

CMCP-TKPro-SR Shaft Rider

Accessory to the CMCP-TKPro Wobbulator

The CMCP-TKPro-SR Shaft Rider is an accessory to the CMCP-TKPro Wobbulator. The Teflon Tipped Spring Loaded Shaft Rider 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 calibration. However it does provide an easy and convenient way to verify sensor and monitoring system end to end operation.

The CMCP-TKPro-SR Shaft Rider Armature is machined out of lightweight Aluminum and is equipped with a replaceable Glass filled Teflon Tip. The Aluminum Armature rides in an oil impregnated bronze linear bearing mounted in an Aluminum Collet. The assembly quickly and easily mounts in the swing arm of the TKPro.

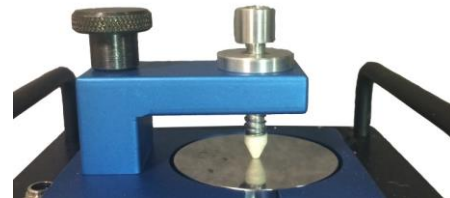


Instructions:

As Velocity is a function of Displacement and Speed (frequency). At moderate speeds of 30 to 60 Hz (1800 to 3600 RPM) it does not take a lot of displacement to generate useful velocity levels. Using as little displacement as needed will extend the Shaft Rider Tip and Battery Life. Be sure to check the Frequency Response of the Monitoring System. ISO Standard Systems are 10 to 1,000 HZ (600 to 10,000 RPM).

Sample Set Up (English):

1. Adjust the TKPro Swing Arm using the Dial Indicator to 1 mil Peak/Peak (0.001"). This will be close to center of Wobble Plate.
2. Tighten Swing Arm Knob.
3. Remove Dial Indicator and Collet.
4. Install Accelerometer using 1/4" x 28 UNF stud to top of Shaft Rider.
5. Install Shaft Rider in TKPro Swing Arm with Collet lip against top of arm.
6. Turn on TKPro and adjust RPM to 3600 RPM
7. Monitor should read about 0.188 in/sec Peak or 0.094 in/sec RMS
8. Velocity can be increased or decreased by moving swing arm or changing speed.



Specifications:

Construction: Machined Aluminum with Bronze Linear Bearing

Wear Tip: Glass Impregnated Teflon

Dimensions: 2.1" x 1.0" Dia.

Weight: ??

Ordering:

Part Number	Description
CMCP-TKPro-SR	Complete Assembly
CMCP-TKPro-SR-Tip	Pack of 3 Replacement Wear Tips

Feel free to download STI's Vibration Calculator in Excel Workbook from our web site so you can see the effect of changing displacement and frequency (speed). [Download Here](#)