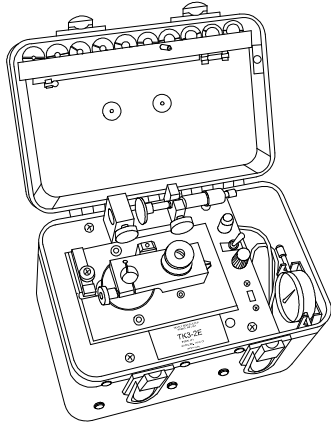


# TK3-2 Calibration Instrument

Bently Nevada™ Asset Condition Monitoring

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## Description

The TK3-2 Calibration Instrument simulates shaft vibration and position for calibrating Bently Nevada monitors. It verifies the operating condition of the monitor readouts as well as the condition of the proximity transducer system. A properly calibrated system means that the monitor readings and transducer inputs are accurate.

A spindle micrometer is used to check the transducer system and position monitor calibration. A probe mounting adapter provided with the TK3-2 holds the probe while the target is moved toward or away from the probe tip in calibrated increments. The output from the Proximator® Sensor is recorded using a voltmeter.

Vibration monitors are calibrated using the motor-driven wobble plate. A swing-arm holder is located over the wobble plate to hold the proximity probe in place. The holder and probe are adjusted to a position where the desired amount of mechanical vibration is found. The vibration is then measured using a dial micrometer that is supplied with the unit (no oscilloscope is needed).

A vibration monitor's reading can then be compared to the known mechanical vibration signal input. The mechanical vibration signal from the TK3-2 can range from 50 to 254  $\mu\text{m}$  (2 to 10 mils) peak-to-peak

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## Specifications

### Inputs

#### Power

##### Electric:

95 - 125 Vac, 50/60 Hz, 1A minimum.

190 - 250 Vac, 50/60 Hz, 1A minimum.

##### Air:

90 psi (6.2 bar) maximum.

#### Wobulator Range

#### Vibration Amplitude Range:

50  $\mu$ m to 254  $\mu$ m (2 to 10 mils) peak-to-peak.

#### Maximum Speed

##### Electric:

0 to 10,000 cpm  $\pm$ 2,500 cpm.

##### Air:

0 to 5,000 cpm  $\pm$ 1,000 cpm.

#### Spindle Micrometer Range:

0 - 25.4 mm (0 - 1000 mils).

Target Button and Wobble Plate:

AISI 4140 Alloy Steel.

**Note:** Contact your nearest Sales Professional for details on special target and wobble plate materials.

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### Physical

#### Height:

215 mm (8.5 in)

#### Width:

184 mm (7.25 in)

#### Depth:

285 mm (11.25 in)

#### Weight:

5.9 kg (13 lb)

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## Ordering Information

### Electric Driven TK3-2 14700-AXX

A: Scale Units

01 English  
02 Metric

### Air Driven TK3-2

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### 14680-AXX

### Option Descriptions

A: Scale Units

01 English  
02 Metric

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## Accessories

### 107360-01

#### REBAM®

#### Verification Kit:

This kit allows you to verify correct operation of the 3300 REBAM Transducer System.

Kit includes:

- 1 High resolution digital micrometer
- 1 Adaptive spacer
- 1 AISI E52100 steel target button to simulate the outer ring of a rolling element bearing.

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## Diagram

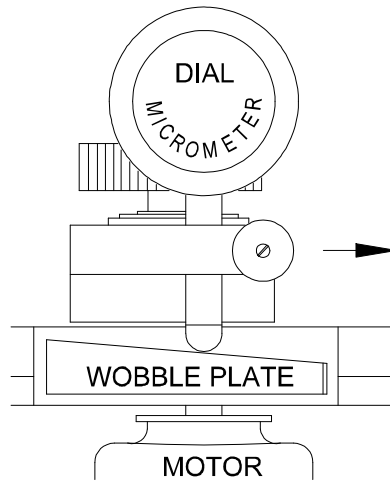


Figure 1

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