



# NT TOOL CATALOG

USA Ver.

# No. 3



**NT USA CORPORATION**

A Step Further Assurance for the Customers.

# - NT TOOL's Risk Management -

NT TOOL has been working on dispersion of risk to prepare for every contingency – such as Natural disasters (earthquake, flooding, etc.) power shortage and such.

## Dispersion of Production Bases

NT TOOL has two factories in Japan, and one in Thailand. These factories have equal production capacity and skill.



THAILAND OFFICE



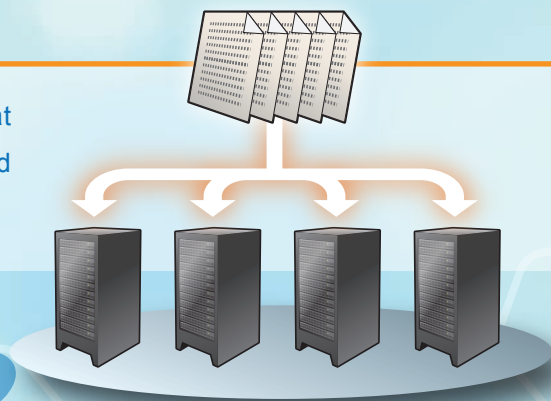
IIDA FACTORY



HEAD OFFICE & FACTORY

## Data Backup

Important data such as drawings are all backed up at four different locations (three locations in Japan and Thailand).







HEAD OFFICE



USA OFFICE



IIDA FACTORY



THAILAND OFFICE / FACTORY



INDONESIA OFFICE / FACTORY

## Expanding and connecting - NT Tool's global network -

In addition to our headquarter in the city of Takahama in Aichi, Japan, we have rolled out domestic bases in Tokyo, Osaka, Hiroshima, and Iida. Outside of Japan, we have established sales centers in the USA, Germany, China, Thailand, and Indonesia. We broadened our communication link to customers in over 30 countries around the world. We will continue to expand the NT Tool network to meet rising worldwide demand in the manufacturing industry.

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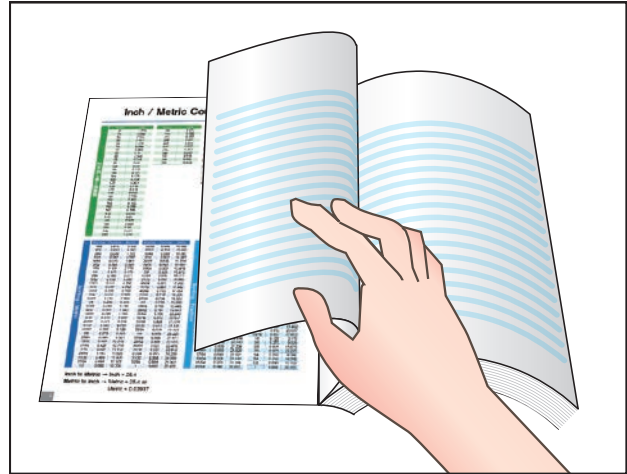
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# Inch / Metric Conversion Table

**Projection length reference / conversion table**

Metric	inch
45	1.772
50	1.969
55	2.165
60	2.362
65	2.559
70	2.756
75	2.953
80	3.15
85	3.346
90	3.543
95	3.74
100	3.937
105	4.134
110	4.331
115	4.528
120	4.724
125	4.921
130	5.118
135	5.315
140	5.512
145	5.709
150	5.906
155	6.102
160	6.299
165	6.496
170	6.693
175	6.89
180	7.087
185	7.283
190	7.48
195	7.677
200	7.874

Metric	inch
205	8.071
210	8.268
215	8.465
220	8.661
225	8.858
230	9.055
235	9.252
240	9.449
245	9.646
250	9.843
255	10.039



Please use these tables to convert metric ↔ inch.

**Sorted by Metric/Decimal**

Fraction	Decimal	Metric	Fraction	Decimal	Metric
1/64	0.015	0.396	33/64	0.515	13.096
1/32	0.031	0.793	17/32	0.531	13.493
3/64	0.046	1.191	35/64	0.546	13.891
1/16	0.062	1.587	9/16	0.562	14.287
5/64	0.078	1.981	37/64	0.578	14.684
3/32	0.093	2.381	19/32	0.593	15.081
7/64	0.109	2.778	39/64	0.609	15.478
1/8	0.125	3.175	5/8	0.625	15.875
9/64	0.140	3.571	41/64	0.640	16.271
5/32	0.156	3.968	21/32	0.656	16.668
11/64	0.171	4.366	43/64	0.671	17.066
3/16	0.187	4.762	11/16	0.687	17.462
13/64	0.203	5.159	45/64	0.703	17.859
7/32	0.218	5.556	23/32	0.718	18.256
15/64	0.234	5.953	47/64	0.734	18.653
1/4	0.250	6.350	3/4	0.750	19.050
17/64	0.265	6.746	49/64	0.765	19.446
9/32	0.281	7.143	25/32	0.781	19.843
19/64	0.296	7.540	51/64	0.796	20.240
5/16	0.312	7.937	13/16	0.812	20.637
21/64	0.328	8.334	53/64	0.828	21.034
11/32	0.343	8.731	27/32	0.843	21.431
23/64	0.359	9.128	55/64	0.859	21.828
3/8	0.375	9.525	7/8	0.875	22.225
25/64	0.390	9.921	57/64	0.890	22.621
13/32	0.406	10.318	29/32	0.906	23.018
27/64	0.421	10.716	59/64	0.921	23.416
7/16	0.437	11.112	15/16	0.937	23.812
29/64	0.453	11.509	61/64	0.953	24.209
15/32	0.468	11.906	31/32	0.968	24.606
31/64	0.484	12.303	63/64	0.984	25.003
1/2	0.500	12.700	1	1.000	25.400

**Sorted by Fraction group**

Fraction	Decimal	Metric	Fraction	Decimal	Metric
1/64	0.015	0.396	1/32	0.031	0.793
3/64	0.046	1.191	3/32	0.093	2.381
5/64	0.078	1.981	5/32	0.156	3.968
7/64	0.109	2.778	7/32	0.218	5.556
9/64	0.140	3.571	9/32	0.281	7.143
11/64	0.171	4.366	11/32	0.343	8.731
13/64	0.203	5.159	13/32	0.406	10.318
15/64	0.234	5.953	15/32	0.468	11.906
17/64	0.265	6.746	17/32	0.531	13.493
19/64	0.296	7.540	19/32	0.593	15.081
21/64	0.328	8.334	21/32	0.656	16.668
23/64	0.359	9.128	23/32	0.718	18.256
25/64	0.390	9.921	25/32	0.781	19.843
27/64	0.421	10.716	27/32	0.843	21.431
29/64	0.453	11.509	29/32	0.906	23.018
31/64	0.484	12.303	31/32	0.968	24.606
33/64	0.515	13.096	1/16	0.062	1.587
35/64	0.546	13.891	3/16	0.187	4.762
37/64	0.578	14.684	5/16	0.312	7.937
39/64	0.609	15.478	7/16	0.437	11.112
41/64	0.640	16.271	9/16	0.562	14.287
43/64	0.671	17.066	11/16	0.687	17.462
45/64	0.703	17.859	13/16	0.812	20.637
47/64	0.734	18.653	15/16	0.937	23.812
49/64	0.765	19.446	1/8	0.125	3.175
51/64	0.796	20.240	3/8	0.375	9.525
53/64	0.828	21.034	5/8	0.625	15.875
55/64	0.859	21.828	7/8	0.875	22.225
57/64	0.890	22.621	1/4	0.250	6.350
59/64	0.921	23.416	3/4	0.750	19.050
61/64	0.953	24.209	1/2	0.500	12.700
63/64	0.984	25.003	1	1.000	25.400

**Inch to Metric** → Inch × 25.4

**Metric to Inch** → Metric ÷ 25.4 or  
Metric × 0.03937



# Safety Instructions

For your own safety

Thank you for using NT products. NT continues to make every effort to improve the quality and safety of our products. We recommend that you read the following instructions carefully before using the products shown in this catalog.



Indicates hazardous conditions that, if not faithfully followed, could result in a great danger. You are requested to read and follow "!" in our instruction manuals without fail to avoid personal injury or property damage.

## Handling

- Care must be taken when handling or unpacking products as they may accidentally drop or slip out of the packaging.
- Care must be taken when carrying or transporting heavy holders. Where necessary, lifting equipment should be used.
- A tool holder must not be used as a taper gauge to produce machine spindles.

## Attaching and removing a cutting tool

- Tool holders must be firmly secured in clamping device when changing cutting tools.
- Do not touch cutting tools with unprotected hands. Gloves should be used for protection.
- Always use the recommended wrench or spanner when tightening a chuck. Never use a hammer or extension to increase tightening torque.

## During machining operation

















- Do not place hands near a rotating tool. This can result in a serious injury.
- Hot metal chips may be projected from the workpiece during machining. Machines should therefore be fully guarded and the operator should use protective equipment at all times.
- If set up is made with high pressure coolant in use, do not approach the cutting edge. The cutter may be ejected and cause personal injury.
- Holders and other tools should be used as intended and should not be modified or disassembled. This can cause accidental injury.

## Care of products

- Tools should be removed from the chucks when not in use for long periods of time. Failure to do so may result in reduced clamping force. After long periods in storage the cap/clamping ring should always be loosened and re-tightened before starting machining operation.
- All holders should be thoroughly cleaned and protected with rust proof oil before being placed in storage. Care should be taken to avoid damaging the contact surface of the taper.











These are general safety warnings and each product has specific safety instructions which should be followed before use. Please contact NT if you have any questions.

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<b>PHC·A</b> Power Hydro Chuck		<b>PHC·S</b> Slim Hydro Chuck						
	<b>Feature</b> ..... 026 BT..... 104 CAT..... 208 AHO..... 258 HSK·A..... 314 HSK·E..... 361 HSK·F..... 368 UTS..... 400		<b>Feature</b> ..... 028 BT..... 112 CAT..... 214 AHO..... 260 HSK·A..... 318 UTS..... 402					
								
	<b>CT·S</b> Super Tite-Lock Milling Chuck <b>CT·S-E</b> Super Tite-Lock Milling Chuck ( High-Balanced Type )		<b>CT·S-CF</b> Super Tite-Lock Milling Chuck ( Flange Through Type )					
			<b>Feature</b> ..... 034 <b>CT·S</b> BT..... 050 CAT..... 192 AHO..... 248 HSK·A..... 290 UTS..... 384 NT..... 058	<b>CT·S-E</b> (High Balanced Type) BT..... 054 CAT..... 194 HSK·A..... 292				
			<b>CT·A</b> Super Tite-Lock Milling Chuck <b>CT·A-CF</b> Super Tite-Lock Milling Chuck ( Flange Through Type )					
						<b>CT·A</b> BT..... 060 HSK·A..... 294 UTS..... 388 NT..... 064 <b>CT·A-CF</b> BT..... 062		<b>HDC·A</b> High-Precision Collet Holder <b>HDC·A-CF</b> High-Precision Collet Holder ( Flange Through Type )
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	<b>ERC-T</b> HSK·F..... 367 UTS..... 394 ST..... 084			<b>ERC-T</b> BT..... 080 HSK·A..... 304 UTS..... 395				
	<b>GDC·A</b> High-Precision Collet Holder ( High-Balanced Type )			<b>CTZ</b> "R"Zero Holder for Large Diameter				
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		<b>Feature</b> ..... 033 BT..... 100 HSK·A..... 309			<b>Feature</b> ..... 033 BT..... 102 HSK·A..... 311 UTS..... 399			
	<b>PHZ·S</b> Slim Hydro "R" Zero Holder							
								
	<b>Feature</b> ..... 033 BT..... 103 CAT..... 207 HSK·A..... 312							
								













<b>STM</b>	<b>Synchronous Tap Holder With Easy Tool Length Adjustment</b>	<b>TP0</b>	<b>Synchro Tapping Chuck</b>	<b>STP</b>	<b>Synchro Tapping Chuck</b>
 <p> <b>Feature</b>..... 037            BT..... 124            CAT..... 222            AHO..... 266            HSK·A..... 332            UTS..... 410         </p>	 <p>           BT..... 130         </p>	 <p>           BT..... 133         </p>			
<b>TP1</b>	<b>Quick Change Tapping Chuck</b>	<b>TP3B</b>	<b>Quick Change Tapping Chuck ( Auto Depth Control )</b>	<b>BT30-SBV SBH, TSB</b>	<b>Turning Tools for brother's SPEEDIO M140X1</b>
 <p>           BT..... 135            CAT..... 227            HSK·A..... 339         </p>	 <p>           BT..... 136         </p>	 <p> <b>Feature</b>..... 042            SBV..... 181            SBH..... 182            TSB..... 183         </p> <p style="text-align: center;"><b>New</b></p>			
<b>HSK·T</b>	<b>HSK·T Turning Tools</b>	<b>AHS, AHL</b>	<b>Angle Heads ( Flexible Type ) 0-90°</b>	<b>AHSE AHLE</b>	<b>Angle Heads ( Flexible Type ) 0-90°</b>
 <p> <b>Feature</b>..... 043            SBV..... 375            SBN..... 376            SBH..... 377            SBT..... 378            TSB..... 379            TSD..... 381         </p>	 <p> <b>Feature</b>..... 038  <b>AHS, AHL</b>            BT..... 168         </p>	 <p> <b>AHSE, AHLE</b>            CAT..... 240            HSK·A..... 357         </p>			
<b>AH**90 AHE**90</b>	<b>Angle Heads ( Fixed Type ) 90°</b>	<b>AH**45</b>	<b>Angle Heads ( Fixed Type ) 45°</b>	<b>HP-H</b>	<b>Hyper Spindle ( Speed Inserter )</b>
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<b>SRE</b> Shrink Fit ( Small Diameter Type )		<b>SRD</b> Shrink Fit ( DIN Standard )		<b>SRK</b> Shrink Fit ( Heavy Type )	
 <ul style="list-style-type: none"> <li><b>Feature</b>..... 040</li> <li>BT..... 114</li> <li>CAT..... 216</li> <li>HSK-A..... 322</li> <li>HSK-E..... 362</li> <li>UTS..... 404</li> </ul>		 <ul style="list-style-type: none"> <li><b>Feature</b>..... 040</li> <li>BT..... 118</li> <li>CAT..... 218</li> <li>AHO..... 262</li> <li>HSK-A..... 326</li> <li>HSK-E..... 363</li> </ul>		 <ul style="list-style-type: none"> <li><b>Feature</b>..... 040</li> <li>BT..... 122</li> <li>HSK-A..... 325</li> <li>UTS..... 406</li> </ul>	
<b>SRS</b> Shrink Fit ( Slim Type )		<b>JTA</b> Jacobs Taper Arbor		<b>SCA</b> Side Cutter Arbor	
 <ul style="list-style-type: none"> <li><b>Feature</b>..... 040</li> <li>BT..... 120</li> <li>CAT..... 220</li> <li>AHO..... 264</li> <li>HSK-A..... 330</li> <li>HSK-E..... 364</li> <li>UTS..... 407</li> </ul>		 <ul style="list-style-type: none"> <li>BT..... 156</li> <li>CAT..... 234</li> </ul>		 <ul style="list-style-type: none"> <li>BT..... 154</li> <li>CAT..... 232</li> <li>AHO..... 282</li> <li>HSK-A..... 350</li> </ul>	
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		<ul style="list-style-type: none"> <li><b>SM1</b></li> <li>BT..... 149</li> <li><b>SMA</b></li> <li>BT..... 150</li> </ul>		<ul style="list-style-type: none"> <li><b>SMB</b></li> <li>BT..... 152</li> <li><b>SMC</b></li> <li>BT..... 153</li> </ul>	
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PSB	Retention Stub	Collet	Shank Dimension
	<p>PSB(BT) ..... 184                      PSB(AHO) ..... 288</p>	 <p><b>New</b></p>	<p>FDC ..... 086                      FDC-OH ..... 087                      FDC-C ..... 088                      FDC-MS ..... 089                      EDC ..... 444                      ER ..... 090                      EMS ..... 480                      FSC ..... 128                      FSC-MS ..... 129</p> <p>BT ..... 187                      NT ..... 188                      JBS ..... 189                      HSK ..... 372</p>

KH-E	Q.C Stub Holder	KH-EC	Q.C Stub Holder with Oil Hole	KH-A, KH KH-A-NL	Q.C Stub Holder
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KD, KD-T KD-NL	Q.C Stub Holder	KTP, KTL KTLP	Q.C Stub Tapper	WE, WES-B WEN, WESN-B	Q.C Tap Adapter
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<b>ISG3400</b>	<b>Shrink Fit System</b>	<b>SRK-HA1 SRK-HB2</b>	<b>Economy Type Heater</b>	<b>ZM-1 ZM-2</b>	<b>Zero Master 3D Master</b>
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# MEMO

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# MEMO

# Holder Selection Guide

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			metric	inch	Runout Accuracy	Rigidity	Clamping Force	Balance
Milling Chuck	Super Tite-Lock Milling Chuck	CTS	16-42 (6-32)	0.750-2.000 (0.250-1.500)	★★	★★★★	★★★★★	★★★
	Super Tite-Lock Milling Chuck (Flange Through Type)	CTSCF	16-42 (6-32)	0.750-2.000 (0.250-1.500)	★★	★★★★	★★★★★	★★★
	Super Tite-Lock Milling Chuck (High-Balanced Type)	CTSE	16-42 (6-32)	0.750-2.000 (0.250-1.500)	★★	★★★★	★★★★★	★★★★
	Tite-Lock Milling Chuck	CTA	16-42 (6-32)	0.750-2.000 (0.250-1.500)	★★	★★★	★★★★	★★★
	Tite-Lock Milling Chuck (Flange Through Type)	CTACF	16-42 (6-32)	0.750-2.000 (0.250-1.500)	★★	★★★	★★★★	★★★
Collet Holder	Drill Holder Easy Tool Length Adjustment	SDM	0.5-22	0.020-0.866	★★★	★★	★★	★★★
	High-Precision Collet Holder	HDCA	0.5-22	0.020-0.866	★★★	★★	★★	★★★
	High-Precision Collet Holder (Flange Through Type)	HDCACF	0.5-22	0.020-0.866	★★★	★★	★★	★★★
	High-Precision Collet Holder (High-Balanced Type)	GDCA	0.5-22	0.020-0.866	★★★	★★	★★	★★★★★
	Collet Holder For Small Diameters	ERC	—	0.020-0.394	★★★	★	★	★★★
"R"Zero Holder	"R" Zero Holder For Large Diameters	CTZ	25-42 (6-32)	—	★★★★★	★★★	★★★★★	★★★
	"R" Zero Holder	HDZ	0.5-22	0.020-0.866	★★★★★	★★	★★	★★★
	"R" Zero Holder (High-Balanced Type)	GDZ	0.5-22	0.020-0.866	★★★★★	★★	★★	★★★★★
	"R" Zero Holder For Small Diameters	ERZ	0.5-7	0.200-0.276	★★★★★	★	★	★★★
	Slim Hydro "R" Zero Holder	PHZ-S	6-12	—	★★★★	★★	★★	★★★
Hydraulic Chuck	Power Hydro Chuck	PHC-A	4, 6-32 (3-16)	0.250-1.250	★★★★	★★★	★★★	★★★
	Slim Hydro Chuck	PHC-S	6-12, 16, 20, 25	0.250-0.500	★★★★	★★	★★	★★★
Shrink Fit	Shrink Fit (Small Diameter Type)	SRE	3-8	—	★★★★	★★	★★	★★★★
	Shrink Fit (Slim type)	SRS	6-32	0.250-0.750	★★★★	★★	★★	★★★★
	Shrink Fit (Heavy type)	SRK	6-32	—	★★★★	★★★★★	★★★	★★★★
	Shrink Fit (DIN Standard)	SRD	6-32	0.250-1.500	★★★★	★★★★★	★★★	★★★★
Side Lock Holder	Side Lock Holder	SLA	16-42		★	★★★★★	★★★★	★★
	Side Lock Holder	SL2	6-42		★	★★★★★	★★★★	★★
	Side Lock Holder	SLB	16-48		★	★★★★★	★★★★	★★

(When collet is used)

Holder Type	Model	Accessory			Function	Drilling		End-milling			Reamer
		Collet	Cap	Wrench Spanner		Normal	High Precision	Heavy	Light	High Precision	Reaming
Milling Chuck	CTS	MC ※1		HS	Coolant	●		●	●		
	CTSCF	MC ※1		HS	Flange Through	●		●	●		
	CTSE	MC ※1		HS	Coolant High-Balanced	●		●	●		
	CTA	MC ※1		HS	Coolant	●		●	●		
	CTACF	MC ※1		HS	Flange Through	●		●	●		
Collet Holder	SDM	FDC	HDP	S	Coolant Length Adjustment	●	●				●
	HDCA	FDC	HDP	S	Coolant	●	●		●	●	●
	HDCACF	FDC	HDP	S	Flange Through	●	●		●	●	●
	GDCA	FDC	GDP	FK	Coolant High-Balanced	●	●		●	●	●
	ERC	ER FDC-07	ERP	S-E	Coolant	●					
"R"Zero Holder	CTZ	MC ※1		HS	Coolant Runout Adjustment	●	●		●	●	●
	HDZ	FDC	HDP	S	Coolant Runout Adjustment Length Adjustment	●	●		●	●	●
	GDZ	FDC	GDP	FK	Coolant Runout Adjustment High-Balanced	●	●		●	●	●
	ERZ	ER FDC-07	ERP	S-E	Coolant Runout Adjustment	●	●				●
	PHZ-S			L	Coolant Runout Adjustment	●	●		●	●	●
Hydraulic Chuck	PHC	PHS ※1		L	Coolant Length Adjustment	●	●		●	●	●
	PHC-S			L	Coolant	●	●		●	●	●
Shrink Fit	SRE				Coolant	●	●		●	●	●
	SRS				Coolant	●	●		●	●	●
	SRK				Coolant	●	●	●	●	●	●
	SRD				Coolant	●	●	●	●	●	●
Side Lock Holder	SLA					●		●			
	SL2					●		●			
	SLB					●		●			

※ 1. Can be used without a collet.

# MEMO



# **PRODUCT INTRODUCTION**

# Introduction

*If you have appliccation problems, let us know!  
NT TOOL has many unique tools and standard tools.  
We do custom / special tools to meet your specs.  
If you don't see tools you are looking for on this catalog,  
don't give up and give us a call!*



## **ABOUT NT USA CORPORATION**

Since it's foundation, NT Tool has focused on developing and providing precision tooling systems for manufacturers in the automotive, aerospace, medical, and die mold industries. As a forerunner and as a pioneer of this field, NT Tool continually strives to achieve the highest product and customer support satisfaction in the industry through the development of new cutting edge technology, and a motivated technically knowledgeable support staff.

## NT TOOL, the best protection against rust!

Special rust proof coating on entire surface including the tapered shank. (CAT, BT, SK only)

Prevent seizure and scoring caused by metal abrasion against the machine spindle.

Special coating protects spindle from abnormal wearing.

Safe with water-soluble coolant.

\*Some holders are excluded.



**Protect spindle from damage**

**Longer cutting tool life**

**Maintain good accuracy**

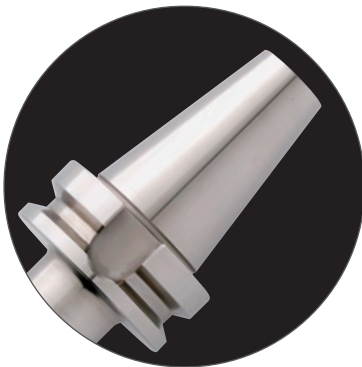
### Rustproof

NT TOOL's rust-proofed holders maintain processing accuracy without additional rust prevention.

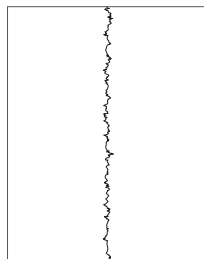
### Ordinary tooling

Without proper maintenance for rust prevention, ordinary tool holders will begin to rust after several days in use. This rust has negative effect on machining accuracy and/or spindle.

When the taper area gets rusty, the runout accuracy of the tip of a cutting tool deteriorates by 0.01-0.02mm.



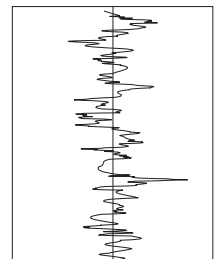
NT's special surface treatment



RMAX 0.8  $\mu$



Rusted surface of standard product



RMAX 15  $\mu$

# Power Hydro Chuck



## NEW! Hydro chuck with collet holder flexibility!

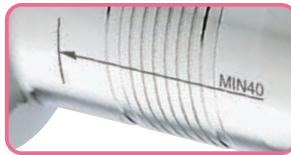
PHC·A has improved clamping pressure for high precision, stable clamping force with collet versatility.



### PHC·A

- BT..... 104
- CAT..... 208
- AHO..... 258
- HSK·A..... 314
- HSK·E..... 361
- HSK·F..... 368
- UTS..... 400

● Minimum clamping length marking  
Easy to see Min. clamping length!

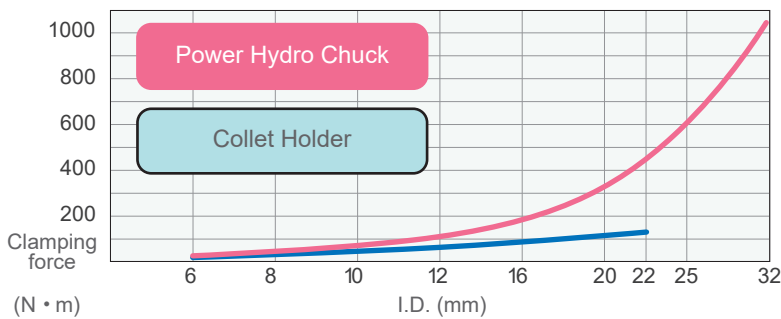


\*short projection length holder may have min. clamping length number only (no lines)

No-slip grip

## Easy to use! Versatile application!

● 20% more clamping force than a collet holder!



● Maximum rotational speed

Chuck size	Maximum rotational speed
PHC04A~16A PHC0250A~0625A	20,000 min <sup>-1</sup>
PHC20A~25A PHC0750A~1000A	15,000 min <sup>-1</sup>
PHC32A PHC1250A	10,000 min <sup>-1</sup>

●  $\phi 3$  shank cutting tool can be clamped using a collet with stopper pin. (PHS series)

- Using PHS collet, variety of shank sizes can be clamped and protect inner shank from damage/scratch.
- For higher precision chucking, align ▲ markings on a PHC·A chuck and collet.



Collet with stopper pin



Internal coolant feeding enabled.



● Easy! Quick! Simple Clamping!!

Simple one hand clamping operation with a hex wrench.

● Numerous ID sizes!  
1mm increments on metric size (6mm - 32mm)  
Standard inch size (0250" - 1250")

\* $\phi 4$ mm is available.

● Available in various spindle interfaces

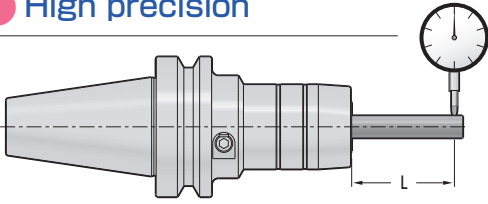
- BT/CAT/SK
- AHO (NBT/WBT)
- HSK(A/E/F)
- UTS

UTS/CAT/SK shank and inch size are available. Please contact NT TOOL for details.



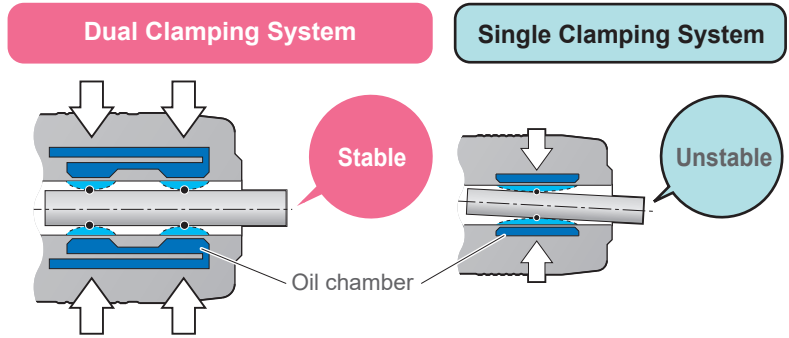
# Excellent performance!

● High precision



Chuck I.D.	Projection length (L)	Accuracy
$\phi 6 \sim \phi 14\text{mm}$ $\phi 0.250'' \sim \phi 0.500''$	50mm	<b>3<math>\mu\text{m}</math></b>
$\phi 15 \sim \phi 32\text{mm}$ $\phi 0.625'' \sim \phi 1.250''$	100mm	

● "Dual clamping points system" for stable and high precision clamping.



● Anti-vibration effect provides better surface



BT40 Vertical Machining Center

Work Piece Material S50C

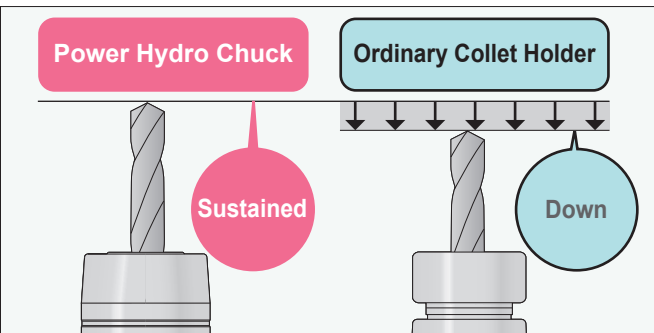
19

Depth of Cut 1.6

Feed	550 mm/min
Rotational Speed	1650 min <sup>-1</sup>
4-flute carbide Endmill	
Feed per flute	0.08 mm/flute

# Minimize set up time!

● Tool pre-set without height offset



● Length adjustment function (Sold separately)



Cutting tool height can be adjusted on the side with a hex wrench.  
 (BT , CAT and SK shank)  
 \* CAT/SK shank are available.  
 Please contact NT TOOL for details.

**NEW!**

# Slim Hydro Chuck

**PHC-S**

Perfect choice for tight space applications, such as endmill finishing, drilling and reaming on 5-axis machines.

- BT..... 112
- CAT..... 214
- AHO..... 260
- HSK-A..... 318
- UTS..... 402



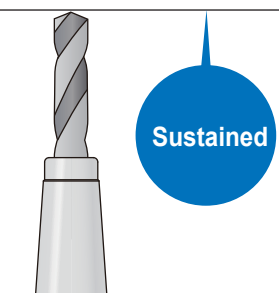
**● Easy! Quick! Simple Clamping!!**  
 Simple one hand clamping operation with a hex wrench.

**No-slip grip**  
 .....

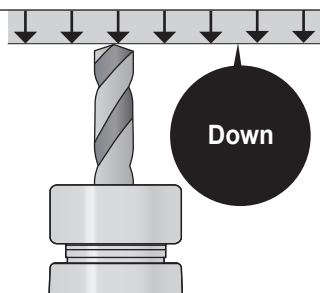
**● Available in metric and inch sizes.**  
 Inch :  $\phi 0250''$  -  $\phi 0500''$   
 Metric :  $\phi 6$  - 12, 16, 20, 25mm

## Tool pre-set without height offset

**Slim Hydro Chuck**

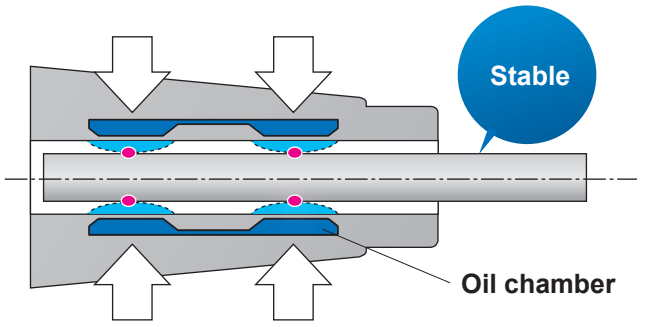


**Ordinary Collet Holder**



## "Dual clamping points system" for stable and high precision clamping.

**Dual Clamping System**

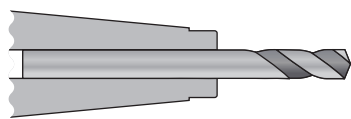
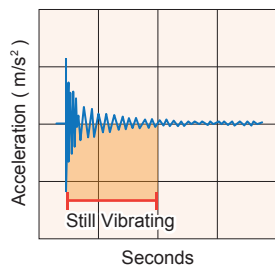


## Anti-vibration effect

High pressured oil chamber around the chucking sleeve absorbs cutting vibrations.

### Slim Type Shrink Fit Chuck

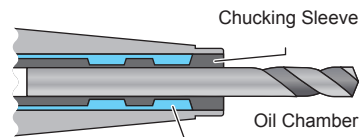
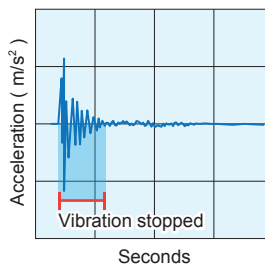
#### Vibration Test



Solid metal body does not absorb cutting vibration.

### Slim Hydro Chuck

#### Vibration Test



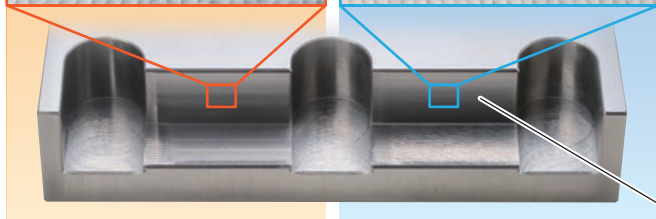
Oil chamber around the chucking sleeve absorbs cutting vibrations.

## Work surface comparison

### Slim Type Shrink Fit Chuck



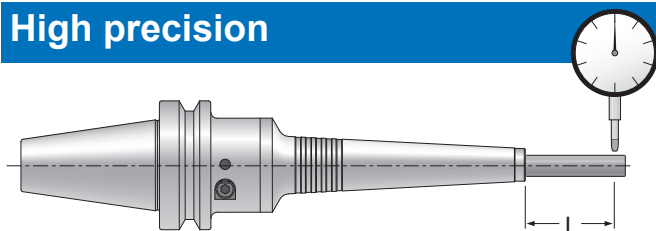
### Slim Hydro Chuck



Cutting Condition	
Machine	Vertical Machining Center
Work Piece Material	S50C
Cutter	φ 12 carbide end-mill with 4 irregular pitch flutes
Rotational Speed	4,200min <sup>-1</sup>
Feed	850mm/min

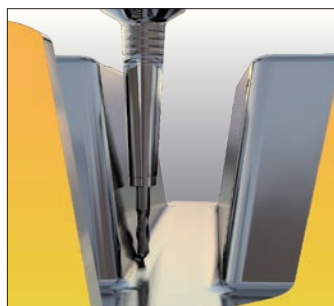
Side wall milling : 1mm × depth 18mm

## High precision



Holder I.D.	Projection length (L)	Accuracy
φ 6~12, 16, 20, 25 (φ 0.250"~0.500")	4d	3μm

## Cutting applications



Finishing with ball endmill in tight space



Finishing with ball endmill on 5-axis machine



Reaming in tight space



Drilling in tight space

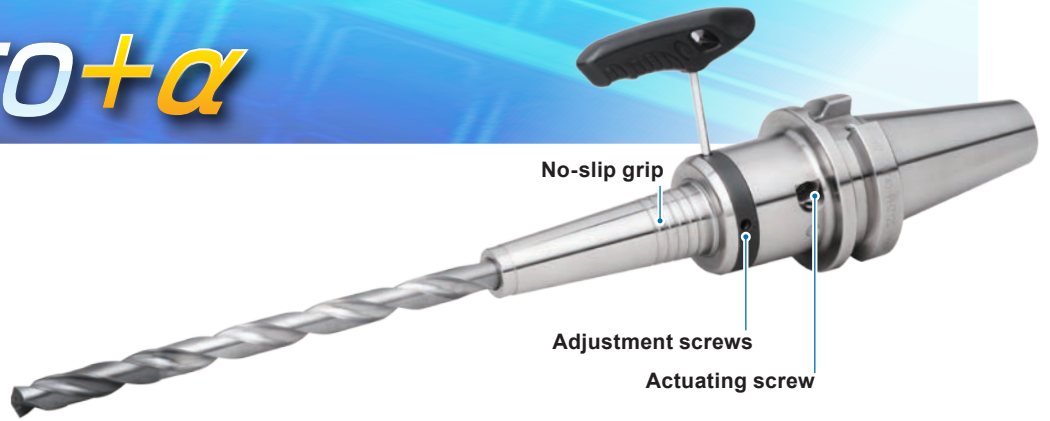
# Slim Hydro "R" Zero Holder



## Hydro+ $\alpha$

### PHZ·S

- BT..... 103
- CAT..... 207
- HSK-A..... 312



**Use for**

Application inside of work piece.  
Jig

High precision cutting without interference with a jig.

High precision cutting in a deep/narrow hole.

## Slim Hydro Chuck

**Tool pre-set without height offset**

Down

Ordinary Collet Holder

Sustained

Slim Hydro "R" Zero Holder

**Easy! Quick! Simple Clamping!**

Simple one hand clamping operation with a hex wrench.

**"Dual clamping points system" for stable and high precision clamping.**

Unstable

---

Stable

Oil chamber

## Anti-vibration effect

High pressured oil chamber around the chucking sleeve absorbs cutting vibrations.

**Slim Type Shrink Fit Chuck**

**Vibration Test**

Acceleration ( m/s<sup>2</sup> )

Still Vibrating

Seconds

Solid metal body does not absorb cutting vibration.

**Slim Hydro "R" Zero Holder**

**Vibration Test**

Acceleration ( m/s<sup>2</sup> )

Vibration stopped

Seconds

Chucking Sleeve

Oil Chamber

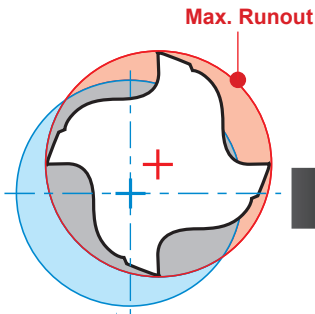
Oil chamber around the chucking sleeve absorbs cutting vibrations.



## "R"Zero Holder

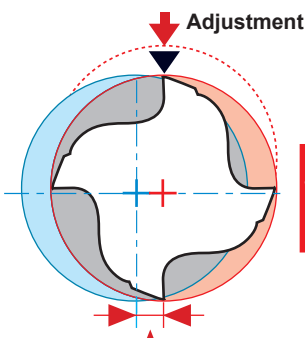
### NT's original and accurate 4 points adjustment system

Before Adjustment



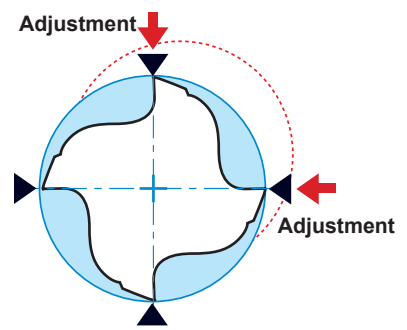
Ideal cutting edge position (0 runout)

Single point adjustment



Further adjustment needed

NT's 4 points adjustment



with 4 adjustment points

#### Competitor's Single point adjustment

With single point adjustment, runout cannot be adjusted to zero unless the exact max. runout point is found.

#### NT's 4 points adjustment

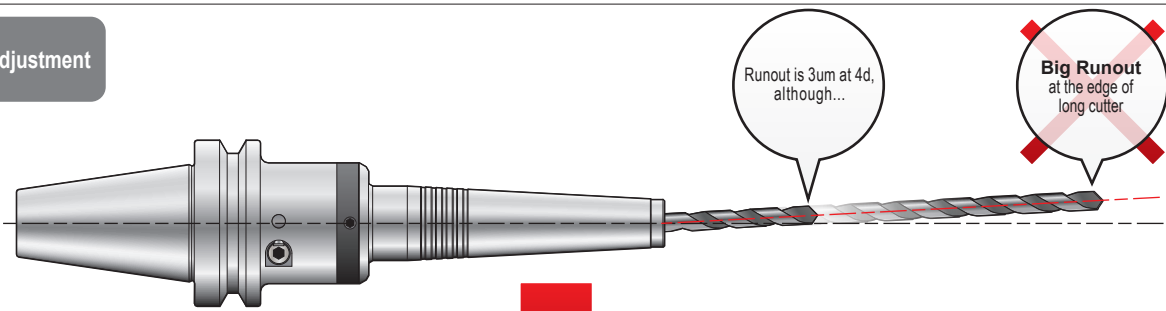
No matter where the max. runout point is, runout can be adjusted to zero!

Simple Operation- Runout of the cutting edge can be adjusted to 0 to 2  $\mu\text{m}$  by simply tightening 4 adjustment screws.

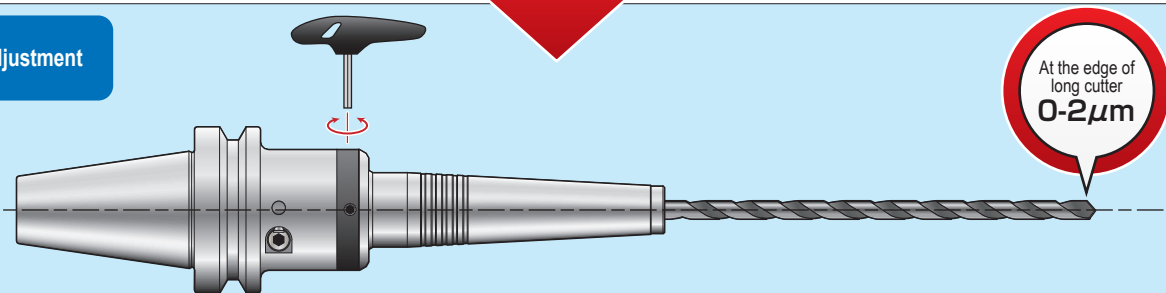
Even if the runout at 4d is in allowable range, runout at the actual cutting edge is much larger as the projection length of the cutter gets longer.

NT's "R" Zero holder realizes invariant hole diameter, better surface roughness and long tool life by adjusting runout at the cutting edge as closely as to zero.

Before Adjustment



After Adjustment



Longer tool life

Better surface roughness

Invariant hole diameter



# "R" Zero Holder for Large Diameter

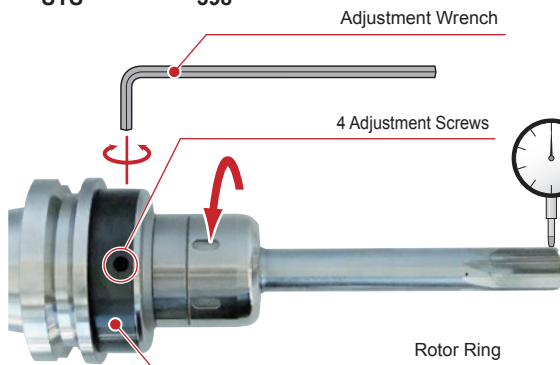


For Large Diameter  
**CTZ**

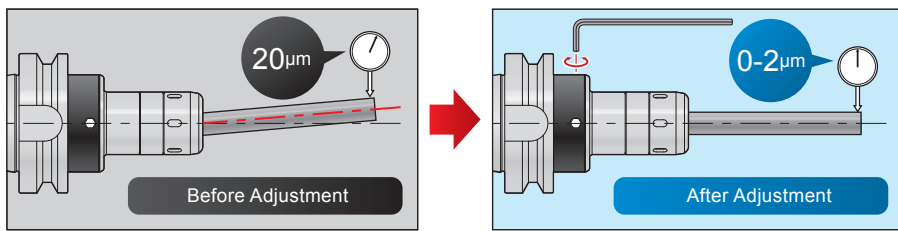
*Runout of the cutting edges can be adjusted to zero.*

- BT..... 098
- CAT..... 206
- AHO..... 256
- HSK-A ..... 308
- UTS..... 398

NT's original 4 Points adjustment system for easy, accurate and speedy runout adjustment!



Holder Type	Max. Adjustable Amount (at 100mm from a holder nose)
CTZ25A	60 μm
CTZ32A	50 μm
CTZ42	50 μm



Simple operation - Runout of the cutting edge can be adjusted to 0 to 2 μm by simply tightening 4 adjustment screws.

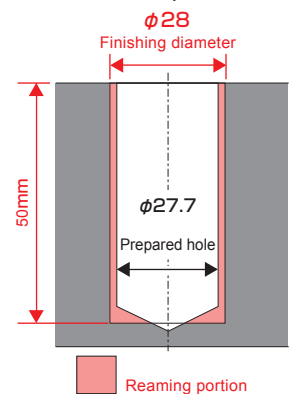
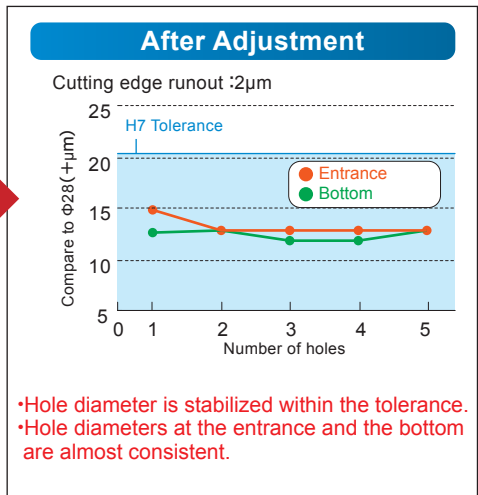
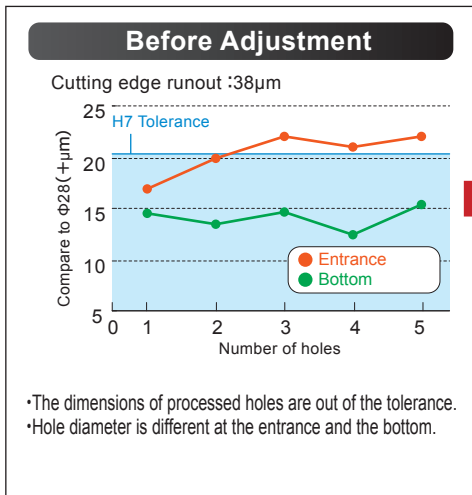
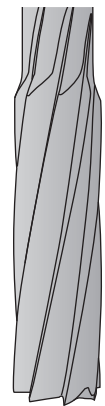
## Cutting Data

### Cutting Data - Reaming

Adjusting the cutting edge to zero runout makes high precision and invariant holes finishing possible.

#### Cutting Condition

- Holder :** BT40-CTZ32A-125
- Cutting tool :** Carbide reamer
- Rotation speed :** 150min<sup>-1</sup> (Peripheral speed 13m/min)
- Feed :** 45mm/min (0.3mm/rev)
- Projection length :** 280mm  
(Cutting tool projection length: 155mm)
- Removing amount :** φ0.3



"R" zero holder series

Most Popular!

Standard type  
**HDZ**

- BT..... 096
- CAT..... 204
- AHO..... 254
- HSK-A..... 306
- UTS..... 396



High balanced type  
**GDZ**

- BT..... 100
- HSK-A..... 309



Small Diameter Type  
**ERZ**

- BT..... 102
- HSK-A..... 311
- UTS..... 399



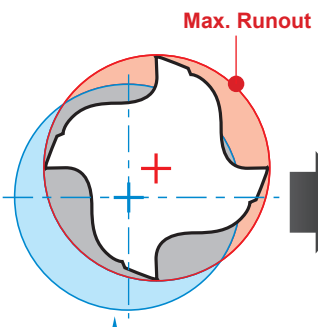
Straight shank  
**ST-HDZ**

- ST..... 082

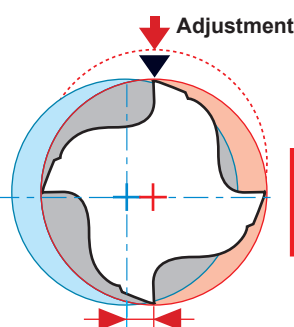


NT's original and accurate 4 points adjustment system

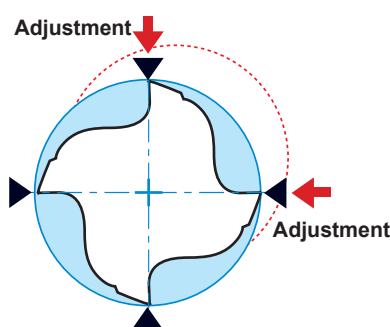
Before Adjustment



Single point adjustment



NT's 4 points adjustment



**Competitor's Single point adjustment**  
With single point adjustment, runout cannot be adjusted to zero unless the exact max. runout point is found.

**NT's 4 points adjustment**  
No matter where the max. runout point is, runout can be adjusted to zero!

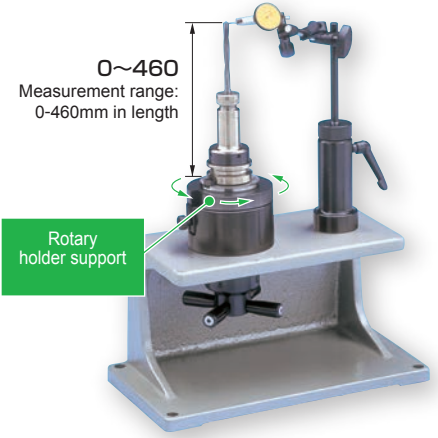
"R"Zero setter  
**SPZ-2**

■ SPZ-2 ..... P. 518

**Easy to measure runout accuracy**

**Rotary holder support**  
Any tool interface can be prepared. (BT, HSK, UTS, SK etc.)

**Holder pull-in device**  
Enables tool change by pulling in (with 4-8kN) and fixing the tool holder.



# Super Tite-lock Milling Chuck

Most Popular!

High rigidity type  
**CT·S**

- BT..... 050
- CAT..... 192
- AHO..... 248
- HSK·A..... 290
- UTS..... 384
- NT..... 058
- Accessories ... 066

## New Generation Milling Chuck

Flange through type  
**CT·S-CF**

- BT..... 056

High balanced type  
**CT·S-E**

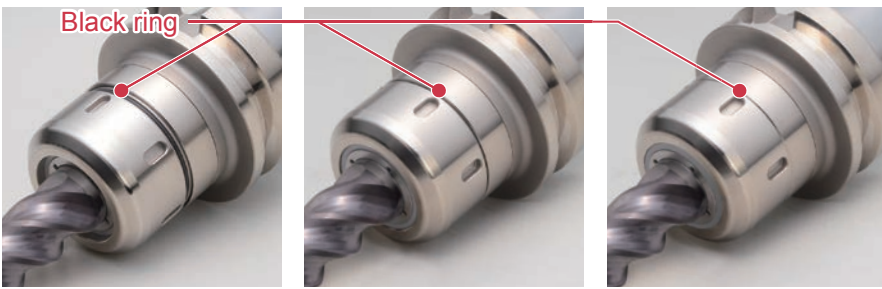
- BT..... 054
- CAT..... 194
- HSK·A ..... 292



**⚠ Caution**  
Please rotate the clamping ring counterclockwise more than 360 degrees after a cutting tool is removed.

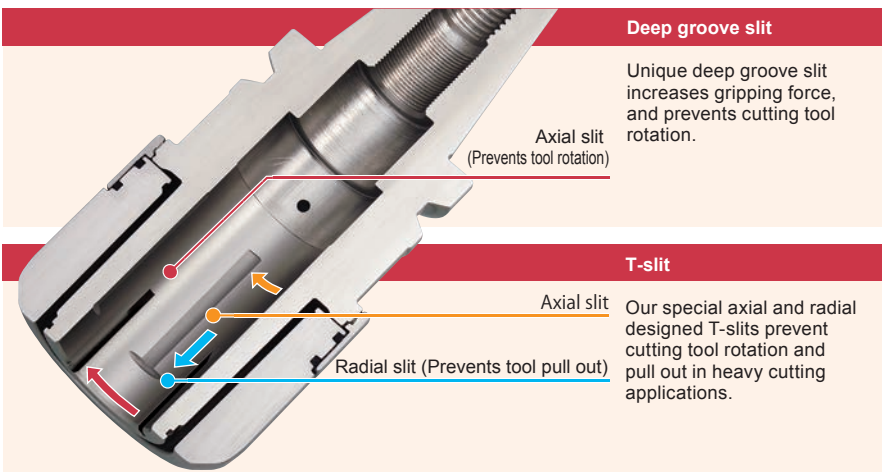
### Unique retaining ring allows high speed milling

### Two-stage tightening



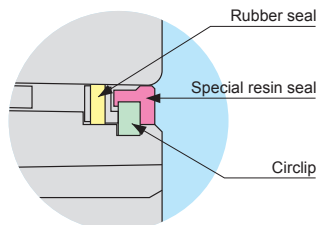
- **Before clamping**
- **Stage one**  
Finish milling  
Tighten clamping ring till the black ring is not visible.
- **Stage two**  
Heavy milling  
Completely tighten clamping ring to achieve maximum gripping torque.

### New patented "T-slit" design minimizes slippage and pull out of end mill.



### Improved durability is ensured by our perfect seal mechanism

Combination use of rubber seal and special resin seal blocks dust entrance, and realizes long durability.



Special resin seal

### Center-through coolant feeding compliant



For cutters with coolant hole      For collet through coolant With MC-C collet

High precision type

## HDC·A

- BT..... 070
- CAT..... 196
- AHO..... 250
- HSK·A ..... 296
- HSK·E ..... 358
- HSK·F ..... 366
- UTS..... 390
- ST..... 081



High balanced type

## GDC·A

- BT..... 076
- CAT..... 200
- HSK·A ..... 300

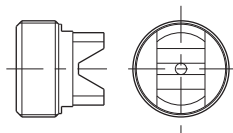


Chucking accuracy of AA grade collet (chucking range: 0.5-22.0mm) is within 5 micrometers at 4d.

## Preset screw

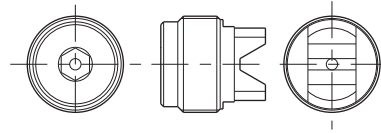
HDS-※※ Type

Standard



The operator can adjust the projection length of the cutting tool from the cap end.

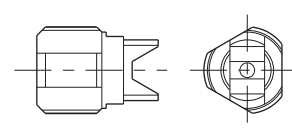
HDS-※※-※ Type with hex. hole (option)



The operator can adjust the projection length of the cutting tool by using a hexagon wrench from the holder shank side.

HDS-※※-MS Type

For semi-dry machining (option)



For semi-dry machining. The operator can adjust the projection length of the cutting tool by using a hexagon wrench from the holder shank side.

The HDC-A comes with a standard preset screw. You may purchase a preset screw separately for the HDC-A and GDC-A according to various requirements.

## Coolant supply



Tool with oil hole  
**FDC-OH type**  
8,000min<sup>-1</sup>  
6MPa



For collet through coolant  
**FDC-C type**  
8,000min<sup>-1</sup>  
6MPa

## Recommended tightening torque for the cap nut

When reached the targeted tool projection length, tighten the nut with a special spanner (sold separately) securely.

Holder size	Recommended torque
07	10~15N·m
09	30~35N·m
12	35~40N·m
16	40~45N·m
22	55~60N·m



# EASY PRESET SERIES Drill Holder With Easy Tool Length Adjustment

For drilling  
**SDM**

BT.....	074
CAT.....	198
AHO.....	252
HSK-A.....	298
UTS.....	392

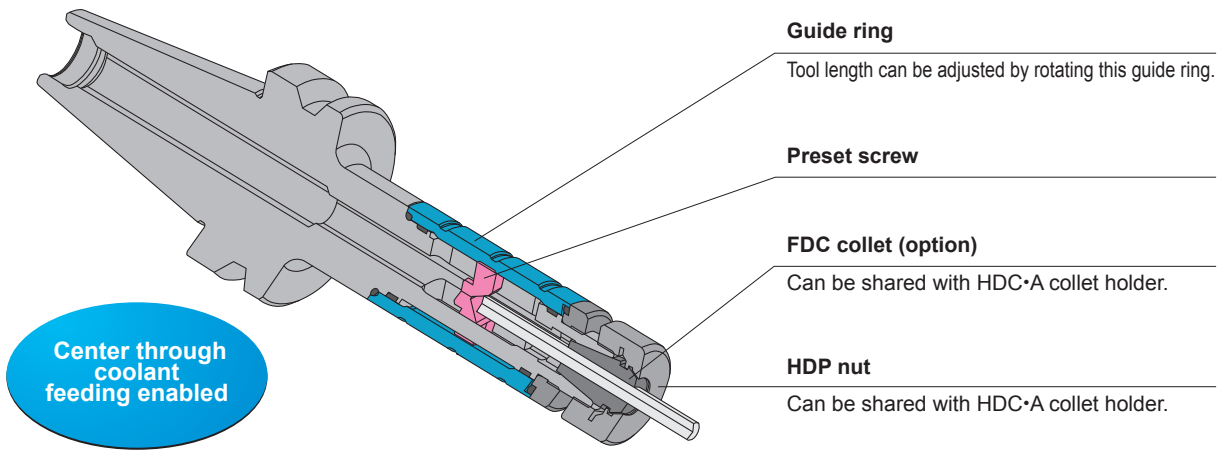
**Adjustable tool length**

Simple length adjustment - all you have to do is turn the guide ring. (No additional tool is required.)

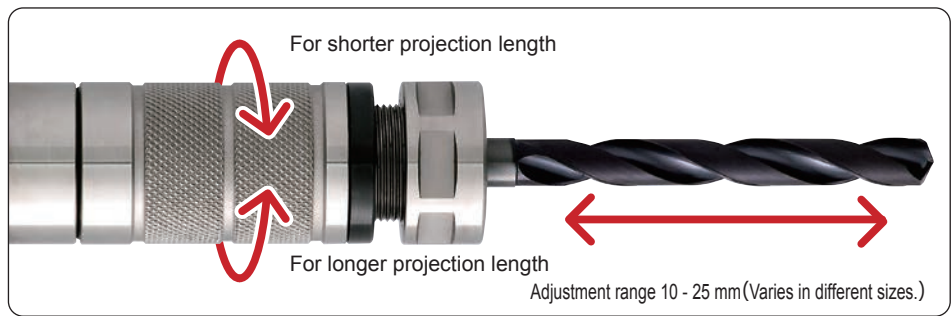


## Advantages of SDM

1. Tool length can be adjusted easily by rotating the guide ring.
2. Center-through coolant feeding enabled. (Max. 7MPa).
3. Preset screw securely locks rotation of cutting tool with tang drive.
4. Size of cutting tools can be changed by simply replacing collets.



## Length adjustment function



Cutting tool length can be adjusted by rotating the guide ring manually. Easy to set the targeted length - can be adjusted at the same time measuring the length.

# EASY PRESET SERIES

## Synchronous Tap Holder With Easy Tool Length Adjustment

For tapping

# STM

BT.....	124
CAT.....	222
AHO.....	266
HSK-A .....	332
UTS.....	410

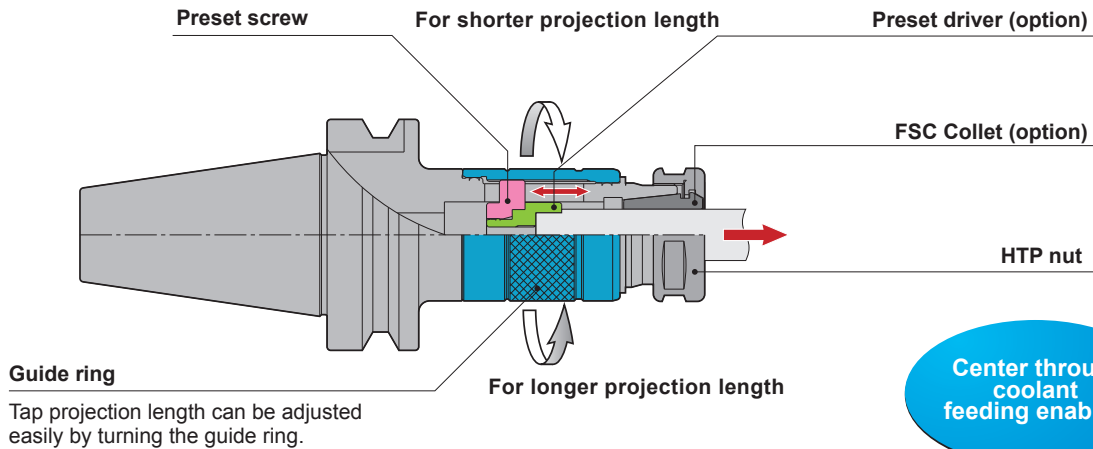
Adjustable tool length

Simple length adjustment - all you have to do is turn the guide ring. (No additional tool is required.)



### Advantages of STM

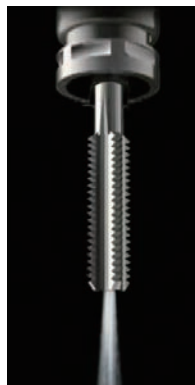
1. Tap projection length can be adjusted easily by turning the guide ring.
2. Center-through coolant feeding is possible (Max. 7MPa).
3. Slippage of tap can be prevented by preset driver.
4. Tap size can be changed by replacing preset drivers and collets.



### Coolant supply

■ Internal coolant feeding enabled.

Maximum coolant pressure:  
 Tool shank diameter 19mm and below: 7MPa  
 20mm and above: 5MPa (Coolant collet is sold separately.)  
 (NOTE) Coolant pressure for UTS is different.



Cutter with oil hole  
**FSC-OH** type



For collet through coolant  
**FSC-C** type

# Angle Head



**Fixed type**  
**AH**  
**AH-OH**

- AH 90°**
- BT ..... 164
- AHO ..... 284
- AH 90°**
- CAT ..... 238
- HSK-A ..... 355
- AH 45°**
- BT ..... 166
- AHO ..... 286



**Flexible type**  
**AHS**  
**AHL**

- AHS, AHL**
- BT ..... 168
- AHSE, AHLE**
- CAT ..... 240
- HSK-A ..... 357

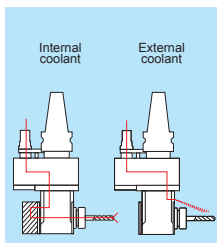
•Flexible type:  
Any tilt angle can be set at your discretion.



•Center through coolant feeding is possible. World's first standardized internal coolant system, which enables pin-point coolant supply to the desired place.

## Coolant type

Fixed type is capable of supplying coolant internally as it is. All you have to do to enable center-through coolant feeding is to add a coolant unit and a coolant collet.



## Specifications

Type	Max. rotational speed	Chucking capacity	Tapping capacity	Tilt angle	Internal coolant
Flexible type	3,000min <sup>-1</sup>	φ0.5~φ22	M3~M22	0°~90°	
Solid type 45	07 size 6,000min <sup>-1</sup> other 3,000min <sup>-1</sup>	φ0.5~φ16	M3~M22	45°	Yes
Solid type 90	07 size 6,000min <sup>-1</sup> other 3,000min <sup>-1</sup>	φ0.5~φ25	M3~M22	90°	Yes

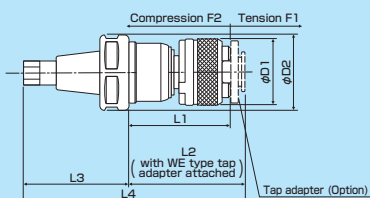
## Guidelines for cutting conditions (Fixed type)

Tool	BT50-AH2290-180-80 Cutting examples					
	2-flute HSS endmill (dia. 10mm)			2-flute HSS endmill (dia. 20mm)		
Work material	S55C	FC250	A2017	S55C	FC250	A2017
Depth of cut (mm)	11	12	11	4	5	5
Rotational speed (min <sup>-1</sup> )	630	1,000	2,000	400	500	1,000
Cutting speed (m/min)	20	40	63	25	31	63
Feed (mm/min)	60	100	200	60	50	100
Feed per rotation (mm/rev)	0.09	0.1	0.1	0.15	0.1	0.1

## Reduction of plant investment

- Without using a tilt table, machining from different angles can be performed. Set-up cost and plant investment cost can be reduced.
- Fixed type has a much higher rigidity than flexible type.

### Quick-change tapping attachment



Type	Tap adapter size	Tapping capacity	L1	L2	L3	L4	φD1	φD2	Axial compensation	
									F1	F2
TPC16-1	1	(M15) U1/4~U7/16 (U9/16) PIPE (PT,PS,PF) 1/8~1/4	50	56.5	64.5	121	32	36	10	2
TPC22-2	2	M8~M22 U3/8~U7/8	69	80	71	150	50	46		



# Hyper Spindle

Speed increaser

## HP-H

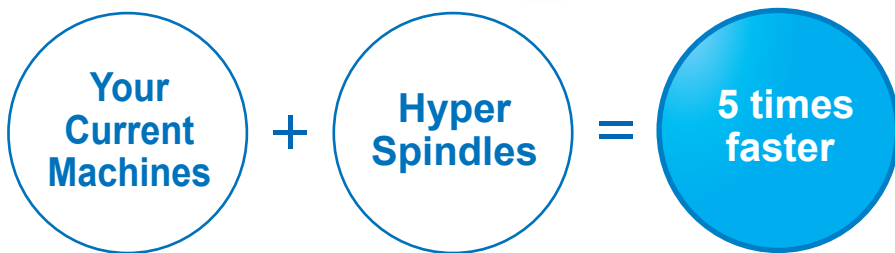
BT..... 163  
CAT..... 237

30,000min<sup>-1</sup>



### Advantages

- Increases tooling revolutions, and reduces cycle time.
- Maximum 30,000 min<sup>-1</sup>.
- Assures low noise and vibration by precision ground steel gears.
- Tool shanks as small as 0.5mm(0.02in)(FDC 07 series), up to 12mm(0.472in)(FDC 12 series) can be chucked.
- Overheating is prevented by a cooling turbo fan.



Hyper spindles increase tooling revolutions up to 5 times higher (maximum 30,000min<sup>-1</sup>), enabling you to reduce per-piece cost with your current machines instead of installing new machines.

### Cutting data

	BT50-HP07H-150	BT50-HP07H-150	BT50-HP12H-165
Work material	(A2017) aluminium alloys		
(min <sup>-1</sup> ) Revolution	30,000		
送り (mm/min) Feed (in/min)	1200 (47.28)	900 (47.28)	1200 (47.28)
刃径 (mm) Mil dia (in)	6.0 (0.24)	3.0 (0.12)	12.0 (0.47)
Depth of cut	<p>Two-flute endmill (HSS)</p>	<p>Two-flute carbide endmill</p>	<p>Two-flute carbide endmill</p>

### Recommended tightening torque

Size	Spanner for cap	Spanner for head shank	Recommended torque value
HP07H	S - 0	16 mm	10~15N·m (80~133lbf-in)
HP09H	S - 1L	21 mm	30~35N·m (266~310lbf-in)
HP12H	S - 3L	21 mm	35~40N·m (310~354lbf-in)

### Maximum rotational speed and chucking accuracy

Size	Collet size	Speed ratio	Max. speed	Chucking accuracy
HP07H	FDC07	1 : 5	30,000min <sup>-1</sup> (M/C6,000min <sup>-1</sup> )	10μm/4D (0.4μin/4D)
HP09H	FDC09			
HP12H	FDC12			

# Shrink Fit System

## Shrink Fit Chuck

Heavy Type(DIN STANDARD)

### S R D

- BT..... 118
- CAT..... 218
- AHO..... 262
- HSK-A..... 326
- HSK-E..... 363



Heavy Type

### S R K

- BT..... 122
- HSK-A..... 325
- UTS..... 406



Small Diameter Type

### S R E

- BT..... 114
- CAT..... 216
- HSK-A..... 322
- HSK-E..... 362
- UTS..... 404



Slim Type

### S R S

- BT..... 120
- CAT..... 220
- AHO..... 264
- HSK-A..... 330
- HSK-E..... 364
- UTS..... 407



## Heating Device

Magnetic Induction Heating Device

### ISG3400

ISG3400 ..... 500



Hot Air Type Heating Device

### SRK-HA1

(100V)

### SRK-HB2

(200V)(230V)

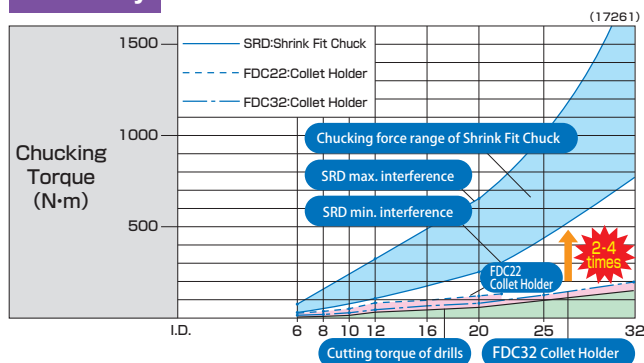
SRK-HA1 ..... 504  
SRK-HB2 ..... 504



## Advantages of Shrink Fit Chuck

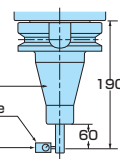
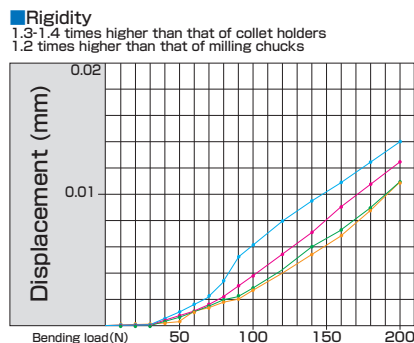
### High retentivity

The chucking torque is 2 - 4 times higher than that of collet holders



### Superior Rigidity

Cutting tools with short shanks can be used. Increased rigidity, feed rates, speed, and longer tool life is achieved.



# WBT / NBT AHO Series

Two-face Contact BT holder. Light weight and efficient

**WBT-AHO**  
(30, 40, 50)

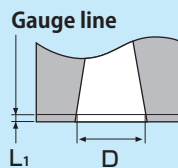
For BT  
Two-face contact spindle

**NBT-AHO**  
(30, 40, 50)

For NT's  
Two-face contact spindle

AHO Series .....247 ~ 288

## AHO spindle dimension



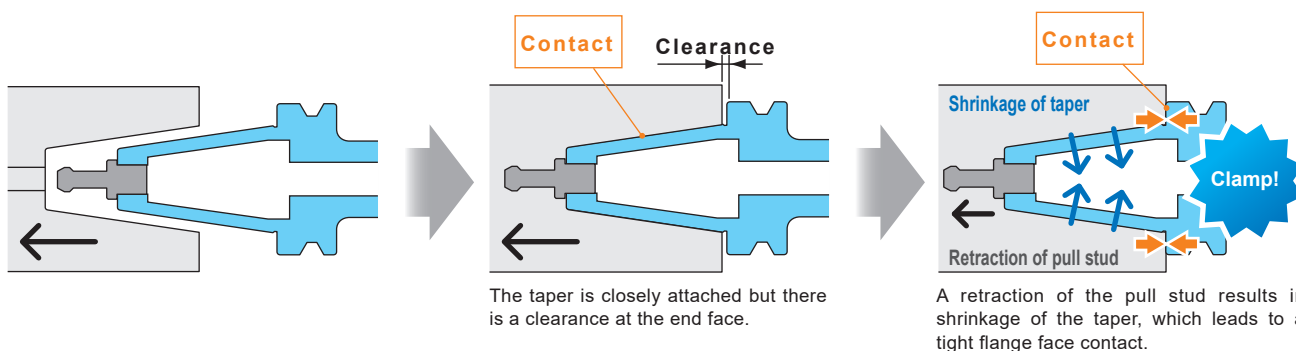
BT	D	※L1	
		NBT-AHO	WBT-AHO
30	31.75	0.2	0.98
40	44.45	0.2	0.98
50	69.85	0.2	1.48

※Tolerance of L1 varies depending on the spindle size.

**Easy to make a spindle**

Please contact us when making spindles.

## Clamp mechanism of AHO



## Advantages of AHO

### Lightweight holder reduces load to spindle, and improves energy efficiency.

The holder is made lighter by hollowing out the shank. Use of lightweight holder reduces load to spindle, and improves energy efficiency.  
Taper shank of BT50 4kg→2.8kg

### Chip removal rate: 20-50% UP

Two-face contact and ideal sustaining balance of taper and flange achieves remarkable increase of performance.

### Inhibition of fretting

Continuous contact between the taper and the end face prevents fretting.

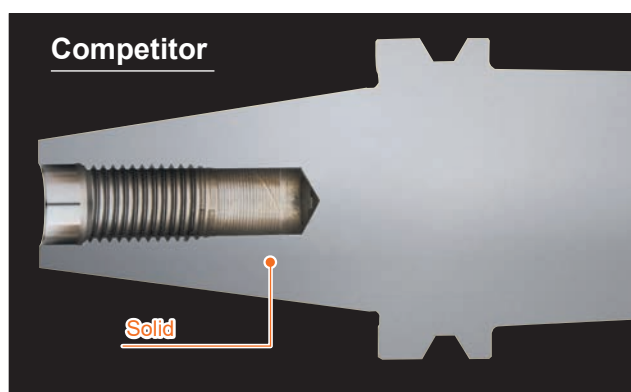
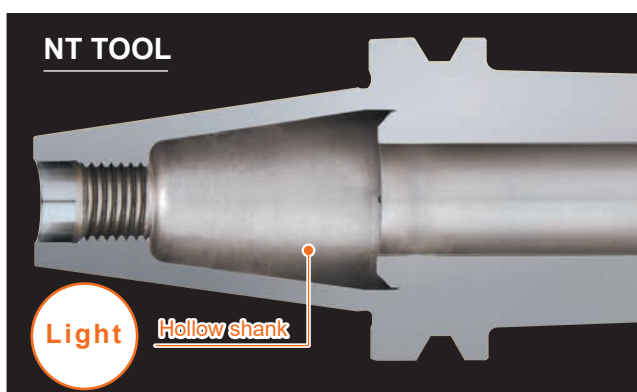
### Perfect two-face contact even at high-speed rotation

Even when the machine spindle expands with centrifugal force, two-face contact is maintained.

### High repetitive accuracy

Taper area of tool holder shrinks along spindle taper. In addition, flange face tightly contacts to the spindle, and realizes precise attachment.

## Feature comparison of two-face contact holer



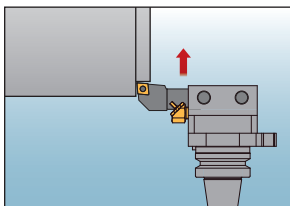
# Turning Tools for M140X1

SPEEDIO

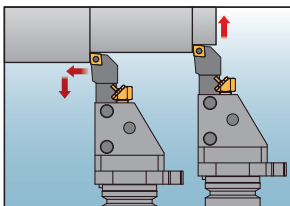
**NEW!**



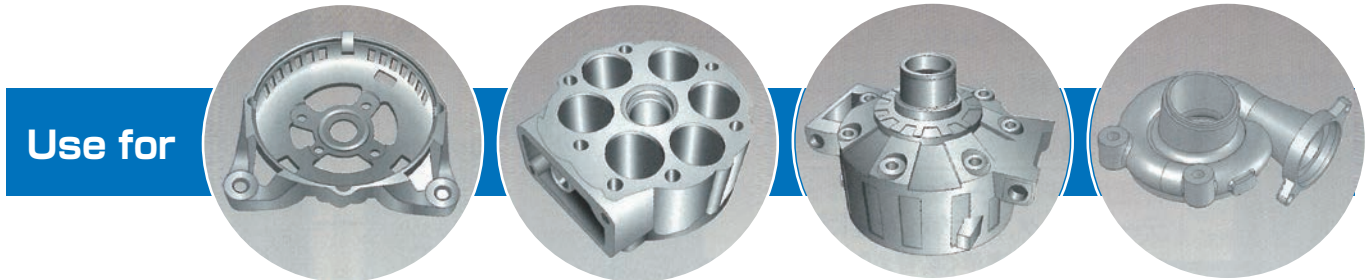
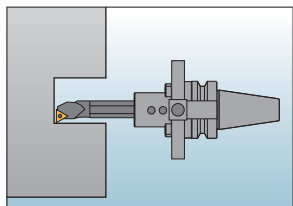
For Facing  
**SBH**  
SBH ..... 182  
□20



For External / Facing  
**SBV**  
SBV ..... 181  
□20



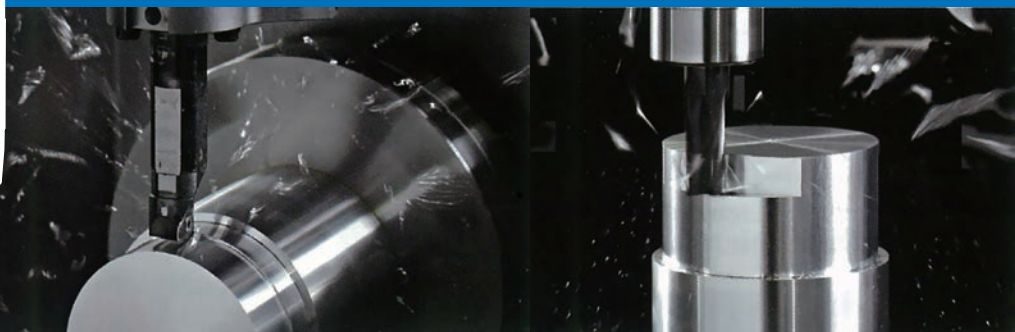
For Boring bar  
**TSB**  
TSB ..... 183  
φ10, 12, 16, 20



## SPEEDIO M140X1

Turning center + Machining center

New Choice for Process Integration





# HSK-T Turning Tools

## What is HSK-T?

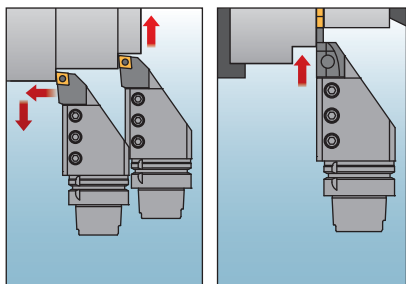
HSK-T interface was developed to maximize cutting ability of multi-tasking machines. HSK-T interface became ISO standard (ISO121 164-3:2008) in 2008.



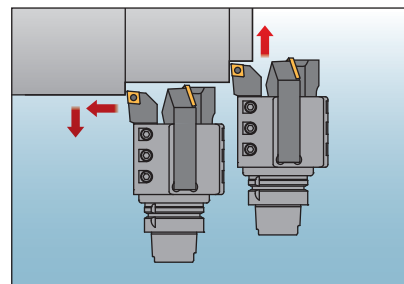
**Rustproof**  
\* Some exceptions apply

**Coolant Feeding Enabled**

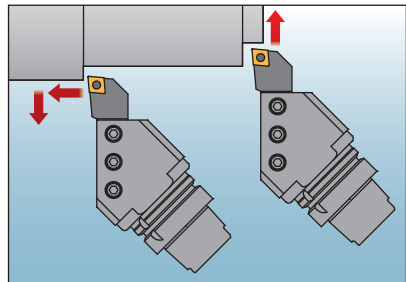
For External/Cut-off  
**SBV**  
SBV ..... 375  
□20, □25, □32



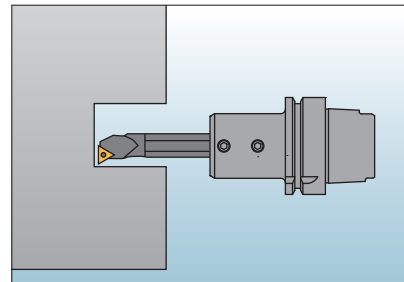
For External/Facing  
**SBT**  
SBT ..... 378  
□20, □25



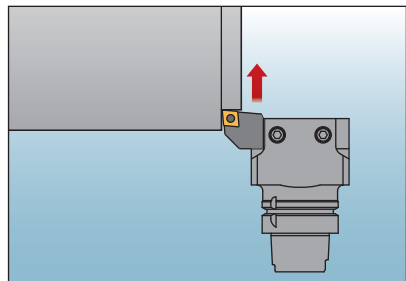
For External/Facing  
**SBN**  
SBN ..... 376  
□20, □25, □32



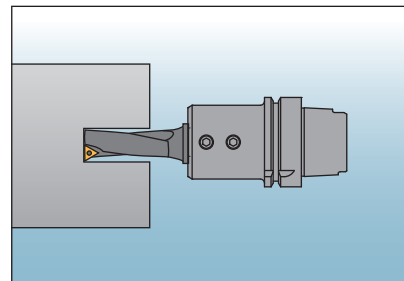
For Boring bar  
**TSB**  
TSB ..... 379  
ø8-50



For Facing  
**SBH**  
SBH ..... 377  
□20, □25, □32



For Drill  
**TSD**  
TSD ..... 381  
ø16-50



MORI SEIKI CO.,LTD granted NT TOOL a manufacturing and distribution license under the patent No.3720202.

# Contactless Optical Tool Presetter



Easy to use!  
Well thought out operational design.

Contactless Optical Tool Presetter  
**AOTP**

AOTP ..... 510



Specifications and design of the product are subject to change without notice.

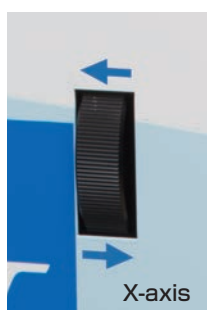
## User Friendly Mechanical Body



**Camera Handle**  
Simple one hand operation.  
Movable in X-axis direction or Z-axis direction separately/simultaneously.



**Fine Adjustment Dial for Z-axis / X-axis**  
Quick camera positioning by rotating the dial.



**Camera Arm**  
Measurement up to dia.400mm is possible.



**Tightening of a collet holder is possible. (Up to 60Nm)**  
Move away the camera from the spindle when tightening.  
Adjustment of cutting tool projection length and runout measurement / adjustment can be done in one spot.



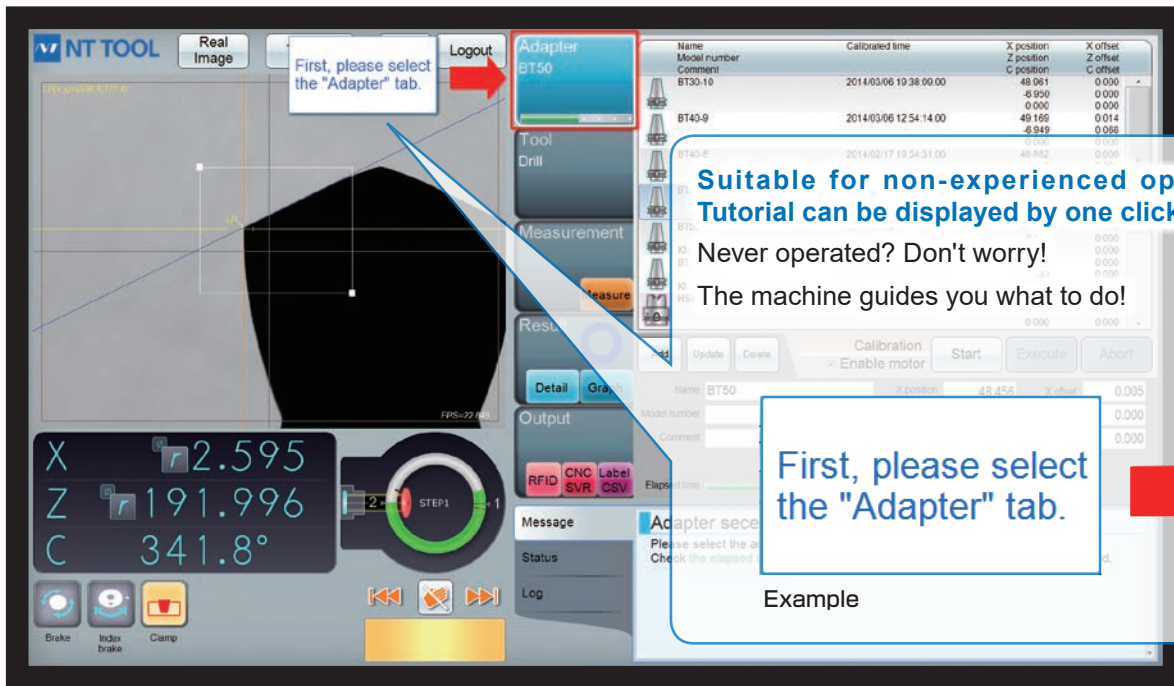
**Label printer (Option)**  
Thermal printer. No need for cartridges. Measured value can be printed. Tool name, model, comment registered beforehand can be printed together.



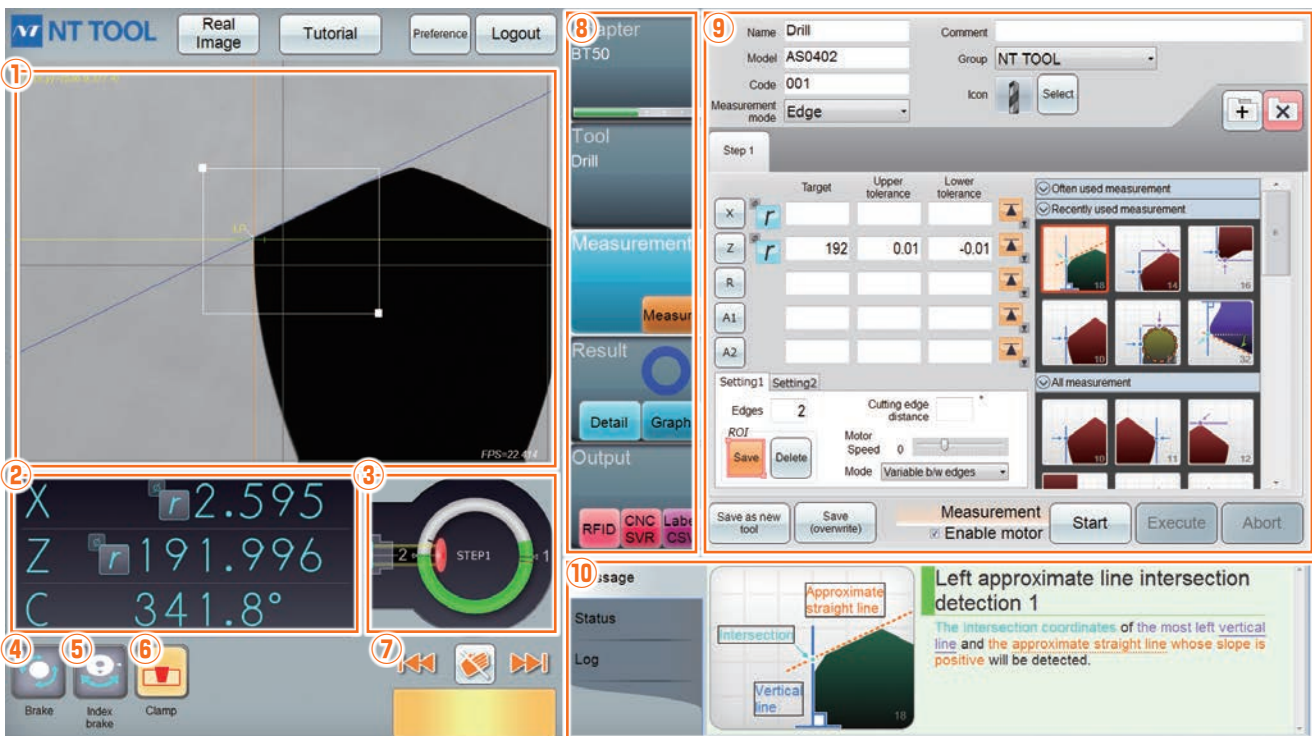
**Cutting Tool Projection Length Adjustment (Option)**  
An operation handle for cutting tool projection length adjustment can be added.

**Mechanical Clamp**  
400kg air cylinder firmly clamps the tool holder. Good repetitive accuracy of tool holder clamping/unclamping.

## Easy-to-use Software with Tutorial Function.



## Basic Function



### ① Camera (Captured Image)

Actual field of view 9.0mm × 6.5mm  
30× Magnification  
35× Digital Zoom

### ② Coordinates

X=Radius/Diameter, Z=Height,  
C=Rotational Position.  
\*X and Z value indicates position of the camera center when not measuring.

### ③ Magic Eye

Cutting edge detection

### ④ Break

Spindle can be stopped at any location.

### ⑤ Index Break

Spindle can be pin-locked at 90 degrees.

### ⑥ Clamp / Unclamp

### ⑦ Spindle Control

Forward / reverse to the next / previous cutting edge.

: Free the motor.

### ⑧ Operation Order Tab

### ⑨ Operation Field

### ⑩ Message Field

The software can be customized upon request.  
Please contact NT Tool Corporation.



# EASY PRESET SERIES Tool Presetter

## Contactless Tool Presetter

Contactless Tool Presetter  
**OTP400**  
**OTP600**

OTP-400 ..... 507  
OTP-600 ..... 507

OTP400/600  
**IC1**

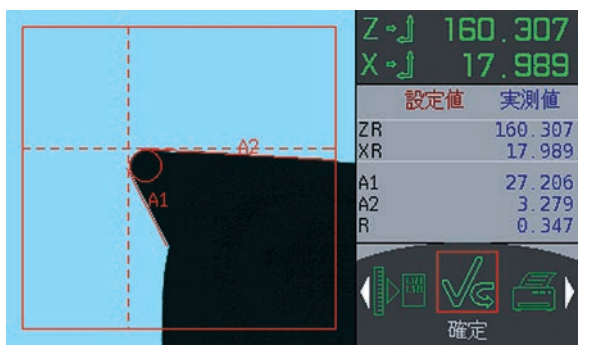


### Advantages of OTP

- Protect cutting edge by contactless measuring. Ideal method for diamond and CBN tools.
- Various cutting edge shapes can be measured.
- Speedy shape recognition.
- Reduces human errors by image processing.

### Basic screen of OTP-IC1

Displaying height, diameter, and cutting edge angle.



## Contact Tool Presetter

TOOL Presetter  
**NTP-300A**

NTP-300A ..... 515

### Specifications

- Operation method  
Manual
- Tool diameter  
0~φ300mm
- Tool length  
50~500mm



TOOL Presetter  
**NTP-400**

NTP-400 ..... 514

### Specifications

- Operation method  
Motor drive
- Tool diameter  
0~φ400mm
- Tool length  
50~500mm



"R" Zero Setter

SPZ-2

SPZ-2 ..... 518

Application / Feature

- Less than 3 μm runout accuracy at 200mm(HSK, UTS)
- Rotary holder support for BT, HSK, UTS.
- Holder pull-in mechanism.



Simple Setter

SPHV-3

SPHV-3 ..... 519

Application / Feature

- Light weight and compact design. Placeable on work table.
- Digital scales adopted for both X axis and Z axis.



HSK Clamper

SPN1-HSK

SPN1-HSK .... 516

Application / Feature

- Easy to clamp holder as just insert HSK (A, C, or T) shank and rotate knob 90 degrees.
- Tool length measurement is possible.



HCL

HCL ..... 517

Application / Feature

- Best suited for tightening milling chucks or collet chucks.
- All types of HSK (A-F, and T) and UTS can be clamped.
- With ADS adaptors, various different shanks can be clamped.
- Tool holder can be clamped by turning the clamp lever only. The clamp lever can be turned in either direction.
- Vinyl mat will prevent damages to taper or flange face of HSK / UTS shank.



Body only



Body + ADS Adapter

# MEMO