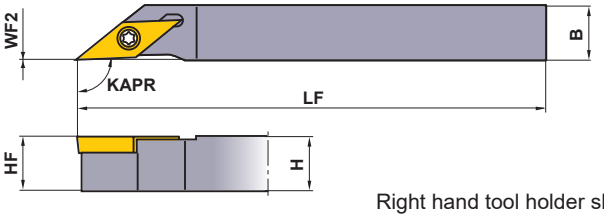
Order Number	Stock R	Stock L	Insert Number		H	B	LF	HF	WF2	Clamp Screw *	Wrench
SVLPR/L1010K08-SM	●	●	VPET VPGT	1.51.5○	10	10	125	10	0	TS202	TKY06R
SVLPR/L1212M08-SM	●	●		1.51.5○	12	12	150	12	0	TS202	TKY06R
SVLPR/L1010K11-SM	●	●		22○	10	10	125	10	0	TS255	TKY08R
SVLPR/L1212M11-SM	●	●		22○	12	12	150	12	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 offset





Right hand tool holder shown.

Finish
R/L-F

(2)

Medium
R/L-SN

(2)

Medium
R/L-SR

(2)

Order Number	Stock R	Stock L	Insert Number		H	B	LF	HF	WF2	Clamp Screw *	Wrench
SVJBR/L1010K11-SM	●	●	VBMT VBET VBGT VBGW	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

RECOMMENDED CUTTING CONDITIONS

	Work Material	Hardness	Grade	Cutting Speed (SFM)	Feed (IPR)
P	Carbon Steel · Alloy Steel	180HB–280HB	**MS6015/VP15TF**	165–490	.0004 –.006
P	Free Cutting Steel	–	**MS6015**	100–590	.0004 –.006
P			**NX2525**	165–820	.0004 –.006
M	Stainless Steel	≤200HB	**VP15TF/MP9005/MP9015**	165–390	.0008 –.004
M		230HB	**MS7025/MS9025**	165–590	.0004 –.006
N	Non-Ferrous Metal	–	**HTi10/MT9005**	230–755	.0012 –.006
S	Titanium Alloy	–	**MT9005**	130–260	.0016 –.005
S	Heat Resistant Alloy	–	**MP9015**	65–245	.0016 –.005

Note 1) Insert photo is an example. Letters show chip breaker style, figures show inscribed circle.
Note 2) Dimensions shown for insert corner RE .008 inch.

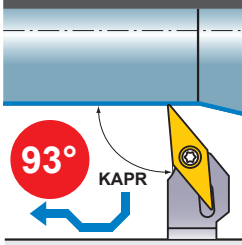
● : **USA Stock**

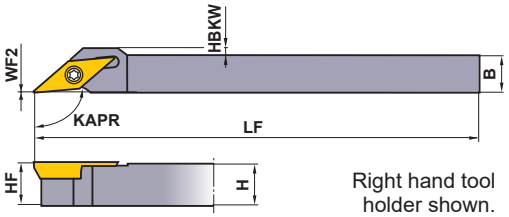
SVLP-SM type inserts ➤ **A194**
SVJB-SM type inserts ➤ **A186–A189**
CBN & PCD inserts ➤ **B045, B058**

METRIC STANDARD

SVJC-SM

Without offset





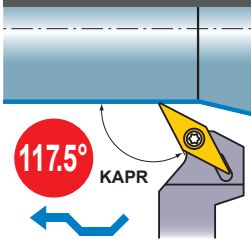
Right hand tool holder shown.

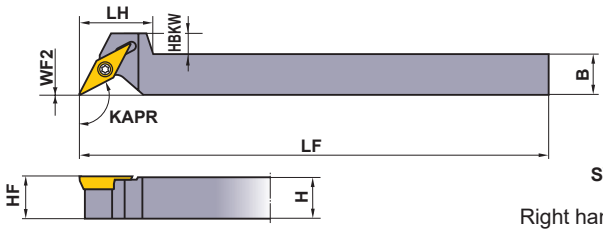
Finish	Finish	Light	Light
FP	FM	LS	LS-P
			
(2)	(2)	(2)	(2)
Light	**Light**	**Light**	
LP	LM	LS	
			
(2)	(2)	(2)	

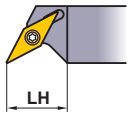
Order Number	Stock		Insert Number		Dimensions (mm)						*	
	R	L			H	B	LF	HBKW	HF	WF2	Clamp Screw	Wrench
SVJCR/L1010JX11-SM	●	●	VCMW VCMT VCGT	22○	10	10	120	–	10	0	TS255	TKY08R
SVJCR/L1010JX13-SM	●	●		2.52○	10	10	120	2	10	0	TS32	TKY08R
SVJCR/L1212JX11-SM	●	●		22○	12	12	120	–	12	0	TS255	TKY08R
SVJCR/L1212JX13-SM	●	●		2.52○	12	12	120	–	12	0	TS32	TKY08R
SVJCR/L1616JX11-SM	●	●		22○	16	16	120	–	16	0	TS255	TKY08R
SVJCR/L1616JX13-SM	●	●		2.52○	16	16	120	–	16	0	TS32	TKY08R

* Clamp Torque (lbf-in) : TS255=8.9, TS32=8.9

SVPP-SM







SVPPR/L1616M11-SM

Right hand tool holder shown.

Finish
R/L-SRF

(2)
Finish
SMG

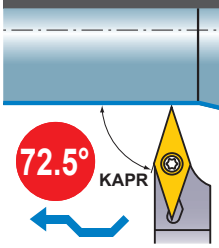
(2)

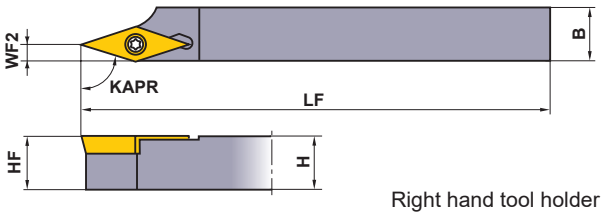
Order Number	Stock		Insert Number		Dimensions (mm)							*	
	R	L			H	B	LF	LH	HBKW	HF	WF2	Clamp Screw	Wrench
SVPPR/L1010K11-SM	●	●	VPET VPGT	22○	10	10	125	20	8	10	0	TS255	TKY08R
SVPPR/L1212M11-SM	●	●		22○	12	12	150	20	6	12	0	TS255	TKY08R
SVPPR/L1616M11-SM	●	●		22○	16	16	150	17	–	16	0	TS255	TKY08R

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

SVVB-SM

Neutral edge with handed holder





Right hand tool holder shown.

Finish	Medium
R/L-F	R/L-SN
	
(2)	(2)
Medium	
R/L-SR	
	
(2)	

Order Number	Stock		Insert Number		Dimensions (mm)					*	
	R	L			H	B	LF	HF	WF2	Clamp Screw	Wrench
SVVBR/L1010K11-SM	●	●	VBET VBGT VBMT VBGW	22○	10	10	125	10	3	TS255	TKY08R
SVVBR/L1212M11-SM	●	●		22○	12	12	150	12	3	TS255	TKY08R
SVVBR/L1616M11-SM	●	●		22○	16	16	150	16	3	TS255	TKY08R

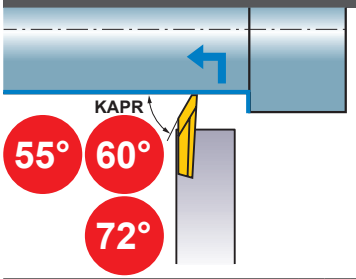
* Clamp Torque (lbf-in) : TS255=8.9

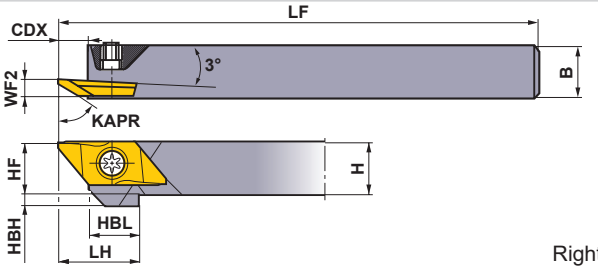
SVJC-SM type inserts	**➤ A190–A192**	**CBN & PCD inserts**	**➤ B045, B058**
SVVB-SM type inserts	**➤ A186–A189**	**SPARE PARTS**	**➤ M001**
SVPP-SM type inserts	**➤ A194**	**TECHNICAL DATA**	**➤ N001**

BACK TURNING TOOLS (FOR GANG TYPE TOOL POSTS)

INCH STANDARD

BTAH





Right hand tool holder shown.

Order Number	Stock		Insert Number		Dimensions (inch)									*	
	R	L			H	B	LF	LH	HF	WF2	HBH	HBL	CDX	Clamp Screw	Wrench
BTAHR/L-062	●	●	BTAT	5528□□R/L-B	.375	.375	4.724	.591	.375	.138	.125	.374	.217	NS402W	NKY15S
BTAHR/L-082	●	●		6035□□R/L-B 605000RX	.500	.500	4.724	.591	.500	.138	—	.374	.217	NS403W	NKY15S
BTAHR/L-102	●			7235□□R-SMB	.625	.625	4.724	.591	.625	.138	—	.374	.217	NS403W	NKY15S

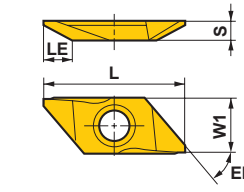
* Clamp Torque (lbf-in) : NS402W=6.2, NS403W=6.2

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

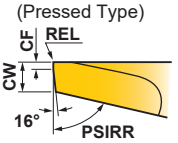
Note 2) Set the maximum depth of cut at under 60% of the effective cutting edge length (LE).

INSERTS

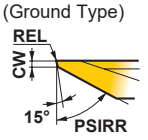
Order Number	Hand	Coated		Dimensions(inch)							LE* (inch)	Geometry
		VP15TF	MS6015	PSIRR/L*	REL	CF	L	W1	CW	S		
BTAT7235V5R-SMB	R	●		72°	.002	.012	.787	.315	.055	.098	.138	With Breaker
BTAT723501MR-SMB	R	●		72°	.003	.012	.787	.315	.055	.098	.138	
BTAT723502MR-SMB	R	●		72°	.007	.012	.787	.315	.055	.098	.138	
BTAT552800R-B	R	●	●	55°	.000	.000	.787	.315	.020	.098	.110	
BTAT552800L-B	L	●		55°	.000	.000	.787	.315	.020	.098	.110	
BTAT552801R-B	R	●	●	55°	.004	.000	.787	.315	.020	.098	.110	
BTAT552801L-B	L	●		55°	.004	.000	.787	.315	.020	.098	.110	
BTAT603500R-B	R	●	●	60°	.000	.000	.787	.315	.020	.098	.138	
BTAT603500L-B	L	●		60°	.000	.000	.787	.315	.020	.098	.138	
BTAT603501MR-B	R		●	60°	.003	.000	.787	.315	.020	.098	.138	
BTAT603501R-B	R	●	●	60°	.004	.000	.787	.315	.020	.098	.138	
BTAT603501L-B	L	●		60°	.004	.000	.787	.315	.020	.098	.138	
BTAT605000RX	R	●		60°	.000	.000	.787	.315	.049	.098	.197	Without Breaker



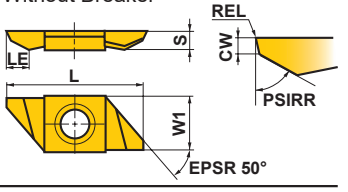
SMB Type (Pressed Type)



B Type (Ground Type)



Right hand insert shown.



* Numeric value set insert on holder.

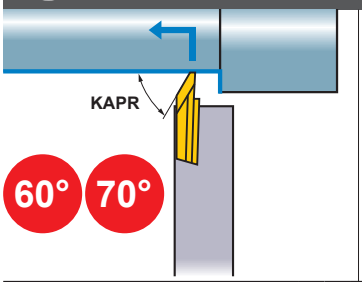
Note 1) REL, PSIRR dimensions for Right Hand Tool and RER,
PSIRL dimensions for Left Hand Tool.

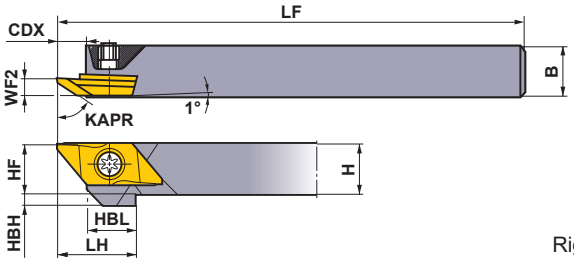
● : USA Stock

<5 inserts in one case>

INCH STANDARD

CTBH





Right hand tool holder shown.

Order Number	Stock		Insert Number		Dimensions (inch)									*	
	R	L			H	B	LF	LH	HF	WF2	HBH	HBL	CDX	Clamp Screw	Wrench
CTBHR/L-062	●	●	BTBT	60450○R/L-B	.375	.375	4.724	.768	.375	.133	.125	.472	.295	NS402W	NKY15S
CTBHR/L-082	●	●		606000R/L	.500	.500	4.724	.768	.500	.133	—	.472	.295	NS403W	NKY15S
CTBHR/L-102	●	●		7055○○R-SMB	.625	.625	4.724	.768	.625	.133	—	.472	.295	NS403W	NKY15S

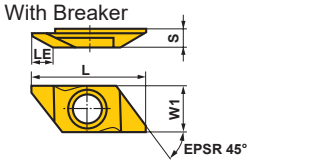
* Clamp Torque (lbf-in) : NS402W=6.2, NS403W=6.2

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

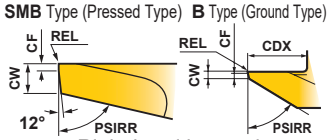
Note 2) Set the maximum depth of cut at under 60% of the effective cutting edge length (LE).

INSERTS

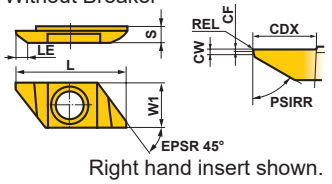
Order Number	Hand	Coated		Dimensions(inch)								LE*	Geometry
		VP15TF	MS6015	PSIRR/L*	REL	CF	L	W1	CW	S	CDX		
BTBT7055V5R-SMB	R	●		70°	.002	.012	.984	.370	.053	.138	.256	.217	With Breaker
BTBT705501MR-SMB	R	●		70°	.003	.012	.984	.370	.053	.138	.256	.217	
BTBT705502MR-SMB	R	●		70°	.007	.012	.984	.370	.053	.138	.256	.217	
BTBT604500R-B	R	●	●	60°	.000	.008	.984	.370	.028	.138	.217	.177	
BTBT604500L-B	L	●		60°	.000	.008	.984	.370	.028	.138	.217	.177	
BTBT604501MR-B	R		●	60°	.003	.012	.984	.370	.028	.138	.217	.177	
BTBT604501R-B	R	●	●	60°	.004	.012	.984	.370	.028	.138	.217	.177	
BTBT604501L-B	L	●		60°	.004	.012	.984	.370	.028	.138	.217	.177	
BTBT606000R	R	●		60°	.000	.008	.984	.370	.028	.138	.276	.236	Without Breaker
BTBT606000L	L	●		60°	.000	.008	.984	.370	.028	.138	.276	.236	



SMB Type (Pressed Type) **B** Type (Ground Type)



Right hand insert shown.



Right hand insert shown.

* Numeric value set insert on holder.

Note 1) REL, PSIRR dimensions for Right Hand Tool and RER, PSIRL dimensions for Left Hand Tool.

RECOMMENDED CUTTING CONDITIONS

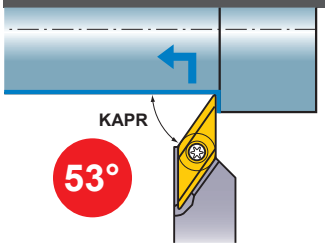
	Work Material	Hardness	Grade	Cutting Speed (SFM)	Feed (IPR)
P	Carbon Steel · Alloy Steel	180HB–280HB	**MS6015/VP15TF**	165–490	.0004–.006
	Free Cutting Steel	–	**MS6015**	100–590	.0004–.006
M	Stainless Steel	≤200HB	**VP15TF**	165–395	.0008–.004
N	Non-Ferrous Metal	–	**MS6015**	230–755	.0012–.006

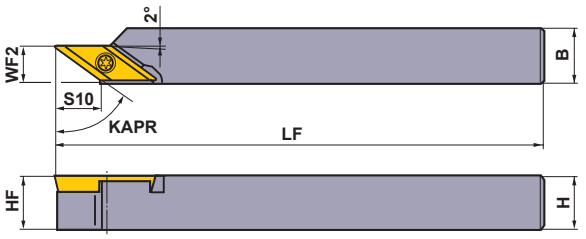
SPARE PARTS ➤ M001
TECHNICAL DATA ➤ N001

BACK TURNING TOOLS (FOR GANG TYPE TOOL POSTS)

INCH STANDARD

BTVH





Right hand tool holder only.

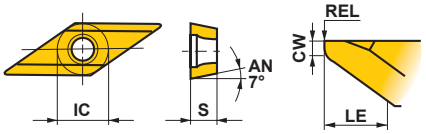
Order Number	Stock	Insert Number		Dimensions (inch)						*	
	R			H	B	LF	HF	WF2	S10	Clamp Screw	Wrench
BTVHR-062	●	BTVT	5375○○R-B	.375	.375	4.724	.375	.295	.335	NS251	NKY15R
BTVHR-082	●			.500	.500	4.724	.500	.295	.335	NS251	NKY15R
BTVHR-102	●			.625	.625	4.724	.625	.295	.335	NS251	NKY15R

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

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

INSERTS

Order Number	Hand	Coated	Dimensions (inch)				LE (inch) *	Geometry
		VP15TF	IC	S	REL	CW		
BTVT5375V5R-B	R	●	.250	.125	.002	.020	.295	With Breaker
BTVT537501R-B	R	●	.250	.125	.004	.020	.295	



* Numeric value set insert on holder.

RECOMMENDED CUTTING CONDITIONS

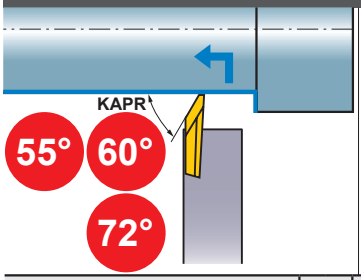
	Work Material	Hardness	Grade	Cutting Speed (SFM)	Feed (IPR)
P	Carbon Steel · Alloy Steel	180HB–280HB	**VP15TF**	165–490	.0004 –.006
	Free Cutting Steel	–	**VP15TF**	100–590	.0004 –.006
M	Stainless Steel	≤200HB	**VP15TF**	165–395	.0008 –.004
N	Non-Ferrous Metal	–	**VP15TF**	230–755	.0012 –.006

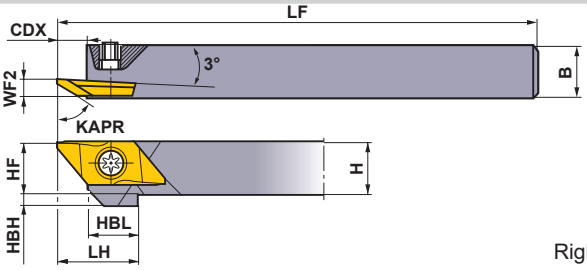
● : USA Stock

<5 inserts in one case>

METRIC STANDARD

BTAH





Right hand tool holder shown.

Order Number	Stock		Insert Number		Dimensions (mm)									*	
	R	L			H	B	LF	LH	HF	WF2	HBH	HBL	CDX	Clamp Screw	Wrench
BTAHR/L0810-50	●	●	BTAT	5528○○R/L-B	8	10	120	15	8	3.5	4	9.5	5.5	NS402W	NKY15S
BTAHR/L1010-50	●	●		6035○○R/L-B	10	10	120	15	10	3.5	2	9.5	5.5	NS402W	NKY15S
BTAHR/L1212-50	●	●		605000RX	12	12	120	15	12	3.5	—	9.5	5.5	NS403W	NKY15S
BTAHR/L1616-50	●			7235○○R-SMB	16	16	120	15	16	3.5	—	9.5	5.5	NS403W	NKY15S

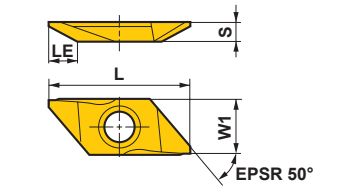
∗ Clamp Torque (lbf-in) : NS402W=6.2, NS403W=6.2

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

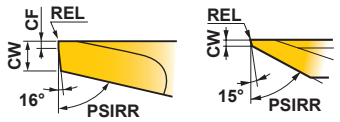
Note 2) Set the maximum depth of cut at under 60% of the effective cutting edge length (LE).

INSERTS

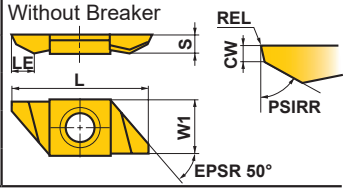
Order Number	Hand	Coated		Dimensions (mm)							LE* (mm)	Geometry
		VP15TF	MS6015	PSIRR/L*	RER/L	CF	L	W1	CW	S		
BTAT7235V5R-SMB	R	●		72°	0.05	0.3	20	8	1.4	2.5	3.5	With Breaker
BTAT723501MR-SMB	R	●		72°	0.08	0.3	20	8	1.4	2.5	3.5	
BTAT723502MR-SMB	R	●		72°	0.18	0.3	20	8	1.4	2.5	3.5	
BTAT552800R-B	R	●	●	55°	0	0	20	8	0.5	2.5	2.8	
BTAT552800L-B	L	●		55°	0	0	20	8	0.5	2.5	2.8	
BTAT552801R-B	R	●	●	55°	0.1	0	20	8	0.5	2.5	2.8	
BTAT552801L-B	L	●		55°	0.1	0	20	8	0.5	2.5	2.8	
BTAT603500R-B	R	●	●	60°	0	0	20	8	0.5	2.5	3.5	
BTAT603500L-B	L	●		60°	0	0	20	8	0.5	2.5	3.5	
BTAT603501MR-B	R		●	60°	0.08	0	20	8	0.5	2.5	3.5	
BTAT603501R-B	R	●	●	60°	0.1	0	20	8	0.5	2.5	3.5	
BTAT603501L-B	L	●		60°	0.1	0	20	8	0.5	2.5	3.5	
BTAT605000RX	R	●		60°	0	0	20	8	1.25	2.5	5.0	Without Breaker



SMB Type (Pressed Type) **B** Type (Ground Type)



Right hand insert shown.



∗ Numeric value set insert on holder.

Note 1) REL, PSIRR dimensions for Right Hand Tool and RER, PSIRL dimensions for Left Hand Tool.

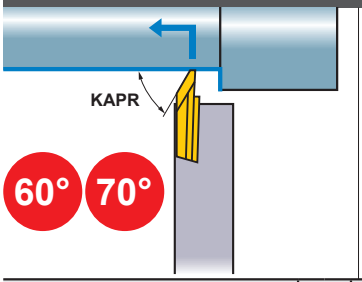
RECOMMENDED CUTTING CONDITIONS

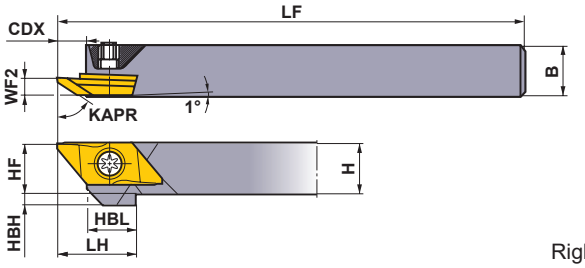
	Work Material	Hardness	Grade	Cutting Speed (SFM)	Feed (IPR)
P	Carbon Steel · Alloy Steel	180HB—280HB	**MS6015/VP15TF**	165—490	.0004 —.006
	Free Cutting Steel	—	**MS6015**	100—590	.0004 —.006
M	Stainless Steel	≤200HB	**VP15TF**	165—395	.0008 —.004
N	Non-Ferrous Metal	—	**MS6015**	230—755	.0012 —.006

BACK TURNING TOOLS (FOR GANG TYPE TOOL POSTS)

METRIC STANDARD

CTBH





Right hand tool holder shown.

Order Number	Stock		Insert Number		Dimensions (mm)									*	
	R	L			H	B	LF	LH	HF	WF2	HBH	HBL	CDX	Clamp Screw	Wrench
CTBHR/L1010-160	●	●	BTBT	60450○R/L-B	10	10	120	19.5	10	3.4	2	12	7.5	NS402W	NKY15S
CTBHR/L1212-160	●	●		606000R/L	12	12	120	19.5	12	3.4	—	12	7.5	NS403W	NKY15S
CTBHR/L1616-160	●	●		7055○○R-SMB	16	16	120	19.5	16	3.4	—	12	7.5	NS403W	NKY15S

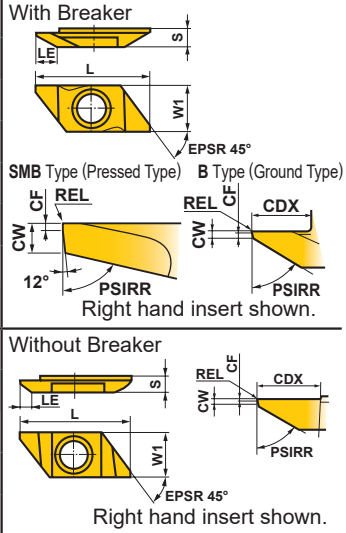
* Clamp Torque (lbf-in) : NS402W=6.2, NS403W=6.2

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).

INSERTS

Order Number	Hand	Coated		Dimensions (mm)								LE* (mm)	Geometry
		VP15TF	MS6015	PSIRR/L*	RER/L	CF	L	W1	CW	S	CDX		
BTBT7055V5R-SMB	R	●		70°	0.05	0.3	25	9.4	1.35	3.5	6.5	5.5	With Breaker
BTBT705501MR-SMB	R	●		70°	0.08	0.3	25	9.4	1.35	3.5	6.5	5.5	
BTBT705502MR-SMB	R	●		70°	0.18	0.3	25	9.4	1.35	3.5	6.5	5.5	
BTBT604500R-B	R	●	●	60°	0	0.2	25	9.4	0.7	3.5	5.5	4.5	
BTBT604500L-B	L	●		60°	0	0.2	25	9.4	0.7	3.5	5.5	4.5	
BTBT604501MR-B	R		●	60°	0.08	0.3	25	9.4	0.7	3.5	5.5	4.5	
BTBT604501R-B	R	●	●	60°	0.1	0.3	25	9.4	0.7	3.5	5.5	4.5	
BTBT604501L-B	L	●		60°	0.1	0.3	25	9.4	0.7	3.5	5.5	4.5	
BTBT606000R	R	●		60°	0	0.2	25	9.4	0.7	3.5	7	6.0	Without Breaker
BTBT606000L	L	●		60°	0	0.2	25	9.4	0.7	3.5	7	6.0	



* Numeric value set insert on holder.

Note 1) REL, PSIRR dimensions for Right Hand Tool and RER, PSIRL dimensions for Left Hand Tool.

RECOMMENDED CUTTING CONDITIONS

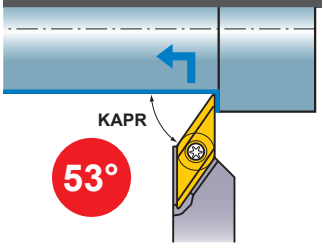
	Work Material	Hardness	Grade	Cutting Speed (SFM)	Feed (IPR)
P	Carbon Steel · Alloy Steel	180HB—280HB	**MS6015/VP15TF**	165—490	.0004 —.006
	Free Cutting Steel	—	**MS6015**	100—590	.0004 —.006
M	Stainless Steel	≤200HB	**VP15TF**	165—395	.0008 —.004
N	Non-Ferrous Metal	—	**MS6015**	230—755	.0012 —.006

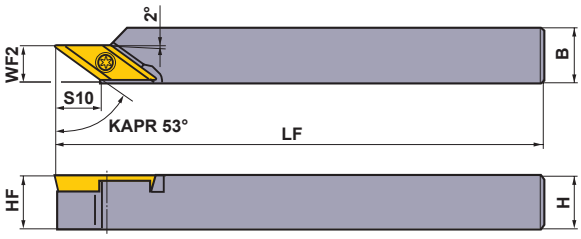
● : USA Stock

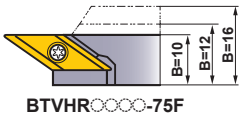
<5 inserts in one case>

METRIC STANDARD

BTVH







Right hand tool holder only.

Order Number	Stock	Insert Number		Dimensions (mm)						*	
	R			H	B	LF	HF	WF2	S10	Clamp Screw	Wrench
BTVHR1010-75	●	BTVT	5375○○R-B	10	10	120	10	7.5	8.5	NS251	NKY15S
BTVHR1212-75	●			12	12	120	12	7.5	8.5	NS251	NKY15S
BTVHR1616-75	●			16	16	120	16	7.5	8.5	NS251	NKY15S
BTVHR1010-75F	●			10	10	120	10	10.0	8.5	NS251	NKY15S
BTVHR1212-75F	●			12	12	120	12	10.0	8.5	NS251	NKY15S
BTVHR1616-75F	●			16	16	120	16	10.0	8.5	NS251	NKY15S

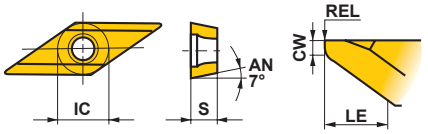
* Clamp Torque (lbf-in) : NS251=6.2

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.

INSERTS

Order Number	Hand	Coated	Dimensions (mm)				LE * (mm)	Geometry
		VP15TF	IC	S	REL	CW		
BTVT5375V5R-B	R	●	6.35	3.18	0.05	0.5	7.5	With Breaker
BTVT537501R-B	R	●	6.35	3.18	0.1	0.5	7.5	



* Numeric value set insert on holder.

RECOMMENDED CUTTING CONDITIONS

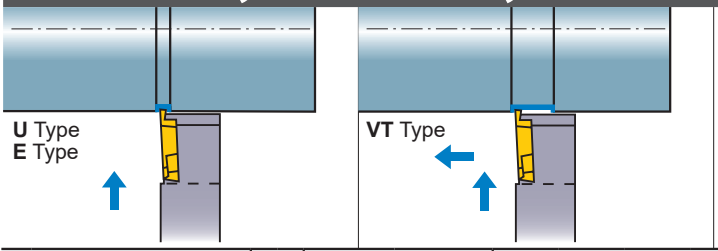
	Work Material	Hardness	Grade	Cutting Speed (SFM)	Feed (IPR)
P	Carbon Steel · Alloy Steel	180HB–280HB	**VP15TF**	165–490	.0004 –.006
	Free Cutting Steel	–	**VP15TF**	100–590	.0004 –.006
M	Stainless Steel	≤200HB	**VP15TF**	165–395	.0008 –.004
N	Non-Ferrous Metal	–	**VP15TF**	230–755	.0012 –.006

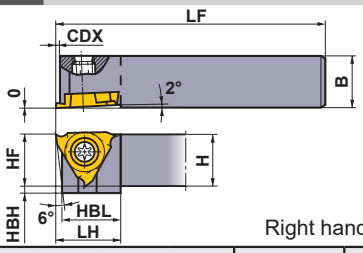
SPARE PARTS ➤ M001
TECHNICAL DATA ➤ N001

GROOVING TOOLS (FOR GANG TYPE TOOL POSTS)

INCH STANDARD

GTAH, GTBH, GTCH





Right hand tool holder shown.

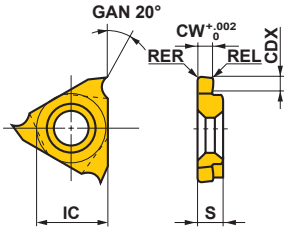
	Order Number	Stock R	Stock L	Insert Number		Dimensions (inch) H	B	HF	LF	CDX*1	LH	HBH	HBL	Cutting Width (inch)	*2 Clamp Screw	Wrench
Long Shank	GTBHR/L-063	●	●	GTAT GTBT GTCT	○○○○	.375	.375	.375	4.724	.118	.591	.156	.528	.057–.118	NS404W	NKY158
Long Shank	GTBHR/L-083	●	●	GTAT GTBT GTCT	○○○○	.500	.500	.500	4.724	.118	.591	.020	.528	.057–.118	NS404W	NKY158
Long Shank	GTBHR/L-103	●	●	GTAT GTBT GTCT	○○○○	.625	.625	.625	4.724	.118	.591	—	.528	.057–.118	NS404W	NKY158

*1 It is not possible to machine depths over **CDX** dimensions(Max. Groove Depth).
For the actual maximum depth that can be machined, check the **CDX** of only the insert.
*2 Clamp Torque (lbf-in) : NS404W=6.2

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

INSERTS

Order Number	Hand	Coated VP15TF	Dimensions (inch) CW	CDX*1	RER/L	IC	S	Geometry
GTAT03006V3R-U	R	●	.012	.011	.001	.375	.125	**U** Type Breaker (Grooving) For general use
GTAT03006V3L-U	L	●	.012	.011	.001	.375	.125	
GTAT05012V5R-U	R	●	.020	.035	.002	.375	.125	
GTAT05012V5L-U	L	●	.020	.035	.002	.375	.125	
GTAT07520V5R-U	R	●	.030	.071	.002	.375	.125	
GTAT07520V5L-U	L	●	.030	.071	.002	.375	.125	
GTAT09520V5R-U	R	●	.037	.071	.002	.375	.125	
GTAT09520V5L-U	L	●	.037	.071	.002	.375	.125	
GTAT10020V5R-U	R	●	.039	.071	.002	.375	.125	
GTAT10020V5L-U	L	●	.039	.071	.002	.375	.125	
GTAT10320V5R-U	R	●	.041	.071	.002	.375	.125	
GTAT12520V5R-U	R	●	.049	.071	.002	.375	.125	
GTAT12520V5L-U	L	●	.049	.071	.002	.375	.125	
GTBT14530V5R-U	R	●	.057	.110	.002	.375	.125	
GTBT14530V5L-U	L	●	.057	.110	.002	.375	.125	
GTBT15030V5R-U	R	●	.059	.110	.002	.375	.125	
GTBT15030V5L-U	L	●	.059	.110	.002	.375	.125	
GTBT17530V5R-U	R	●	.069	.110	.002	.375	.125	
GTBT17530V5L-U	L	●	.069	.110	.002	.375	.125	
GTBT20030V5R-U	R	●	.079	.110	.002	.375	.125	
GTBT20030V5L-U	L	●	.079	.110	.002	.375	.125	
GTCT25030V5R-U	R	●	.098	.110	.002	.375	.125	
GTCT25030V5L-U	L	●	.098	.110	.002	.375	.125	

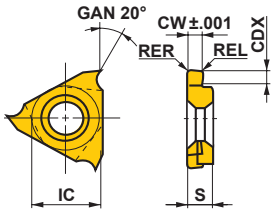


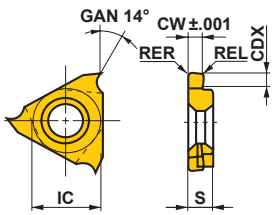
Right hand insert shown.

● : USA Stock
<5 inserts in one case>

INSERTS

Order Number	Hand	Coated		Dimensions (inch)					Geometry
		VP15TF	VP15KZ	CW	CDX	RER/L	IC	S	
GTAT03306V3R-E	R	●		.013	.011	.001	.375	.125	**E** Type Breaker (Grooving) For precision cutting
GTAT03306V3L-E	L	●		.013	.011	.001	.375	.125	
GTAT04312V3R-E	R	●		.017	.035	.001	.375	.125	
GTAT04312V3L-E	L	●		.017	.035	.001	.375	.125	
GTAT05312V5R-E	R	●		.021	.035	.002	.375	.125	
GTAT05312V5L-E	L	●		.021	.035	.002	.375	.125	
GTAT07520V5R-E	R	●		.030	.071	.002	.375	.125	
GTAT07520V5L-E	L	●		.030	.071	.002	.375	.125	
GTAT09520V5R-E	R	●		.037	.071	.002	.375	.125	
GTAT09520V5L-E	L	●		.037	.071	.002	.375	.125	
GTAT10020V5R-E	R	●		.039	.071	.002	.375	.125	
GTAT10020V5L-E	L	●		.039	.071	.002	.375	.125	
GTAT1002001R-E	R	●		.039	.071	.004	.375	.125	
GTAT1002001L-E	L	●		.039	.071	.004	.375	.125	
GTAT12020V5R-E	R	●		.047	.071	.002	.375	.125	
GTAT12020V5L-E	L	●		.047	.071	.002	.375	.125	
GTAT1202001R-E	R	●		.047	.071	.004	.375	.125	
GTAT1202001L-E	L	●		.047	.071	.004	.375	.125	
GTAT14020V5R-E	R	●		.055	.071	.002	.375	.125	
GTAT14020V5L-E	L	●		.055	.071	.002	.375	.125	
GTBT15030V5R-E	R	●		.059	.110	.002	.375	.125	
GTBT15030V5L-E	L	●		.059	.110	.002	.375	.125	
GTBT1503001R-E	R	●		.059	.110	.004	.375	.125	
GTBT1503001L-E	L	●		.059	.110	.004	.375	.125	
GTBT18030V5R-E	R	●		.071	.110	.002	.375	.125	
GTBT18030V5L-E	L	●		.071	.110	.002	.375	.125	
GTBT20030V5R-E	R	●		.079	.110	.002	.375	.125	
GTBT20030V5L-E	L	●		.079	.110	.002	.375	.125	
GTBT2003001R-E	R	●		.079	.110	.004	.375	.125	
GTBT2003001L-E	L	●		.079	.110	.004	.375	.125	
GTBT22530V5R-E	R	●		.089	.110	.002	.375	.125	
GTBT22530V5L-E	L	●		.089	.110	.002	.375	.125	
GTCT25030V5R-E	R	●		.098	.110	.002	.375	.125	
GTCT25030V5L-E	L	●		.098	.110	.002	.375	.125	
GTCT27530V5R-E	R	●		.108	.110	.002	.375	.125	
GTCT27530V5L-E	L	●		.108	.110	.002	.375	.125	
GTCT30030V5R-E	R	●		.118	.110	.002	.375	.125	
GTCT30030V5L-E	L	●		.118	.110	.002	.375	.125	Right hand insert shown.
GTAT0330600R-VT	R		●	.013	.010	0	.375	.125	**VT** Type Breaker (Grooving, Profiling)
GTAT0431200R-VT	R		●	.017	.035	0	.375	.125	
GTAT0532000R-VT	R		●	.021	.063	0	.375	.125	
GTAT0652000R-VT	R		●	.026	.063	0	.375	.125	
GTAT0752000R-VT	R		●	.030	.063	0	.375	.125	
GTAT0802000R-VT	R		●	.031	.063	0	.375	.125	
GTAT0852000R-VT	R		●	.033	.063	0	.375	.125	
GTAT0952000R-VT	R		●	.037	.063	0	.375	.125	
GTAT1002000R-VT	R		●	.039	.063	0	.375	.125	
GTAT1102000R-VT	R		●	.043	.063	0	.375	.125	
GTAT1202000R-VT	R		●	.047	.063	0	.375	.125	
GTAT1302000R-VT	R		●	.051	.063	0	.375	.125	
GTAT1402000R-VT	R		●	.055	.063	0	.375	.125	
GTBT1503000R-VT	R		●	.059	.106	0	.375	.125	
GTBT2003000R-VT	R		●	.079	.106	0	.375	.125	





RECOMMENDED CUTTING CONDITIONS

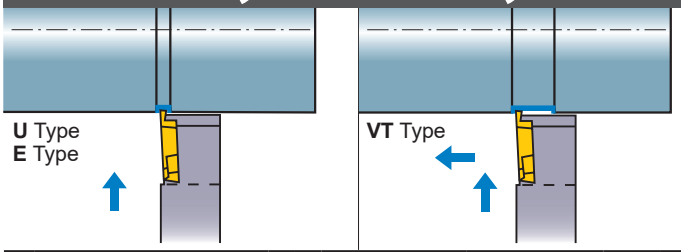
	Work Material	Hardness	Grade	Cutting Speed (SFM)	Feed (IPR)
P	Carbon Steel · Alloy Steel	180HB–280HB	**VP15TF/VP15KZ**	165–490	.0004–.0035
	Free Cutting Steel	–	**VP15TF/VP15KZ**	100–590	.0004–.0035
M	Stainless Steel	≤200HB	**VP15TF/VP15KZ**	165–395	.0008–.002
N	Non-Ferrous Metal	–	**VP15TF/VP15KZ**	230–755	.0012–.004

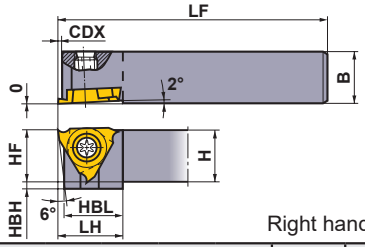
SPARE PARTS ➤ M001
TECHNICAL DATA ➤ N001

GROOVING TOOLS (FOR GANG TYPE TOOL POSTS)

METRIC STANDARD

GTAH, GTBH, GTCH





Right hand tool holder shown.

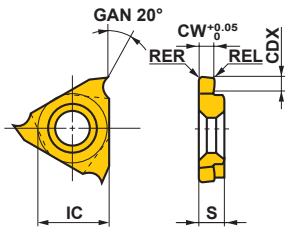
	Order Number	Stock R	Stock L	Insert Number		Dimensions (mm) H	B	HF	LF	CDX*1	LH	HBH	HBL	Cutting Width (mm)	*2 Clamp Screw	Wrench
Standard Shank	GTAHR/L0808-20S	★	★	GTAT GTBT*1 GTCT*1	○○○○	8	8	8	80	2	15	5	12.9	0.3–3.0	NS404W	NKY15S
	GTAHR/L1010-20S	★	★		○○○○	10	10	10	80	2	15	3	12.9	0.3–3.0	NS404W	NKY15S
	GTAHR/L1212-20S	★	★		○○○○	12	12	12	80	2	15	1	12.9	0.3–3.0	NS404W	NKY15S
	GTBHR/L1010-30S	★	★	GTBT. GTCT	○○○○	10	10	10	80	3	15	3	13.4	1.45–3.0	NS404W	NKY15S
	GTCHR/L1010-30S	★	★	GTCT	○○○○	10	10	10	80	3	15	3	13.4	2.5–3.0	NS404W	NKY15S
Long Shank	GTAHR/L0808-20	★	★	GTAT GTBT*1 GTCT*1	○○○○	8	8	8	120	2	15	5	12.9	0.3–3.0	NS404W	NKY15S
	GTAHR/L1010-20	★	★		○○○○	10	10	10	120	2	15	3	12.9	0.3–3.0	NS404W	NKY15S
	GTAHR/L1212-20	★	★		○○○○	12	12	12	120	2	15	1	12.9	0.3–3.0	NS404W	NKY15S
	GTAHR/L1616-20	★	★		○○○○	16	16	16	120	2	15	—	12.9	0.3–3.0	NS404W	NKY15S
	GTBHR/L1010-30	●	●	GTBT. GTCT	○○○○	10	10	10	120	3	15	3	13.4	1.45–3.0	NS404W	NKY15S
	GTBHR/L1212-30	●	●		○○○○	12	12	12	120	3	15	1	13.4	1.45–3.0	NS404W	NKY15S
	GTBHR/L1616-30	●	●		○○○○	16	16	16	120	3	15	—	13.4	1.45–3.0	NS404W	NKY15S
	GTCHR/L1010-30	★	★	GTCT	○○○○	10	10	10	120	3	15	3	13.4	2.5–3.0	NS404W	NKY15S

*1 It is not possible to machine depths over **CDX** dimensions(Max. Groove Depth).
For the actual maximum depth that can be machined, check the **CDX** of only the insert.
*2 Clamp Torque (lbf-in) : NS404W=6.2

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

INSERTS

Order Number	Hand	Coated VP15TF	Dimensions (mm) CW	CDX*1	RER/L	IC	S	Geometry
GTAT03006V3R-U	R	●	0.3	0.27	0.03	9.525	3.18	**U** Type Breaker (Grooving) For general use
GTAT03006V3L-U	L	●	0.3	0.27	0.03	9.525	3.18	
GTAT05012V5R-U	R	●	0.5	0.9	0.05	9.525	3.18	
GTAT05012V5L-U	L	●	0.5	0.9	0.05	9.525	3.18	
GTAT07520V5R-U	R	●	0.75	1.8	0.05	9.525	3.18	
GTAT07520V5L-U	L	●	0.75	1.8	0.05	9.525	3.18	
GTAT09520V5R-U	R	●	0.95	1.8	0.05	9.525	3.18	
GTAT09520V5L-U	L	●	0.95	1.8	0.05	9.525	3.18	
GTAT10020V5R-U	R	●	1.0	1.8	0.05	9.525	3.18	
GTAT10020V5L-U	L	●	1.0	1.8	0.05	9.525	3.18	
GTAT10320V5R-U	R	●	1.03	1.8	0.05	9.525	3.18	
GTAT12520V5R-U	R	●	1.25	1.8	0.05	9.525	3.18	
GTAT12520V5L-U	L	●	1.25	1.8	0.05	9.525	3.18	
GTBT14530V5R-U	R	●	1.45	2.8	0.05	9.525	3.18	
GTBT14530V5L-U	L	●	1.45	2.8	0.05	9.525	3.18	
GTBT15030V5R-U	R	●	1.5	2.8	0.05	9.525	3.18	
GTBT15030V5L-U	L	●	1.5	2.8	0.05	9.525	3.18	
GTBT17530V5R-U	R	●	1.75	2.8	0.05	9.525	3.18	
GTBT17530V5L-U	L	●	1.75	2.8	0.05	9.525	3.18	
GTBT20030V5R-U	R	●	2.0	2.8	0.05	9.525	3.18	
GTBT20030V5L-U	L	●	2.0	2.8	0.05	9.525	3.18	
GTCT25030V5R-U	R	●	2.5	2.8	0.05	9.525	3.18	
GTCT25030V5L-U	L	●	2.5	2.8	0.05	9.525	3.18	

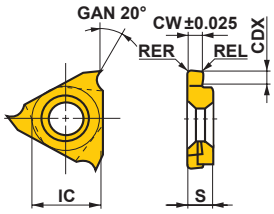


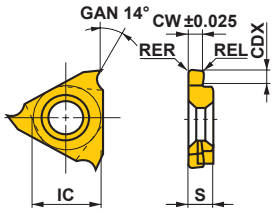
Right hand insert shown.

● : USA Stock ★ : Stocked in Japan
<5 inserts in one case>

INSERTS

Order Number	Hand	Coated		Dimensions (mm)					Geometry
		VP15TF	VP15KZ	CW	CDX	RER/L	IC	S	
GTAT03306V3R-E	R	●		0.33	0.27	0.03	9.525	3.18	**E** Type Breaker (Grooving) For precision cutting
GTAT03306V3L-E	L	●		0.33	0.27	0.03	9.525	3.18	
GTAT04312V3R-E	R	●		0.43	0.9	0.03	9.525	3.18	
GTAT04312V3L-E	L	●		0.43	0.9	0.03	9.525	3.18	
GTAT05312V5R-E	R	●		0.53	0.9	0.05	9.525	3.18	
GTAT05312V5L-E	L	●		0.53	0.9	0.05	9.525	3.18	
GTAT07520V5R-E	R	●		0.75	1.8	0.05	9.525	3.18	
GTAT07520V5L-E	L	●		0.75	1.8	0.05	9.525	3.18	
GTAT09520V5R-E	R	●		0.95	1.8	0.05	9.525	3.18	
GTAT09520V5L-E	L	●		0.95	1.8	0.05	9.525	3.18	
GTAT10020V5R-E	R	●		1.0	1.8	0.05	9.525	3.18	
GTAT10020V5L-E	L	●		1.0	1.8	0.05	9.525	3.18	
GTAT1002001R-E	R	●		1.0	1.8	0.1	9.525	3.18	
GTAT1002001L-E	L	●		1.0	1.8	0.1	9.525	3.18	
GTAT12020V5R-E	R	●		1.2	1.8	0.05	9.525	3.18	
GTAT12020V5L-E	L	●		1.2	1.8	0.05	9.525	3.18	
GTAT1202001R-E	R	●		1.2	1.8	0.1	9.525	3.18	
GTAT1202001L-E	L	●		1.2	1.8	0.1	9.525	3.18	
GTAT14020V5R-E	R	●		1.4	1.8	0.05	9.525	3.18	
GTAT14020V5L-E	L	●		1.4	1.8	0.05	9.525	3.18	
GTBT15030V5R-E	R	●		1.5	2.8	0.05	9.525	3.18	
GTBT15030V5L-E	L	●		1.5	2.8	0.05	9.525	3.18	
GTBT1503001R-E	R	●		1.5	2.8	0.1	9.525	3.18	
GTBT1503001L-E	L	●		1.5	2.8	0.1	9.525	3.18	
GTBT18030V5R-E	R	●		1.8	2.8	0.05	9.525	3.18	
GTBT18030V5L-E	L	●		1.8	2.8	0.05	9.525	3.18	
GTBT20030V5R-E	R	●		2.0	2.8	0.05	9.525	3.18	
GTBT20030V5L-E	L	●		2.0	2.8	0.05	9.525	3.18	
GTBT2003001R-E	R	●		2.0	2.8	0.1	9.525	3.18	
GTBT2003001L-E	L	●		2.0	2.8	0.1	9.525	3.18	
GTBT22530V5R-E	R	●		2.25	2.8	0.05	9.525	3.18	
GTBT22530V5L-E	L	●		2.25	2.8	0.05	9.525	3.18	
GTCT25030V5R-E	R	●		2.5	2.8	0.05	9.525	3.18	
GTCT25030V5L-E	L	●		2.5	2.8	0.05	9.525	3.18	
GTCT27530V5R-E	R	●		2.75	2.8	0.05	9.525	3.18	
GTCT27530V5L-E	L	●		2.75	2.8	0.05	9.525	3.18	
GTCT30030V5R-E	R	●		3.0	2.8	0.05	9.525	3.18	
GTCT30030V5L-E	L	●		3.0	2.8	0.05	9.525	3.18	Right hand insert shown.
GTAT0330600R-VT	R		●	0.33	0.25	0	9.525	3.18	**VT** Type Breaker (Grooving, Profiling)
GTAT0431200R-VT	R		●	0.43	0.9	0	9.525	3.18	
GTAT0532000R-VT	R		●	0.53	1.6	0	9.525	3.18	
GTAT0652000R-VT	R		●	0.65	1.6	0	9.525	3.18	
GTAT0752000R-VT	R		●	0.75	1.6	0	9.525	3.18	
GTAT0802000R-VT	R		●	0.8	1.6	0	9.525	3.18	
GTAT0852000R-VT	R		●	0.85	1.6	0	9.525	3.18	
GTAT0952000R-VT	R		●	0.95	1.6	0	9.525	3.18	
GTAT1002000R-VT	R		●	1.0	1.6	0	9.525	3.18	
GTAT1102000R-VT	R		●	1.1	1.6	0	9.525	3.18	
GTAT1202000R-VT	R		●	1.2	1.6	0	9.525	3.18	
GTAT1302000R-VT	R		●	1.3	1.6	0	9.525	3.18	
GTAT1402000R-VT	R		●	1.4	1.6	0	9.525	3.18	
GTBT1503000R-VT	R		●	1.5	2.7	0	9.525	3.18	
GTBT2003000R-VT	R		●	2.0	2.7	0	9.525	3.18	





RECOMMENDED CUTTING CONDITIONS

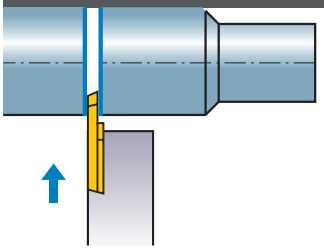
	Work Material	Hardness	Grade	Cutting Speed (SFM)	Feed (IPR)
P	Carbon Steel · Alloy Steel	180HB–280HB	**VP15TF/VP15KZ**	165–490	.0004–.0035
	Free Cutting Steel	–	**VP15TF/VP15KZ**	100–590	.0004–.0035
M	Stainless Steel	≤200HB	**VP15TF/VP15KZ**	165–395	.0008–.002
N	Non-Ferrous Metal	–	**VP15TF/VP15KZ**	230–755	.0012–.004

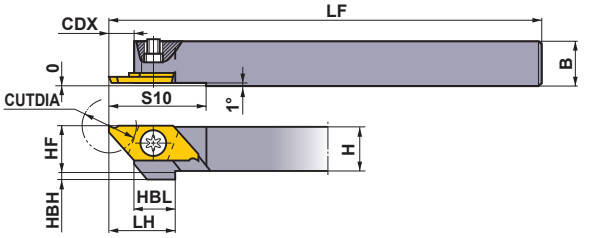
SPARE PARTS ➤ M001
TECHNICAL DATA ➤ N001

CUTTING OFF TOOLS (FOR GANG TYPE TOOL POSTS)

INCH STANDARD

CTAH



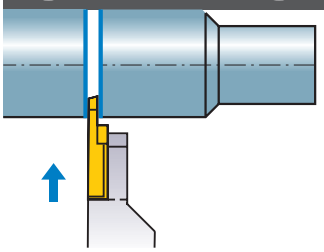


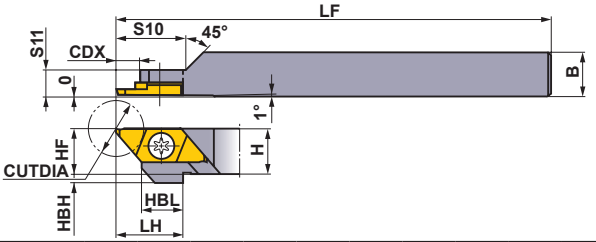
Right hand tool holder shown.

Order Number	Stock		Insert Number		Dimensions (inch)									CUTDIA (inch)	*2	
	R	L			H	B	HF	LF	LH	CDX	HBH	HBL	S10		Clamp Screw	Wrench
CTAHR/L-062	●	●	CTAT	○○○○	.375	.375	.375	4.724	.591	.217	.125	.374	.866	.472 (.315)*1	NS402W	NKY15S
CTAHR/L-082	●	●		○○○○	.500	.500	.500	4.724	.591	.217	—	.374	.866		NS402W	NKY15S
CTAHR/L-102	●	●		○○○○	.625	.625	.625	4.724	.591	.217	—	.374	.866		NS403W	NKY15S

*1 When the width of cutting off (CW) is .028 inch.
*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)	*2	
	R			H	B	HF	LF	LH	CDX	HBH	HBL	S10	S11		Clamp Screw	Wrench
CTAHR-062S	●	CTAT	○○○○	.375	.375	.375	3.150	.591	.217	.125	.374	.630	.217	.472 (.315)*1	NS401	NKY25R
CTAHR-082S	●		○○○○	.500	.500	.500	3.150	.591	.217	—	.374	.630	.217		NS401	NKY25R

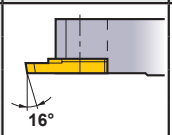
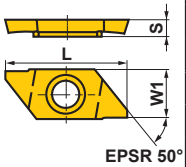
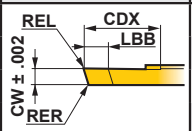
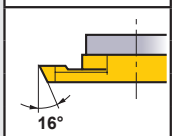
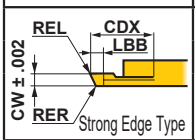
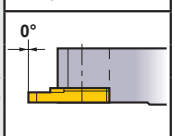
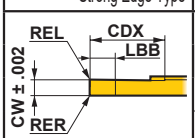
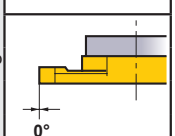
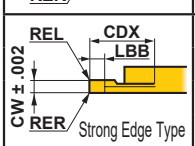
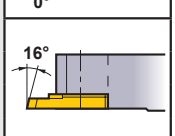
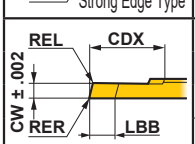
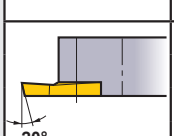
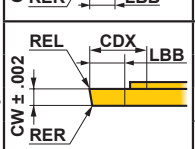
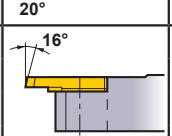
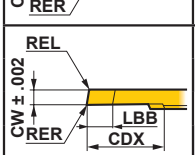
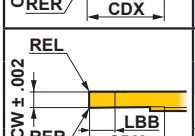
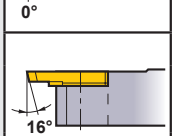
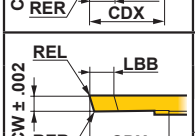
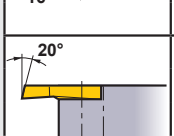
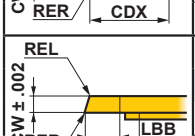
*1 When the width of cutting off (CW) is .028 inch.
*2 Clamp Torque (lbf-in) : NS401=31

RECOMMENDED CUTTING CONDITIONS

	Work Material	Hardness	Grade	Cutting Speed (SFM)	Feed (IPR)
P	Carbon Steel · Alloy Steel	180HB–280HB	**MS6015/VP15TF**	165–490	.0008–.0035
	Free Cutting Steel	–	**MS6015**	100–590	.0004–.0035
M	Stainless Steel	≤200HB	**VP15TF**	165–395	.0008–.0019
N	Non-Ferrous Metal	–	**MS6015**	230–755	.0012–.0043

● : USA Stock
<5 inserts in one case>

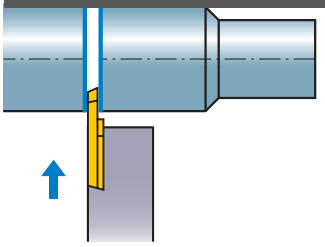
INSERTS

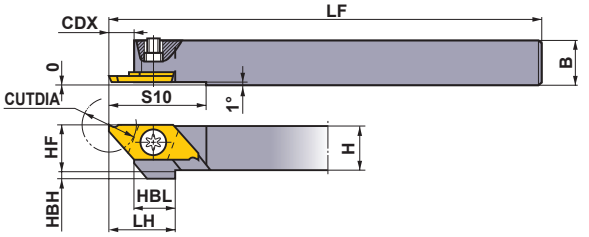
Holder	Setting Geometry	Breaker	Geometry	Insert Geometry	Order Number	Hand	Coated		Dimensions (inch)							CUTDIA (inch)
							VP15TF	MS6015	CW	CDX	RER/L	L	W1	S	LBB	
Right Hand (R)	 16°	With Breaker	 S L W1 EPSR 50°	 REL CDX LBB CW ± .002 RER	CTAT07080V5RR-B	R	●		.028	.177	.002	.787	.315	.098	.059	.315
					CTAT10120V5RR-B	R	●	●	.039	.264	.002	.787	.315	.098	.059	.472
					CTAT15120V5RR-B	R	●	●	.059	.264	.002	.787	.315	.098	.059	.472
					CTAT20120V5RR-B	R	●	●	.079	.264	.002	.787	.315	.098	.059	.472
	 16°			 REL CDX LBB CW ± .002 RER Strong Edge Type	CTAT15120V5RR-BX	R	●		.059	.264	.002	.787	.315	.098	.059	.472
					CTAT20120V5RR-BX	R	●		.079	.264	.002	.787	.315	.098	.059	.472
	 0°			 REL CDX LBB CW ± .002 RER	CTAT10120V5RN-B	N	●	●	.039	.264	.002	.787	.315	.098	.059	.472
					CTAT15120V5RN-B	N	●	●	.059	.264	.002	.787	.315	.098	.059	.472
					CTAT20120V5RN-B	N	●	●	.079	.264	.002	.787	.315	.098	.059	.472
	 0°			 REL CDX LBB CW ± .002 RER Strong Edge Type	CTAT15120V5RN-BX	N	●		.059	.264	.002	.787	.315	.098	.059	.472
					CTAT20120V5RN-BX	N	●		.079	.264	.002	.787	.315	.098	.059	.472
	 16°			 REL CDX CW ± .002 RER LBB	CTAT10110V5RL-B	L	●		.039	.264	.002	.787	.315	.098	.059	.433
					CTAT15110V5RL-B	L	●		.059	.264	.002	.787	.315	.098	.059	.433
					CTAT20110V5RL-B	L	●		.079	.264	.002	.787	.315	.098	.059	.433
	 20°	Without Breaker		 REL CDX LBB CW ± .002 RER	CTAT1012000RR	R	●	●	.039	.264	.000	.787	.315	.098	.138	.472
					CTAT1512000RR	R	●	●	.059	.264	.000	.787	.315	.098	.138	.472
					CTAT2012000RR	R	●	●	.079	.264	.000	.787	.315	.098	.138	.472
Left Hand (L)	 16°	With Breaker		 REL CW ± .002 RER LBB CDX	CTAT07080V5LL-B	L	●		.028	.177	.002	.787	.315	.098	.059	.315
					CTAT10120V5LL-B	L	●		.039	.264	.002	.787	.315	.098	.059	.472
					CTAT15120V5LL-B	L	●		.059	.264	.002	.787	.315	.098	.059	.472
					CTAT20120V5LL-B	L	●		.079	.264	.002	.787	.315	.098	.059	.472
	 0°			 REL CW ± .002 RER LBB CDX	CTAT10120V5LN-B	N	●	●	.039	.264	.002	.787	.315	.098	.059	.472
					CTAT15120V5LN-B	N	●	●	.059	.264	.002	.787	.315	.098	.059	.472
					CTAT20120V5LN-B	N	●	●	.079	.264	.002	.787	.315	.098	.059	.472
	 16°			 REL LBB CW ± .002 RER CDX	CTAT10110V5LR-B	R	●	●	.039	.264	.002	.787	.315	.098	.059	.433
					CTAT15110V5LR-B	R	●	●	.059	.264	.002	.787	.315	.098	.059	.433
					CTAT20110V5LR-B	R	●	●	.079	.264	.002	.787	.315	.098	.059	.433
	 20°	Without Breaker	Right hand insert shown.	 REL CW ± .002 RER LBB CDX	CTAT1012000LL	L	●		.039	.264	.000	.787	.315	.098	.138	.472
					CTAT1512000LL	L	●		.059	.264	.000	.787	.315	.098	.138	.472
					CTAT2012000LL	L	●		.079	.264	.000	.787	.315	.098	.138	.472

CUTTING OFF TOOLS (FOR GANG TYPE TOOL POSTS)

METRIC STANDARD

CTAH



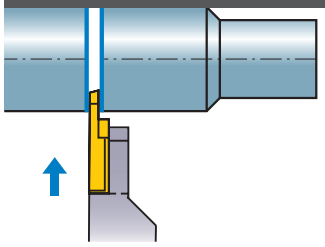


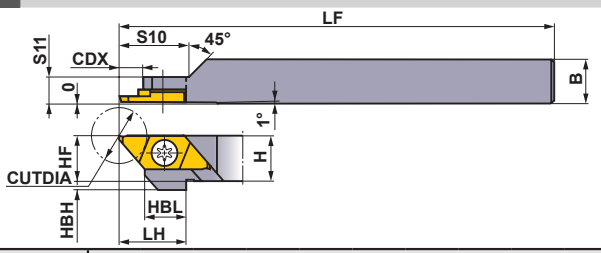
Right hand tool holder shown.

Order Number	Stock R	Stock L	Insert Number		Dimensions (mm) H	B	HF	LF	LH	CDX	HBH	HBL	S10	CUTDIA (mm)	✶2 Clamp Screw	Wrench
CTAHR/L0810-120	●	●	CTAT	○○○○	8	10	8	120	15	5.5	4	9.5	22	12 (8)✶1	NS402W	NKY15S
CTAHR/L1010-120	●	●		○○○○	10	10	10	120	15	5.5	2	9.5	22		NS402W	NKY15S
CTAHR/L1212-120	●	●		○○○○	12	12	12	120	15	5.5	—	9.5	22		NS403W	NKY15S
CTAHR/L1616-120	●	●		○○○○	16	16	16	120	15	5.5	—	9.5	22		NS403W	NKY15S

✶1 When the width of cutting off (CW) is 0.7 mm.
✶2 Clamp Torque (lbf-in) : NS402W=6.2, NS403W=6.2

CTAH-S





Right hand tool holder only.

Order Number	Stock R	Insert Number		Dimensions (mm) H	B	HF	LF	LH	CDX	HBH	HBL	S10	S11	CUTDIA (mm)	✶2 Clamp Screw	Wrench
CTAHR1010-120S	●	CTAT	○○○○	10	10	10	80	15	16	2	9.5	16	5.5	12 (8)✶1	NS401	NKY25R

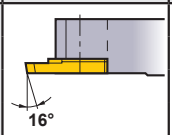
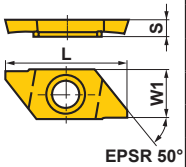
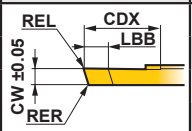
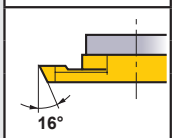
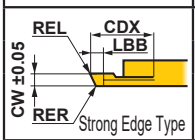
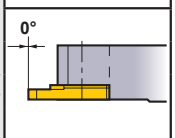
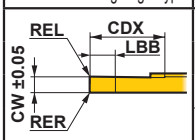
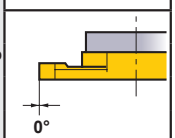
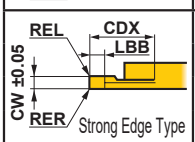
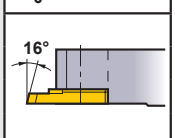
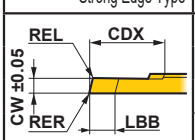
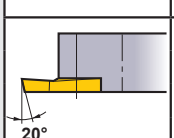
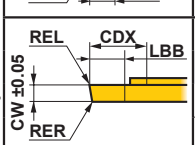
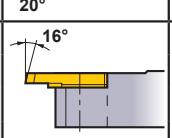
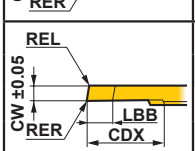
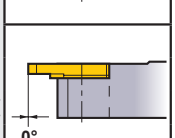
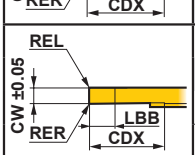
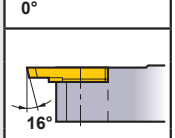
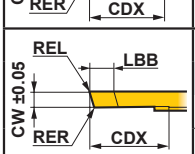
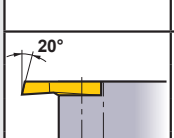
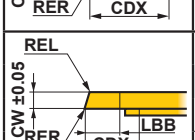
✶1 When the width of cutting off (CW) is 0.7 mm.
✶2 Clamp Torque (lbf-in) : NS401=31

RECOMMENDED CUTTING CONDITIONS

	Work Material	Hardness	Grade	Cutting Speed (SFM)	Feed (IPR)
P	Carbon Steel · Alloy Steel	180HB—280HB	**MS6015/VP15TF**	165—490	.0008 —.0035
	Free Cutting Steel	—	**MS6015**	100—590	.0004 —.0035
M	Stainless Steel	≤200HB	**VP15TF**	165—395	.0008 —.0019
N	Non-Ferrous Metal	—	**MS6015**	230—755	.0012 —.0043

● : USA Stock
<5 inserts in one case>

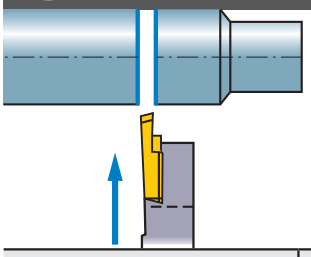
INSERTS

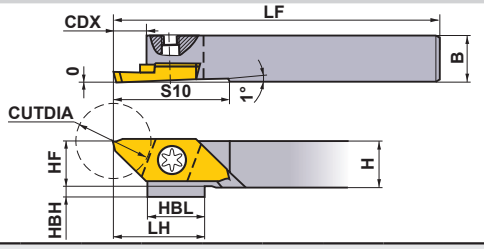
Holder	Setting Geometry	Breaker	Geometry	Insert Geometry	Order Number	Hand	Coated		Dimensions (mm)							CUTDIA (mm)
							VP15TF	MS6015	CW	CDX	RER/L	L	W1	S	LBB	
Right Hand (R)		With Breaker			**CTAT07080V5RR-B**	R	●		0.7	4.5	0.05	20	8	2.5	1.5	8
					CTAT10120V5RR-B	R	●	●	1.0	6.7	0.05	20	8	2.5	1.5	12
					CTAT15120V5RR-B	R	●	●	1.5	6.7	0.05	20	8	2.5	1.5	12
					CTAT20120V5RR-B	R	●	●	2.0	6.7	0.05	20	8	2.5	1.5	12
					**CTAT15120V5RR-BX**	R	●		1.5	6.7	0.05	20	8	2.5	1.5	12
					CTAT20120V5RR-BX	R	●		2.0	6.7	0.05	20	8	2.5	1.5	12
					**CTAT10120V5RN-B**	N	●	●	1.0	6.7	0.05	20	8	2.5	1.5	12
					CTAT15120V5RN-B	N	●	●	1.5	6.7	0.05	20	8	2.5	1.5	12
					CTAT20120V5RN-B	N	●	●	2.0	6.7	0.05	20	8	2.5	1.5	12
					**CTAT15120V5RN-BX**	N	●		1.5	6.7	0.05	20	8	2.5	1.5	12
					CTAT20120V5RN-BX	N	●		2.0	6.7	0.05	20	8	2.5	1.5	12
					**CTAT10110V5RL-B**	L	●		1.0	6.7	0.05	20	8	2.5	1.5	11
					CTAT15110V5RL-B	L	●		1.5	6.7	0.05	20	8	2.5	1.5	11
					CTAT20110V5RL-B	L	●		2.0	6.7	0.05	20	8	2.5	1.5	11
		Without Breaker			**CTAT1012000RR**	R	●	●	1.0	6.7	0	20	8	2.5	3.5	12
					CTAT1512000RR	R	●	●	1.5	6.7	0	20	8	2.5	3.5	12
					CTAT2012000RR	R	●	●	2.0	6.7	0	20	8	2.5	3.5	12
Left Hand (L)		With Breaker			**CTAT07080V5LL-B**	L	●		0.7	4.5	0.05	20	8	2.5	1.5	8
					CTAT10120V5LL-B	L	●		1.0	6.7	0	20	8	2.5	1.5	12
					CTAT15120V5LL-B	L	●		1.5	6.7	0	20	8	2.5	1.5	12
					CTAT20120V5LL-B	L	●		2.0	6.7	0	20	8	2.5	1.5	12
					**CTAT10120V5LN-B**	N	●	●	1.0	6.7	0.05	20	8	2.5	1.5	12
					CTAT15120V5LN-B	N	●	●	1.5	6.7	0.05	20	8	2.5	1.5	12
					CTAT20120V5LN-B	N	●	●	2.0	6.7	0.05	20	8	2.5	1.5	12
					**CTAT10110V5LR-B**	R	●	●	1.0	6.7	0.05	20	8	2.5	1.5	11
					CTAT15110V5LR-B	R	●	●	1.5	6.7	0.05	20	8	2.5	1.5	11
					CTAT20110V5LR-B	R	●	●	2.0	6.7	0.05	20	8	2.5	1.5	11
		Without Breaker	Right hand insert shown.		**CTAT1012000LL**	L	●		1.0	6.7	0	20	8	2.5	3.5	12
					CTAT1512000LL	L	●		1.5	6.7	0	20	8	2.5	3.5	12
					CTAT2012000LL	L	●		2.0	6.7	0	20	8	2.5	3.5	12

CUTTING OFF TOOLS (FOR GANG TYPE TOOL POSTS)

INCH STANDARD

CTBH



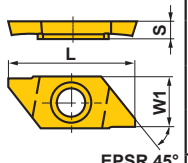
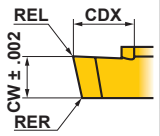
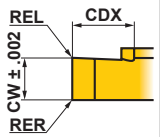
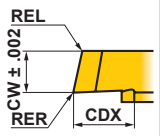
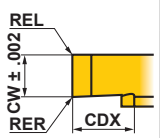
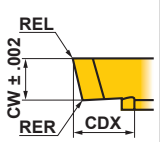


Right hand tool holder shown.

Order Number	Stock R	Stock L	Insert Number		Dimensions (inch) H	B	HF	LF	LH	CDX	HBH	HBL	S10	CUTDIA (inch)	* Clamp Screw	Wrench
CTBHR/L-062	●	●	CTBT	○○○○	.375	.375	.375	4.724	.768	.295	.125	.374	.984	.630	NS402W	NKY15S
CTBHR/L-082	●	●		○○○○	.500	.500	.500	4.724	.768	.295	—	.374	.984	.630	NS403W	NKY15S
CTBHR/L-102	●	●		○○○○	.625	.625	.625	4.724	.768	.295	—	.374	.984	.630	NS403W	NKY15S

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

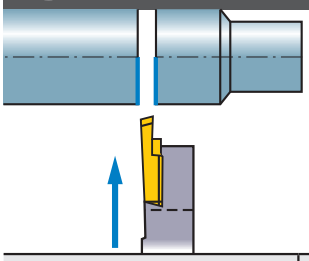
INSERTS

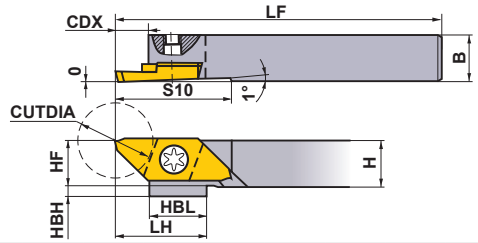
Holder	Setting Geometry	Breaker	Geometry	Insert Geometry	Order Number	Hand	Coated VP15TF	Coated MS6015	Dimensions (inch) CW	CDX	RER/L	L	W1	S	CUTDIA (inch)
Right Hand (R)	16°	With Breaker			**CTBT15160V5RR-B**	R	●	●	.059	.362	.002	.984	.370	.138	.630
					CTBT20160V5RR-B	R	●	●	.079	.362	.002	.984	.370	.138	.630
	0°				**CTBT20160V5RN-B**	N	●	●	.079	.362	.002	.984	.370	.138	.630
Left Hand (L)	16°				**CTBT20160V5LL-B**	L	●		.079	.362	.002	.984	.370	.138	.630
	0°				**CTBT20160V5LN-B**	N	●	●	.079	.362	.002	.984	.370	.138	.630
	16°		Right hand insert shown.		**CTBT20145V5LR-B**	R	●	●	.079	.362	.002	.984	.370	.138	.571

● : USA Stock
<5 inserts in one case>

METRIC STANDARD

CTBH



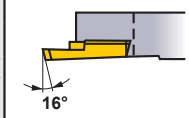
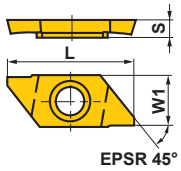
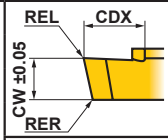
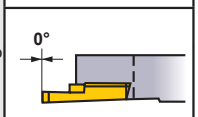
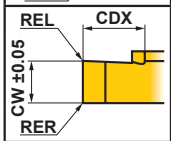
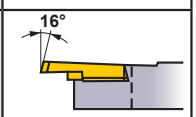
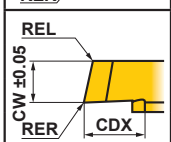
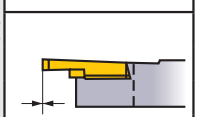
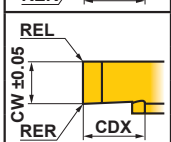
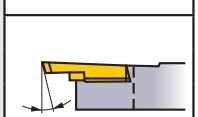
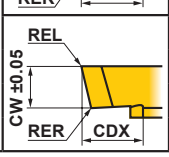


Right hand tool holder shown.

Order Number	Stock R	Stock L	Insert Number		Dimensions (mm) H	B	HF	LF	LH	CDX	HBH	HBL	S10	CUTDIA (mm)	* Clamp Screw	Wrench
CTBHR/L1010-160	●	●	CTBT	○○○○	10	10	10	120	19.5	7.5	2	9.5	25	16	NS402W	NKY15S
CTBHR/L1212-160	●	●		○○○○	12	12	12	120	19.5	7.5	—	9.5	25	16	NS403W	NKY15S
CTBHR/L1616-160	●	●		○○○○	16	16	16	120	19.5	7.5	—	9.5	25	16	NS403W	NKY15S

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

INSERTS

Holder	Setting Geometry	Breaker	Geometry	Insert Geometry	Order Number	Hand	Coated VP15TF	Coated MS6015	CW	CDX	RER/L	L	W1	S	CUTDIA (mm)
Right Hand (R)		With Breaker			**CTBT15160V5RR-B**	R	●	●	1.5	9.2	0.05	25	9.4	3.5	16
					CTBT20160V5RR-B	R	●	●	2.0	9.2	0.05	25	9.4	3.5	16
					**CTBT20160V5RN-B**	N	●	●	2.0	9.2	0.05	25	9.4	3.5	16
Left Hand (L)					**CTBT20160V5LL-B**	L	●		2.0	9.2	0.05	25	9.4	3.5	16
					**CTBT20160V5LN-B**	N	●	●	2.0	9.2	0.05	25	9.4	3.5	16
			Right hand insert shown.		**CTBT20145V5LR-B**	R	●	●	2.0	9.2	0.05	25	9.4	3.5	14.5

RECOMMENDED CUTTING CONDITIONS

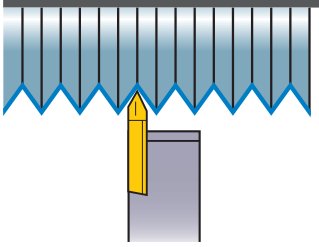
	Work Material	Hardness	Grade	Cutting Speed (SFM)	Feed (IPR)
P	Carbon Steel · Alloy Steel	180HB—280HB	**MS6015/VP15TF**	165—490	.0008 —.0035
	Free Cutting Steel	—	**MS6015**	100—590	.0004 —.0035
M	Stainless Steel	≤200HB	**VP15TF**	165—395	.0008 —.0019
N	Non-Ferrous Metal	—	**MS6015**	230—755	.0012 —.0043

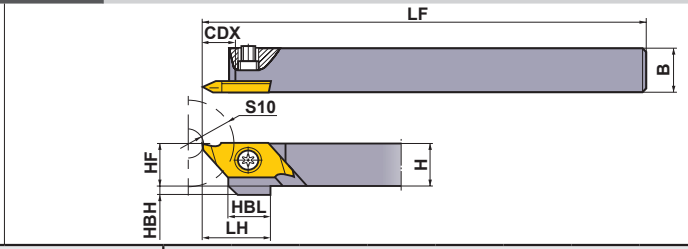
SPARE PARTS ➤ M001
TECHNICAL DATA ➤ N001

THREADING TOOLS (FOR GANG TYPE TOOL POSTS)

INCH STANDARD

TTAH





Right hand tool holder shown.

Order Number	Stock R	Stock L	Insert Number		Dimensions (inch) H	B	HF	LF	LH	HBH	HBL	CDX	S10	* Clamp Screw	Wrench
TTAHR/L-062	●	●	TTAT	○○○○	.375	.375	.375	4.724	.591	.125	.374	.276	.256	NS402W	NKY15S
TTAHR/L-082	●	●		○○○○	.500	.500	.500	4.724	.591	—	.374	.276	.256	NS402W	NKY15S
TTAHR/L-102	●	●		○○○○	.625	.625	.625	4.724	.591	—	.374	.276	.256	NS402W	NKY15S

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

INSERTS

Holder	Setting Geometry	Breaker	Geometry	Insert Geometry	Order Number	Hand	Coated VP15TF	Dimensions (inch) PDX	RE	L	W1	S	Pitch of Thread (inch) (thread/inch)
Right Hand (R)		With Breaker	General Purpose (60°)		TTAT60075F5RR-B	R	●	.016	.002 Flat	.787	.315	.098	.008—.030 (80—36)
					TTAT60125V5RR-B	R	●	.031	.002	.787	.315	.098	.020—.049 (40—16)
					TTAT60075F5RL-B	L	●	.016	.002 Flat	.787	.315	.098	.008—.030 (80—36)
					TTAT60125V5RL-B	L	●	.031	.002	.787	.315	.098	.020—.049 (40—16)
					TTAT6015001RN-B	N	●	.049	.004	.787	.315	.098	.039—.059 (24—18)
Left Hand (L)					TTAT60075F5LR-B	R	●	.016	.002 Flat	.787	.315	.098	.008—.030 (80—36)
					TTAT60125V5LR-B	R	●	.031	.002	.787	.315	.098	.020—.049 (40—16)
					TTAT60075F5LL-B	L	●	.016	.002 Flat	.787	.315	.098	.008—.030 (80—36)
					TTAT60125V5LL-B	L	●	.031	.002	.787	.315	.098	.020—.049 (40—16)
					TTAT6015001LN-B	N	●	.049	.004	.787	.315	.098	.039—.059 (24—18)
Right Hand (R)			General Purpose (55°)		TTAT55158V5RR-B	R	●	.031	.002	.787	.315	.098	(40—16)
					TTAT55158V5RL-B	L	●	.031	.002	.787	.315	.098	(40—16)
Left Hand (L)					TTAT55158V5LR-B	R	●	.031	.002	.787	.315	.098	(40—16)
					TTAT55158V5LL-B	L	●	.031	.002	.787	.315	.098	(40—16)

Right hand insert shown.

Right hand insert shown.

Refer to page D036 for the thread diameter range.

RECOMMENDED CUTTING CONDITIONS

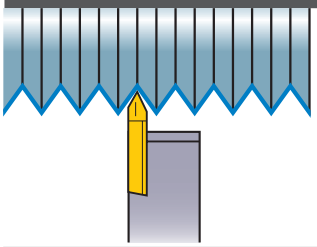
	Work Material	Hardness	Cutting Speed (SFM)
P	Carbon Steel · Alloy Steel	180HB—280HB	165—490
	Free Cutting Steel	—	100—590

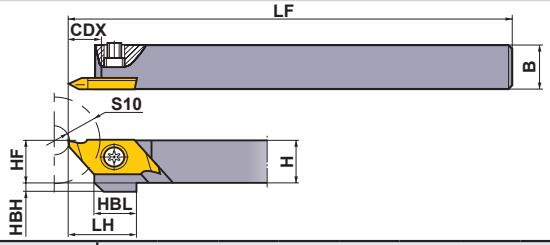
	Work Material	Hardness	Cutting Speed (SFM)
M	Stainless Steel	≤200HB	165—395
N	Non-Ferrous Metal	—	230—755

● : USA Stock
<5 inserts in one case>

METRIC STANDARD

TTAH





Right hand tool holder shown.

Order Number	Stock R	Stock L	Insert Number		Dimensions (mm) H	B	HF	LF	LH	HBH	HBL	CDX	S10	* Clamp Screw	Wrench
TTAHR/L0810	●	●	TTAT	○○○○	8	10	8	120	15	4	9.5	7	6.5	NS402W	NKY15S
TTAHR/L1010	●	●		○○○○	10	10	10	120	15	2	9.5	7	6.5	NS402W	NKY15S
TTAHR/L1212	●	●		○○○○	12	12	12	120	15	—	9.5	7	6.5	NS403W	NKY15S
TTAHR/L1616	●	●		○○○○	16	16	16	120	15	—	9.5	7	6.5	NS403W	NKY15S

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

INSERTS

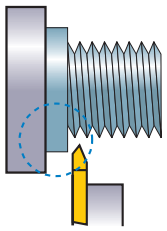
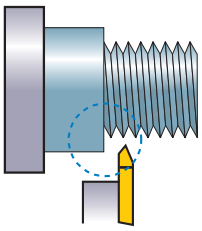
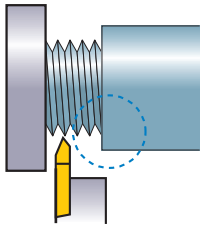
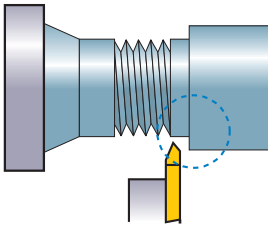
Holder	Setting Geometry	Breaker	Geometry	Insert Geometry	Order Number	Hand	Coated VP15TF	Dimensions (mm) PDX	RE	L	W1	S	Pitch of Thread (mm) (thread/inch)
Right Hand (R)		With Breaker	General Purpose (60°)	PDX PNA 60° RE	**TTAT60075F5RR-B**	R	●	0.4	0.05 Flat	20.0	8.0	2.5	0.2–0.75 (80–36)
					TTAT60125V5RR-B	R	●	0.8	0.05	20.0	8.0	2.5	0.5–1.25 (40–16)
				PDX PNA 60° RE	**TTAT60075F5RL-B**	L	●	0.4	0.05 Flat	20.0	8.0	2.5	0.2–0.75 (80–36)
					TTAT60125V5RL-B	L	●	0.8	0.05	20.0	8.0	2.5	0.5–1.25 (40–16)
			S	PDX PNA 60° RE	**TTAT6015001RN-B**	N	●	1.25	0.1	20.0	8.0	2.5	1.0–1.5 (24–18)
Left Hand (L)			L W1 EPSR 50°	PDX PNA 60° RE	**TTAT60075F5LR-B**	R	●	0.4	0.05 Flat	20.0	8.0	2.5	0.2–0.75 (80–36)
					TTAT60125V5LR-B	R	●	0.8	0.05	20.0	8.0	2.5	0.5–1.25 (40–16)
				PDX PNA 60° RE	**TTAT60075F5LL-B**	L	●	0.4	0.05 Flat	20.0	8.0	2.5	0.2–0.75 (80–36)
					TTAT60125V5LL-B	L	●	0.8	0.05	20.0	8.0	2.5	0.5–1.25 (40–16)
			Right hand insert shown.	PDX PNA 60° RE	**TTAT6015001LN-B**	N	●	1.25	0.1	20.0	8.0	2.5	1.0–1.5 (24–18)
Right Hand (R)			General Purpose (55°)	RE PDX PNA 55°	**TTAT55158V5RR-B**	R	●	0.8	0.05	20.0	8.0	2.5	(40–16)
				PDX PNA 55° RE	**TTAT55158V5RL-B**	L	●	0.8	0.05	20.0	8.0	2.5	(40–16)
Left Hand (L)			S L W1 EPSR 50°	RE PDX PNA 55°	**TTAT55158V5LR-B**	R	●	0.8	0.05	20.0	8.0	2.5	(40–16)
			Right hand insert shown.	PDX PNA 55° RE	**TTAT55158V5LL-B**	L	●	0.8	0.05	20.0	8.0	2.5	(40–16)

Refer to page D036 for the thread diameter range.

SPARE PARTS ➤ M001
TECHNICAL DATA ➤ N001

THREADING TOOLS (FOR GANG TYPE TOOL POSTS)

HOLDER APPLICATION

	Right Hand Holder + Right Hand Insert	Left Hand Holder + Left Hand Insert
Right Hand	RR 	LR 
Left Hand	RL 	LL 

* Above 4 combinations enable machining at the areas shown by ◌.

THREAD DIAMETER RANGE

Application Range

Pitch (mm)	Thread Diameter (mm) ≥ϕ1.0	≥ϕ1.2	≥ϕ1.6	≥ϕ2.0	≥ϕ2.5	≥ϕ3.0	≥ϕ4.0	≥ϕ5.0	≥ϕ6.0	≥ϕ7.0	Number of Passes
0.2											2 – 4
0.25											
0.3											3 – 5
0.35											
0.4											4 – 6
0.45											
0.5											5 – 7
0.6											
0.7			Machining Impossible								
0.75											
0.8											
1											
1.25											6 – 8
1.5											

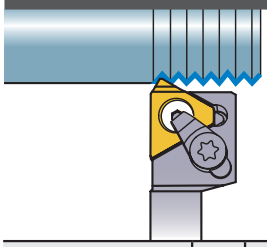
*Metric Thread (60°)

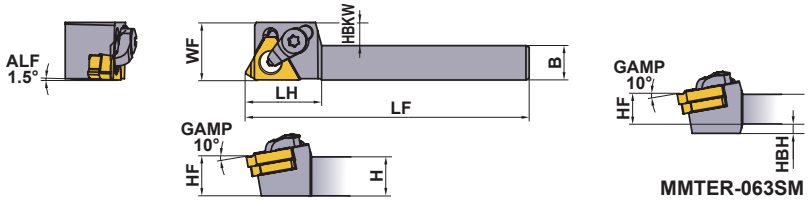
Pitch(thread/inch)	Thread Diameter									Number of Passes
Inch	≥ϕ.060	≥ϕ.073	≥ϕ.086	≥ϕ.099	≥ϕ.112	≥ϕ.164	≥ϕ.190	≥ϕ.250	≥ϕ.313	
mm	≥ϕ1.524	≥ϕ1.854	≥ϕ2.184	≥ϕ2.515	≥ϕ2.845	≥ϕ4.166	≥ϕ4.826	≥ϕ6.350	≥ϕ7.938	
80										3 – 5
72										
64										4 – 6
56										
48										5 – 7
44										
40										
32										
28			Machining Impossible							
26										
24										
20										6 – 8
18										
16										

*American UN, Whitworth Thread

INCH STANDARD

MMTE





MMTER-063SM

Order Number	Stock	Insert Number		Dimensions (inch)								Clamp Bridge	* Clamp Screw	Stop Ring	* Shim Screw	Shim	①② Wrench
	R			H	B	LF	LH	HBH	HF	HBKW	WF						
MMTER-063SM	●	TTAT	MMT16ER	.375	.375	4.724	.875	.118	.375	.250	.625	SETK51	SETS51	CR4	HFC03008	CTE32TP15	①TKY15F ②HKY20R
MMTER-083SM	●			.500	.500	4.724	.875	–	.500	.125	.625	SETK51	SETS51	CR4	HFC03008	CTE32TP15	①TKY15F ②HKY20R

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

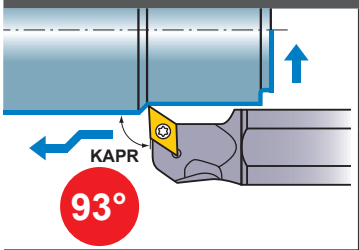
● : USA Stock

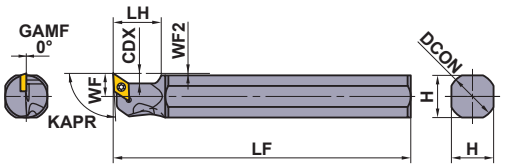
MMTE type inserts ➢ G022–G025
HOW TO SELECT A SHIM ➢ G012, G013

DIMPLE SLEEVE HOLDER (FOR OPPOSITE TOOL POSTS)

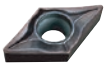
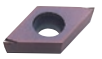
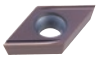
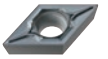
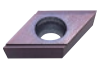
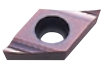
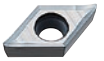
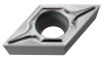
INCH STANDARD

SH





Left hand tool holder only.

Finish	Finish	Light	Light
SMG/FS	R-F	R-SS	LS
			
(2, 3)	(2, 3)	(2, 3)	(2, 3)
Medium	**Medium**	**Non-Ferrous Metal**	**Light**
R-SN	R-SR	AZ	LS-P
			
(2, 3)	(2, 3)	(2, 3)	(2, 3)

Order Number	Stock	Insert Number		Dimensions (inch)							*	
	L			DCON	LF	LH	H	WF	WF2	CDX	Clamp Screw	Wrench
SH16H-FSDUCL07	●	DCMT DCMW DCET DCGT DCGW	21.5○○	.625	3.937	.787	.551	.305	.030	.165	TS254	TKY08R
SH19K-FSDUCL07	●			.750	4.921	.787	.669	.364	.030	.165	TS254	TKY08R
SH25M-FSDUCL07	●			1.000	5.906	.787	.906	.482	.030	.165	TS254	TKY08R
SH16H-FSDUCL11	●	DCMT DCMW DCET DCGT DCGW	32.5○○	.625	3.937	.787	.551	.305	.030	.252	TS43	TKY15R
SH19K-FSDUCL11	●			.750	4.921	.787	.669	.364	.030	.252	TS43	TKY15R
SH25M-FSDUCL11	●			1.000	5.906	.787	.906	.482	.030	.252	TS43	TKY15R

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

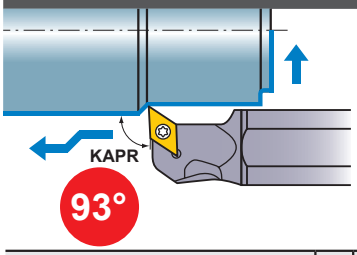
Note 1) When using insert with right and left hand chip breaker, please use right hand insert.

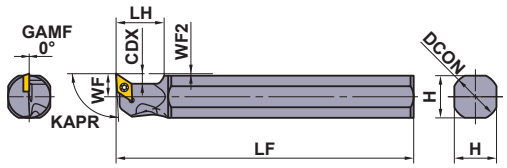
Note 2) Insert photo is an example. Letters show chip breaker style, figures show inscribed circle.

● : USA Stock

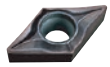
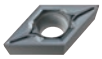
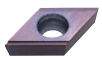
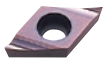
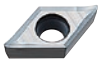
METRIC STANDARD

SH





Left hand tool holder only.

Finish	Finish	Light	Light
SMG/FS	R-F	R-SS	LS
			
(2, 3)	(2, 3)	(2, 3)	(2, 3)
Medium	**Medium**	**Non-Ferrous Metal**	**Light**
R-SN	R-SR	AZ	LS-P
			
(2, 3)	(2, 3)	(2, 3)	(2, 3)

Order Number	Stock	Insert Number		Dimensions (mm)							*	
	L			DCON	LF	LH	H	WF	WF2	CDX	Clamp Screw	Wrench
SH20K-FSDUCL07	●	DCMT DCMW DCET DCGT DCGW	21.5○○	20	125	20	18	9.75	0.75	4.2	TS254	TKY08R
SH22K-FSDUCL07	●			22	125	20	20	10.75	0.75	4.2	TS254	TKY08R
SH20K-FSDUCL11	●	DCMT DCMW DCET DCGT DCGW	32.5○○	20	125	20	18	9.75	0.75	6.4	TS43	TKY15R
SH22K-FSDUCL11	●			22	125	20	20	10.75	0.75	6.4	TS43	TKY15R

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

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.

RECOMMENDED CUTTING CONDITIONS

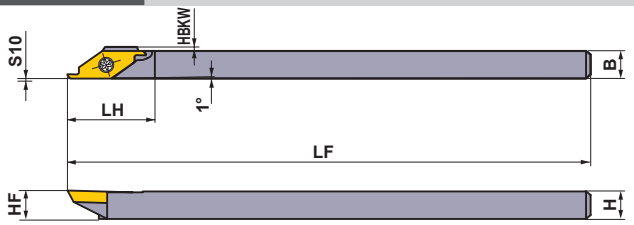
	Work Material	Hardness	Grade	Cutting Speed (SFM)	Feed (IPR)
P	Carbon Steel · Alloy Steel	180HB–280HB	**MS6015/VP15TF**	165–490	.0004 –.006
P	Free Cutting Steel	–	**MS6015**	100–590	.0004 –.006
P	Free Cutting Steel	–	**NX2525**	165–820	.0004 –.006
M	Stainless Steel	≤200HB	**VP15TF/MP9005/MP9015**	165–395	.0008 –.004
N	Non-Ferrous Metal	–	**HTi10/MT9005**	230–755	.0012 –.006
S	Titanium Alloy	–	**MT9005**	130–260	.0016 –.005
S	Heat Resistant Alloy	–	**MP9015**	65–245	.0016 –.005

SH○○○ type inserts ➤ **A164–A171**
CBN & PCD inserts ➤ **B040, B041, B054**
SPARE PARTS ➤ **M001**
TECHNICAL DATA ➤ **N001**

FOR RADIAL TYPE TOOL POSTS

INCH STANDARD

CSVH



Right hand tool holder shown.

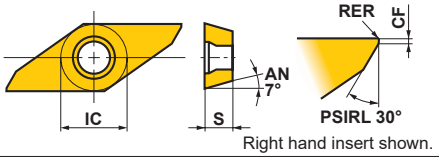
Order Number	Stock		Insert Number		Dimensions (inch)							*1 APMX (inch)	*2 Clamp Screw	Wrench
	R	L			H	B	HF	LF	HBKW	LH	S10			
CSVHR/L-062	●	●	CSVT	○○○○	.375	.375	.375	5.512	0	.787	.004	.118	NS251	NKY15S
CSVHR/L-082	●			○○○○	.500	.500	.500	5.512	0	.787	.004	.118	NS251	NKY15S

*1 APMX : Max. Depth of Cut
*2 Clamp Torque (lbf-in) : NS251=6.2
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.

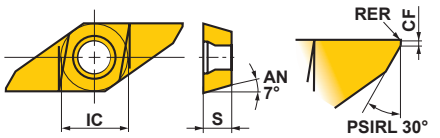
INSERTS

CSVTF — Front turning

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



Right hand insert shown.

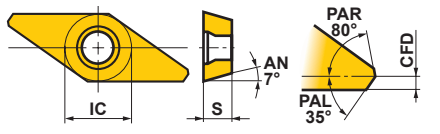


Right hand insert shown.

* APMX : Max. Depth of Cut

CSVTFXL — Front turning, Copying

Order Number	Hand	Coated	Dimensions (inch)			*APMX (inch)	Geometry
		VP15KZ	IC	S	CFD		
CSVTFXL	L	●	.250	.094	.028	.118	Without Breaker

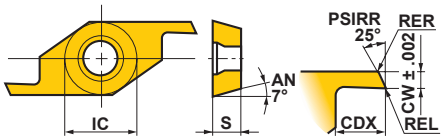


* APMX : Max. Depth of Cut

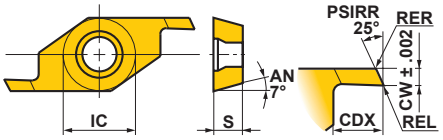
● : USA Stock
<5 inserts in one case>

CSVTC — Cutting off

Order Number	Hand	Coated VP15KZ	Dimensions (inch) IC	S	RER/L	CDX	CW	APMX* (inch)	Geometry
CSVTC0640R	R	●	.250	.094	0	.079	.024	.059	Without Breaker
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	With Breaker
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	.035	
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	



Right hand insert shown.

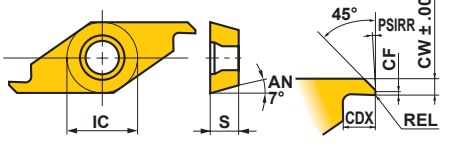


Right hand insert shown.

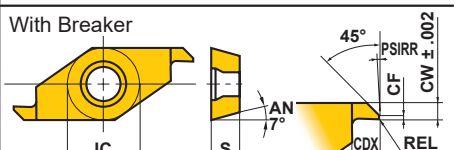
* APMX : Max. Depth of Cut

CSVTB — Back turning

Order Number	Hand	Coated VP15KZ	Dimensions (inch) IC	S	REL/L	CDX	CW	CF	PSIRR/L	APMX* (inch)	Geometry
CSVTB10AR	R	●	.250	.094	0	.098	.039	.012	5°	.079	Without Breaker
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	With Breaker
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	



Right hand insert shown.

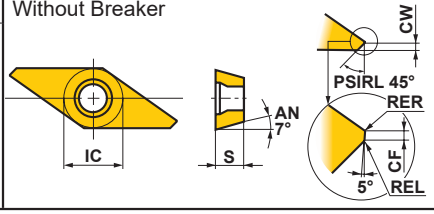


Right hand insert shown.

* APMX : Max. Depth of Cut

CSVTBXL — Back turning, Copying

Order Number	Hand	Coated VP15KZ	Dimensions (inch) IC	S	RER/L	CW	CF	APMX* (inch)	Geometry
CSVTBXL	L	●	.250	.094	0	.028	.0014	.118	Without Breaker



* APMX : Max. Depth of Cut

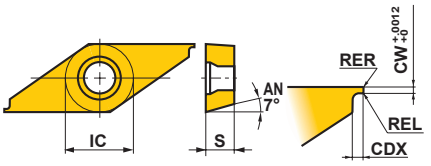
SPARE PARTS ➤ M001
TECHNICAL DATA ➤ N001

FOR RADIAL TYPE TOOL POSTS

INSERTS

CSVTG — Grooving

Order Number	Hand	Coated VP15KZ	Dimensions (inch) IC	S	RER/L	CDX	CW	APMX* (inch)	Geometry
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	

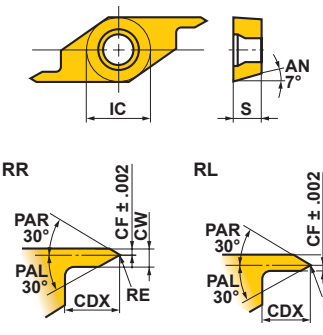


Right hand insert shown.

* APMX : Max. Depth of Cut

CSVTT — Threading

Order Number	Hand	Coated VP15KZ	Pitch (inch)	Dimensions (inch) IC	S	RE	CDX	CW	CF	Geometry
CSVTT60050RR	R	●	.008–.020	.250	.094	.001	.118	.039	.014	Without Breaker General Purpose (60°)
CSVTT60050RL	R	●	.008–.020	.250	.094	.001	.118	.039	.014	

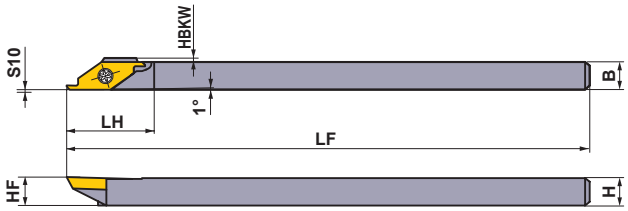


Right hand insert shown.

● : USA Stock
<5 inserts in one case>

METRIC STANDARD

CSVH



Right hand tool holder shown.

Order Number	Stock		Insert Number		Dimensions (mm)							*1 APMX (mm)	*2 Clamp Screw	Wrench
	R	L			H	B	HF	LF	HBKW	LH	S10			
CSVHR/L0707	●	●	CSVT	○○○○	7	7	7	140	0.5	20	0.1	3.0	NS251	NKY15S
CSVHR/L0808	●	●		○○○○	8	8	8	140	0	20	0.1	3.0	NS251	NKY15S
CSVHR/L0909	●			○○○○	9.5	9.5	9.5	140	0	20	0.1	3.0	NS251	NKY15S
CSVHR/L1010	●	●		○○○○	10	10	10	140	0	20	0.1	3.0	NS251	NKY15S
CSVHR/L1212	●			○○○○	12	12	12	140	0	20	0.1	3.0	NS251	NKY15S

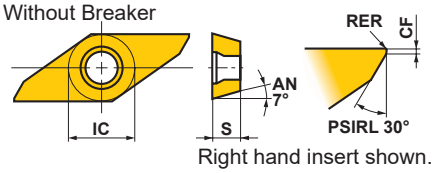
∗1 APMX : Max. Depth of Cut
∗2 Clamp Torque (lbf-in) : NS251=6.2
Note 1) Please use right hand insert for right hand holder and left hand insert for left hand holder.
Note 2) Each insert has own depth of cut.

INSERTS

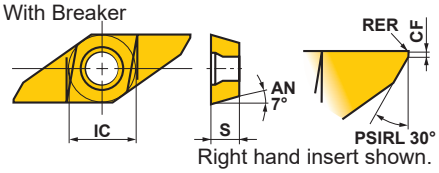
CSVTF

Front turning

Order Number	Hand	Coated	Dimensions (mm)				APMX * (mm)	Geometry
		VP15KZ	IC	S	RER/L	CF		
CSVTF30AR	R	●	6.35	2.38	0	0.3	3.0	Without Breaker
CSVTF30AL	L	●	6.35	2.38	0	0.3	3.0	
CSVTF30BR	R	●	6.35	2.38	0	0.3	3.0	
CSVTF30CR	R	●	6.35	2.38	0	0.15	3.0	
CSVTF30DR	R	●	6.35	2.38	0	0.15	3.0	
CSVTF30AR-B	R	●	6.35	2.38	0	0.3	3.0	With Breaker
CSVTF30AL-B	L	●	6.35	2.38	0	0.3	3.0	
CSVTF30BR-B	R	●	6.35	2.38	0	0.3	3.0	
CSVTF30CR-B	R	●	6.35	2.38	0	0.15	3.0	
CSVTF30DR-B	R	●	6.35	2.38	0	0.15	3.0	



Right hand insert shown.



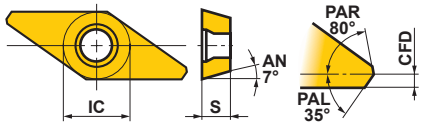
Right hand insert shown.

∗ APMX : Max. Depth of Cut

CSVTFXL

Front turning, Copying

Order Number	Hand	Coated	Dimensions (mm)			APMX * (mm)	Geometry
		VP15KZ	IC	S	CFD		
CSVTFXL	L	●	6.35	2.38	0.7	3.0	Without Breaker



∗ APMX : Max. Depth of Cut

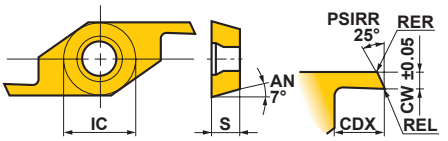
SPARE PARTS ➢ M001
TECHNICAL DATA ➢ N001

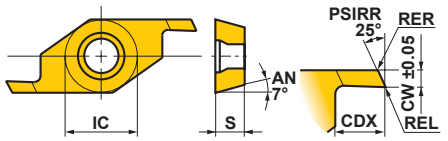
FOR RADIAL TYPE TOOL POSTS

INSERTS

CSVTC — Cutting off

Order Number	Hand	Coated	Dimensions (mm)					APMX* (mm)	Geometry
		VP15KZ	IC	S	RER/L	CDX	CW		
CSVTC0640R	R	●	6.35	2.38	0	2.0	0.6	1.5	Without Breaker
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	Right hand insert shown.
CSVTC0640R-B	R	●	6.35	2.38	0	2.0	0.6	1.5	With Breaker
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	2.0	
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	Right hand insert shown.

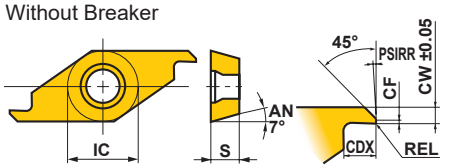


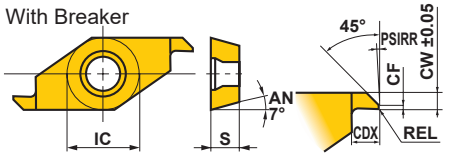


* APMX : Max. Depth of Cut

CSVTB — Back turning

Order Number	Hand	Coated	Dimensions (mm)							APMX* (mm)	Geometry
		VP15KZ	IC	S	RER/L	CDX	CW	CF	PSIRR/L		
CSVTB10AR	R	●	6.35	2.38	0	2.5	1	0.3	5°	2.0	Without Breaker
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	Right hand insert shown.
CSVTB10AR-B	R	●	6.35	2.38	0	2.5	1	0.3	5°	2.0	With Breaker
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	Right hand insert shown.

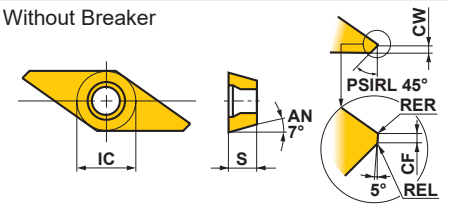




* APMX : Max. Depth of Cut

CSVTBXL — Back turning, Copying

Order Number	Hand	Coated	Dimensions (mm)					APMX* (mm)	Geometry
		VP15KZ	IC	S	RER/L	CW	CF		
CSVTBXL	L	●	6.35	2.38	0	0.7	0.035	3.0	Without Breaker



* APMX : Max. Depth of Cut

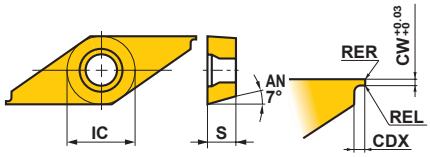
● : USA Stock

<5 inserts in one case>

CSVTG

Grooving

Order Number	Hand	Coated	Dimensions (mm)					APMX* (mm)	Geometry
		VP15KZ	IC	S	RER/L	CDX	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	



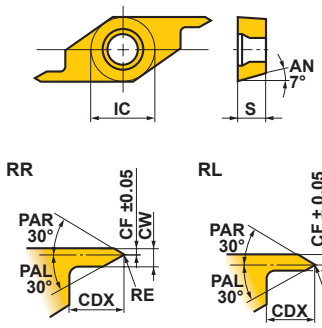
Right hand insert shown.

* APMX : Max. Depth of Cut

CSVTT

Threading

Order Number	Hand	Coated	Pitch (mm)	Dimensions (mm)						Geometry
		VP15KZ		IC	S	RE	CDX	CW	CF	
CSVTT60050RR	R	●	0.2—0.5	6.35	2.38	0.03	3.0	1.0	0.35	Without Breaker General Purpose (60°)
CSVTT60050RL	R	●	0.2—0.5	6.35	2.38	0.03	3.0	1.0	0.35	



Right hand insert shown.

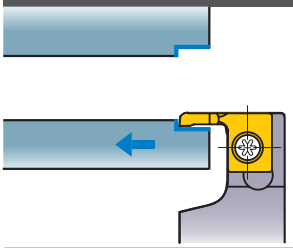
SPARE PARTS ➤ M001
TECHNICAL DATA ➤ N001

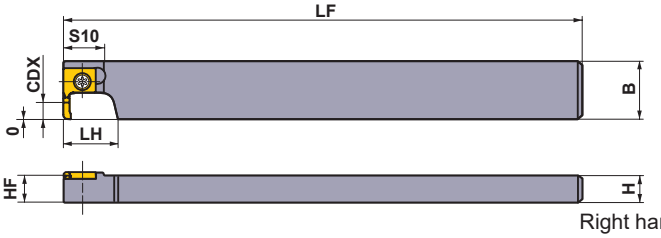
BORING TOOLS (FOR GANG TYPE TOOL POSTS)

METRIC STANDARD

SBAH

Without offset





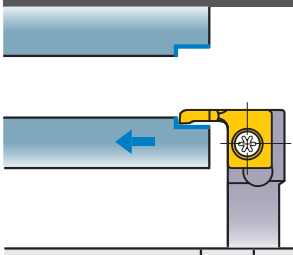
Right hand tool holder only.

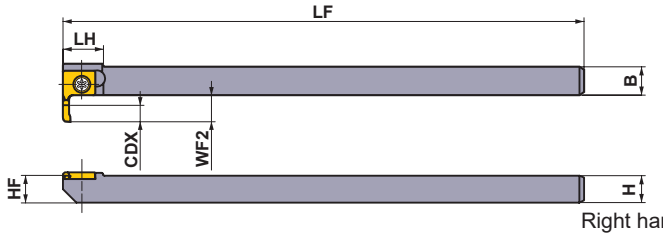
Order Number	Stock	Insert Number		Dimensions (mm)						CDX (mm)	*1 DMIN (mm)	*2 Clamp Screw	Wrench
	R			H	B	LF	HF	LH	S10				
SBAHR1022	●	SBAT	3080○○L/L-B	10	21.5	120	10	17.5	15	8	3	NS402W	NKY15S
SBAHR1222	●		3080○○L/L-B	12	21.5	120	12	17.5	15	8	3	NS403W	NKY15S

*1 DMIN : Min. Cutting Diameter
*2 Clamp Torque (lbf-in) : NS402W=6.2, NS403W=6.2

SBAH

With offset





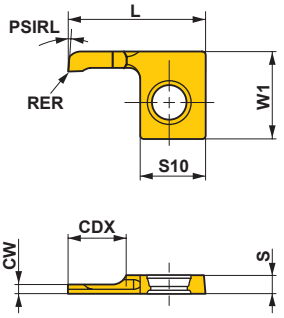
Right hand tool holder only.

Order Number	Stock	Insert Number		Dimensions (mm)						CDX (mm)	*1 DMIN (mm)	*2 Clamp Screw	Wrench
	R			H	B	LF	HF	WF2	LH				
SBAHR1010	●	SBAT	3080○○L/L-B	10	10	120	10	10	15	8	3	NS402W	NKY15S

*1 DMIN : Min. Cutting Diameter
*2 Clamp Torque (lbf-in) : NS402W=0.7

INSERTS

Breaker	Order Number	Coated	Dimensions (mm)								*DMIN (mm)	Geometry
		VP15KZ	PSIRL	RER	CDX	L	W1	S	CW	S10		
Without Breaker	SBAT308000L	●	5°	0	8.0	18.5	12.0	2.50	1.25	9.0	3	
	SBAT3080V5L	●	5°	0.05	8.0	18.5	12.0	2.50	1.25	9.0	3	
With Breaker	SBAT308000L-B	●	5°	0	8.0	18.5	12.0	2.50	1.25	9.0	3	
	SBAT3080V5L-B	●	5°	0.05	8.0	18.5	12.0	2.50	1.25	9.0	3	



* DMIN : Min. Cutting Diameter

● : USA Stock
<5 inserts in one case>

SPARE PARTS ➤ M001
TECHNICAL DATA ➤ N001

Memo