

HOW TO READ THE STANDARD OF SMALL TOOLS

● How this section page is organized

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

SMALL TOOLS

FRONT TURNING TOOLS (FOR GANG TYPE)

INCH STANDARD

SCAC-SM

Order Number	Stock	Insert Number	Dimensions (inch)								Clamp Screw	Wrench
			H	B	LF	LH	HBKW	HF	WF2	WF1		
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

Order Number	Stock	Insert Number	Dimensions (inch)								Clamp Screw	Wrench
			H	B	LF	LH	HBKW	HF	WF2	WF1		
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

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

INCH STANDARD

SDJC-SM

Order Number	Stock	Insert Number	Dimensions (inch)								Clamp Screw	Wrench
			H	B	LF	LH	HBKW	HF	WF2	WF1		
SDJCR/L-062SM	●●	DCMT	21.5	.375	.375	4.921	—	.375	0	TS254	TKY08R	
SDJCR/L-063SM	●●	DCMW	32.5	.375	.375	4.921	.965	.176	.375	0	TS43	TKY15R
SDJCR/L-083SM	●●	DCGT	32.5	.500	.500	5.906	.843	.051	.500	0	TS43	TKY15R
SDJCR/L-103SM	●●	DGGW	32.5	.625	.625	5.906	—	.625	0	TS43	TKY15R	

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

SDNC-SM

Order Number	Stock	Insert Number	Dimensions (inch)								Clamp Screw	Wrench
			H	B	LF	LH	HBKW	HF	WF2	WF1		
SDNCR/L-062SM	●●	DCMT	21.5	.375	.375	4.921	—	.375	.118	TS254	TKY08R	
SDNCR/L-063SM	●●	DCMW	32.5	.375	.375	4.921	.965	.097	.375	.197	TS43	TKY15R
SDNCR/L-083SM	●●	DCGT	32.5	.500	.500	5.906	—	.500	.197	TS43	TKY15R	
SDNCR/L-103SM	●●	DGGW	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	M56015/VP15TF	165-450	.004 - .006
	—	M56015	100-500	.004 - .006
Free Cutting Steel	—	NX2122	165-820	.004 - .006
	—	—	—	—
M Stainless Steel	≤200HB	VP15TF/MP9005/MP9015	165-300	.004 - .004
	230HB	M57025/M59025	165-500	.004 - .006
N Non-Ferrous Metal	—	HT110/MT9006	230-755	.012 - .006
S Titanium Alloy	—	MT9005	130-200	.016 - .005
	—	MP9015	65-245	.016 - .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, 0.08 inch.

USA Stock

SCAC-SM type inserts > A162-A161
SCLC-SM type inserts > A162-A161
CBN & PCD Inserts > B037, B038, B093

SDJC-SM type inserts > A164-A171
SDNC-SM type inserts > A164-A171
CBN & PCD inserts > B040, B041, B054

SPARE PARTS > M001
TECHNICAL DATA > M001

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

D018 **BTAH** (INCH STANDARD)
 D021 **BTAH** (METRIC STANDARD)
 D018 **BTAT** INSERTS
 D019 **BTBT** INSERTS
 D020 **BTVH** (INCH STANDARD)
 D023 **BTVH** (METRIC STANDARD)
 D020 **BTVT** INSERTS
 D040 **CSVH** (INCH STANDARD)
 D043 **CSVH** (METRIC STANDARD)
 D041 **CSVTB** INSERTS
 D041 **CSVTBXL** INSERTS
 D041 **CSVTC** INSERTS
 D040 **CSVTF** INSERTS
 D040 **CSVTFXL** INSERTS
 D042 **CSVTG** INSERTS
 D042 **CSVTT** INSERTS
 D028 **CTAH** (INCH STANDARD)
 D030 **CTAH** (METRIC STANDARD)
 D028 **CTAH-S** (INCH STANDARD)
 D030 **CTAH-S** (METRIC STANDARD)
 D029 **CTAT** INSERTS
 D019 **CTBH** (INCH STANDARD)
 D032 **CTBH** (INCH STANDARD)
 D022 **CTBH** (METRIC STANDARD)
 D033 **CTBH** (METRIC STANDARD)
 D032 **CTBT** INSERTS
 D024 **GTAH/GTBH/GTCH** (INCH STANDARD)
 D026 **GTAH/GTBH/GTCH** (METRIC STANDARD)
 D024 **GTAH/GTBT/GTCT** INSERTS
 D037 **MMTE** (INCH STANDARD)
 D046 **SBAH** (METRIC STANDARD)
 D046 **SBAT** INSERTS
 D010 **SCAC-SM** (INCH STANDARD)
 D014 **SCAC-SM** (METRIC STANDARD)
 D010 **SCLC-SM** (INCH STANDARD)
 D014 **SCLC-SM** (METRIC STANDARD)
 D011 **SDJC-SM** (INCH STANDARD)
 D015 **SDJC-SM** (METRIC STANDARD)
 D011 **SDNC-SM** (INCH STANDARD)
 D015 **SDNC-SM** (METRIC STANDARD)
 D038 **SH** (INCH STANDARD)
 D039 **SH** (METRIC STANDARD)
 D012 **SVJB-SM** (INCH STANDARD)
 D016 **SVJB-SM** (METRIC STANDARD)
 D013 **SVJC-SM** (INCH STANDARD)
 D017 **SVJC-SM** (METRIC STANDARD)
 D012 **SVLP-SM** (INCH STANDARD)
 D016 **SVLP-SM** (METRIC STANDARD)
 D017 **SVPP-SM** (METRIC STANDARD)
 D013 **SVVB-SM** (INCH STANDARD)
 D017 **SVVB-SM** (METRIC STANDARD)
 D034 **TTAH** (INCH STANDARD)
 D035 **TTAH** (METRIC STANDARD)
 D034 **TTAT** INSERTS

OUTLINE OF SMALL TOOLS D002 CLASSIFICATION..... D006

STANDARD

GANG TYPE TOOL POSTS

	INCH	METRIC
FRONT TURNING TOOLS		
SCAC-SM	D010	D014
SCLC-SM	D010	D014
SDJC-SM	D011	D015
SDNC-SM	D011	D015
SVLP-SM	D012	D016
SVJB-SM	D012	D016
SVJC-SM	D013	D017
SVVB-SM	D013	D017
SVPP-SM	—	D017

BACK TURNING TOOLS

BTAH	D018	D021
CTBH	D019	D022
BTVH	D020	D023

GROOVING TOOLS

GTAH / GTBH / GTCH	D024	D026
GYS (For Swiss-type lathes) ..	F016	F040

CUTTING OFF TOOLS

CTAH / CTAH-S	D028	D030
CTBH	D032	D033

THREADING TOOLS

TTAH	D034	D035
MMTE	D037	—

BORING TOOLS

SBAH	—	D046
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OPPOSITE TOOL POSTS

DIMPLE SLEEVE HOLDER		
SH	D038	D039

RADIAL TYPE TOOL POSTS

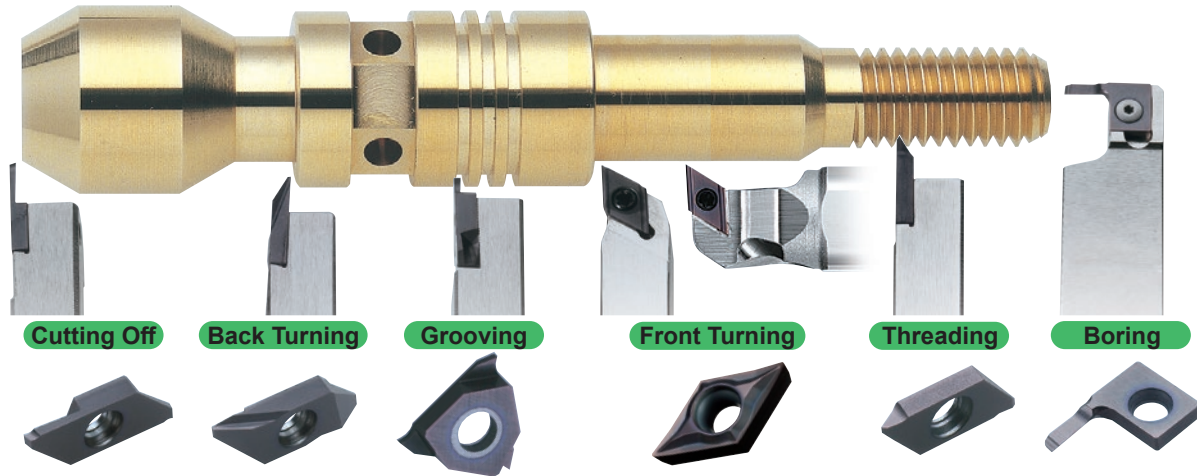
CSVH	D040	D043
CSVTF	D040	D043
CSVTFXL	D040	D043
CSVTC	D041	D044
CSVTB	D041	D044
CSVTBXL	D041	D044
CSVTG	D042	D045
CSVTT	D042	D045



*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)



D

SMALL TOOLS

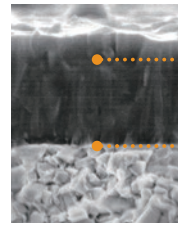
MS Series - PVD Coated Grades for High Precision and Small Parts Machining

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



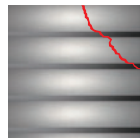
Superior wear and welding resistance and demonstrating the best possible results for carbon steel.

Minute multilayers remarkably improve welding.

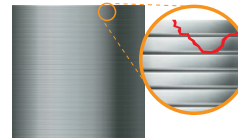
MS7025 NEW

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

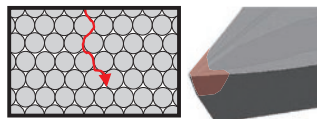
Enlarged Image

MS9025 NEW

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

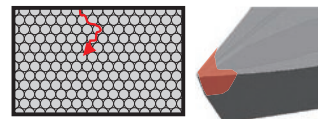
Thermal conductivity has been improved by optimizing the grain size and therefore reducing the boundary contact between the WC particles. This optimization reduces the temperature of the cutting edge during machining.

MS9025



Reducing the cutting edge temperature by improved thermal conductivity.

Conventional



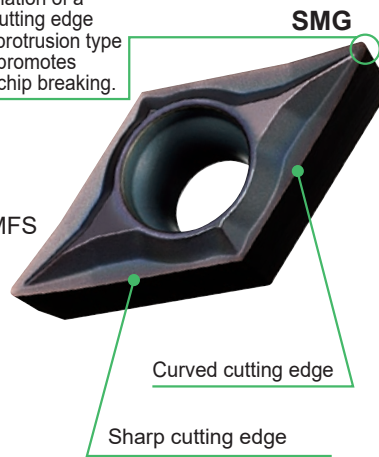
Higher cutting edge temperatures due to more particle boundary contact.

● Molded Breaker Insert

Nose radii designed with minus tolerance

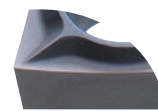
- Suitable for small parts applications that often require minus tolerance dimensions.
- The order number is shown with the letter "M" that indicates minus tolerance. ex) DCGT32.50.2MFS
- The radius value is printed on the side of the insert label for easy recognition.

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



FS

FS-P

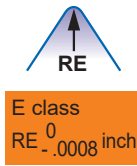


LS

LS-P

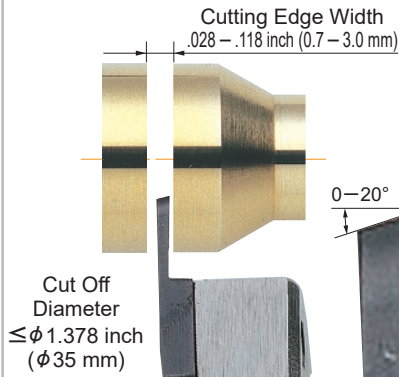


● Tolerance Corner R

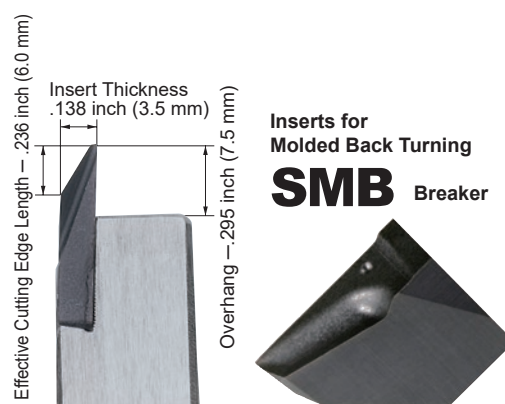


The letter "M" insert
RE_{-0.002} inch
(Conventional G-class insert)
RE ± .004 inch

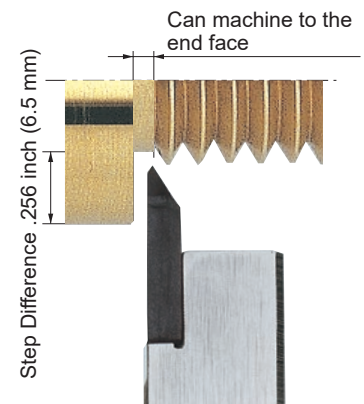
● Cutting Off



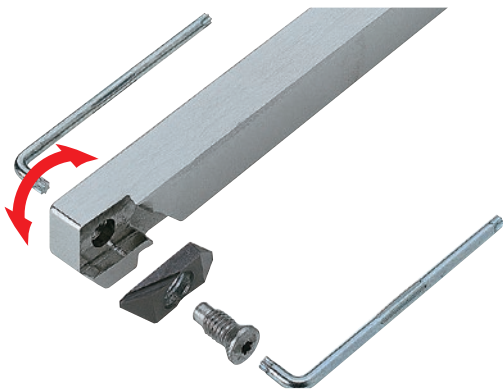
● Back Turning



● Threading



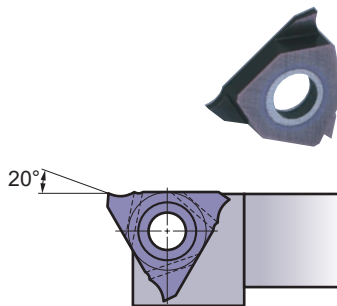
● Back Clamping Mechanism



Screw designed for front and back clamping.

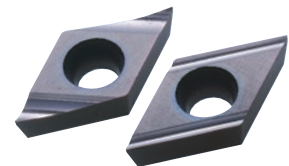
● Grooving

- 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

Monoblock Holder for Swiss-type Automatic Lathe

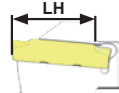
The new geometry with greatly improved rigidity suppresses vibrations and dimensional changes thereby solving problems during cut off.

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



Overhang Length Compatible with Swiss-type Automatic Lathes

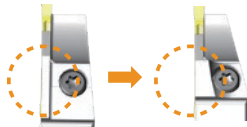
Head length corresponding to the maximum machining diameter of CNC Swiss-type automatic lathes and turret machines.



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

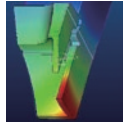
Deflection Measurement : .0017 inch (0.044 mm)



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 ϕ 1 inch (ϕ 25.4 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

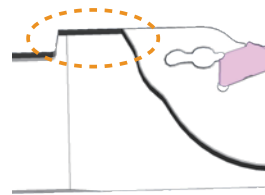
Monoblock Holder for Swiss-type Automatic Lathe

Max. Cut Off 2.992 inch (76mm)



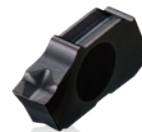
High Rigidity Holder

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

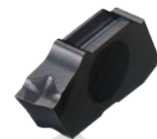


New Low Resistance and High Lead Angle Insert

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

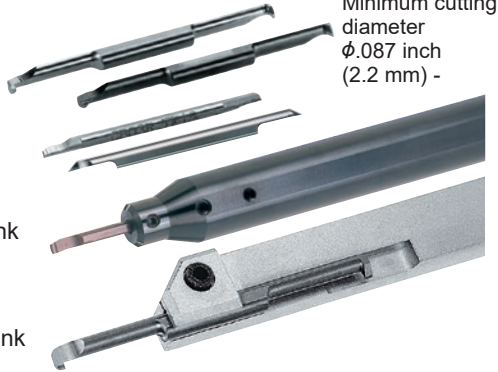
- The most suitable for the use with cam type automatic lathes (radial pattern tool posts)
- The most suitable for machining of small parts with work diameter .197 inch (5mm) or smaller
- Single holder for front turning, back turning, grooving, threading and cutting off operations



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



D

SMALL TOOLS

CLASSIFICATION (EXTERNAL TURNING)

GANG TYPE TOOL POSTS

FRONT TURNING

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

BACK TURNING

Name of Tool Holder	Tool Size (H x B x LF)		Geometry
	Inch	Metric	
BTAH (Edge Length)	.375 x .375 x 4.724	8 x 10 x 120	
	.500 x .500 x 4.724	10 x 10 x 120	
	.625 x .625 x 4.724	12 x 12 x 120	
Inch ↻ D018 Metric ↻ D021			
CTBH (Edge Length)	.375 x .375 x 4.724	10 x 10 x 120	
	.500 x .500 x 4.724	12 x 12 x 120	
	.625 x .625 x 4.724	16 x 16 x 120	
Inch ↻ D019 Metric ↻ D022			
BTVH (Edge Length)	.375 x .375 x 4.724	10 x 10 x 120	
	.500 x .500 x 4.724	12 x 12 x 120	
	.625 x .625 x 4.724	16 x 16 x 120	
Inch ↻ D020 Metric ↻ D023			

THREADING

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

GROOVING

Name of Tool Holder	Tool Size (H x B x LF)		Geometry
	Inch	Metric	
GTAH (Grooving Width)	.375 x .375 x 3.150	8 x 8 x 80	
	.500 x .500 x 3.150	8 x 8 x 120	
	.500 x .500 x 4.724	10 x 10 x 80	
	.625 x .625 x 4.724	10 x 10 x 120	
Inch ↻ D024 Metric ↻ D026			
GTBH (Grooving Width)	.375 x .375 x 3.150	10 x 10 x 80	
	.375 x .375 x 4.724	10 x 10 x 120	
	.500 x .500 x 4.724	12 x 12 x 120	
	.625 x .625 x 4.724	16 x 16 x 120	
Inch ↻ D024 Metric ↻ D026			
GTCH (Grooving Width)	.375 x .375 x 3.150	10 x 10 x 80	
	.375 x .375 x 4.724	10 x 10 x 120	
Inch ↻ D024 Metric ↻ D026			

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

CUTTING OFF

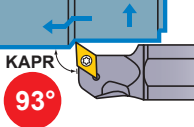
Name of Tool Holder	Tool Size (H x B x LF)		Geometry
	Inch	Metric	
CTAH (Max. Cut Off Diameter)	.375 x .375 x 4.724	8 x 10 x 120	
	.500 x .500 x 4.724	10 x 10 x 120	
	.625 x .625 x 4.724	12 x 12 x 120	
Inch ↻ D028 Metric ↻ D030			
CTAH-S (Max. Cut Off Diameter)	.375 x .375 x 3.150	10 x 10 x 80	
	.500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


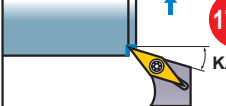
D

SMALL TOOLS

OPPOSITE TOOL POSTS

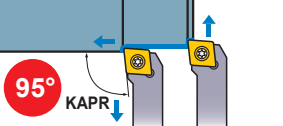








● DIMPLE SLEEVE HOLDER

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

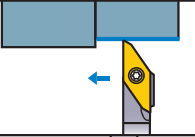
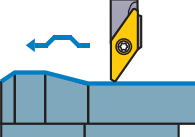
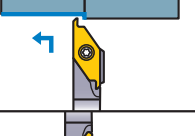
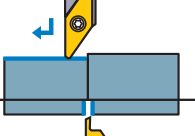
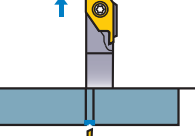
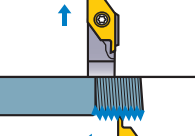
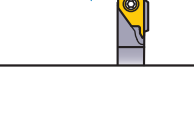
Name of Tool Holder	Shank Size (inch) (H x B x LF)	Geometry
SVVB	.375 x .375 x 2.500 .500 x .500 x 3.000 .625 x .625 x 4.000	
Inch → C028		
SVHB	.375 x .375 x 2.500 .500 x .500 x 3.500 .625 x .625 x 4.000	
Inch → C029		

TURRET TYPE TOOL POSTS

● FRONT TURNING

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

RADIAL TYPE TOOL POSTS


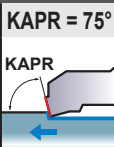
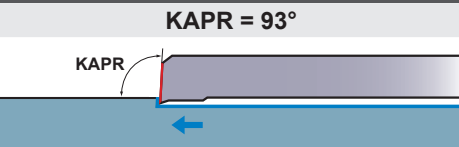
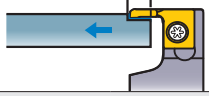






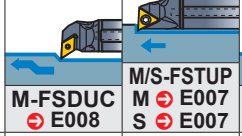
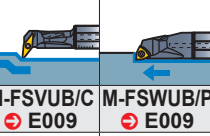






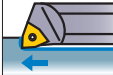





Name of Tool Holder	Tool Size (H x B x LF)		Geometry
	Inch	Metric	
CSVH (Front Turning)	.375 x .375 x 5.512 .500 x .500 x 5.512	7 x 7 x 140 8 x 8 x 140 9.5 x 9.5 x 140 10 x 10 x 140 12 x 12 x 140	
Inch → D040			
Metric → D043			
CSVH (Front Turning Copying)	.375 x .375 x 5.512 .500 x .500 x 5.512	7 x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

D

SMALL TOOLS

CLASSIFICATION (INTERNAL TURNING)

SMALL TOOLS

Min. Cutting Dia.	Name of Tool Holder	Features	KAPR = 75°	KAPR = 93°			
ϕ3.0 mm (ϕ .118 inch)	For Gang Type Tool Posts SBAH 	<ul style="list-style-type: none"> The minimum cutting diameter is ϕ3 mm (.118 inch). Tools for Gang type Swiss-type lathes. 		  SBAH ↻ E046			
ϕ2.2 mm ϕ7.2 mm (ϕ .087 inch) (ϕ .283 inch)	MICRO-MINI TWIN Boring Bars (Solid Carbide) 	<ul style="list-style-type: none"> 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 inch) (ϕ .205 inch)	MICRO-MINI Boring Bars (Solid Carbide) 	<ul style="list-style-type: none"> 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.) 		 FR-BLS ↻ E031			
ϕ5.0 mm ϕ8.0 mm (ϕ .197 inch) (ϕ .315 inch)	MICRO-DEX Boring Bars 	<ul style="list-style-type: none"> 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) 	<ul style="list-style-type: none"> 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) 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Multi-functional bar for threading, grooving and boring. Minimum bore ϕ .390 inch. Rigid insert retention. 					
ϕ 10 mm ϕ 20 mm (ϕ .394 inch) (ϕ .787 inch)	F Type Boring Bars (FSL51,52) 	<ul style="list-style-type: none"> The minimum cutting diameter is ϕ 10 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
										○	○
						○	○	○			○
							○	○			○
							○	○	○		
						○	○	○			
							○	○			
							○	○			
							○	○			○
							○	○			○

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

FRONT TURNING TOOLS (FOR GANG TYPE) TOOL POSTS

INCH STANDARD

SCAC-SM

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

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							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								
												 (2, 3)	 (2, 3)	 (2, 3)	 (2, 3)
				R/L-SN	R/L-SR	AZ	LS-P								

Order Number	Stock		Insert Number	Dimensions (inch)								*	
	R	L		H	B	LF	LH	HBKW	HF	WF2	Clamp Screw	Wrench	
SDJCR/L-062SM	●	●	DCMT 21.5	.375	.375	4.921	—	—	.375	0	TS254	TKY08R	
SDJCR/L-063SM	●	●	DCMW 32.5	.375	.375	4.921	.965	.176	.375	0	TS43	TKY15R	
SDJCR/L-083SM	●	●	DCET 32.5	.500	.500	5.906	.843	.051	.500	0	TS43	TKY15R	
SDJCR/L-103SM	●	●	DCGT 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							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								
												 (2, 3)	 (2, 3)	 (2, 3)	 (2, 3)
				R/L-SN	R/L-SR	AZ	LS-P								

Order Number	Stock		Insert Number	Dimensions (inch)								*	
	R	L		H	B	LF	LH	HBKW	HF	WF2	Clamp Screw	Wrench	
SDNCR/L-062SM	●	●	DCMT 21.5	.375	.375	4.921	—	—	.375	.118	TS254	TKY08R	
SDNCR/L-063SM	●	●	DCMW 32.5	.375	.375	4.921	.965	.097	.375	.197	TS43	TKY15R	
SDNCR/L-083SM	●	●	DCET 32.5	.500	.500	5.906	—	—	.500	.197	TS43	TKY15R	
SDNCR/L-103SM	●	●	DCGT 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—0.006
	Free Cutting Steel	—	MS6015	100—590	.0004—0.006
			NX2525	165—820	.0004—0.006
M	Stainless Steel	≤200HB	VP15TF/MP9005/MP9015	165—390	.0008—0.004
		230HB	MS7025/MS9025	165—590	.0004—0.006
N	Non-Ferrous Metal	—	HTi10/MT9005	230—755	.0012—0.006
S	Titanium Alloy	—	MT9005	130—260	.0016—0.005
	Heat Resistant Alloy	—	MP9015	65—245	.0016—0.005

SDJC-SM type inserts > A164—A171

SDNC-SM type inserts > A164—A171

CBN & PCD inserts > B040, B041, B054

SPARE PARTS > M001

TECHNICAL DATA > N001

D

SMALL TOOLS

D011

FRONT TURNING TOOLS (FOR GANG TYPE) TOOL POSTS

INCH STANDARD

SVLP-SM

Without offset

95° KAPR

Right hand tool holder shown.

Finish	R/L-SRF
(1.5, 2)	
Finish	SMG
(1.5, 2)	

SMALL TOOLS

Order Number	Stock		Insert Number	Dimensions (inch)					* Clamp Screw	Wrench	
	R	L		H	B	LF	HF	WF2			
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

93° KAPR

Right hand tool holder shown.

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

Order Number	Stock		Insert Number	Dimensions (inch)					* Clamp Screw	Wrench	
	R	L		H	B	LF	HF	WF2			
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							Finish		Light	
			FP	FM	LS	LS-P							
										(2)		(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 \odot	.375	.375	4.500	—	.375	0	TS255	TKY08R	
SVJCR/L-062.5B-SM	●	●		2.52 \odot	.375	.375	4.500	.079	.375	0	TS32	TKY08R	
SVJCR/L-082B-SM	●	●		22 \odot	.500	.500	4.500	—	.500	0	TS255	TKY08R	
SVJCR/L-082.5B-SM	●	●		2.52 \odot	.500	.500	4.500	—	.500	0	TS32	TKY08R	
SVJCR/L-102B-SM	●	●		22 \odot	.625	.625	4.500	—	.625	0	TS255	TKY08R	
SVJCR/L-102.5B-SM	●	●		2.52 \odot	.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							Finish		Medium
			R/L-F	R/L-SN								
										(2)		(2)
										(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 \odot	.375	.375	4.921	.375	.118	TS255	TKY08R	
SVVBR/L-082SM	●	●		22 \odot	.500	.500	5.906	.500	.118	TS255	TKY08R	
SVVBR/L-102SM	●	●		22 \odot	.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
		MS6015	100—590	.0004—-.006
	Free Cutting Steel	—	NX2525	165—820
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
	—	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

D
SMALL TOOLS

D013

FRONT TURNING TOOLS (FOR GANG TYPE) TOOL POSTS

METRIC STANDARD

SCAC-SM

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

Order Number	Stock		Insert Number	Dimensions (mm)							*		
	R	L		H	B	LF	LH	HBKW	HF	WF2	Clamp Screw	Wrench	
SCACR/L0808K06-SM	●	●	21.5	8	8	125	11	1.6	8	0	TS254	TKY08R	
SCACR/L1010K06-SM	●	●	CC●B CC●H	21.5	10	10	125	—	—	10	0	TS254	TKY08R
SCACR/L1010K09-SM	●	●	CC●T	32.5	10	10	125	16	3.5	10	0	TS43	TKY15R
SCACR/L1212M09-SM	●	●	CC●W	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

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

Order Number	Stock		Insert Number	Dimensions (mm)							*		
	R	L		H	B	LF	LH	HBKW	HF	WF2	Clamp Screw	Wrench	
SCLCR/L0808K06-SM	●	●	21.5	8	8	125	11	2.1	8	0	TS254	TKY08R	
SCLCR/L1010K06-SM	●	●	CC●B CC●H	21.5	10	10	125	—	—	10	0	TS254	TKY08R
SCLCR/L1010K09-SM	●	●	CC●T	32.5	10	10	125	20	4	10	0	TS43	TKY15R
SCLCR/L1212M09-SM	●	●	CC●W	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							Finish	Finish	Light	Light
				SMG/FS	R/L-F	R/L-SS	LS							
				(2,3)	(2,3)	(2,3)	(2,3)	(2,3)	(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	21.5	8	8	125	15	2	8	0	TS254	TKY08R
SDJCR/L1010K07-SM	●	●		DCMW	21.5	10	10	125	—	—	10	0	TS254
SDJCR/L1010K11-SM	●	●	DCET	32.5	10	10	125	24	4	10	0	TS43	TKY15R
SDJCR/L1212M11-SM	●	●	DCGT	32.5	12	12	150	22	2	12	0	TS43	TKY15R
SDJCR/L1616M11-SM	●	●	DCGW	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							Finish	Finish	Light	Light
				SMG/FS	R/L-F	R/L-SS	LS							
				(2,3)	(2,3)	(2,3)	(2,3)	(2,3)	(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	21.5	8	8	125	—	—	8	3	TS254	TKY08R
SDNCR/L1010K07-SM	●	●		DCMW	21.5	10	10	125	—	—	10	3	TS254
SDNCR/L1010K11-SM	●	●	DCET	32.5	10	10	125	24	2	10	5	TS43	TKY15R
SDNCR/L1212M11-SM	●	●	DCGT	32.5	12	12	150	—	—	12	5	TS43	TKY15R
SDNCR/L1616M11-SM	●	●	DCGW	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
			MS6015	100–590	.0004 –.006
	Free Cutting Steel	—	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

SDJC-SM type inserts > A164–A171

SDNC-SM type inserts > A164–A171

CBN & PCD inserts > B040, B041, B054

SPARE PARTS > M001

TECHNICAL DATA > N001

D
SMALL TOOLS

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)	

SMALL TOOLS

Order Number	Stock		Insert Number	Dimensions (mm)					* Clamp Screw	Wrench	
	R	L		H	B	LF	HF	WF2			
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	Medium
(2)		
Medium	R/L-SR	
(2)		

Order Number	Stock		Insert Number	Dimensions (mm)					* Clamp Screw	Wrench	
	R	L		H	B	LF	HF	WF2			
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
		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
	—	MP9015	65—245	.0016 —.005

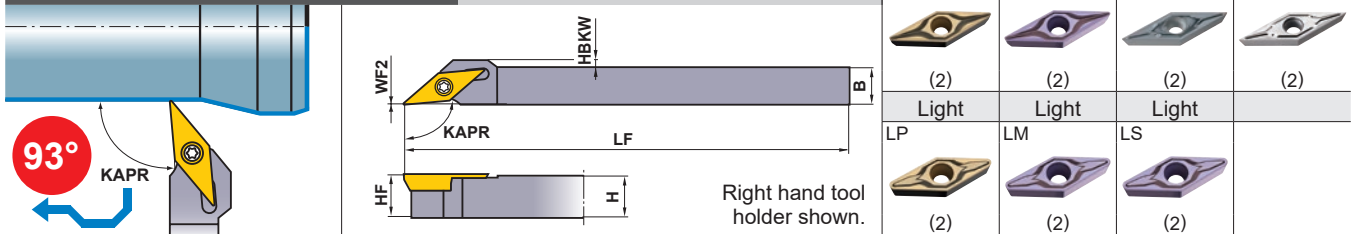
Note 1) Insert photo is an example. Letters show chip breaker style, figures show inscribed circle.
 Note 2) Dimensions shown for insert corner RE .008 inch.

● : USA Stock



SVLP-SM type inserts > A194
 SVJB-SM type inserts > A186—A189
 CBN & PCD inserts > B045, B058

METRIC STANDARD

SVJC-SM

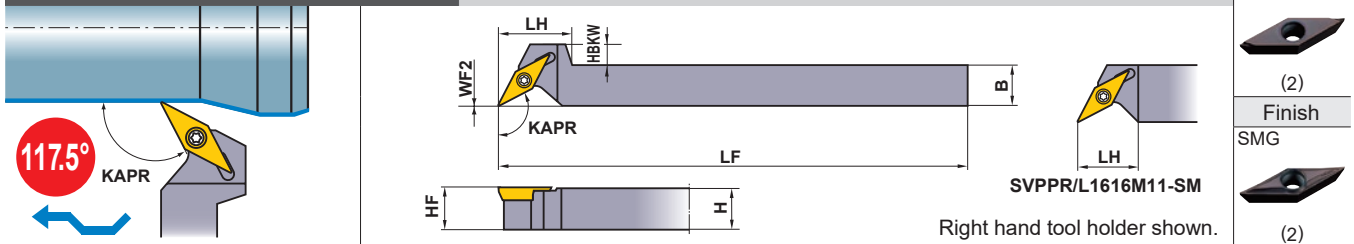


Finish	Finish	Light	Light
FP	FM	LS	LS-P
(2)	(2)	(2)	(2)
Light	Light	Light	
LP	LM	LS	
(2)	(2)	(2)	



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 \odot	10	10	120	—	10	0	TS255	TKY08R
SVJCR/L1010JX13-SM	●	●		2.52 \odot	10	10	120	2	10	0	TS32	TKY08R
SVJCR/L1212JX11-SM	●	●		22 \odot	12	12	120	—	12	0	TS255	TKY08R
SVJCR/L1212JX13-SM	●	●		2.52 \odot	12	12	120	—	12	0	TS32	TKY08R
SVJCR/L1616JX11-SM	●	●		22 \odot	16	16	120	—	16	0	TS255	TKY08R
SVJCR/L1616JX13-SM	●	●		2.52 \odot	16	16	120	—	16	0	TS32	TKY08R

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

SVPP-SM

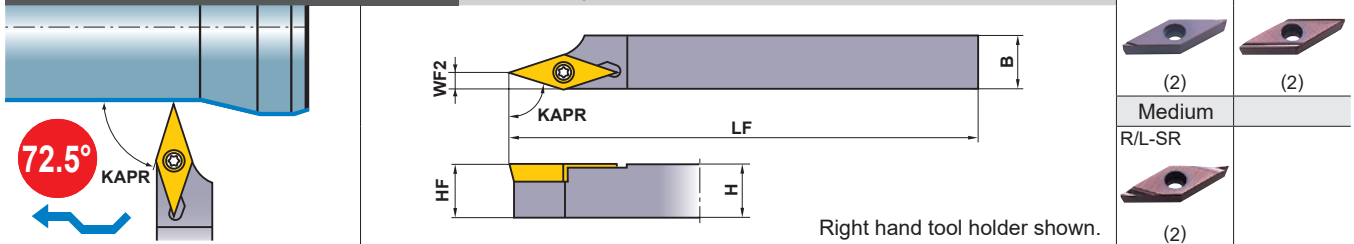


Finish
R/L-SRF
(2)
Finish
SMG
(2)



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 \odot	10	10	125	20	8	10	0	TS255	TKY08R
SVPPR/L1212M11-SM	●	●		22 \odot	12	12	150	20	6	12	0	TS255	TKY08R
SVPPR/L1616M11-SM	●	●		22 \odot	16	16	150	17	—	16	0	TS255	TKY08R

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

SVVB-SM



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 \odot	10	10	125	10	3	TS255	TKY08R
SVVBR/L1212M11-SM	●	●		22 \odot	12	12	150	12	3	TS255	TKY08R
SVVBR/L1616M11-SM	●	●		22 \odot	16	16	150	16	3	TS255	TKY08R

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

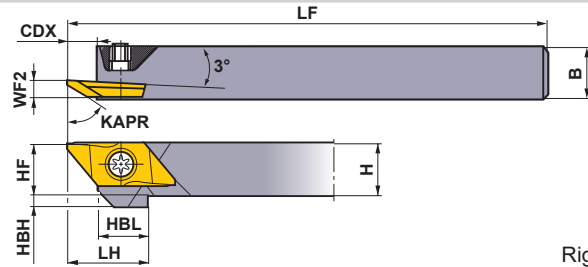
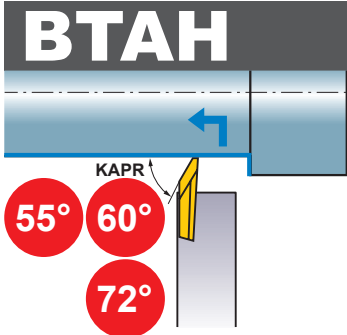
SVJC-SM type inserts > A190–A192
 SVVB-SM type inserts > A186–A189
 SVPP-SM type inserts > A194

CBN & PCD inserts > B045, B058
 SPARE PARTS > M001
 TECHNICAL DATA > N001

D SMALL TOOLS

BACK TURNING TOOLS (FOR GANG TYPE) TOOL POSTS

INCH STANDARD



Right hand tool holder shown.

D

SMALL TOOLS

Order Number	Stock		Insert Number	Dimensions (inch)								* Clamp Screw	Wrench		
	R	L		H	B	LF	LH	HF	WF2	HBH	HBL			CDX	
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	.500	.500	4.724	.591	.500	.138	—	.374	.217	NS403W	NKY15S
BTAHR/L-102	●	●		605000RX	.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	PSIRRL*	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

* Numeric value set insert on holder.

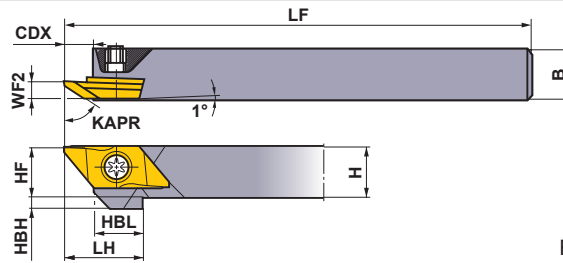
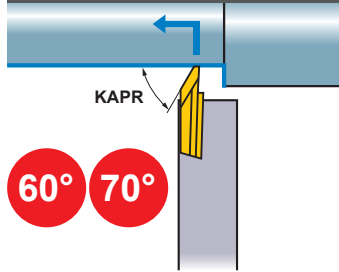
Note 1) REL, PSIRL dimensions for Right Hand Tool and RER, PSIRL dimensions for Left Hand Tool.

● : USA Stock



<5 inserts in one case>

INCH STANDARD

CTBH



Right hand tool holder shown.

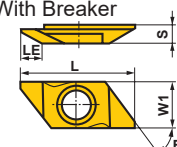
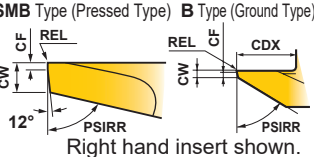
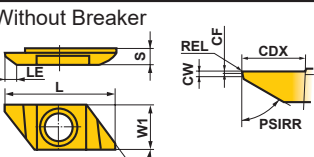
Order Number	Stock		Insert Number	Dimensions (inch)								*  					
	R	L		H	B	LF	LH	HF	WF2	HBH	HBL	CDX	Clamp Screw	Wrench			
CTBHR/L-062	●	●	BTBT	60450	○	R/L-B	.375	.375	4.724	.768	.375	.133	.125	.472	.295	NS402W	NKY15S
CTBHR/L-082	●	●		606000	R/L	.500	.500	4.724	.768	.500	.133	—	.472	.295	NS403W	NKY15S	
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	PSIRRL*	REL	CF	L	W1	CW	S	CDX		
BTBT7055V5R-SMB	R	●		70°	.002	.012	.984	.370	.053	.138	.256	.217	 <p>With Breaker</p>
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	 <p>SMB Type (Pressed Type) B Type (Ground Type)</p> <p>Right hand insert shown.</p>
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	
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	 <p>Without Breaker</p> <p>Right hand insert shown.</p>
BTBT606000L	L	●		60°	.000	.008	.984	.370	.028	.138	.276	.236	

* 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

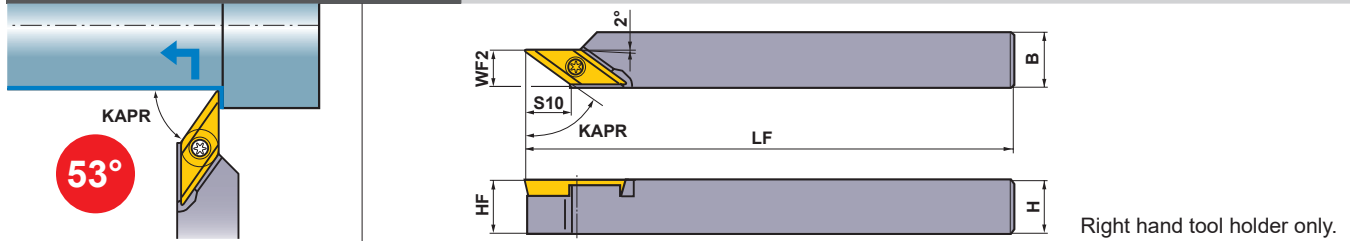
	Work Material	Hardness	Grade	Cutting Speed (SFM)	Feed (IPR)
P	Carbon Steel · Alloy Steel	180HB–280HB	MS6015/VP15TF	165–490	.0004–.006
	Free Cutting Steel	—	MS6015	100–590	.0004–.006
M	Stainless Steel	≤200HB	VP15TF	165–395	.0008–.004
N	Non-Ferrous Metal	—	MS6015	230–755	.0012–.006



SPARE PARTS > M001
TECHNICAL DATA > N001

BACK TURNING TOOLS (FOR GANG TYPE) TOOL POSTS

INCH STANDARD

BTVH

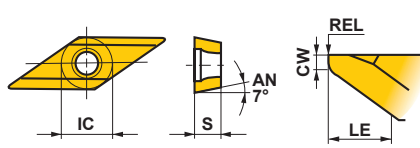


Order Number	Stock R	Insert Number	Dimensions (inch)							*  	
			H	B	LF	HF	WF2	S10	Clamp Screw	Wrench	
BTVHR-062	●	BTVT	5375○OR-B	.375	.375	4.724	.375	.295	.335	NS251	NKY15R
BTVHR-082	●			.500	.500	4.724	.500	.295	.335	NS251	NKY15R
BTVHR-102	●			.625	.625	4.724	.625	.295	.335	NS251	NKY15R

* 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 R	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

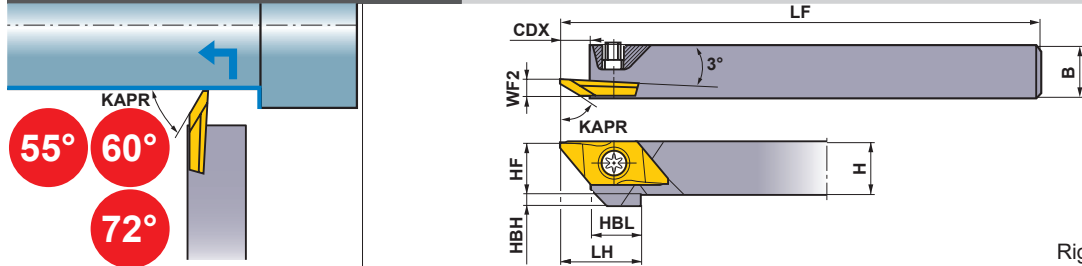
Work Material	Hardness	Grade	Cutting Speed (SFM)	Feed (IPR)
P Carbon Steel · Alloy Steel	180HB–280HB	VP15TF	165–490	.0004 –.006
	Free Cutting Steel	VP15TF	100–590	.0004 –.006
M Stainless Steel	≤200HB	VP15TF	165–395	.0008 –.004
N Non-Ferrous Metal	–	VP15TF	230–755	.0012 –.006

● : USA Stock

<5 inserts in one case>

METRIC STANDARD

BTAH



Right hand tool holder shown.

Order Number	Stock		Insert Number	Dimensions (mm)										Clamp Screw *	Wrench		
	R	L		H	B	LF	LH	HF	WF2	HBH	HBL	CDX					
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 *	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	<p>Right hand insert shown.</p>
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	

* Numeric value set insert on holder.

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

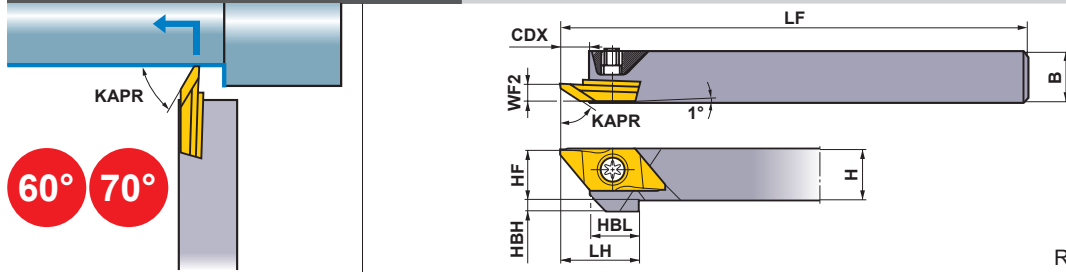
RECOMMENDED CUTTING CONDITIONS

	Work Material	Hardness	Grade	Cutting Speed (SFM)	Feed (IPR)
P	Carbon Steel · Alloy Steel	180HB—280HB	MS6015/VP15TF	165—490	.0004—0.006
	Free Cutting Steel	—	MS6015	100—590	.0004—0.006
M	Stainless Steel	≤200HB	VP15TF	165—395	.0008—0.004
N	Non-Ferrous Metal	—	MS6015	230—755	.0012—0.006

BACK TURNING TOOLS (FOR GANG TYPE) TOOL POSTS

METRIC STANDARD

CTBH



Right hand tool holder shown.

Order Number	Stock		Insert Number	Dimensions (mm)								* Clamp Screw	Wrench				
	R	L		H	B	LF	LH	HF	WF2	HBH	HBL			CDX			
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	●	●		606000	○	R/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	PSIRRL*	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	SMB Type (Pressed Type) B Type (Ground Type)
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	Without Breaker
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	Right hand insert shown.
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	Right hand insert shown.
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.

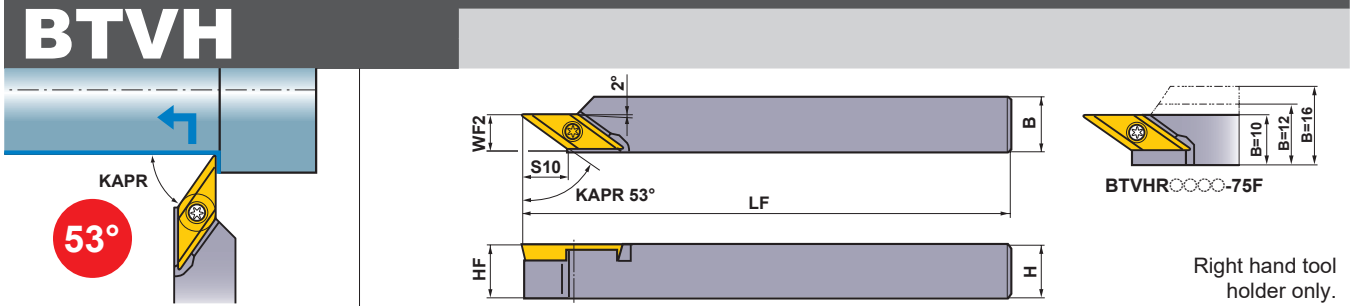
RECOMMENDED CUTTING CONDITIONS

	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



Right hand tool holder only.

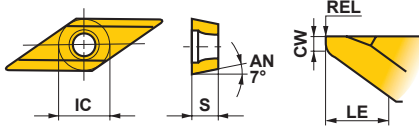
Order Number	Stock	Insert Number	Dimensions (mm)						*  	
	R		H	B	LF	HF	WF2	S10	Clamp Screw	Wrench
BTVHR1010-75	●	BTVT 5375○○○R-B	10	10	120	10	7.5	8.5	NS251	NKY15S
BTVHR1212-75	●		12	12	120	12	7.5	8.5	NS251	NKY15S
BTVHR1616-75	●		16	16	120	16	7.5	8.5	NS251	NKY15S
BTVHR1010-75F	●		10	10	120	10	10.0	8.5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

D023

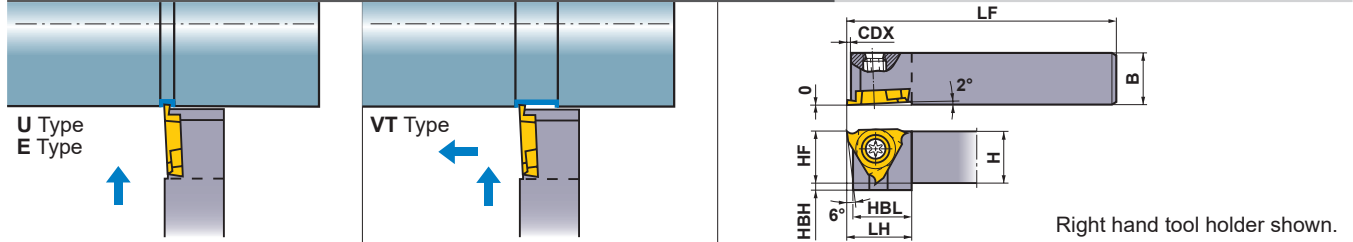
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SMALL TOOLS

GROOVING TOOLS (FOR GANG TYPE) TOOL POSTS

INCH STANDARD

GTAH, GTBH, GTCH



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

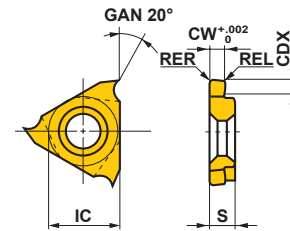
*1 It is not possible to machine depths over **CDX** dimensions(Max. Groove Depth).
For the actual maximum depth that can be machined, check the **CDX** of only the insert.

*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	Dimensions (inch)					Geometry
		VP15TF	CW	CDX*1	RER/L	IC	S	
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.

SMALL TOOLS

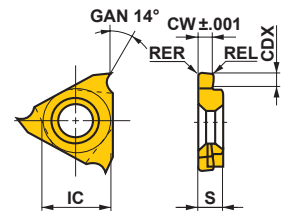
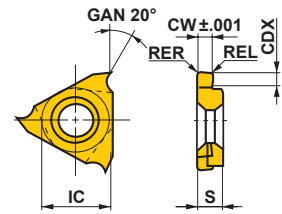
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● : USA Stock

<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	



D

SMALL TOOLS

RECOMMENDED CUTTING CONDITIONS

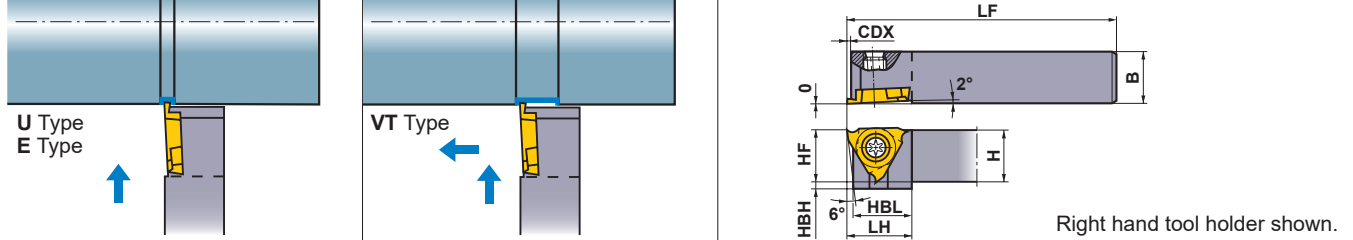
	Work Material	Hardness	Grade	Cutting Speed (SFM)	Feed (IPR)
P	Carbon Steel · Alloy Steel	180HB–280HB	VP15TF/VP15KZ	165–490	.0004–.0035
	Free Cutting Steel	—	VP15TF/VP15KZ	100–590	.0004–.0035
M	Stainless Steel	≤200HB	VP15TF/VP15KZ	165–395	.0008–.002
N	Non-Ferrous Metal	—	VP15TF/VP15KZ	230–755	.0012–.004

SPARE PARTS > M001
TECHNICAL DATA > N001

GROOVING TOOLS (FOR GANG TYPE) TOOL POSTS

METRIC STANDARD

GTAH, GTBH, GTCH



Right hand tool holder shown.

SMALL TOOLS

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

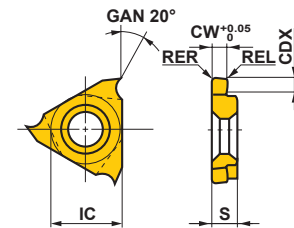
*1 It is not possible to machine depths over CDX dimensions(Max. Groove Depth).
For the actual maximum depth that can be machined, check the CDX of only the insert.

*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	Dimensions (mm)					Geometry
		VP15TF	CW	CDX*1	RER/L	IC	S	
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	



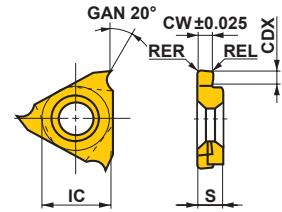
Right hand insert shown.

● : USA Stock ★ : Stocked in Japan

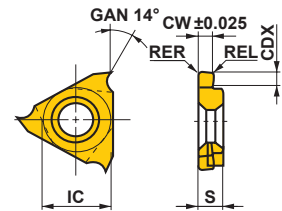
<5 inserts in one case>

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	
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	



Right hand insert shown.



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

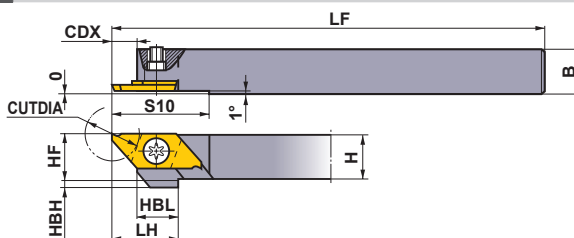
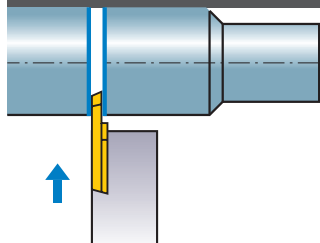
SPARE PARTS > M001
TECHNICAL DATA > N001

D
SMALL TOOLS

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

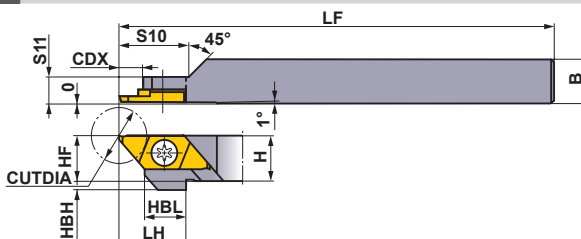
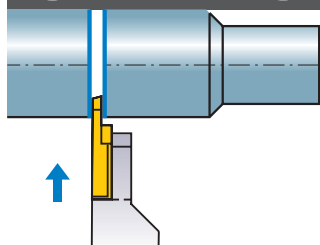
*1 When the width of cutting off (CW) is .028 inch.

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

SMALL TOOLS

D

CTAH-S



Right hand tool holder only.

Order Number	Stock		Insert Number	Dimensions (inch)										CUTDIA (inch)	*2		
	R	L		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

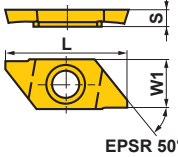
	Work Material	Hardness	Grade	Cutting Speed (SFM)	Feed (IPR)
P	Carbon Steel · Alloy Steel	180HB—280HB	MS6015/VP15TF	165—490	.0008— .0035
	Free Cutting Steel	—	MS6015	100—590	.0004— .0035
M	Stainless Steel	≤200HB	VP15TF	165—395	.0008— .0019
N	Non-Ferrous Metal	—	MS6015	230—755	.0012— .0043

● : 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			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°				CTAT15120V5RR-BX	R	●		.059	.264	.002	.787	.315	.098	.059	.472	
					CTAT20120V5RR-BX	R	●		.079	.264	.002	.787	.315	.098	.059	.472	
				0°		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°					CTAT15120V5RN-BX	N	●		.059	.264	.002	.787	.315	.098	.059	.472
					CTAT20120V5RN-BX	N	●		.079	.264	.002	.787	.315	.098	.059	.472	
				16°		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				
Left Hand (L)	16°	Without Breaker			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	
				16°		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°				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°		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°		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				



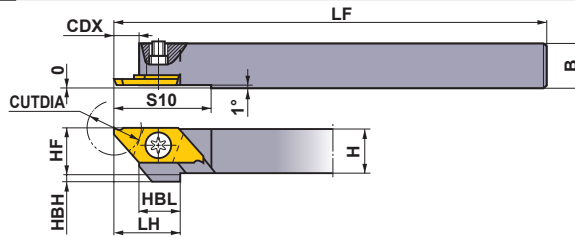
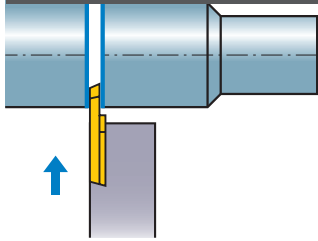
Right hand insert shown.

D
SMALL TOOLS

CUTTING OFF TOOLS (FOR GANG TYPE) TOOL POSTS

METRIC STANDARD

CTAH



Right hand tool holder shown.

Order Number	Stock		Insert Number	Dimensions (mm)									CUTDIA (mm)	*2		
	R	L		H	B	HF	LF	LH	CDX	HBH	HBL	S10		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

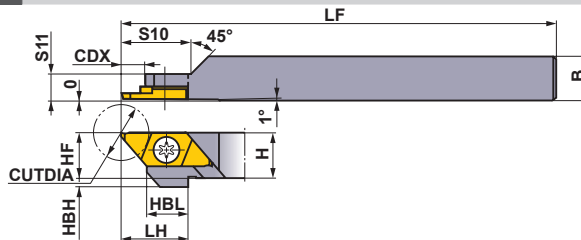
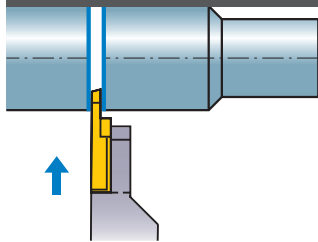
*1 When the width of cutting off (CW) is 0.7 mm.

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

SMALL TOOLS

D

CTAH-S



Right hand tool holder only.

Order Number	Stock		Insert Number	Dimensions (mm)										CUTDIA (mm)	*2		
	R	L		H	B	HF	LF	LH	CDX	HBH	HBL	S10	S11		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

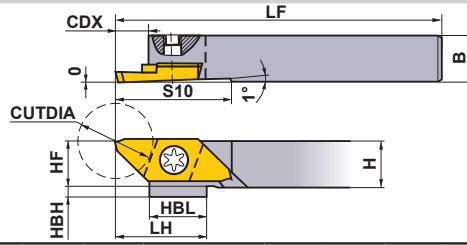
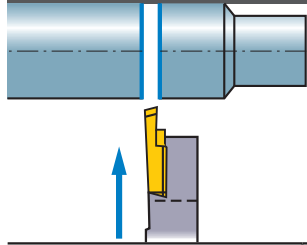
Holder	Setting Geometry	Breaker	Geometry	Insert Geometry	Order Number	Hand	Coated		Dimensions (mm)								CUTDIA (mm)
							VP15TF	MS6015	CW	CDX	RER/L	L	W1	S	LBB		
Right Hand (R)	16°	With Breaker			CTAT07080V5RR-B	R	●		0.7	4.5	0.05	20	8	2.5	1.5	8	
					CTAT10120V5RR-B	R	●	●	1.0	6.7	0.05	20	8	2.5	1.5	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	
	16°				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	
	0°				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	
	0°				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	
	16°				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					
20°	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)	16°	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	
	0°				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	
	16°				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	
	20°			Without Breaker		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			

D
SMALL TOOLS

CUTTING OFF TOOLS (FOR GANG TYPE) TOOL POSTS

INCH STANDARD

CTBH



Right hand tool holder shown.

Order Number	Stock		Insert Number	Dimensions (inch)										CUTDIA (inch)	* Clamp Screw	Wrench
	R	L		H	B	HF	LF	LH	CDX	HBH	HBL	S10				
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

SMALL TOOLS

D

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	
Right Hand (R)					CTBT15160V5RR-B	R	●	●	.059	.362	.002	.984	.370	.138	.630
					CTBT20160V5RR-B	R	●	●	.079	.362	.002	.984	.370	.138	.630
Left Hand (L)		With Breaker			CTBT20160V5RN-B	N	●	●	.079	.362	.002	.984	.370	.138	.630
					CTBT20160V5LL-B	L	●		.079	.362	.002	.984	.370	.138	.630
	CTBT20160V5LN-B				N	●	●	.079	.362	.002	.984	.370	.138	.630	
	CTBT20145V5LR-B				R	●	●	.079	.362	.002	.984	.370	.138	.571	

Right hand insert shown.

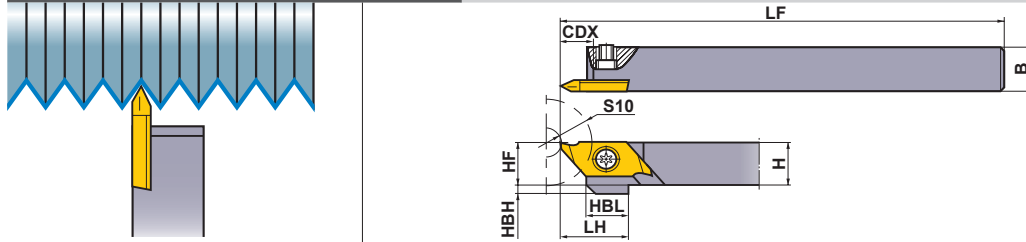
● : USA Stock

<5 inserts in one case>

THREADING TOOLS (FOR GANG TYPE) TOOL POSTS

INCH STANDARD

TTAH



Right hand tool holder shown.

Order Number	Stock		Insert Number	Dimensions (inch)								*		
	R	L		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	Dimensions (inch)					Pitch of Thread (inch) (thread/inch)
							VP15TF	PDX	RE	L	W1	S	
Right Hand (R)			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)
Left Hand (L)		With Breaker	General Purpose (60°)		TTAT6015001RN-B	N	●	.049	.004	.787	.315	.098	.039-.059 (24-18)
					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)
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)
					TTAT55158V5LR-B	R	●	.031	.002	.787	.315	.098	(40-16)
					TTAT55158V5LL-B	L	●	.031	.002	.787	.315	.098	(40-16)

Refer to page D036 for the thread diameter range.

RECOMMENDED CUTTING CONDITIONS

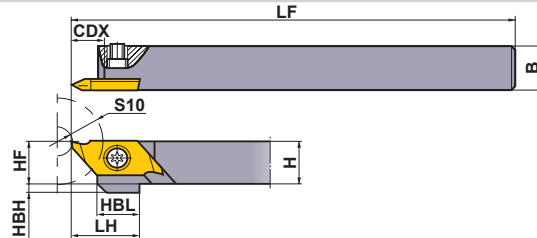
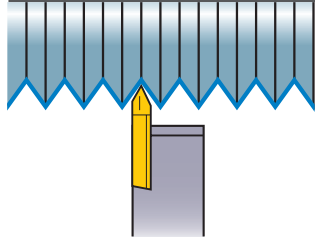
	Work Material	Hardness	Cutting Speed (SFM)		Work Material	Hardness	Cutting Speed (SFM)
P	Carbon Steel · Alloy Steel	180HB-280HB	165-490	M	Stainless Steel	≤200HB	165-395
	Free Cutting Steel	—	100-590	N	Non-Ferrous Metal	—	230-755

● : USA Stock

<5 inserts in one case>

METRIC STANDARD

TTAH



Right hand tool holder shown.

Order Number	Stock		Insert Number	Dimensions (mm)										*	
	R	L		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

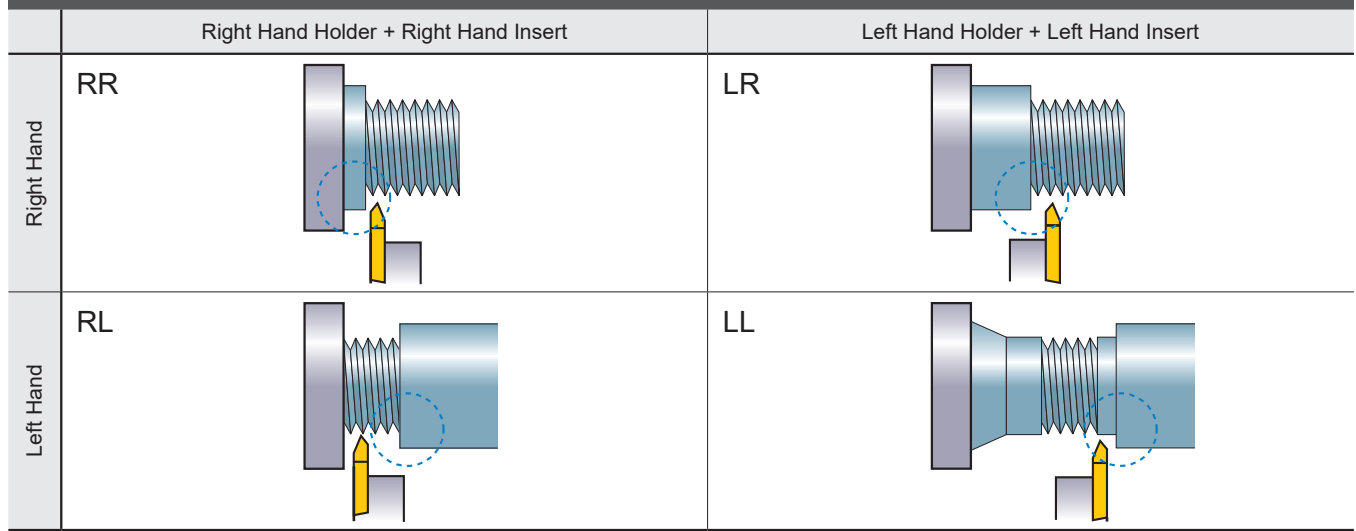
Holder	Setting Geometry	Breaker	Geometry	Insert Geometry	Order Number	Hand	Coated	Dimensions (mm)					Pitch of Thread (mm) (thread/inch)
							VP15TF	PDX	RE	L	W1	S	
Right Hand (R)		With Breaker	General Purpose (60°)		TTAT60075F5RR-B	R	●	0.4	0.05 Flat	20.0	8.0	2.5	0.2–0.75 (80–36)
					TTAT60125V5RR-B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

Refer to page D036 for the thread diameter range.

SPARE PARTS > M001
TECHNICAL DATA > N001

THREADING TOOLS (FOR GANG TYPE) TOOL POSTS

HOLDER APPLICATION



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

D
SMALL TOOLS

THREAD DIAMETER RANGE

Application Range

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

Machining Impossible

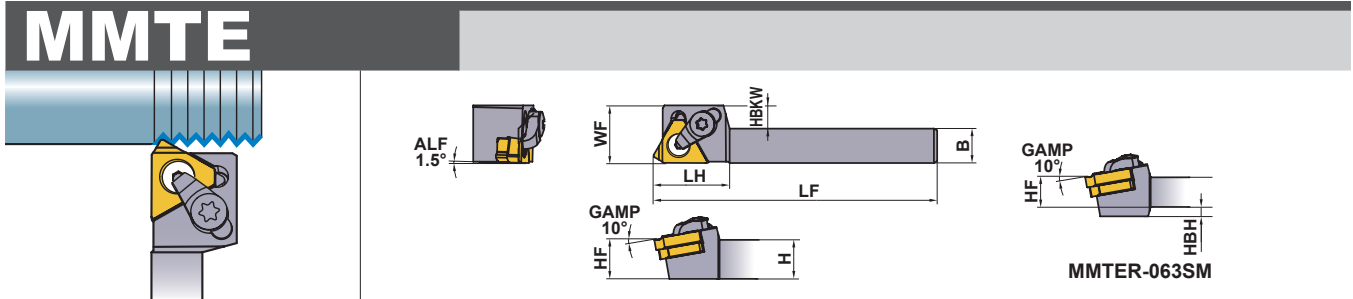
*Metric Thread (60°)

Pitch(thread/inch)	Thread Diameter									Number of Passes
	≥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										
44										
40										
32										5-7
28										
26										
24										
20										
18										6-8
16										

Machining Impossible

*American UN, Whitworth Thread

INCH STANDARD



Order Number	Stock	Insert Number	Dimensions (inch)															
	R		H	B	LF	LH	HBH	HF	HBKW	WF	Clamp Bridge	Clamp Screw	Stop Ring	Shim Screw	Shim	Wrench		
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

D
SMALL TOOLS

● : USA Stock

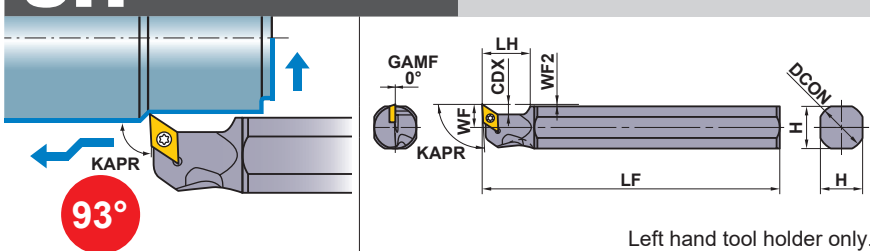
MMTE type inserts > G022–G025
HOW TO SELECT A SHIM > G012, G013


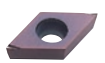
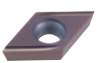
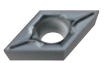


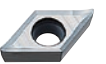
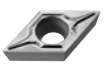
D037

DIMPLE SLEEVE HOLDER (FOR OPPOSITE TOOL POSTS)



INCH STANDARD

SH



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

D
SMALL TOOLS

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

* 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		GAMF 0°		KAPR		WF		CDX		LH		WF2		DCON		Finish		Light		Light	
																SMG/FS	R-F	R-SS	LS		
														(2, 3)	(2, 3)	(2, 3)	(2, 3)				
														Medium	Medium	Non-Ferrous Metal	Light				
Left hand tool holder only.														R-SN	R-SR	AZ	LS-P				
														(2, 3)	(2, 3)	(2, 3)	(2, 3)				

Order Number	Stock L	Insert Number	Dimensions (mm)								*	
			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	●	DCMT DCMW DCET DCGT DCGW		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	●	DCMT DCMW DCET DCGT DCGW		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.

D
SMALL TOOLS

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
		MS6015	100–590	.0004 –.006
	Free Cutting Steel	–	NX2525	165–820
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
		MP9015	65–245	.0016 –.005
Heat Resistant Alloy	–	MP9015	65–245	.0016 –.005

SH type inserts > A164–A171
CBN & PCD inserts > B040, B041, B054

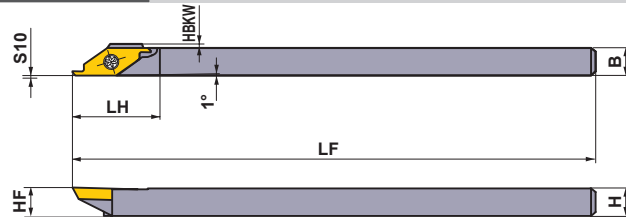
SPARE PARTS > M001
TECHNICAL DATA > N001

D039

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.

SMALL TOOLS

D

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	<p>Without Breaker</p> <p>With Breaker</p> <p>Right hand insert shown.</p>
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	
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	

* APMX : Max. Depth of Cut

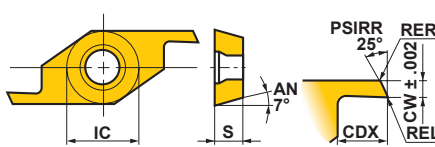
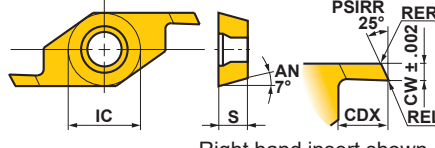
CSVTFXL

Front turning, Copying

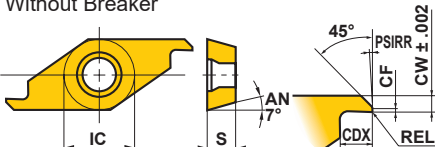
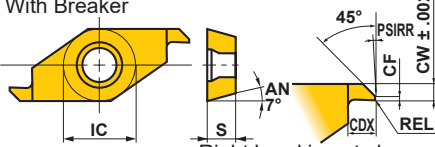
Order Number	Hand	Coated	Dimensions (inch)			APMX (inch)*	Geometry
		VP15KZ	IC	S	CFD		
CSVTFXL	L	●	.250	.094	.028	.118	<p>Without Breaker</p>

* APMX : Max. Depth of Cut

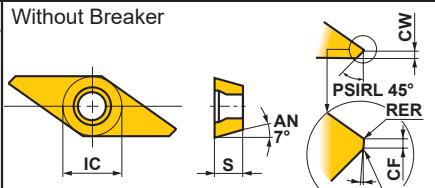
INSERTS

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

* APMX : Max. Depth of Cut

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

* APMX : Max. Depth of Cut

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

* APMX : Max. Depth of Cut

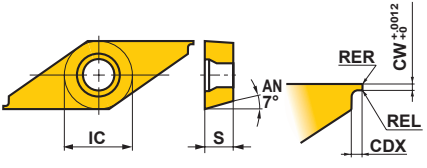
SPARE PARTS > M001
TECHNICAL DATA > N001

FOR RADIAL TYPE TOOL POSTS

INSERTS

CSVTG

Grooving

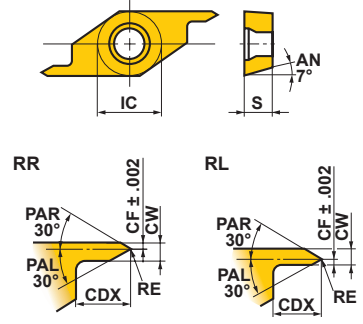
Order Number	Hand	Coated	Dimensions (inch)					APMX* (inch)	Geometry
		VP15KZ	IC	S	RER/L	CDX	CW		
CSVTG02505R	R	●	.250	.094	0	.020	.010	.006	Without Breaker 
CSVTG03005R	R	●	.250	.094	0	.020	.012	.006	
CSVTG03505R	R	●	.250	.094	0	.020	.014	.006	
CSVTG04005R	R	●	.250	.094	0	.020	.016	.006	
CSVTG04510R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

Right hand insert shown.

* APMX : Max. Depth of Cut

CSVTT

Threading

Order Number	Hand	Coated	Pitch (inch)	Dimensions (inch)					Geometry	
		VP15KZ		IC	S	RE	CDX	CW		CF
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	

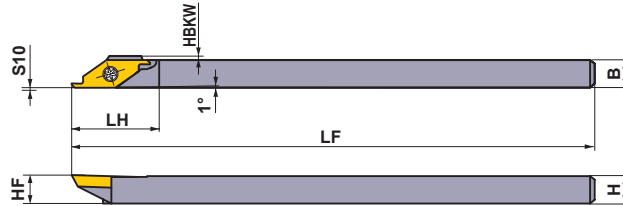
Right hand insert shown.

D

SMALL TOOLS

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 Right hand insert shown.
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 Right hand insert shown.
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	

* 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	<p>Without Breaker</p>	
CSVTC0750R	R	●	6.35	2.38	0	2.5	0.7	2.0		
CSVTC0750L	L	●	6.35	2.38	0	2.5	0.7	2.0		
CSVTC0850R	R	●	6.35	2.38	0	2.5	0.8	2.0		
CSVTC0850L	L	●	6.35	2.38	0	2.5	0.8	2.0		
CSVTC0950R	R	●	6.35	2.38	0	2.5	0.9	2.0		
CSVTC1060R	R	●	6.35	2.38	0	3.0	1.0	2.5		
CSVTC1060L	L	●	6.35	2.38	0	3.0	1.0	2.5		
CSVTC1360R	R	●	6.35	2.38	0	3.0	1.3	2.5		
CSVTC1360L	L	●	6.35	2.38	0	3.0	1.3	2.5		
CSVTC1560R	R	●	6.35	2.38	0	3.0	1.5	2.5		
CSVTC1560L	L	●	6.35	2.38	0	3.0	1.5	2.5		
CSVTC0640R-B	R	●	6.35	2.38	0	2.0	0.6	1.5		<p>With Breaker</p>
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		

* 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	<p>Without Breaker</p>	
CSVTB10AL	L	●	6.35	2.38	0	2.5	1	0.3	5°	2.0		
CSVTB10BR	R	●	6.35	2.38	0	2.5	1	0.3	2°	2.0		
CSVTB10CR	R	●	6.35	2.38	0	2.5	1	0.15	2°	2.0		
CSVTB10DR	R	●	6.35	2.38	0	2.5	1	0.15	5°	2.0		
CSVTB12AR	R	●	6.35	2.38	0	2.5	1.2	0.3	5°	2.0		
CSVTB14AR	R	●	6.35	2.38	0	2.5	1.4	0.3	5°	2.0		
CSVTB10AR-B	R	●	6.35	2.38	0	2.5	1	0.3	5°	2.0		<p>With Breaker</p>
CSVTB10BR-B	R	●	6.35	2.38	0	2.5	1	0.3	2°	2.0		
CSVTB10CR-B	R	●	6.35	2.38	0	2.5	1	0.15	2°	2.0		
CSVTB10DR-B	R	●	6.35	2.38	0	2.5	1	0.15	5°	2.0		
CSVTB12AR-B	R	●	6.35	2.38	0	2.5	1.2	0.3	5°	2.0		
CSVTB14AR-B	R	●	6.35	2.38	0	2.5	1.4	0.3	5°	2.0		

* APMX : Max. Depth of Cut

CSVTBXL

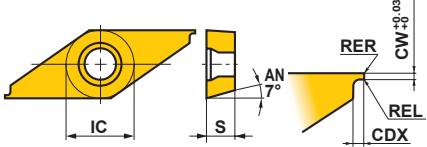
Back turning, Copying

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

* APMX : Max. Depth of Cut

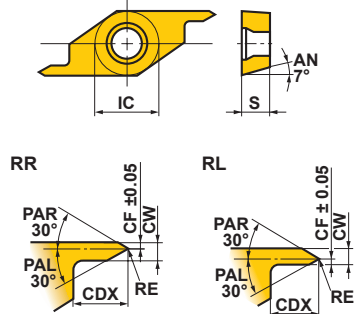
● : USA Stock

INSERTS

		Grooving								
Order Number	Hand	Coated	Dimensions (mm)					APMX* (mm)	Geometry	
		VP15KZ	IC	S	RER/L	CDX	CW			
CSV TG02505R	R	●	6.35	2.38	0	0.5	0.25	0.15	Without Breaker 	
CSV TG03005R	R	●	6.35	2.38	0	0.5	0.3	0.15		
CSV TG03505R	R	●	6.35	2.38	0	0.5	0.35	0.15		
CSV TG04005R	R	●	6.35	2.38	0	0.5	0.4	0.15		
CSV TG04510R	R	●	6.35	2.38	0	1.0	0.45	0.45		
CSV TG05010R	R	●	6.35	2.38	0	1.0	0.5	0.45		
CSV TG05510R	R	●	6.35	2.38	0	1.0	0.55	0.45		
CSV TG06010R	R	●	6.35	2.38	0	1.0	0.6	0.45		
CSV TG06510R	R	●	6.35	2.38	0	1.0	0.65	0.45		
CSV TG07010R	R	●	6.35	2.38	0	1.0	0.7	0.45		
CSV TG07520R	R	●	6.35	2.38	0	2.0	0.75	1.4		
CSV TG07520L	L	●	6.35	2.38	0	2.0	0.75	1.4		
CSV TG08020R	R	●	6.35	2.38	0	2.0	0.8	1.4		
CSV TG08520R	R	●	6.35	2.38	0	2.0	0.85	1.4		
CSV TG09020R	R	●	6.35	2.38	0	2.0	0.9	1.4		
CSV TG09520R	R	●	6.35	2.38	0	2.0	0.95	1.4		
CSV TG09520L	L	●	6.35	2.38	0	2.0	0.95	1.4		
CSV TG10020R	R	●	6.35	2.38	0	2.0	1.0	1.4		
CSV TG11030R	R	●	6.35	2.38	0	3.0	1.1	2.6		
CSV TG12030R	R	●	6.35	2.38	0	3.0	1.2	2.6		
CSV TG12030L	L	●	6.35	2.38	0	3.0	1.2	2.6		
CSV TG13030R	R	●	6.35	2.38	0	3.0	1.3	2.6		
CSV TG14030R	R	●	6.35	2.38	0	3.0	1.4	2.6		
CSV TG15030R	R	●	6.35	2.38	0	3.0	1.5	2.6		

Right hand insert shown.

* APMX : Max. Depth of Cut

		Threading								
Order Number	Hand	Coated	Pitch (mm)	Dimensions (mm)					CF	Geometry
		VP15KZ		IC	S	RE	CDX	CW		
CSV TT60050RR	R	●	0.2—0.5	6.35	2.38	0.03	3.0	1.0	0.35	Without Breaker General Purpose (60°) 
CSV TT60050RL	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

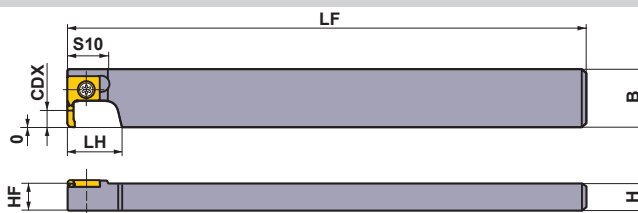
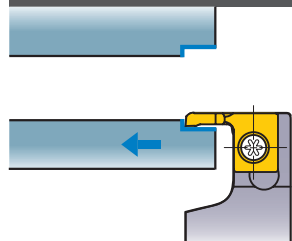
D
SMALL TOOLS

BORING TOOLS (FOR GANG TYPE) TOOL POSTS

METRIC STANDARD

SBAH

Without offset



Right hand tool holder only.

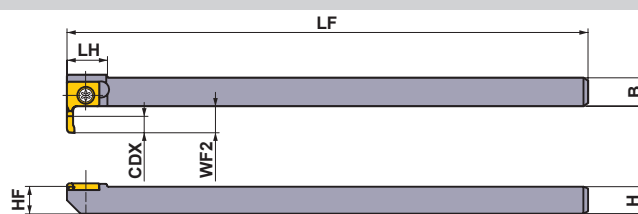
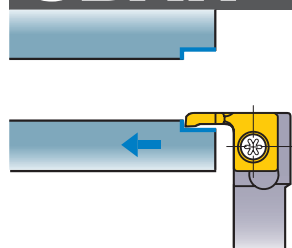
Order Number	Stock	Insert Number	Dimensions (mm)							CDX (mm)	*1 DMIN (mm)	*2 	
	R		H	B	LF	HF	LH	S10	Clamp Screw				
SBAHR1022	●	SBAT	3080 \odot L-L-B	10	21.5	120	10	17.5	15	8	3	NS402W	NKY15S
SBAHR1222	●		3080 \odot L-L-B	12	21.5	120	12	17.5	15	8	3	NS403W	NKY15S

*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 		
	R		H	B	LF	HF	WF2	LH					Clamp Screw
SBAHR1010	●	SBAT	3080 \odot 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

Memo

A series of horizontal dotted lines for writing.