6. Rotate the micrometer in 0.005” (English) increments using the patented QuickClick adapter. The adapter is indexed allowing for quick and repeatable adjustments. As the micrometer moves the springs will force the armature up, changing the gap between the tip of the probe and the target material.

7. Record the DC voltage output from the proximitor with a Digital RMS Voltmeter and record enter the data into the Probe Calibration Curve Generator provided with the calibrator in Microsoft Excel format (see graph on next page).

8. Repeat the measurement until the voltage output from the proximity probe driver stops.

9. The probe sensitivity will be displayed at the bottom of the chart.

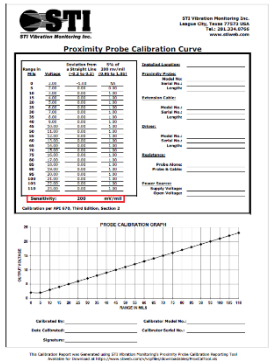
10. Additional information can be entered into the report such as part numbers, serial numbers, power supply voltage, date of calibration and installed location.

Calibration

The CMCP-TKPC features a Starrett 463P Micrometer Head and is the only part of the calibrator that can be regularly calibrated. The micrometer head can be returned to STI for calibration or it can be sent to a local tool calibration company. The micrometer has been factory calibrated by Starrett prior to being shipped.

QuickClick Adjustment

The QuickClick features a ball and plunger which indexes with the notches in the shaft adapter. The QuickClick tension can be set by adjusting the screw on the back on the calibrator. When fully loosened, the micrometer will free spin, allowing for 0.001” (English) or 0.01mm (Metric) graduations.



Probe Calibration Chart
(Downloadable)

STI Vibration Monitoring Inc.

CMCP-TKSC
Shaft Calibrator
For Static Probe Calibration

User’s Guide

Release: January 2020

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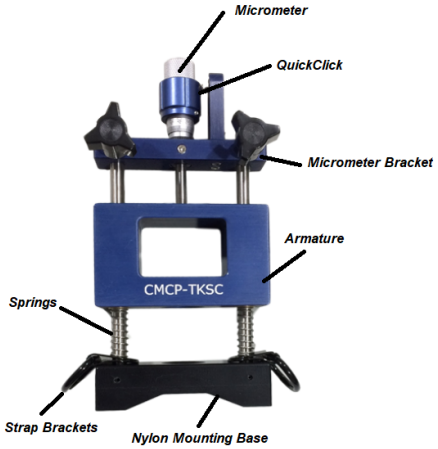
Introduction

The CMCP-TKSC Shaft Calibrator is used to determine the actual Proximity Probe System Output in mv/mil or mv/um of a machine shaft or piston rod. Proximity Probe Systems are calibrated by the manufactures to 200 mv/mil (7.87 mv/um) using a 4140 Steel as standard. STI's patented QuickClick micrometer allows the user to easily adjust the micrometer in 0.005" (English option) or 0.1mm (Metric option) increments quickly and reliably, improving the overall time it takes to complete calibration and with greater precision. The QuickClick can also be disengaged to allow for 0.001" or 0.01mm graduations. A free downloadable Proximity Probe Field Calibration reporting tool is available on the STI website which allows the user to generate a Calibration Certificate in Microsoft Excel format.

Layout



Specifications

Target Material: Direct to Shaft
Micrometer Range:
- English: 0 to 0.50"
- Metric: 0 to 13mm

QuickClick Graduations:
- English: 0.005"
- Metric: 0.1mm

Micrometer Graduations:
- English: 0.001"
- Metric: 0.01mm

What's Included

1x Shaft Calibrator with QuickClick Adapter
4x Various Size Collets
1x Bungee Strap
1x Travel Case

Downloaded Calibration Reporting Tool

https://www.stiweb.com/v/vspfiles/downloadables/ProxCalTool.xls

Instructions:

1. Insert the Proximity Probe into the correct size Collet.
   Collets are provided for 1/4", 3/8", M8 and M10 Probes.

2. Insert the probe and collet into the calibrator and secure with the thumbscrew.
3. Use the bungee strap to secure the calibrator to the shaft.

4. Zero micrometer by aligning the notches together at the 0 mark.

5. Press down on the armature and micrometer bracket until the tip of the probe is in contact with the target material and the springs are compressed, then tighten the two thumb screws.