



Hilde - example data capturing

How to calibrate a CNC.

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INTRODUCTION

Qualifications:

- Level 1 Safety Training
- CNC Operation Training

PPE:

Please make sure you have the following PPE:

- Gloves
- Helmet
- Safety Glasses

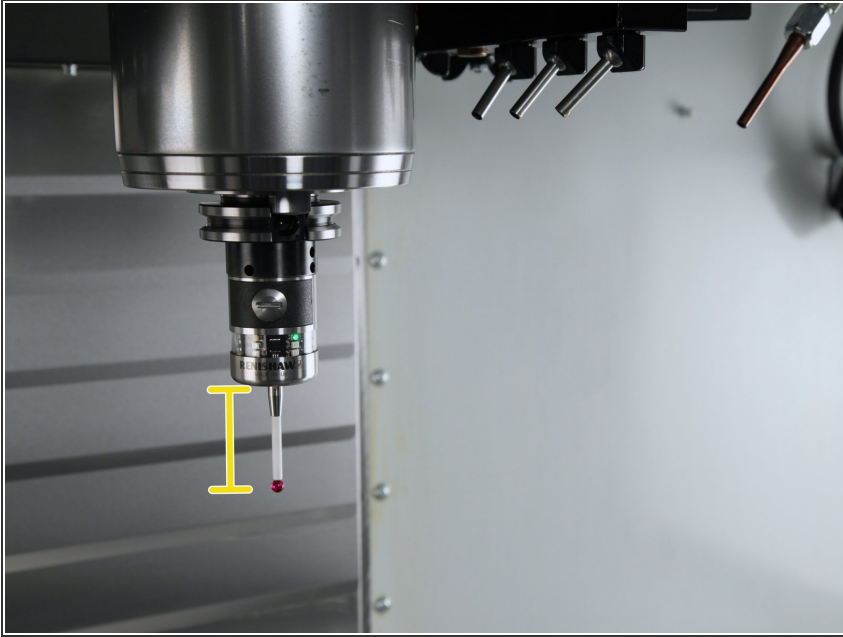
TOOLS:

- [Allen Wrench](#) (1)
Steps 7-9
- [WIPS Calibration Software Test](#) (1)
Steps 11, 15, 17, and 24
- [Paper](#) (15)
Steps 15 and 20
- [Micrometer](#) (1)
Steps 16 and 22
- [Machinist's Scale](#) (2)
Accuracy of 1/16 inch or 1.5 mm, Step 21
- [3/8" Drive Extension](#) (1)
- [Punch-Down Tools](#) (1)
- [Punch \(Center\)](#) (1)
- [Ring Gauge - US](#) (1)

PARTS:

- [Spindle - Sold by Dozuki](#) (1)
Steps 1, 5, 11, 13, and 14
- [Test Indicator](#) (1)
Steps 4, 5, 12, 13, and 14
- [Magnetic Base](#) (1)
Steps 4 and 5
- [Calibration Bar](#) (1)
Steps 4, 11, 16, 17, 20 and 21
- [Work Probe](#) (1)
Steps 3, 5, and 21

Step 1 — Check if the Probe is Functioning Properly



- Check if the probe system and the connections to the machine are functioning correctly.
 - ⚠ **Reminder:** Remove the spindle before starting.
- Before starting check if the fuse is working. If the fuse is not working [go to this work instruction](#)
 - Note:* View the [Ring Gauge](#) for more detailed part information.
- Remove the spindle.
- Check this page [wiring diagram](#) before moving to step 2.

Step 2



- In MDI, enter: **M59 P1134**.
- Hold the probe within range of the **OMI**. Press and Hold **CYCLE START**.
- Gently depress the stylus. The control pendant will beep when the probe is activated.
- View [MSDS here](#)

Step 3

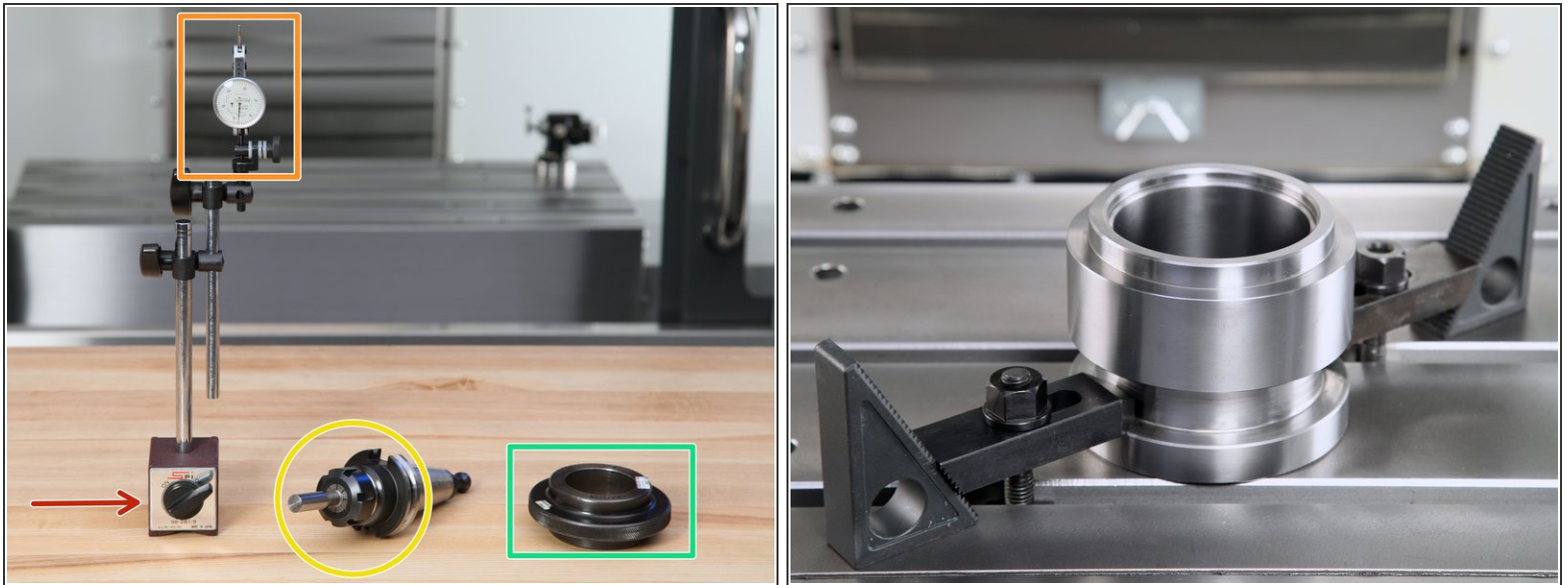


- In MDI Mode, enter: **M59 P1133; G04 P1.0: M59 P1134.**
- Please note [Quality Alert](#).
- The doors are open. Press and hold **CYCLE START**.
- After the program has run, gently tap the probe with your finger.

The control pendant will beep each time the Tool Probe is depressed. The Probe is activated.

- Press **RESET** to end the activation.

Step 4 — Calibration Tools:



- Test if Indicator is accurate to 0.0005" or 0.013 mm
- Magnetic Base to mount the Indicator
- "Calibration Bar", generally consisting of a 1/2" or 12 mm gauge pin clamped in a collet style toolholder.
- "Ring Gauge" typically with a 2.000" or 50.000 mm bore.

Note: an accurately bored hole in a part or fixture can also be used in place of the Ring Gauge.

This guide was created using Dozuki electronic work instruction software.

Data Capture

Step 1

Completed

Text Input

Not completed

Why not completed?

Step 2

Completed

Not completed

Why not completed?

Step 3

Completed

Not completed

Why not completed?

Step 4

All steps completed

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