

# RAZORGAGE

AUTOMATIC MEASURING SYSTEM

## CALIPER MEASURING TABLE



**BETTER  
BY  
DESIGN**

Measure long parts  
accurately on this  
reasonably priced,  
PC-based, single axis  
measuring table



WWW.RAZORGAGE.COM  
515.232.3188 • Sales@RazorGage.com

# Caliper Measuring Table *Automatic Measuring System*

The Caliper Measuring Table is a reasonably priced, PC-based, single axis measuring table with many features only found on high end coordinate measuring machines. Virtually unlimited error compensation points and extremely tight repeatability result in astounding accuracy even better than our stated spec.

Simply place the part to be measured on the table, with one end against the hardened & ground end stop, and slide the measuring head against the opposite end. The Caliper Measuring Table can be ordered with the gauge block on either the left or right end.

The Caliper Measuring Table can be ordered in any length to measure parts up to 20 feet long.

Windows Touchscreen  
PC connects wirelessly  
to your network.

Error Compensation  
provides higher accuracy  
with endless error  
compensation points

## FEATURES

- ◆ Measure long parts accurately on this Windows PC-based, single axis measuring table
- ◆ Color touch-screen monitor
- ◆ Displays can be set for either metric or imperial measures
- ◆ Carriage features a double bearing block Hiwin linear bearing system
- ◆ Non-contact linear encoder provides long life accuracy
- ◆ Error Compensation, with endless compensation points, provides higher accuracy
- ◆ Accuracy -  $\pm 0.004$ " over 10' (or better when applying Error Compensation)
- ◆ Repeatability -  $\pm 0.001$ "
- ◆ Heavy gage steel table with 1/4" solid PVC surface.
- ◆ Available in any stroke up to 20'

Caliper Measuring Beam can be ordered separately for your existing bench or table

# Caliper Measuring Table *Better Software*

The RazorGage Caliper Measuring Table comes with Windows 10 Professional measuring software. With this software, you can open reference files and build data files as you measure parts. Those files may be saved on the PC, or you can use the built-in WiFi to save them on your network. The USB port may be used to copy files to or from the tablet. The display can be set for either metric or imperial measures.

## MAIN SCREEN

Offset, Nominal Length and Tolerance are defined individually for each profile. If Nominal and Tolerance are defined, the large position display will be Red if not in tolerance, or Green if in tolerance.

Annotations for the Main Screen:

- Current Position**: Points to the top left display showing 24.143.
- Current Position + Offset**: Points to the large central display showing 22.014 in green.
- Select Inches or Millimeters Here**: Points to the unit selection buttons (Inches/Millimeters).
- Zero the Position Counter**: Points to the 'Zero Caliper' button.
- Setup Screen**: Points to the 'Setup Caliper' button.
- Specify New Log File Path**: Points to the 'Delete Data from Log File' button.
- As measurements are captured, they are displayed here and saved**: Points to the log list on the left.
- Press this button to capture the current position and store it in the log file**: Points to the large yellow trapezoid button.
- Current Capture File Path**: Points to the file path at the bottom: C:\CaliperLogFiles\SS 36 & 34.csv.

Screen Content:

- Caliper Table Data Logger v5.1
- Caliper Reading: 24.143
- Caliper Reading + Profile Offset: 22.014
- Profile's Offset: -2.129
- POLYGONS: TRAPEZOID
- Log list: 5.878, 22.010, 8/5/2020 11:41:35 AM
- Buttons: Zero Caliper, Setup Caliper, Select Different Profile/Log, Delete Data from Log File
- Large yellow trapezoid button: PRESS IMAGE TO CAPTURE MEASUREMENT
- Bottom status: C:\CaliperLogFiles\SS 36 & 34.csv

## SETUP SCREEN

The scale factor is the number of encoder counts per inch. Adjust the Scale Factor to improve accuracy.

Setup Screen Fields and Controls:

- Current Position: 0.985
- Scale Factor: Current: 25400.10, Change to: [ ]
- Home Offset: Current: 0", Change to: [ ]
- Zero the Encoder button
- Raw Receive: <C3 0000.985>, <S326C1EA>, <C3 0000.985>, <S326C1EA>, <C3 0000.985>
- Import Error Compensation File button
- OK, Cancel, Apply buttons

Import an error compensation file to dial in the accuracy even further. This will add or subtract from the reading starting at certain distances.

For example:

If the error compensation file looked like the one shown here, measurements would be unaffected up to 63.5. From there to 118, all measurements would be increased by .003. Then from 118 on out, all measurements would be decreased by .002. You can put as many error compensation points in the file as needed.

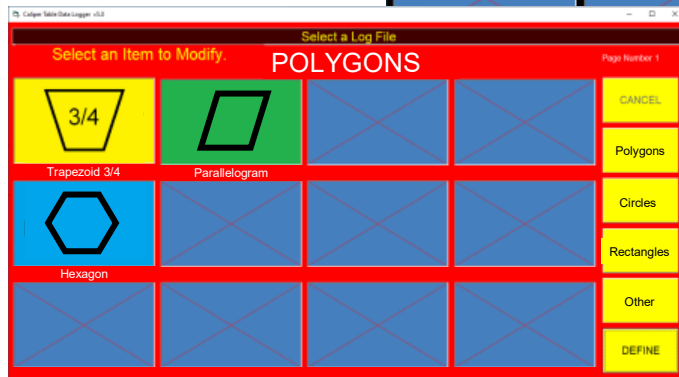
error comp.txt - Notepad

63.5, .003
118, -.002

# Caliper Measuring Table *Better Software*

## SELECT A LOG FILE

In this screen, you may define pages with up to 12 log files per page. When you make a selection on this page, measurements captured will be saved in the log file designated by the selection. The buttons shown are used to select the log file you want to use.



To define a new log file click DEFINE.

When you click the DEFINE button the background of the screen turns red. Next, click the button you want to define. The definition screen will then appear.

## PROFILE DEFINITION SCREEN

*Profile's Name* – assign a name for the capture file that is meaningful to the operator.

*Log's Filename* – enter the name of the actual file where captured measurements will be stored.

*Profile's Offset, Nominal Length and Tolerance* may be left blank.

Click the button labeled 'Select Folder for Log File' to browse for the folder in which measurement capture file for this profile will be stored.

Click the 'Browse for Image' button to browse for the image that will be displayed for this capture file.

When satisfied with your definition click SAVE.

