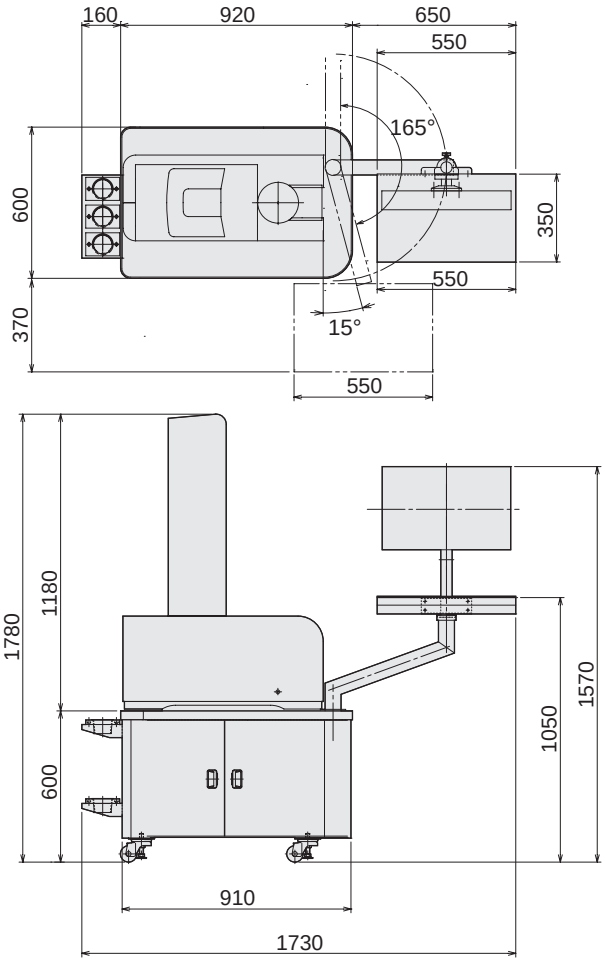
# AOTP New

Contactless Tool Presetter


## Specification of AOTP

| Code | Model | Retention Stud | |
|---|---|---|---|
| | | BT | CAT |
| 4940 00050011 | AOTP-500-1A | PSB-7, PSB-8, PSB-14 PSB-19, PSB-7-OH PSB-8-OH | — |
| 4940 00050012 | AOTP-500-1B | PSB-20 | — |
| 4940 00050013 | AOTP-500-1C | PSB-17 | — |
| 4940 00050024 | AOTP-500-2D | PSB-24 | PSC50-1 |
| 4940 00050025 | AOTP-500-2E | PSB-50P | — |

1. Please select a model based on the retention stud type.
2. Retention stud not shown in the above chart can be also used. Please contact NT Tool Corporation for details.




| | |
|---|---|
| External dimensions | 1730mm x 600mm x 1780mm (DxWxH) |
| Weight | 280kg |
| Power supply | 100 ~ 240V AC, 50/60Hz |
| Power consumption | 300W |
| Air pressure | 0.4 ~ 0.6Mpa |
| Measurement | X-axis ø400mm<br>Z-axis 500mm |
| Minimum reading | 0.001mm |
| Spindle Size | BT50 (Adapters for different spindle sizes available.)<br>1. When using an adapter, Z-axis measurement area will be narrower due to the height of the adapter.<br>2. Manual spindle rotation. Motor drive can be added as an option. |
| Clamp method | Mechanical clamp |
| Specifications of camera | 1.3 million pixel CCD monochrome |
| Screen magnification ratio | 30× Magnification |
| Display size | 23.6" |
| Cutting edge measurement range | 9.0 x 6.5mm |
| Menu manipulation method | Touch panel, mouse, keyboard |
| Language selection | English, Japanese, Korean |
| Accessories | Adapter tray |

1. Switchable between Inch and Metric display.
2. Label printer is sold separately.
3. Specifications and design of the product are subject to change without notice.



Inch to Metric (mm) → Inch × 25.4
Metric (mm) to Inch → Metric ÷ 25.4 or Metric × 0.03937

Special / Custom Sizes on request

## Unit Option

| | Standard | Option |
|---|---|---|
| Spindle rotation | Manual | Automatic (Motor driven) |
| Cutting edge height adjustment | — | Height adjustment handle can be added to the front. |

In addition to those options, customization of software and body is possible upon request. Please contact NT TOOL for details.

## Adapter (Sold Separately)

To measure tool holders other than BT50 shank size, adapters are necessary.
Please contact NT TOOL for details.

### For BT, CAT and SK

For BT 30 and CAT 30
For BT40, CAT40 and SK40
※Please designate the type of retention stud in use.

### For HSK

HSK32, HSK40, HSK50,
HSK63, HSK100

### For UTS

UTS6350, UTS10080

## Accessories

### Label printer

※ Sold Separately.

Model

**AOTP-PRINT-KG**

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

### Label for printer

※ Sold Separately.

Model

**AOTP-PRINT-LA**

Approx. 70 labels.
Label size : 100 X 24mm

### Cleaning putty

※ Included with AOTP.

Model

**AOTP-DUST-C**

To clean the cutting edge for accurate measurement.

Inch to Metric (mm) → Inch × 25.4
Metric (mm) to Inch → Metric ÷ 25.4 or Metric × 0.03937

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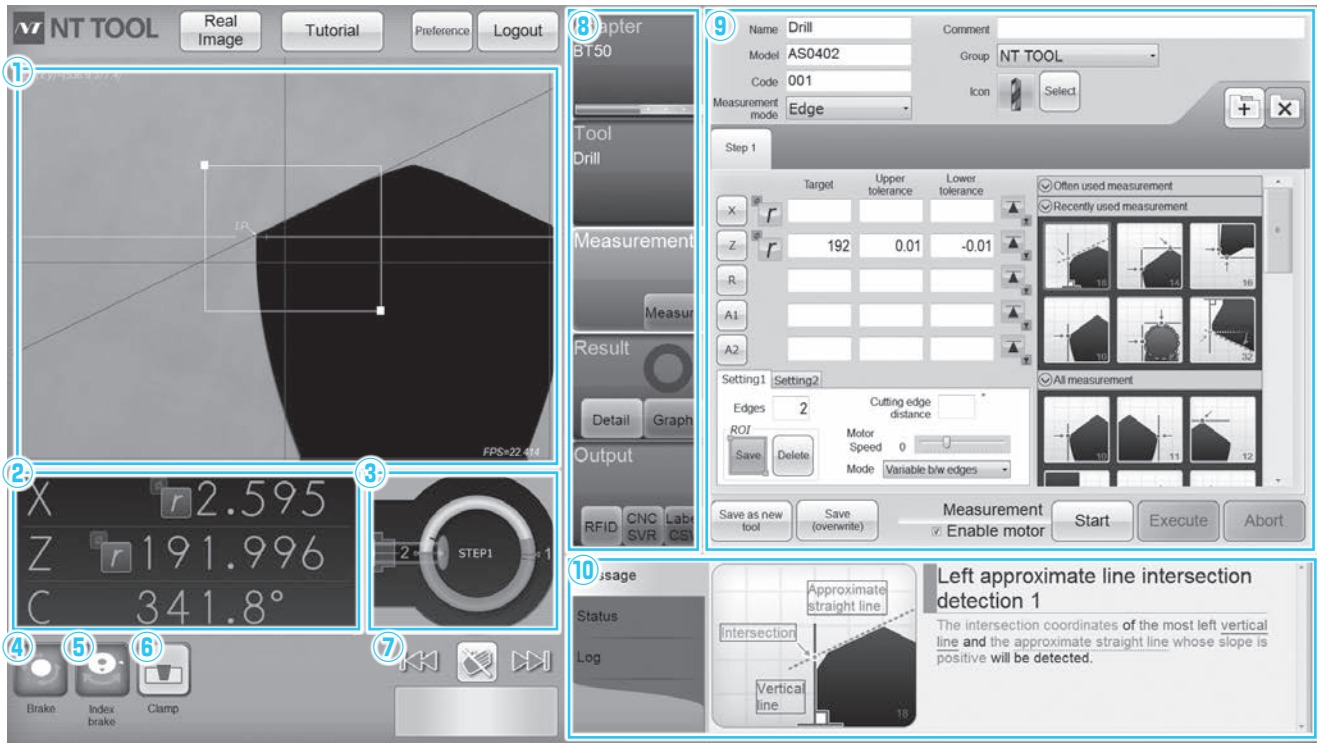
# Basic Function




①Camera (Captured Image)
Actual field of view 9.0mm × 6.5mm
30× Magnification
35× Digital Zoom

②Coordinates
X=Radius/Diameter, Z=Height,
C=Rotational Position.
*X and Z value indicates position of the camera center when not measuring.

③Magic Eye
Cutting edge detection

④Break
Spindle can be stopped at any location.

⑤Index Break
Spindle can be pin-locked at 90 degrees.

⑥Clamp / Unclamp

⑦Spindle Control
Forward / reverse to the next / previous cutting edge.
: Free the motor.

⑧Operation Order Tab

⑨Operation Field

⑩Message Field

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

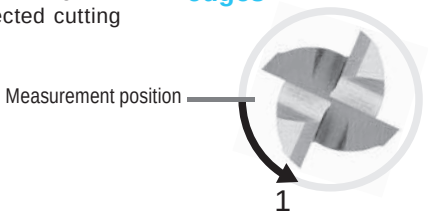
## "Magic Eye" shows the positions of cutting edges.

Target cutting edge is always clear even with endmills and facemill cutters.

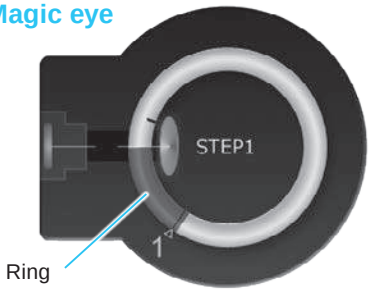
### Beginning of measurement

The ring turns green in accordance with cutting tool rotation. Numbers are assigned on the detected cutting edges.

### Actual cutting edges

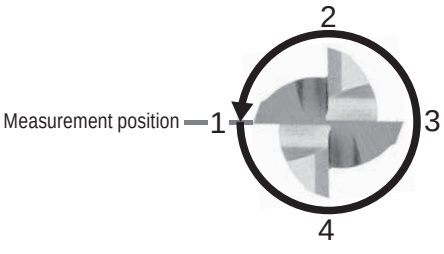


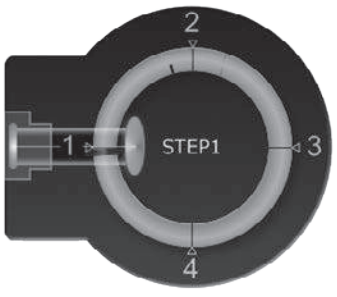

### Magic eye




### Detection of cutting edges completed.

Shows position of cutting edges in real-time.



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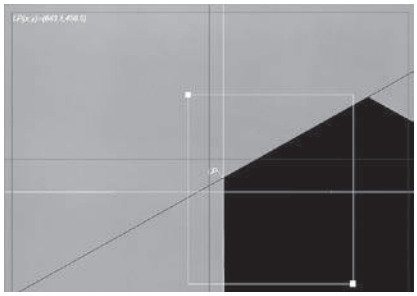
Special / Custom Sizes on request

# Measurement function

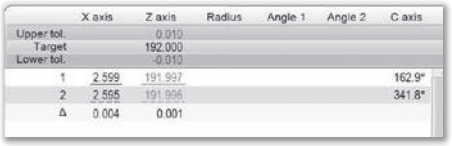
## Runout measurement of the cutting edge

Capture the area where you want to measure. Then, turn the spindle 360degrees.

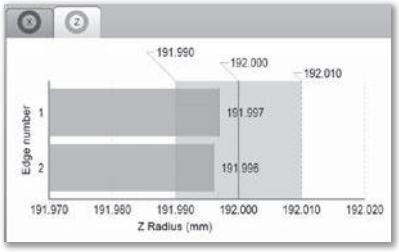


The measurement result against target value can be shown in ○×along with sound effects. The result can be also shown as a graph.


○: Good, ×: Bad



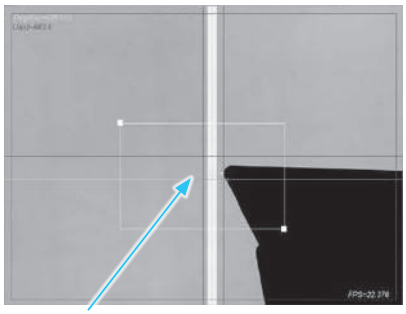

Measurement result



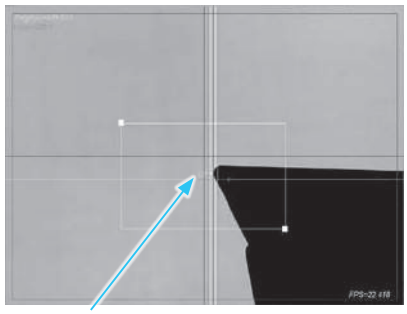

Graph

## Target Bar

Easy diameter adjustment for boring bars with presetting target shown on the screen.



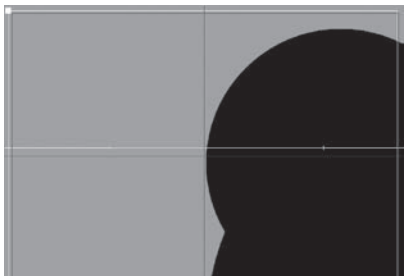
Presetting Target Range (Yellow color when the cutting edge is out of the range)



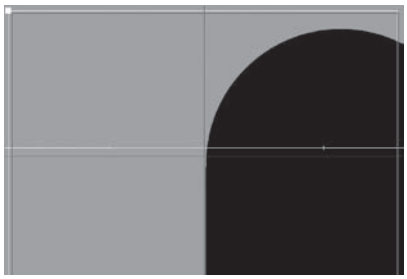
Presetting Target Range (Green color when the cutting edge is within the range)

## Measuring Afterimage

The cutting tool's profile is plotted by rotating the spindle 360 degrees.



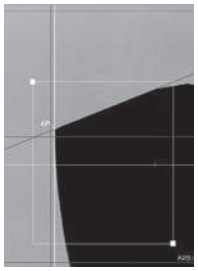
Before afterimage measurement



After afterimage measurement (afterimage of rotated tool is shown.)

## Measuring Step Drill

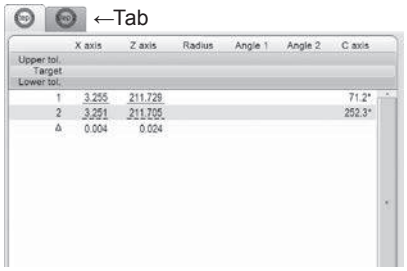
Each step can be measured separately.



Step 1

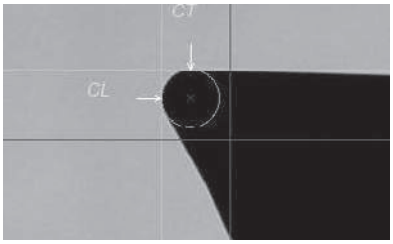
Step 2

←Tab




## Measuring Radius

Nose-radius can be measured by based on contour of cutting edge.




## Real image of cutting edge

Wearing and chipping on cutting edge can be inspected.