

ANGLE HEAD

M/C Tool

HSK-T Tooling Systems for Turning Mill

General Purpose Tool

JIG

Measuring Equipment

Maintenance Tool

Wire EDM fixture

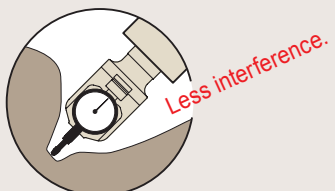
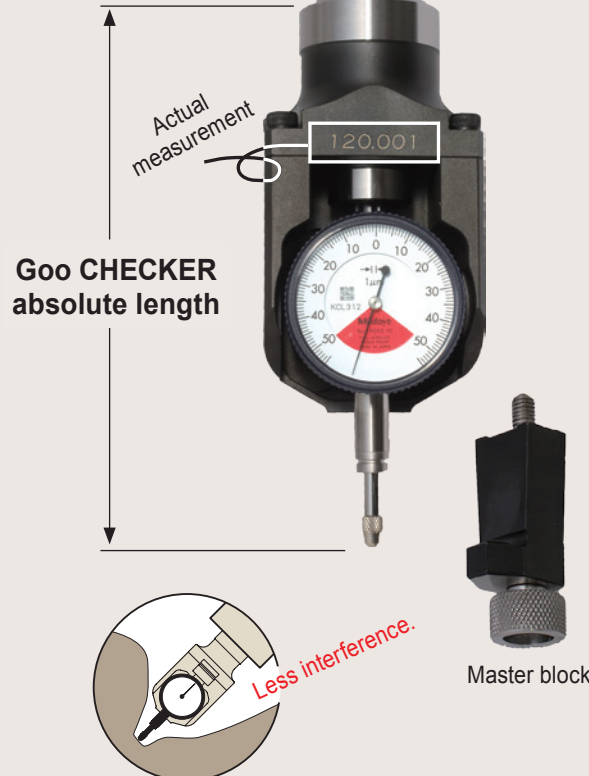
Technical Information

Easy and accurate Z-axis origin setting!

It is easy to accurately set the Z-axis origin of the machining center, the reference surface of work-piece, and the jig fixture.



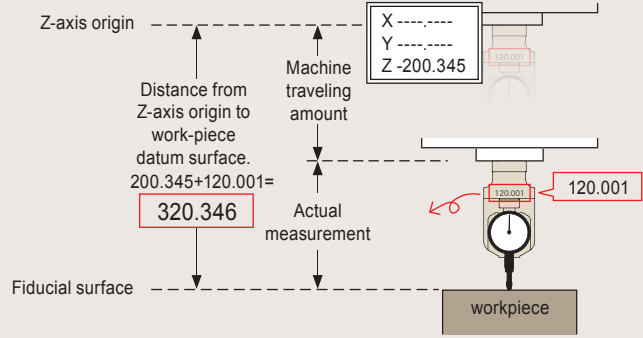
ZPM



Available for using 5-axis machine.

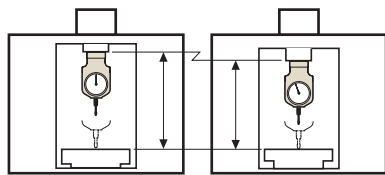
Measuring steps are easy.

Accurate measuring of the distance from the Z-axis origin to the reference surface of the work-piece and jig fixture is easy.



Sharable Z-axis origin for several machining centers

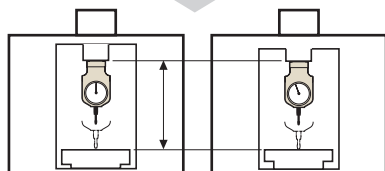
After measuring the distance from the Z-axis origin to the table surface of each machining center and correcting any variations, multiple machining centers can share the tool holders and programming.



Sharing tool holders

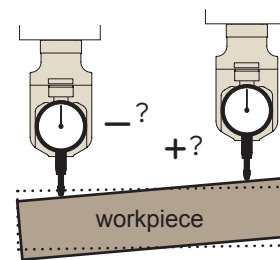
No need to measure all your machines

Sharing program



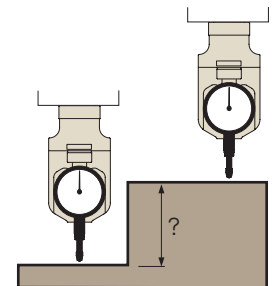
Flatness check

Precise measurement for flatness.



Step measurement

Measurement for steps on the work-piece.



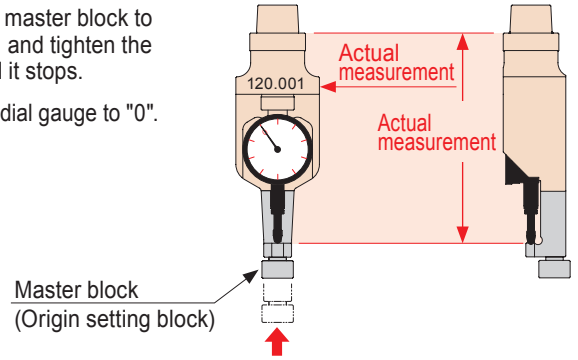
Goo Checker ZPM type (ZPM)

Thanks to its compact design, interference is reduced, making it the optimum holder for compact machining centers.



Easy confirmation of actual value (self-check function)

1. Attach the master block to the holder, and tighten the screw until it stops.
2. Adjust the dial gauge to "0".



CODE	Fig.	L	L1	Kg
BT30-ZPM-130	1	130	100	1.0
-165		165	135	1.2
BT40-ZPM-150	2	150	120	1.3
-210		210	180	1.5
BT50-ZPM-180	2	180	150	2.9
-240		240	210	4.1
A63 -ZPM-150	3	150	120	1.2
-210		210	180	1.5
A100-ZPM-180	3	180	150	2.5
-240		240	210	3.8
E32 -ZPM-120	3	120	90	0.7
-165		165	135	1.0
E40 -ZPM-120	3	120	90	0.8
-180		180	150	1.1
E50 -ZPM-150	3	150	120	1.0
-195		195	165	1.3
F63 -ZPM-150	3	150	120	1.1
-210		210	180	1.3
DN40-ZPM-150	2	150	120	1.3
DN50-ZPM-180	2	180	150	2.9
CT40-ZPM-150	2	150	120	1.3
CT50-ZPM-240	2	240	210	4.1

Option

- Retention knob (BT/DIN/CAT.) → P.64

Std. Access.

- Master block
- Indicator, 1/ 1000 reading

Caution

- A.T.C is not available. (except for BT30)

Fig. 1

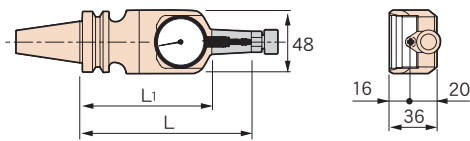


Fig. 2

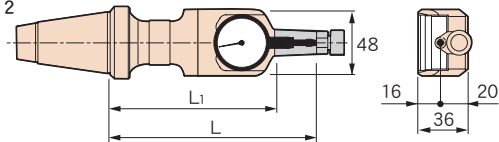
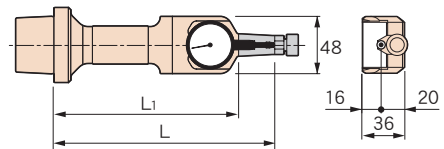
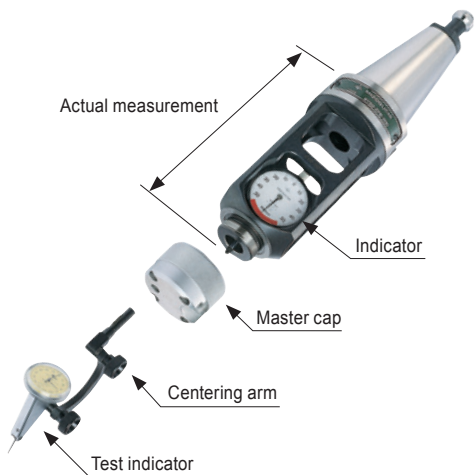


Fig. 3

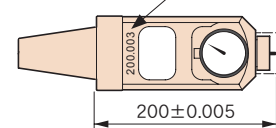
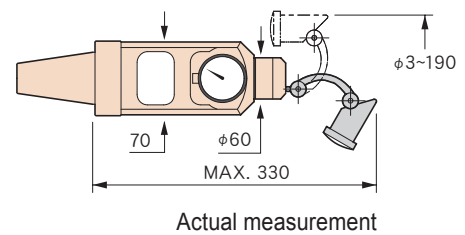


Goo Checker ZPB type (ZPB)

High reliability due to its machined solid structure.



Usage example for test indicator



CODE	Kg
BT40-ZPB-200	3.3
BT50-ZPB-200	5.2

Option

- Retention knob → P.64

Std. Access.

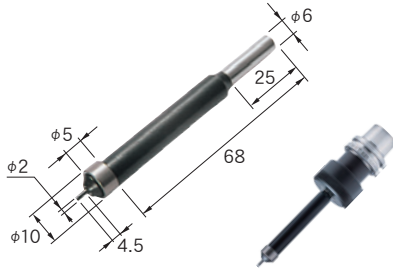
- Indicator, 1/ 1000 reading
- Test Indicator, 2/ 1000 reading
- Centering arm
- Master cap
- Wooden box

Centering bar

To identify workpiece datum position

CODE

ST6-CEB102

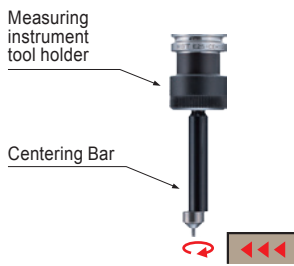


Usage

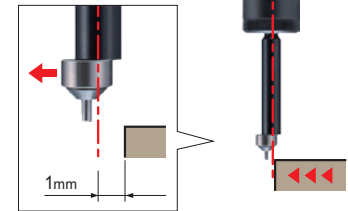
① Rotate a spindle in low-speed rotation (450~600 min^{-1})

② Contact the stylus carefully with a work-piece by micro feeding until it doesn't have a swing.

③ You can find the alignment between the machine spindle center and the work-piece edge face after the stylus moves another 1mm (the radius of dia. 2mm stylus).



Rapid eccentricity



Measuring instrument tool holder (HSK-E25)

Use when centering a workpiece.

The spring collet (C10-6-P) and the centering bar (ST6-CEB102) are required and sold separately. Tighten nuts by hand.



CODE

E25-CEH10-37

Option

- Centering bar
- Spring collet (C10-6-P) → P.38

Caution

- Not usable for machining.