



HSK-T TOOLS

OUTLINE OF HSK-T TOOLS..... 630 HSK-T TOOL STANDARDS..... 632

★Arranged by Alphabetical order					
DCLN	637	MMTE/MMTEN	644	PDJN/DDJN	634
DDJN	639	MT	646	PDNN/DDNN	638
H-TH	648	PCLN/DCLN	635	PRGC/PRDC	640
MG	642	PCMN/DCMN	636	SVPB/SVVB	641

OUTLINE OF HSK-T TOOLS

HSK-T System

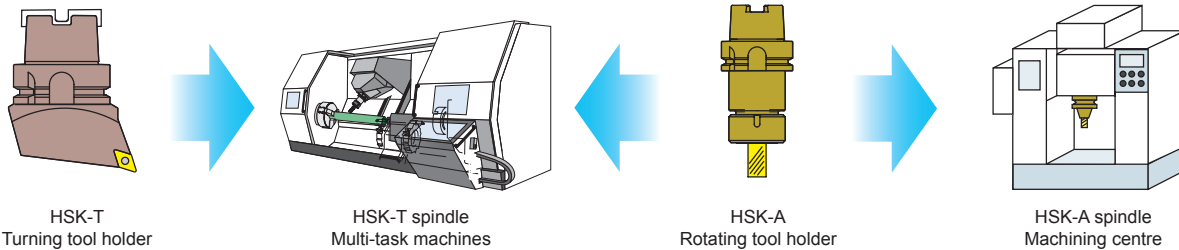
HSK-T is a new HSK system designed for turning on multi-task machines that are compatible with HSK-A type (ISO standard: ISO12164-1:2001). The HSK system was developed by a consortium of 17 Japanese manufacturers and registered in ISO standard (ISO12164-3:2008) under the name HSK-T type in 2008 and JIS standard (JIS B6064-3) in 2013.



High accuracy cutting edge positioning

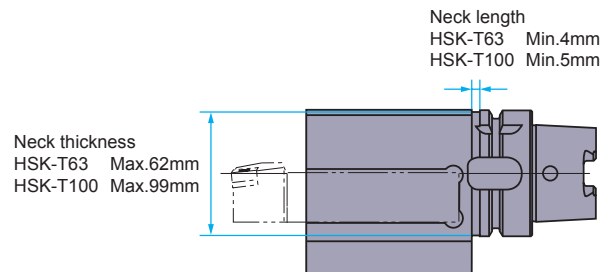
The HSK-T type has a closer tolerance between the spindle key and tool holder keyway than the HSK-A type. This results in higher cutting edge positional accuracies. For milling, the conventional HSK-A type tools can be still used.

Compatible with both multi-task machines and machining centres



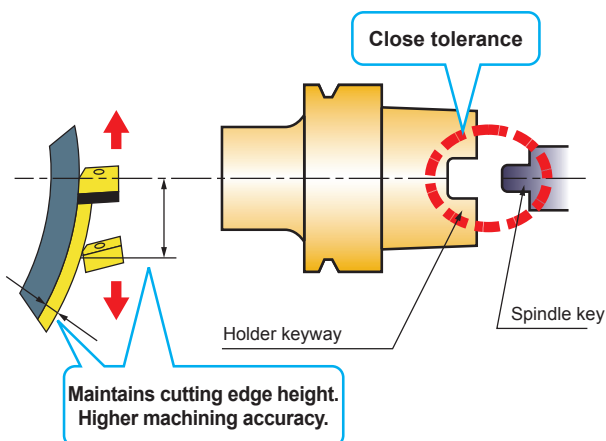
*Note

Short neck length from the flange with thick body of the HSK-T turning tool as shown in the figure at the left. Because there are machines which cannot be mounted depending on the ATC specifications of the multi-task machine (HSK-A type), please check beforehand. Also be careful of interference of the magazine with adjacent tools.



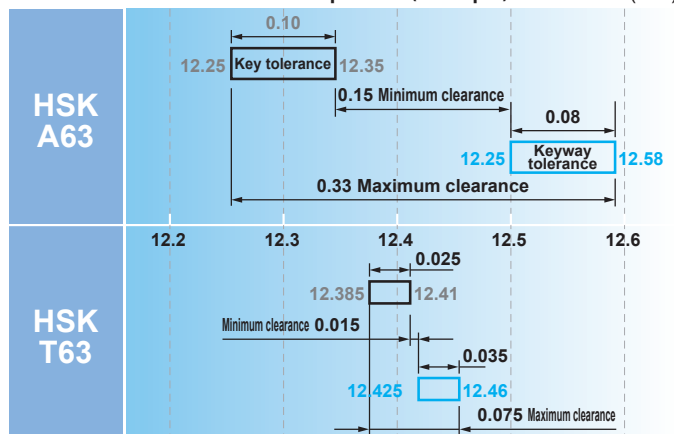
HSK-T turning tool standard (Example)

Improved keyway tolerance



Tolerance comparison (Example)

(mm)

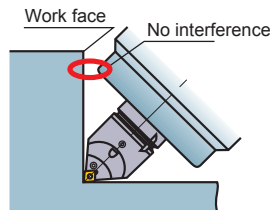


High accuracy and rigidity HSK-T type tooling system developed for use on multi-task machines.

Straight type tools suitable for use on multi-task machines

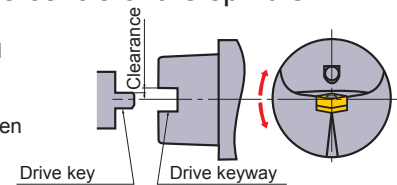
Avoid workpiece interference with improved tool accessibility.

By tilting the machines B spindle (main axis of the tool) at 45 deg, interference between the spindle, holder, workpiece and chuck can be avoided.



Improve centreline height by positioning the cutting edge at the centre of the spindle.

Increased stability and accuracy can be achieved because the cutting edge centreline height is not affected by the gap between the spindle and the key.



New one-action type double clamp series

The double clamp mechanism offers high rigidity, accuracy and reliability that ensures secure insert clamping. There fore making it suitable turning of difficult to machine materials such as stainless and heat resistant alloys.



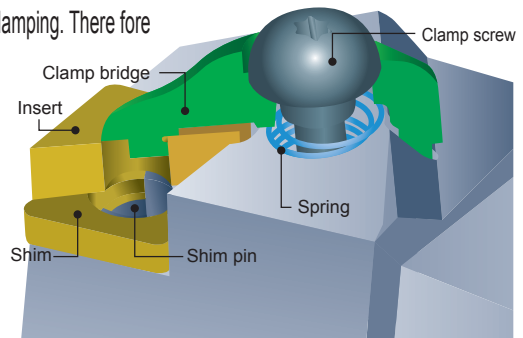
Handed type for turning and facing



Straight type for turning and facing



For turning, facing and boring



3 on 1 tool for process and tool consolidation

3 turning inserts of the same geometry can be installed on a single tool.

The same type of inserts can be installed for quick change with spare tools.

Different types of inserts can be installed for different applications (roughing, semi finishing and finishing)

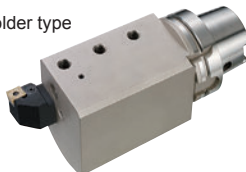
Inserts in different grade types can be installed to cover various kinds of workpieces.



New HSK-T100 size for large workpieces

Larger tool holder sizes for high efficiency machining.

Square shank holder type



Boring bar / Drill type

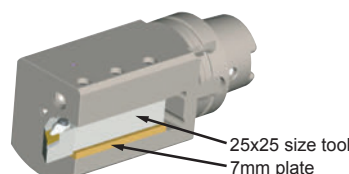


Sleeve



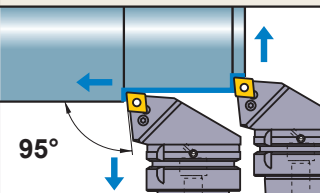
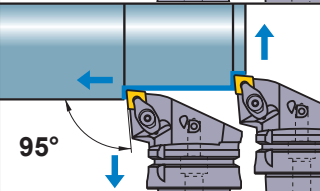
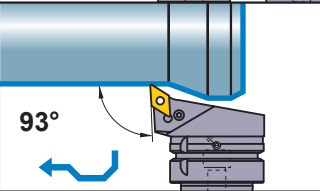
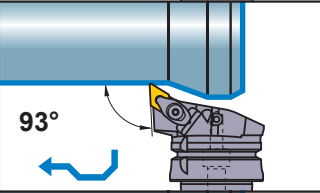
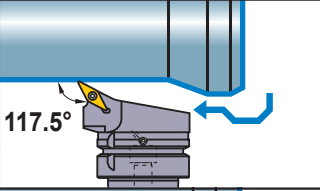
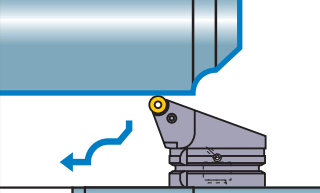
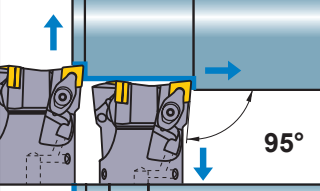
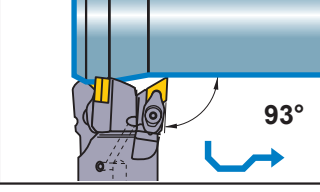
A single tool can be used with different sized tool holders.

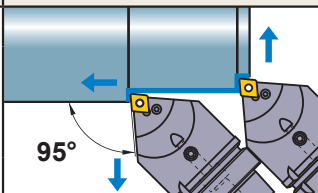
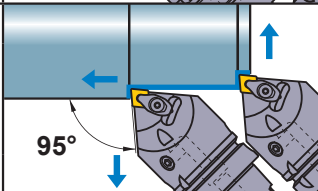
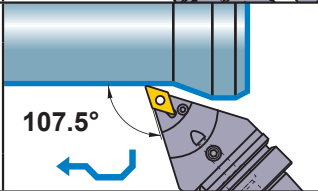
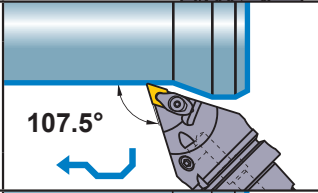
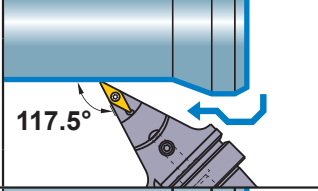
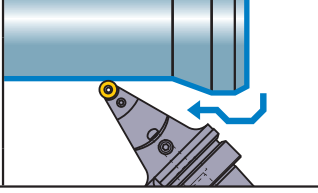
- Available for use with JIS B4126 (ISO 5610) 32x32 and 32x25 tools.
- Possible to fit a 25x25 tool by using a 7mm plate.
- *Please prepare a plate on your own.



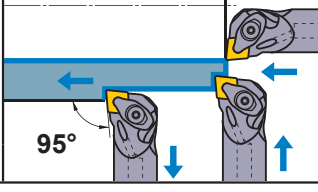
CLASSIFICATION OF HSK-T TOOLS

EXTERNAL TURNING • FACING • COPYING

Order Number	Cutting Mode
H63TH-PCLNR/L-DX12  ➡ 635	 95°
H63TH-DCLNR/L-DX12  ➡ 635	 95°
H63TH-PDJNR/L-DX15  ➡ 634	 93°
H63TH-DDJNR/L-DX15  ➡ 634	 93°
H63TH-SVPBR/L-DX16  ➡ 641	 117.5°
H63TH-PRGCR/L-DX12  ➡ 640	 ➡
H63TH-DCLNL-L12-3  ➡ 637	 95°
H63TH-DDJNL-L15-3  ➡ 639	 93°

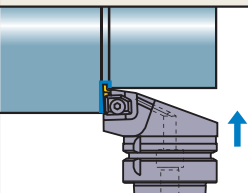
Order Number	Cutting Mode
H63TH-PCMNN-H/L12  ➡ 636	 95°
H63TH-DCMNN-H/L12  ➡ 636	 95°
H63TH-PDNNN-H/L15  ➡ 638	 107.5°
H63TH-DDNNN-H/L15  ➡ 638	 107.5°
H63TH-SVVBH-H/L16  ➡ 641	 117.5°
H63TH-PRDCN-H/L12  ➡ 640	 ➡

EXTERNAL TURNING • FACING • BORING

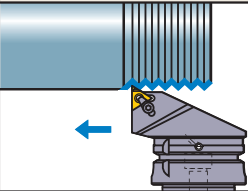
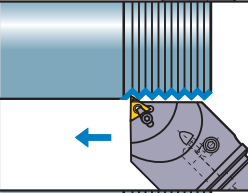
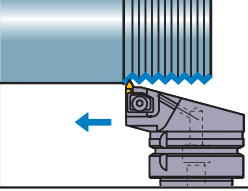
Order Number	Cutting Mode
H63TH-A25KDCLNR/L12 H63TH-A32LDCLNR/L12  ➡ 637	 95°

CLASSIFICATION OF HSK-T TOOLS

GROOVING

Order Number	Cutting Mode
H63TH-MGHR/L-DX43	
	➡ 642

THREADING

Order Number	Cutting Mode
H63TH-MMTER-DX16	
	➡ 644
H63TH-MMTENR-H/L16	
	➡ 644
H63TH-MTHR/L-DX43	
	➡ 646

EXTERNAL TURNING TOOL HOLDERS

Order Number	Holder
H63TH-EV2525R/L-112	
	➡ 648
H100TH-EV3232R/L-180	
	➡ 649
H63TH-EN2525R/L-115	
*1	➡ 650
H100TH-EN3232R/L-130	
*1	➡ 650
H63TH-EV2020R/L-105-3	
	➡ 651

BORING BAR HOLDERS

Order Number	Holder
H63TH-B	
	➡ 651
H100TH-B	
	➡ 652
SL32-90 (Sleeve)	
*2	➡ 652

*1 Mitsubishi Materials is licensed for production and distribution of these tools from MORI SEIKI CO., LTD under Patent No.3720202.

*2 The SL32-90 sleeve is only for use with H100TH-B32-135.

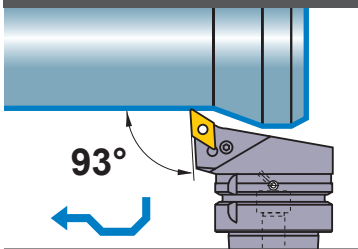
PDJN/DDJN

Product Information

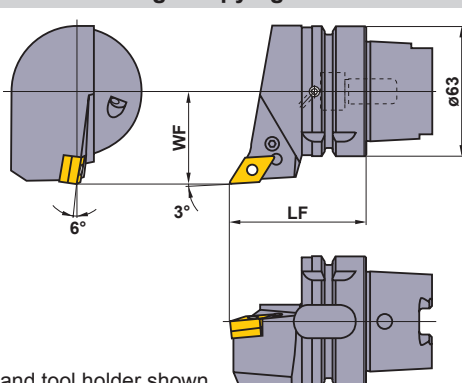
Spare Parts >> 1927
ISO13399 Property >> 1966

Technical Info >> 1971

PDJN



External turning • Copying



Right hand tool holder shown.

Finish	Light	Medium
FP (15)	LP (15)	MP (15)
Medium MK (15)	Medium – Rough RP (15)	Stainless MS (15)
G Class R/L (15)	CBN (15)	

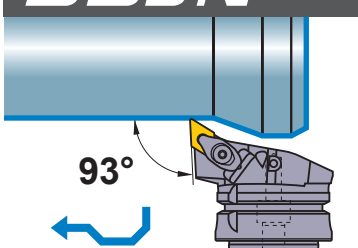
Order Number	Stock		Insert Number	Dimensions (mm)		*3 WT (kg)	*2				*1	
	R	L		LF	WF		Shim	Shim Pin	Clamp Lever	Clamp Screw	Wrench	
H63TH-PDJNR/L-DX15	●	●	DNM DNG NP-DN	1504	65 45	1.2	LLSDN43 (LLSDN42)	LLP14	LLCL24	LLCS108	HKY30R	

*1 Clamp Torque (N • m) : LLCS108=3.3

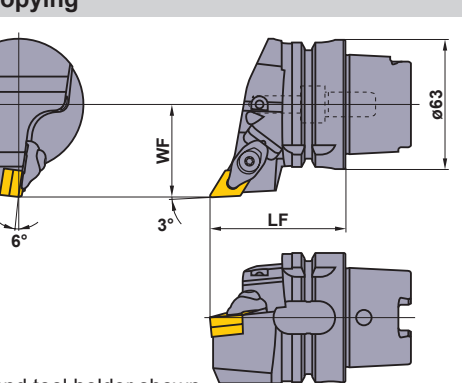
*2 Please use shim no. LLSDN42 with 6.35mm thick inserts. When using 6.35mm thick inserts, the shim should be ordered separately.

*3 WT : Tool Weight

DDJN



External turning • Copying **DOUBLE CLAMP type**



Right hand tool holder shown.

Finish	Light	Medium
FP (15)	LP (15)	MP (15)
Medium MK (15)	Medium – Rough RP (15)	Stainless MS (15)
G Class R/L (15)	CBN (15)	

Order Number	Stock		Insert Number	Dimensions (mm)		*3 WT (kg)	*2					*1	
	R	L		LF	WF		Shim	Shim Pin	Clamp Bridge	Spring	Clamp Screw	Wrench	
H63TH-DDJNR/L-DX15	●	●	DNM DNG NP-DN	1504	65 45	1.2	LLSDN43 (LLSDN42)	LLP24	DCK2613	DCS1	DC0621T	TKY20F	

*1 Clamp Torque (N • m) : DC0621T=5.0

*2 Please use shim no. LLSDN42 with 6.35mm thick inserts. When using 6.35mm thick inserts, the shim should be ordered separately.

*3 WT : Tool Weight

PCLN/DCLN

Product Information

Spare Parts >> 1927
ISO13399 Property >> 1966

Technical Info >> 1971

PCLN

External turning • Facing

Right hand tool holder shown.

Finish	Light	Medium
FP  (12)	LP  (12)	MP  (12)
Medium MK  (12)	Medium Standard  (12)	Medium – Rough RP  (12)
Stainless MS  (12)	CBN  (12)	

Order Number	Stock		Insert Number	Dimensions (mm)		*2 WT (kg)					
	R	L		LF	WF		Shim	Shim Pin	Clamp Lever	Clamp Screw	Wrench
H63TH-PCLNR/L-DX12	●	●	CNM CNG NP-CN	1204	65 45	1.3	LLSCN42	LLP14	LLCL14	LLCS108	HKY30R

*1 Clamp Torque (N • m) : LLCS108=3.3

*2 WT : Tool Weight

● : Inventory maintained in Japan.

DCLN

External turning • Facing

DOUBLE CLAMP type

Right hand tool holder shown.

Finish	Light	Medium
FP  (12)	LP  (12)	MP  (12)
Medium MK  (12)	Medium Standard  (12)	Medium – Rough RP  (12)
Stainless MS  (12)	CBN  (12)	

Order Number	Stock		Insert Number	Dimensions (mm)		*2 WT (kg)						
	R	L		LF	WF		Shim	Shim Pin	Clamp Bridge	Spring	Clamp Screw	Wrench
H63TH-DCLNR/L-DX12	●	●	CNM CNG NP-CN	1204	65 45	1.3	LLSCN42	LLP14	DCK2613	DCS1	DC0621T	TKY20F

*1 Clamp Torque (N • m) : DC0621T=5.0

*2 WT : Tool Weight

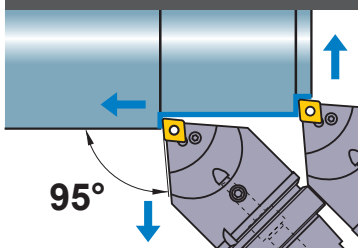
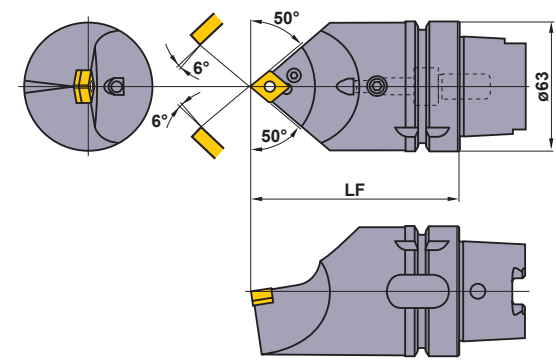
● : Inventory maintained in Japan.

PCMN/DCMN

Product Information

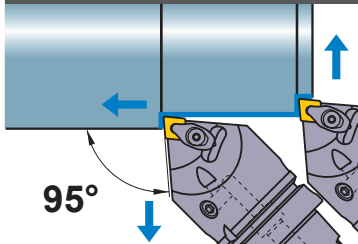
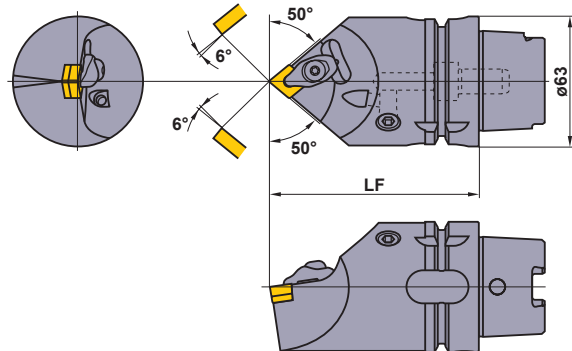
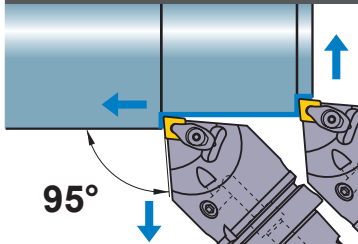
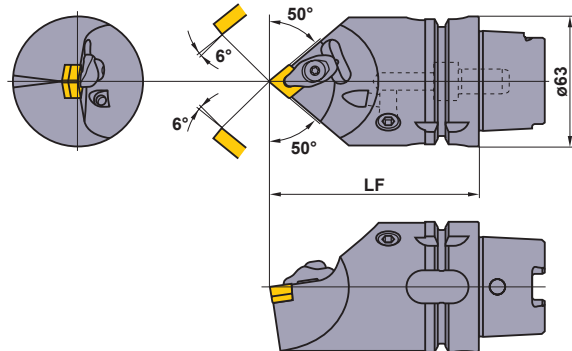
 Spare Parts >> 1927
 ISO13399 Property >> 1966

Technical Info >> 1971

PCMN				External turning • Facing							Finish			Light			Medium		
											FP	LP	MP						
																			
											(12)	(12)	(12)						
											Medium	Medium	Medium – Rough						
											MK	Standard	RP						
											(12)	(12)	(12)						
											Stainless	CBN							
											MS								
																			
											(12)	(12)							
Order Number	Stock	Insert Number	Dimensions (mm)	*2 WT (kg)															
H63TH-PCMNN-H12	●	CNM	1204	100	1.7	LLSCN42	LLP14	LLCL14	LLCS108	HGM-PT1/8	HKY30R								
H63TH-PCMNN-L12	●	CNG		140	2.7	LLSCN42	LLP14	LLCL14	LLCS108	HGM-PT1/8	HKY30R								
		NP-CN																	

*1 Clamp Torque (N • m) : LLCS108=3.3

*2 WT : Tool Weight

DCMN				External turning • Facing		DOUBLE CLAMP type		Finish		Light		Medium	
								FP	LP	MP			
													
								(12)	(12)	(12)			
								Medium	Medium	Medium – Rough			
								MK	Standard	RP			
													
(12)	(12)	(12)											
								Stainless	CBN				
								MS					
													
(12)	(12)												
Order Number	Stock	Insert Number	Dimensions (mm)	*2 WT (kg)						*1 			
H63TH-DCMNN-H12	●	CNM	1204	100	1.7	LLSCN42	LLP14	DCK2613	DCS1	DC0621T	TKY20F		
H63TH-DCMNN-L12	●	CNG		140	2.7	LLSCN42	LLP14	DCK2613	DCS1	DC0621T	TKY20F		
		NP-CN											

*1 Clamp Torque (N • m) : DC0621T=5.0

*2 WT : Tool Weight

DCLN

Product Information

Spare Parts >> 1927
ISO13399 Property >> 1966

Technical Info >> 1971

DCLN



External turning • Facing

DOUBLE CLAMP type





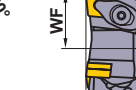
WF

5°

LF



ø63



Left hand tool holder only.

Order Number	Stock	Insert Number		Dimensions (mm)		*2 WT (kg)					 *1	
	L			LF	WF		Shim	Shim Pin	Clamp Bridge	Spring	Clamp Screw	Wrench
H63TH-DCLNL-L12-3	●	 CNMG120408  CNGP120408  CNCN120408		140	30	2.2	LLSCN42	LLP14	DCK2613	DCS1	DC0621T	TKY20F

*1 Clamp Torque (N・m) : DC0621T=5.0

*2 WT : Tool Weight

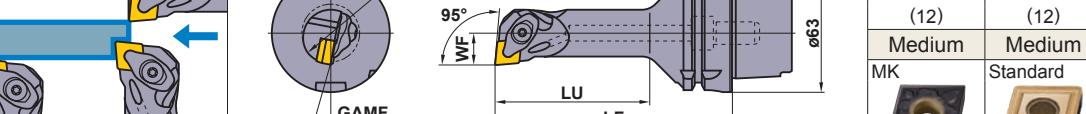
● : Inventory maintained in Japan.

DCLN

External turning • Facing • Boring

DOUBLE CLAMP type

Finish	Light	Medium
FP  (12)	LP  (12)	MP  (12)
Medium MK  (12)	Medium Standard  (12)	Medium-Rough RP  (12)
Stainless MS  (12)	CBN  (12)	



Right hand tool holder shown.

Order Number	Stock		Insert Number	Dimensions (mm)				DMIN (mm)	WT*2 (kg)					 *1		
	R	L		LF	LU	WF	GAMF									Shim
H63TH-A25KDCLNR/L12	●	●	  	1204 	125	82	17	11°	32	1.1	LLSCP42	LLP14	DCK2613	DCS1	DC0621T	TKY20F
H63TH-A32LDCLNR/L12	●	●			140	100	22	13°	40	1.4	LLSCN42	LLP14	DCK2613	DCS1	DC0621T	TKY20F

*1 Clamp Torque (N・m) : DC0621T=5.0

*2 WT : Tool Weight

● : Inventory maintained in Japan.

PDNN/DDNN

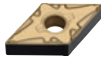
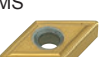
Product Information

Spare Parts >> 1927
ISO13399 Property >> 1966

Technical Info >> 1971

PDNN

External turning • Copying

Finish	Light	Medium
FP  (15)	LP  (15)	MP  (15)
Medium MK  (15)	Medium-Rough RP  (15)	Stainless MS  (15)
G Class R/L  (15)	CBN  (15)	

Order Number	Stock	Insert Number	Dimensions (mm)	*3 WT (kg)	*2					
					Shim	Shim Pin	Clamp Lever	Clamp Screw	Plug	Wrench
H63TH-PDNNN-H15	●	DNM DNG 1504	100	1.6	LLSDN43 (LLSDN42)	LLP14	LLCL24	LLCS108	HGM-PT1/8	HKY30R
H63TH-PDNNN-L15	●	NP-DNA	140	2.5	LLSDN43 (LLSDN42)	LLP14	LLCL24	LLCS108	HGM-PT1/8	HKY30R

*1 Clamp Torque (N • m) : LLCS108=3.3

*2 Please use shim no. LLSDN42 with 6.35mm thick inserts. When using 6.35mm thick inserts, the shim should be ordered separately.

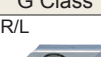
*3 WT : Tool Weight

● : Inventory maintained in Japan.

DDNN

External turning • Copying

DOUBLE CLAMP type

Finish	Light	Medium
FP  (15)	LP  (15)	MP  (15)
Medium MK  (15)	Medium-Rough RP  (15)	Stainless MS  (15)
G Class R/L  (15)	CBN  (15)	

Order Number	Stock	Insert Number	Dimensions (mm)	*3 WT (kg)	*2					
					Shim	Shim Pin	Clamp Bridge	Spring	Clamp Screw	Wrench
H63TH-DDNNN-H15	●	DNM DNG 1504	100	1.6	LLSDN43 (LLSDN42)	LLP24	DCK2613	DCS1	DC0621T	TKY20F
H63TH-DDNNN-L15	●	NP-DNA	140	2.5	LLSDN43 (LLSDN42)	LLP24	DCK2613	DCS1	DC0621T	TKY20F

*1 Clamp Torque (N • m) : DC0621T=5.0

*2 Please use shim no. LLSDN42 with 6.35mm thick inserts. When using 6.35mm thick inserts, the shim should be ordered separately.

*3 WT : Tool Weight

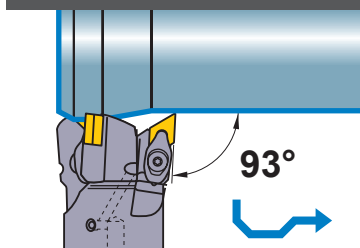
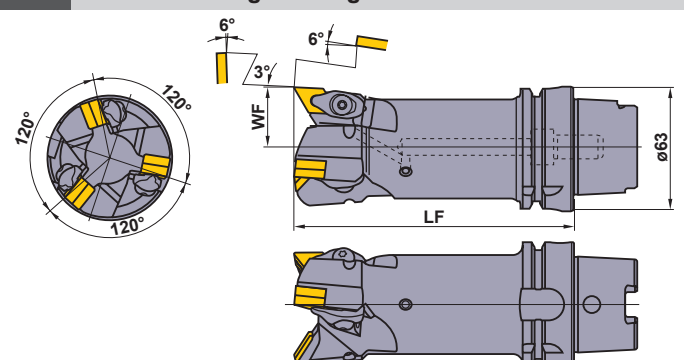
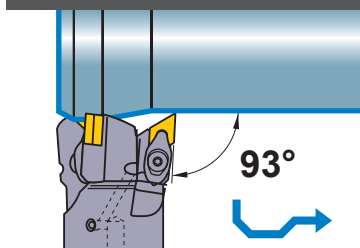
● : Inventory maintained in Japan.

DDJN

Product Information

Spare Parts >> 1927
ISO13399 Property >> 1966

Technical Info >> 1971

DDJN		External turning • Facing				DOUBLE CLAMP type				Finish	Light	
										FP	LP	
										(15)	(15)	
										Medium	Medium	
										MP	MK	
										(15)	(15)	
										Medium – Rough	Stainless	
										RP	MS	
										(15)	(15)	
Left hand tool holder only.												
Order Number	Stock	Insert Number		Dimensions (mm)		*3 WT (kg)	*2					
	L			LF	WF		Shim	Shim Pin	Clamp Bridge	Spring	Clamp Screw	Wrench
H63TH-DDJNL-L15-3	●	DNM DNG NP-DNCA	1504	140	30	2.2	LLSDN43 (LLSDN42)	LLP24	DCK2613	DCS1	DC0621T	TKY20F

*1 Clamp Torque (N • m) : DC0621T=5.0

*2 Please use shim no. LLSDN42 with 6.35mm thick inserts. When using 6.35mm thick inserts, the shim should be ordered separately.

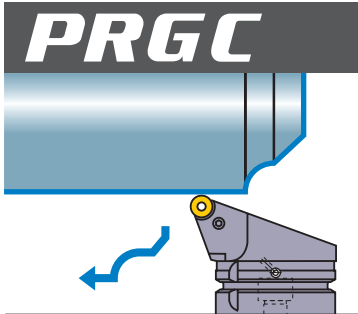
*3 WT : Tool Weight

PRGC/PRDC

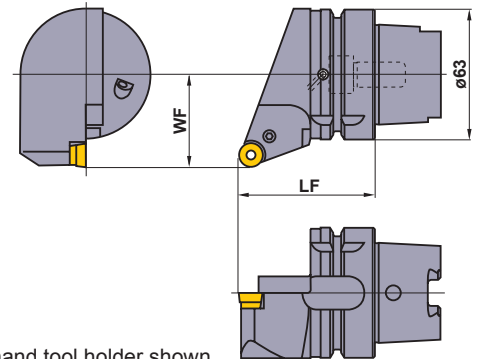
Product Information

Spare Parts >> 1927
ISO13399 Property >> 1966

Technical Info >> 1971



External turning • Facing • Copying



Right hand tool holder shown.

Medium



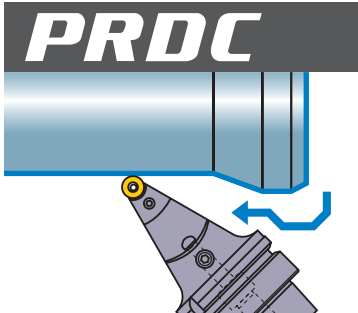
(12)

Order Number	Stock		Insert Number		Dimensions (mm)		*2 WT (kg)				*1 	
	R	L			LF	WF		Shim	Shim Pin	Clamp Lever	Clamp Screw	Wrench
H63TH-PRGCR/L-DX12	●	●	RCMX	1204M0	65	45	1.2	LLSRN123	LLP13	LLCL112	LLCS106	HKY25R

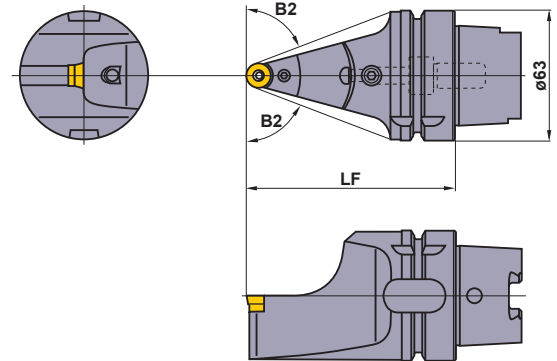
*1 Clamp Torque (N • m) : LLCS106=2.2

*2 WT : Tool Weight

● : Inventory maintained in Japan.



External turning • Facing • Copying



Medium



(12)

Order Number	Stock	Insert Number		Dimensions (mm)		*2 WT (kg)				 *1		
				LF	B2		Shim	Shim Pin	Clamp Lever	Clamp Screw	Plug	Wrench
H63TH-PRDCN-H12	●	RCMX	1204M0	100	69°	1.4	LLSRN123	LLP13	LLCL112	LLCS106	HGM-PT1/8	HKY25R
H63TH-PRDCN-L12	●			140	75°	2.3	LLSRN123	LLP13	LLCL112	LLCS106	HGM-PT1/8	HKY25R

*1 Clamp Torque (N • m) : LLCS106=2.2

*2 WT : Tool Weight

● : Inventory maintained in Japan.

RECOMMENDED CUTTING CONDITIONS

	Work Material	Hardness	Cutting Mode	Breaker	Grade	Cutting Speed (m/min)
P	Mild Steel	≤180HB	Medium Cutting	Standard	UE6110	205—350
	Carbon Steel • Alloy Steel	180HB—350HB	Medium Cutting	Standard	UE6110	150—260
M	Stainless Steel	≤200HB	Medium Cutting	Standard	US735	70—130

SVPB/SVVB

Product Information

Spare Parts >> 1927
ISO13399 Property >> 1966

Technical Info >> 1971

SVPB

Facing • Copying

Right hand tool holder shown.

Finish		Light
R/L-F	SV	
(16)	(16)	
Medium		Medium
MV	MP	
(16)	(16)	
CBN		
(16)		

Order Number	Stock		Insert Number		Dimensions (mm)		*2 WT (kg)				
	R	L			LF	WF		Shim	Shim Pin	Clamp Screw	Wrench
H63TH-SVPBR/L-DX16	●	●	VBMT VBGT	1604	65	45	1.1	SPSVN32	BCP141	TS35D	TKY15F

*1 Clamp Torque (N • m) : TS35D=3.5

*2 WT : Tool Weight

SVVB

Facing • Copying

Finish		Light
R/L-F	SV	
(16)	(16)	
Medium		Medium
MV	MP	
(16)	(16)	
CBN		
(16)		

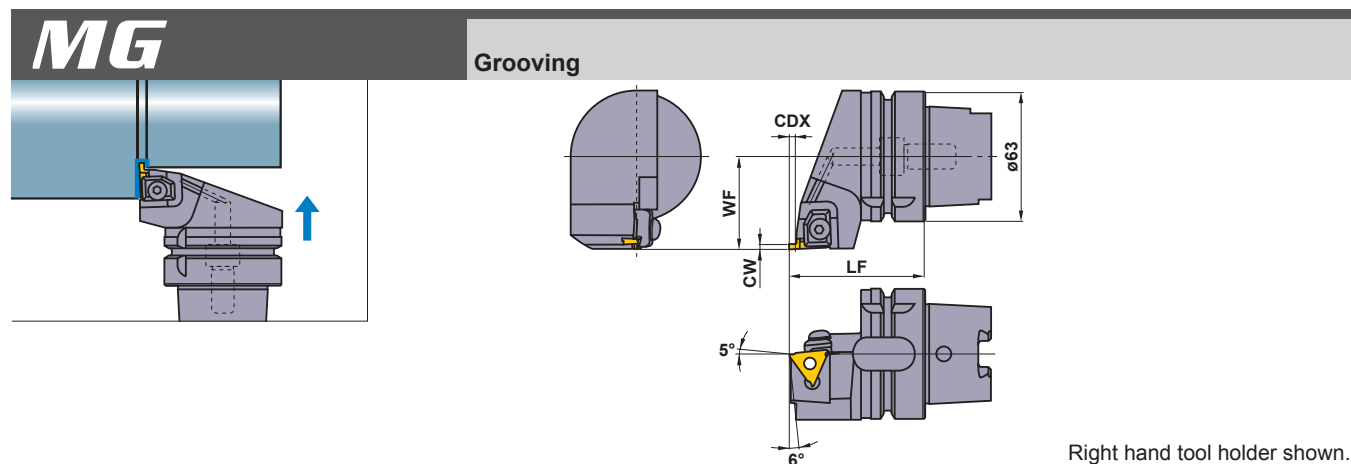
Order Number	Stock	Insert Number		Dimensions (mm)		*2 WT (kg)			 *1		
				LF	B2		Shim	Shim Pin	Clamp Screw	Plug	Wrench
H63TH-SVVBH-H16	●	VBMT	1604 	100	66°30'	1.3	SPSVN32	BCP141	TS35D	HGM-PT1/8	TKY15F
H63TH-SVVBH-L16	●	VBGT		140	72°30'	2.2	SPSVN32	BCP141	TS35D	HGM-PT1/8	TKY15F

*1 Clamp Torque (N • m) : TS35D=3.5

*2 WT : Tool Weight

RECOMMENDED CUTTING CONDITIONS

	Work Material	Hardness	Cutting Mode	Breaker	Grade	Cutting Speed (m/min)
P	Mild Steel	≤180HB	Finish Cutting	F	AP25N	250 (150—300)
			Medium Cutting	MV	UE6020	200 (150—250)
	Carbon Steel Alloy Steel	180HB—350HB	Finish Cutting	F	AP25N	210 (150—260)
			Medium Cutting	MV	UE6020	170 (120—210)
M	Stainless Steel	≤200HB	Medium Cutting	MV	US735	100 (70—120)
K	Gray Cast Iron	Tensile Strength≤350MPa	Medium Cutting	MV	UE6020	170 (140—200)



Right hand tool holder shown.

Order Number	Stock		Insert Number	Dimensions (mm)				*2 WT (kg)	 Clamp Bridge	 Clamp Screw	 Spring	 Wrench
	R	L		CW	CDX	LF	WF					
H63TH-MGHR/L-DX4315	●	●	MGTR/L 43125 I 43470	1.25	1.2							
				1.45	1.5							
H63TH-MGHR/L-DX4323	●	●		1.5≤CW≤2.3	3	65	45	1.2	MTK1R/L	HBH06020	MES3	HKY40R
H63TH-MGHR/L-DX4333	●	●		2.3<CW≤3.3	4.5							
				3.3<CW≤4.7	4.5							

*1 Clamp Torque (N · m) : HBH06020=7.0

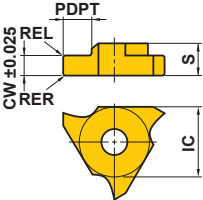
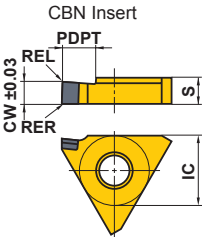
*2 WT : Tool Weight

● : Inventory maintained in Japan.

RECOMMENDED CUTTING CONDITIONS

	Work Material	Hardness	Grade	Cutting Speed (m/min)	Feed (mm/rev)
P	Carbon Steel Alloy Steel	180—350HB	VP20MF	120 (100—140)	0.10 (0.03—0.18)
			NX2525	130 (100—160)	0.12 (0.03—0.2)
M	Stainless Steel	≤200HB	VP20MF	120 (100—140)	0.10 (0.03—0.18)
K	Gray Cast Iron	Tensile Strength≤350MPa	VP20MF	120 (100—140)	0.10 (0.03—0.18)

INSERTS FOR MG TYPE

Order Number	Stock							Dimensions (mm)					Geometry
	Coated		Cermet		Carbide		CBN	CW	PDPT	IC	S	RER/L	
	VP20MF		NX2525		UT120T		MB8025						
	R	L	R	L	R	L	R						
MGTR/L43125	●	●	●	□	●	●	●	1.25	1.2	12.7	4.76	0.2	MGTR/L...   Right hand insert shown.
MGTR/L43145	●	□		□	●	□		1.45	1.5	12.7	4.76	0.2	
MGTR/L43150	●	●	●	●	●	●	●	1.5	3	12.7	4.76	0.2	
MGTR/L43175	●	●	●	□	●	●		1.75	3	12.7	4.76	0.2	
MGTR/L43200	●	●	●	●	●	●	●	2	3	12.7	4.76	0.2	
MGTR/L43230	●	●				●		2.3	3	12.7	4.76	0.2	
MGTR/L43250	●	●	●	●	●	●	●	2.5	4.5	12.7	4.76	0.3	
MGTR/L43260	●	□	□		●	●		2.6	4.5	12.7	4.76	0.3	
MGTR/L43270	●	□			●	□		2.7	4.5	12.7	4.76	0.3	
MGTR/L43280		●		□	●	●		2.8	4.5	12.7	4.76	0.3	
MGTR/L43300	●	●	●	●	●	●	●	3	4.5	12.7	4.76	0.3	
MGTR/L43320	●				●	●		3.2	4.5	12.7	4.76	0.3	
MGTR/L43330		●		□	●	●		3.3	4.5	12.7	4.76	0.3	
MGTR/L43350	●	□	●	□	●	●	●	3.5	4.5	12.7	4.76	0.3	
MGTR/L43400	●	●	●		●	●	●	4	4.5	12.7	4.76	0.3	
MGTR/L43420	●	□	□		●	□		4.2	4.5	12.7	4.76	0.4	
MGTR/L43430	●	□	□		●	●		4.3	4.5	12.7	4.76	0.4	
MGTR/L43450	●	●	●	●	●	●		4.5	4.5	12.7	4.76	0.4	
MGTR/L43470	●	□	□	□	●	□		4.7	4.5	12.7	4.76	0.4	

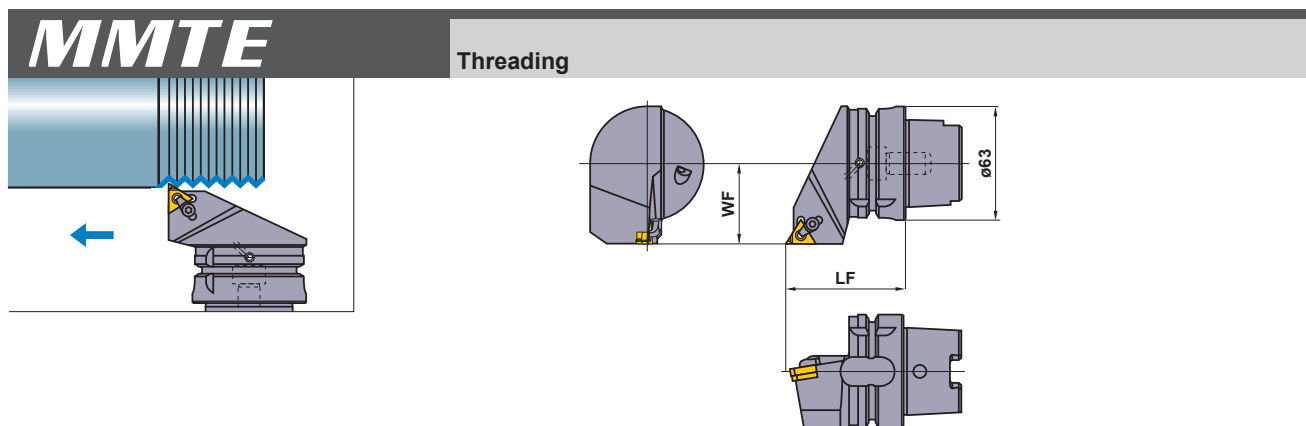
● : Inventory maintained in Japan. □ : Non stock, produced to order only.
 (10 inserts in one case) (CBN inserts are available in 1 piece in one case.)

MMTE/MMTEN

Product Information

Spare Parts >> 1927
ISO13399 Property >> 1966

Technical Info >> 1971



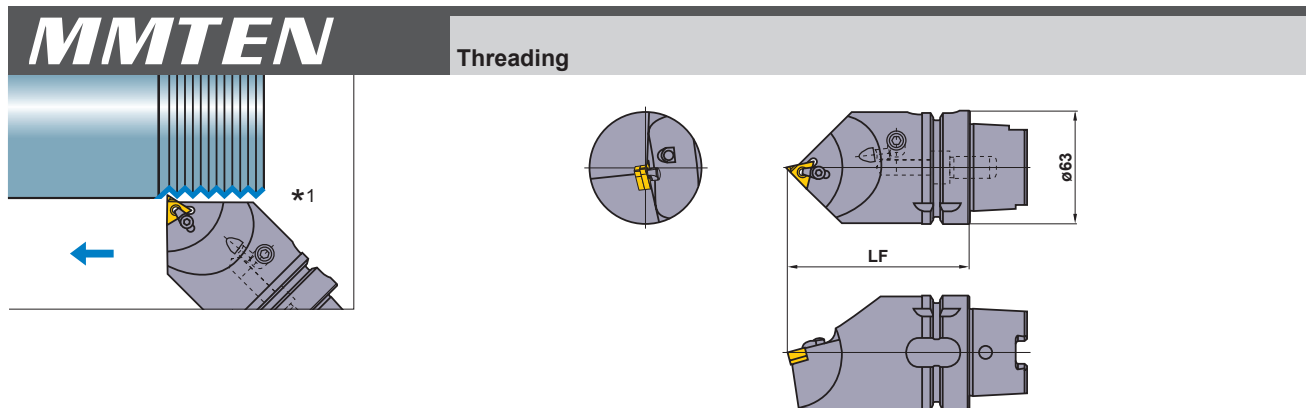
Right hand tool holder only.

Order Number	Stock	Insert Number	Dimensions (mm)		*2 WT (kg)						
			LF	WF							
H63TH-MMTER-DX16	●	MMT16ER	65	45	1.2	SETK51	SETS51	CR4	CTE32TP15	HFC03008	①TKY15F ②HKY20R

*1 Clamp Torque (N • m) : SETS51=3.5, HFC03008=1.5

*2 WT : Tool Weight

● : Inventory maintained in Japan.



Tool holder for right hand insert only.

Order Number	Stock	Insert Number	Dimensions (mm)		*3 WT (kg)							
			LF	WF								
H63TH-MMTENR-H16	●	MMT16ER	100		1.7	SETK51	SETS51	CR4	CTE32TP15	HFC03008	HGM-PT1/8	①TKY15F ②HKY20R
H63TH-MMTENR-L16	●	MMT16ER	140		2.7	SETK51	SETS51	CR4	CTE32TP15	HFC03008	HGM-PT1/8	①TKY15F ②HKY20R

*1 For use with B axis tilted at 45 degrees.

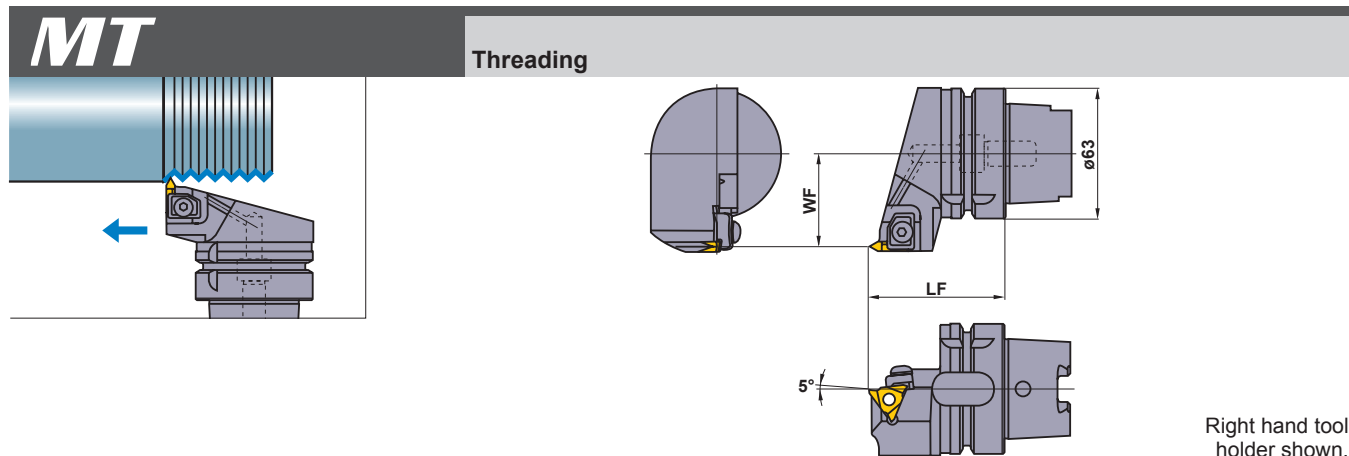
*2 Clamp Torque (N • m) : SETS51=3.5, HFC03008=1.5

*3 WT : Tool Weight

● : Inventory maintained in Japan.

RECOMMENDED CUTTING CONDITIONS

	Work Material	Hardness	Grade	Cutting Speed (m/min)
P	Mild Steel	≤180HB	VP10MF	150 (70—230)
			VP15TF	100 (60—140)
	Carbon Steel Alloy Steel	180—350HB	VP10MF	140 (80—200)
			VP15TF	100 (60—140)
M	Stainless Steel	≤200HB	VP10MF	130 (80—180)
			VP15TF	80 (40—120)
K	Gray Cast Iron	Tensile Strength≤350MPa	VP10MF	140 (80—200)
			VP15TF	90 (60—120)



Order Number	Stock		Insert Number		Dimensions (mm)		*2 WT (kg)				
	R	L			LF	WF					
H63TH-MTHR/L-DX43	●	●	MTTR/L	43○○○○	65	45	1.2	MTK1R/L	HBH06020	MES3	HKY40R

*1 Clamp Torque (N · m) : HBH06020=7.0

*2 WT : Tool Weight

● : Inventory maintained in Japan.

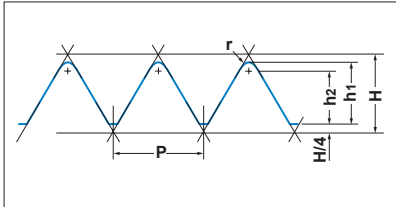
INSERTS FOR MT TYPE

Type	Order Number	Class	Coated				Cermet				Carbide				ISO Pitch mm (thread/inch)	Dimensions (mm)			Geometry
			UP20M	NX2525	UT120T	HT110	UP20M	NX2525	UT120T	HT110	UP20M	NX2525	UT120T	HT110		IC	S	RE	
General • 60°	MTTR436000	G	●	●	●	●									-0.8	12.7	4.76	0	MTTR/L(60°) (G Class) Right hand insert shown.
	MTTR436001	G	●	●	●	●									1.0—1.75	12.7	4.76	0.1	
	MTTL436001	G	●		●	●									1.0—1.75	12.7	4.76	0.1	
	MTTR436002	G	●	●	●	●									2.0—2.5	12.7	4.76	0.2	
	MTTL436002	G		●	●	●									2.0—2.5	12.7	4.76	0.2	
	MTTR436003	G	□	●	●	●									3.0—3.5	12.7	4.76	0.3	
	MTTL436003	G		●	●	●									3.0—3.5	12.7	4.76	0.3	
	MTTR436004	G		●	●	●									4.0—4.5	12.7	4.76	0.4	
General • 55°	MTTR435501	G		●	●	●									(28—10)	12.7	4.76	0.1	MTTR/L(55°) (G Class) Right hand insert shown.
	MTTR435502	G		●	●	●									(16—8)	12.7	4.76	0.2	
	MTTR435503	G		●	●	●									(11—8)	12.7	4.76	0.3	

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

STANDARD DEPTH OF CUT

- The chart on the right shows the cutting depths when machining external ISO metric screw threads.
- When you use cermet grades or cut stainless steel, please increase the number of passes by 2—3 times.


METRIC THREAD

Unit : mm

P (Pitch)	0.75	1.00	1.25	1.50	1.75	2.00	2.50	3.00	3.50	4.00	4.50
h ₁	0.46	0.61	0.77	0.92	1.07	1.23	1.53	1.84	2.15	2.45	2.76
h ₂	0.35	0.47	0.59	0.70	0.82	0.94	1.17	1.41	1.65	1.87	2.11
r (Corner Radius)	0.11	0.14	0.18	0.22	0.25	0.29	0.36	0.43	0.50	0.58	0.65
Number of Passes	1	0.18	0.20	0.20	0.25	0.25	0.25	0.30	0.30	0.35	0.35
	2	0.13	0.15	0.18	0.20	0.20	0.25	0.25	0.25	0.30	0.30
	3	0.10	0.10	0.12	0.15	0.20	0.20	0.20	0.25	0.25	0.30
	4	0.05	0.10	0.12	0.15	0.15	0.20	0.20	0.20	0.25	0.25
	5		0.06	0.10	0.10	0.12	0.15	0.15	0.20	0.20	0.25
	6			0.05	0.07	0.10	0.10	0.10	0.15	0.20	0.20
	7					0.05	0.08	0.10	0.15	0.15	0.20
	8						0.05	0.10	0.10	0.15	0.15
	9							0.08	0.10	0.10	0.15
	10							0.05	0.09	0.10	0.10
	11								0.05	0.10	0.10
	12									0.05	0.10
	13										0.05
	14										0.06

(Note) The first pass causes a high load on the cutting edge.

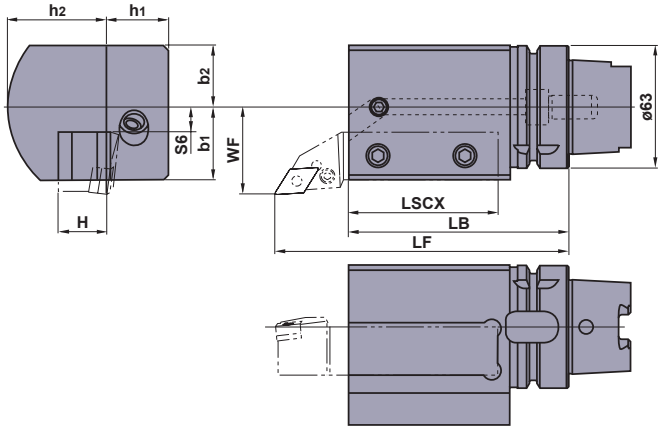
In order to avoid damage, keep the depth of cut to 0.4—0.5mm maximum.

RECOMMENDED CUTTING CONDITIONS

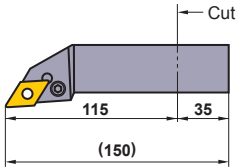
	Work Material	Hardness	Grade	Cutting Speed (m/min)
P	Mild Steel	≤180HB	UP20M	140 (100—180)
			NX2525	200 (150—250)
			UTi20T	120 (100—150)
	Carbon Steel Alloy Steel	180HB—350HB	UP20M	120 (100—150)
			NX2525	170 (150—200)
			UTi20T	100 (70—120)
M	Stainless Steel	≤200HB	UP20M	120 (80—150)
			UTi20T	100 (70—130)
K	Gray Cast Iron	Tensile Strength≤350MPa	UP20M	80 (60—100)
			UTi20T	80 (60—100)
			HTi10	100 (70—130)

EXTERNAL TURNING TOOL HOLDERS

External turning • Facing



■ This holder is for 25×25 size tools.
Please shorten the tool as shown below
before use.



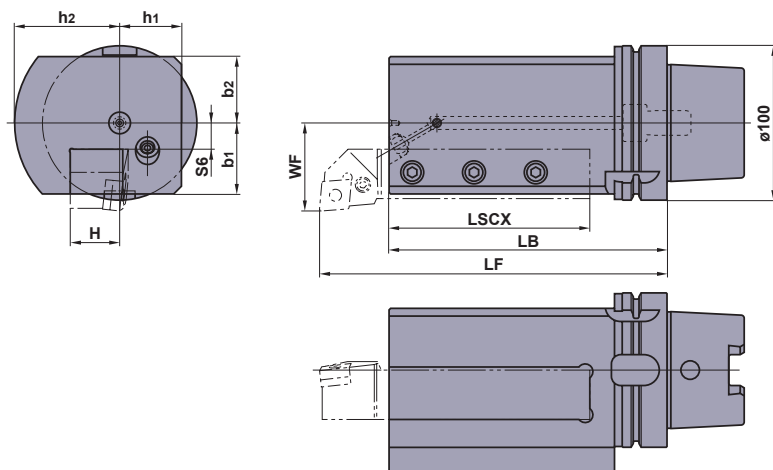
Right hand tool holder shown.

Order Number	Stock		Dimensions (mm)										WT (kg)		
	R	L	LF	LB	LSCX	H	h1	h2	WF	S6	b1	b2		Clamp Screw	Plug
H63TH-EV2525R/L-112	●	●	150	112	77	25	32	53	45	13	38	32	3.9	HSS12025	HGM-PT1/8

★ WT : Tool Weight
● : Inventory maintained in Japan.

EXTERNAL TURNING TOOL HOLDERS

External turning • Facing



■ This holder is for 32×32 and 32×25 size tools.

Right hand tool holder shown.

Order Number	Stock		Dimensions (mm)										WT (kg)		
	R	L	LF	LB	LSCX	H	h1	h2	WF	S6	b1	b2		Clamp Screw	Plug
H100TH-EV3232R/L-180	●	●	220	180	130	32	40	68	57	17	46	43	11.7	HSS14035	HSS06006

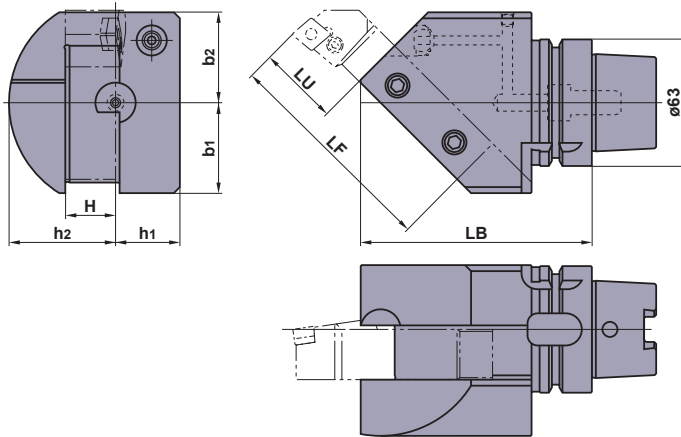
* WT : Tool Weight

(Note) Possible to fit a 25 x 25 tool by using a 7mm plate.

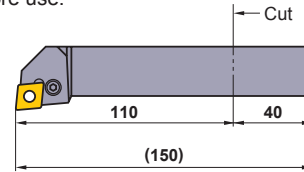
● : Inventory maintained in Japan.

EXTERNAL TURNING TOOL HOLDERS

External turning • Facing



■ This holder is for 25×25 size tools.
Please shorten the tool as shown below before use.



Mitsubishi Materials is licensed for production and distribution of these tools from MORI SEIKI CO., LTD under Patent No.3720202.

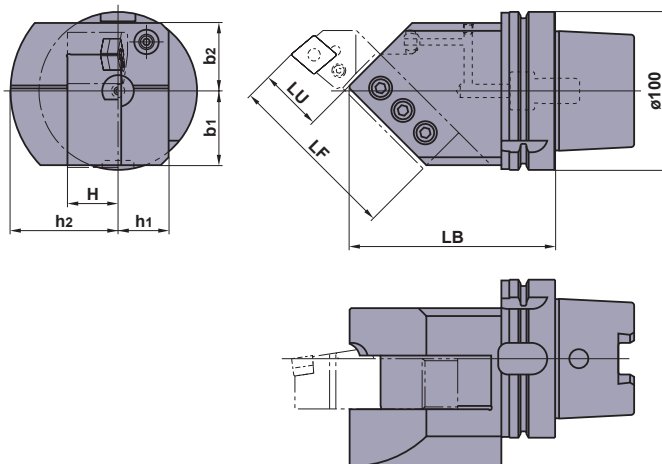
Right hand tool holder shown.

Order Number	Stock		Dimensions (mm)								WT (kg)		
	R	L	LB	LU	LF	H	h1	h2	b1	b2			
H63TH-EN2525R/L-115	●	●	115	40	110	25	32	53	45	45	3.7	HSS12030	HSS06006

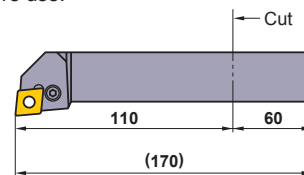
* WT : Tool Weight

EXTERNAL TURNING TOOL HOLDERS

External turning • Facing



■ This holder is for 32×32 and 32×25 size tools.
Please shorten the tool as shown below before use.



Mitsubishi Materials is licensed for production and distribution of these tools from MORI SEIKI CO., LTD under Patent No.3720202.

Right hand tool holder shown.

Order Number	Stock		Dimensions (mm)								WT (kg)		
	R	L	LB	LU	LF	H	h1	h2	b1	b2			
H100TH-EN3232R/L-130	●	●	130	40	110	32	32	68	47	43	6.6	HSS14030	HSS06006

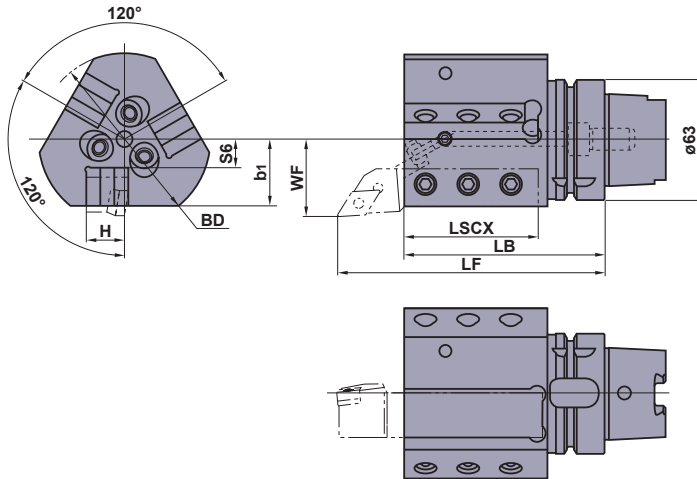
* WT : Tool Weight

(Note) Possible to fit a 25 x 25 tool by using a 7mm plate.

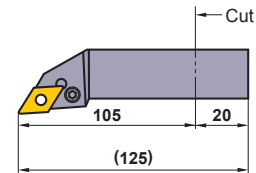
● : Inventory maintained in Japan.

EXTERNAL TURNING TOOL HOLDERS

External turning • Facing



■ This holder is for 20×20 size tools.
Please shorten the tool as shown below before use.



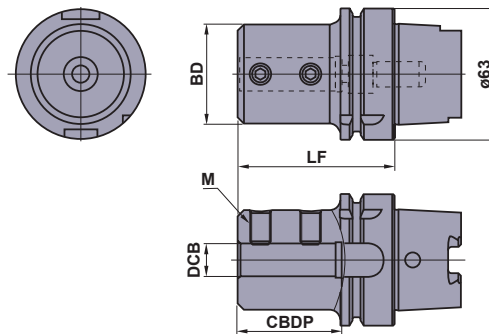
Right hand tool holder shown.

Order Number	Stock		Dimensions (mm)								WT* (kg)			
	R	L	LF	LB	LSCX	H	BD	WF	S6	b1		Clamp Screw	Nozzle Plug	Plug
H63TH-EV2020R/L-105-3	●	●	140	105	70	20	90	40	15	35	2.9	HSS12030	HSS05012	HSS06006

* WT : Tool Weight

BORING BAR HOLDERS

Boring



Order Number	Stock	Dimensions (mm)					WT* (kg)	
		BD	DCB	LF	CBDP	M		Clamp Screw
H63TH-B08-65	●	28	8	65	40	M8	0.9	HSS08010
H63TH-B10-70	●	35	10	70	45	M8	1.0	HSS08012
H63TH-B12-70	●	42	12	70	45	M8	1.1	HSS08012
H63TH-B16-75	●	48	16	75	50	M10	1.3	HSS10016
H63TH-B20-75	●	52	20	75	50	M10	1.4	HSS10016
H63TH-B25-83	●	62	25	83	58	M12	1.7	HSS12016
H63TH-B32-87	●	62	32	87	62	M12	1.7	HSS12016
H63TH-B40-97	●	65	40	97	72	M16	1.8	HSS16012

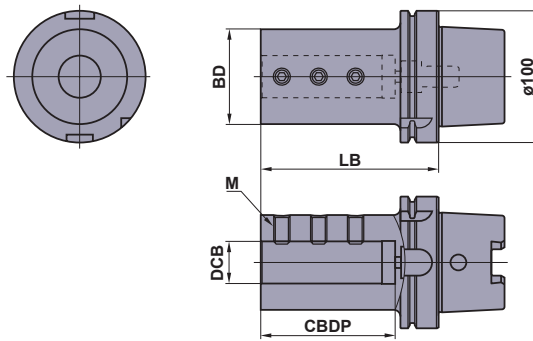
* WT : Tool Weight

(Note) Please shorten a boring bar to the required shank length. This holder is for boring bars and indexable type drills.

● : Inventory maintained in Japan.

BORING BAR HOLDERS

Boring



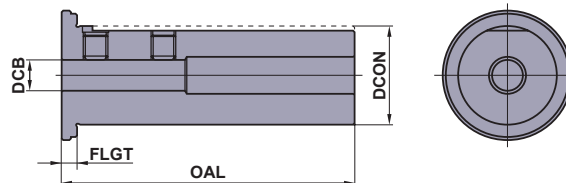
Order Number	Stock	Dimensions (mm)					WT* (kg)	 Clamp Screw
		BD	DCB	LB	CBDP	M		
H100TH-B25-120	●	62	25	120	88	12	3.9	HSS12016
H100TH-B32-135	●	72	32	135	102	12	4.8	HSS12018
H100TH-B40-150	●	82	40	150	117	16	5.9	HSS16020
H100TH-B50-180	●	92	50	180	147	16	7.7	HSS16020

* WT : Tool Weight

(Note) Please shorten a boring bar to the required shank length. This holder is for boring bars and indexable type drills.

● : Inventory maintained in Japan.

BORING BAR SLEEVES FOR H100TH-B32-135



Order Number	Stock	Dimensions (mm)				WT* (kg)	 Clamp Screw
		DCB	DCON	OAL	FLGT		
SL3208-90	●	8	32	95	5	0.6	HSS06008
SL3210-90	●	10	32	95	5	0.5	HSS08008
SL3212-90	●	12	32	95	5	0.5	HSS08008
SL3216-90	●	16	32	95	5	0.5	HSS08006
SL3220-90	●	20	32	95	5	0.4	HSS08005

* WT : Tool Weight

(Note) These sleeves are only compatible with H100TH-B32-135 holder.

● : Inventory maintained in Japan.