

CMCP-TKPRO Vibration Test Kit

The CMCP-TKPro is used to provide a calibrated mechanical vibration using a variable speed 414 Steel Wobble Plate. A Precision Dial Indicator is used to position the Swing Arm to the desired amplitude. The Dial Indicator is then replaced with a Proximity Probe. Both the Proximity Probe System and Monitoring System can be verified by this method.



Features:

- AC or Battery Powered
- Li-Ion 1.4 Ah Battery
- 82 mA Draw @ 3600 RPM
- Smart Charger
- 0-15 mils Dynamic Range
- Precision Dial Micrometer
- Variable Speed to 7000 RPM
- Tachometer Display
- English and Metric Versions
- Weatherproof Travel Case

CMCPTKPRO-SR Shaft Rider Accessory

The CMCP-TKPro-SR Shaft Rider is a Teflon Tipped Spring Loaded Shaft Rider that transforms the motion of the TKPro's rotating wobble plate into linear mechanical motion for an Accelerometer or Accelerometer based Velocity Sensor. The Shaft Rider is not designed for precision calibration, however it does provide an easy and convenient way to verify sensor and monitoring system end to end operation.



Features:

- Simple to Use
- Glass Filled Teflon Tip
- Spares Included
- 1/4"-28 UNF Threaded Mount
- Aluminum Collet
- Fits CMCP-TKPro
- Spare Tip/Spring Kits Available

CMCP-TKSC Shaft Calibrator

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 a standard of 200 mv/mil (7.87 mv/um) using 4140 Steel. All other materials will need to be tested.



Features:

- Easy to Use
- 3/4" Wide (19 mm)
- Measure Shaft/Rod Sensitivity
- Proximity Probes up to 0.400 dia.
- 0.50" or 12.7 mm Range
- Nylon Base
- Mounting Strap Included

CMCP610 Benchtop Proximity Probe System Static Calibrator

The CMCP610 Eddy Probe Calibrator provides a convenient and precise method of verifying the voltage output vs. physical gap of a Proximity Probe and Driver system. Designed for use in the field or the shop, the CMCP610 will work with any manufacturer's 5mm or 8mm probe systems. Other Target materials available.



Features:

- Voltage output vs. physical gap
- Use with 5mm or 8mm Probes
- 1.0" Range 0.001" Increments
- 1.125" (28.6 mm) Diameter
- 4140 Steel Target
- English or Metric Micrometer

Balancing and Test Equipment Overview



STI Vibration Monitoring Inc.

Demonstration Rotor Kits

Balancing Kits

Balancing Weights

Proximity Probe Calibration

Shaft Runout Kits

CMCP600 Bearing Fault Demonstrator

The CMCP600 is designed to demonstrate Vibration measurement techniques that illustrate bearing fault analysis in rolling element bearings. Includes two bearings, a perfect bearing, and one with a flaw, which are easily and quickly exchanged for demonstration of bearing fault signals.



Features:

- Excellent for Enveloping
- Quick Bearing Change Out
- Easy, Fast, Repeatable Results
- One "Good" Bearing
- One "Fault Induced" Bearing
- Hard Carrying Case
- 110 or 220 VAC (50/60 Hz)
- 1/4"-28 UNF Tapped Hole for Accelerometer

CMCP810PC Runout Measurement Kit

The CMCP810PC Runout Kit documents electrical and mechanical runout present on a shaft. Surface Irregularities, Electrical Runout, Residual Magnetism, and Residual Stress Concentrations can all contribute to shaft runout which will create erroneous readings for proximity or eddy probe systems.



Features:

- PC Based 2 Ch. USB Oscilloscope
- Software Included
- 16 Bit Resolution
- Eliminates Bucking Amplifier
- Optical Phase Reference Kit
- Proximity Probe System
- -24 VDC Power Supply
- Two Magnetic Mounts
- Modified Vice Grips
- Hard Carrying Case
- Optional Gauss Meter

CMCP601-01 Short Base Rotor Kit

The CMCP601 Rotor Kits were developed as a small working example of a real machine where vibration signals may be simulated under realistic circumstances. Both Proximity Probes and Accelerometers may be installed to provide vibration signals used to train for troubleshooting actual vibration transducer systems and machinery problems.

Measurements that may be obtained and studied using the Short Base Rotor Kit:



- 0-10,000 RPM
- One (1) Critical Speed
- Frequency Based Signals
- Time Based Signals
- Orbital Analysis
- Single Plane Balancing
- Shaft Runout
- Identify Rotor Critical Speeds
- Shaft Relative Signals
- Resonance Amplitude Factor
- Rotor Dynamic Studies
- Phase Signals
- Optional Rolling Element Bearing

CMCP601-02 Long Base Rotor Kit

The Long Base Rotor Kit with two (2) Masses allows for dual plane balancing and speeds above second critical, along with all the features noted in the short base kit above. Shaft Bow may also be studied.

Measurements that may be obtained and studied using the Long Base Rotor Kit:



- 0-10,000 RPM
- Two (2) Critical Speeds
- Frequency Based Signals
- Time Based Signals
- Orbital Analysis
- Dual Plane Balancing
- Shaft Runout
- Shaft Bow
- Identify Rotor Critical Speeds
- Shaft Relative Signals
- Resonance Amplitude Factor
- Rotor Dynamic Studies
- Phase Signals

CMCP800 Universal Field Balancing Kit

The CMCP800U Universal Field Balancing Accessory Kit contains all the accessories necessary to perform in-place field balancing of rotating machinery. This is a complete kit that provides the necessary transducers, magnetic bases, cables, trial weight kit, precision electronic balance scale, and more packaged in a rugged watertight carrying case. Add an analyzer and you are ready to balance pumps, fans, motors, couplings, small turbines and more.



Features:

- Two accelerometers with magnetic bases
- Optical or Laser Phase Reference Kit
- Three (3) 25 Foot BNC Cables
- Two (2) BNC to 5015 Adapters
- Three (3) Banana to BNC Adapters
- Precision Scale
- Large Trial Weight Kit
- Custom Vice Grips
- Goose Necks w/Magnets
- Rugged Watertight Hard Carrying Case

CMCP811 Balance Weight Kit

The CMCP811 provides an assortment of balancing weights and is conveniently packaged as a starter kit. It may be purchased stand-alone and is also available as a component in the CMCP800U Balancing Accessories Kit above.



Kit Contains:

- 225 assorted squirrel cage type weights ranging from 0.2 Oz (0.6g) to 0.46 oz. (13.0g)
- 26 Steel C-Clamp style weights ranging in size from 5/16" throat and .10 oz. (2.83g) to 3/4" throat and 8.0 oz. (226.8g)
- 24 compartment container
- Compartment Size Guide
- Replacement Weights Available