

# *THE CTC DIFFERENCE: COMPLIMENTARY ANNUAL SENSOR CALIBRATION*



**WHEN RELIABILITY MATTERS  
CONNECT TO CONFIDENCE**



Did you know that CTC proudly offers you complimentary calibration of your CTC Line Sensors, once a year? It's part of our commitment to offering you the most durable and reliable vibration measurement tools on the market.

## **SENSOR CALIBRATION BASICS**

In order for an analyst to properly perform their job, they need to have tools they have confidence in and understand how to use. One of the primary tools for a vibration analyst is a properly calibrated sensor.

Every CTC Line Sensor manufactured by CTC is calibrated using a reference sensor which is traceable to the National Institute of Standards and Technology (NIST).

## **SENSOR CALIBRATION PROCESS**

Once the sensor assembly is completed, it is processed for calibration. Prior to calibration, every sensor has been engraved with a part number and serial number.

The calibration technician selects the sensor model and enters the serial number into the computerized calibration system, and then mounts the sensor to be calibrated to a 'reference sensor,' which is calibrated annually by a third party. The reference sensor is mounted to a reference shaker, which is also calibrated annually and traceable to NIST.

At this point, the entire assembly is shaken at several frequencies along the sensor's range to ensure that the output of the sensor falls within the sensor's specified tolerances. The actual sensitivity of the sensor, as measured at 100 Hz RMS, is then printed on a calibration sticker, along with the model number, serial number, bias voltage, and the date / time at which the testing was conducted.

<b>ALL CALIBRATION IS TRACEABLE TO NIST</b>	
	
<b>VIBRATION ANALYSIS HARDWARE</b>	
<b>MODEL:</b>	<b>AC104-1A</b>
<b>SERIAL NO.:</b>	<b>61775</b>
<b>SENSITIVITY:</b>	<b>100.62</b>
<b>BIAS V.:</b>	<b>11.95 V</b>
<b>DATE:</b>	<b>2014-04-28 15:08:19</b>

*Typical CTC Calibration Card  
provided with all CTC Line Accelerometers*

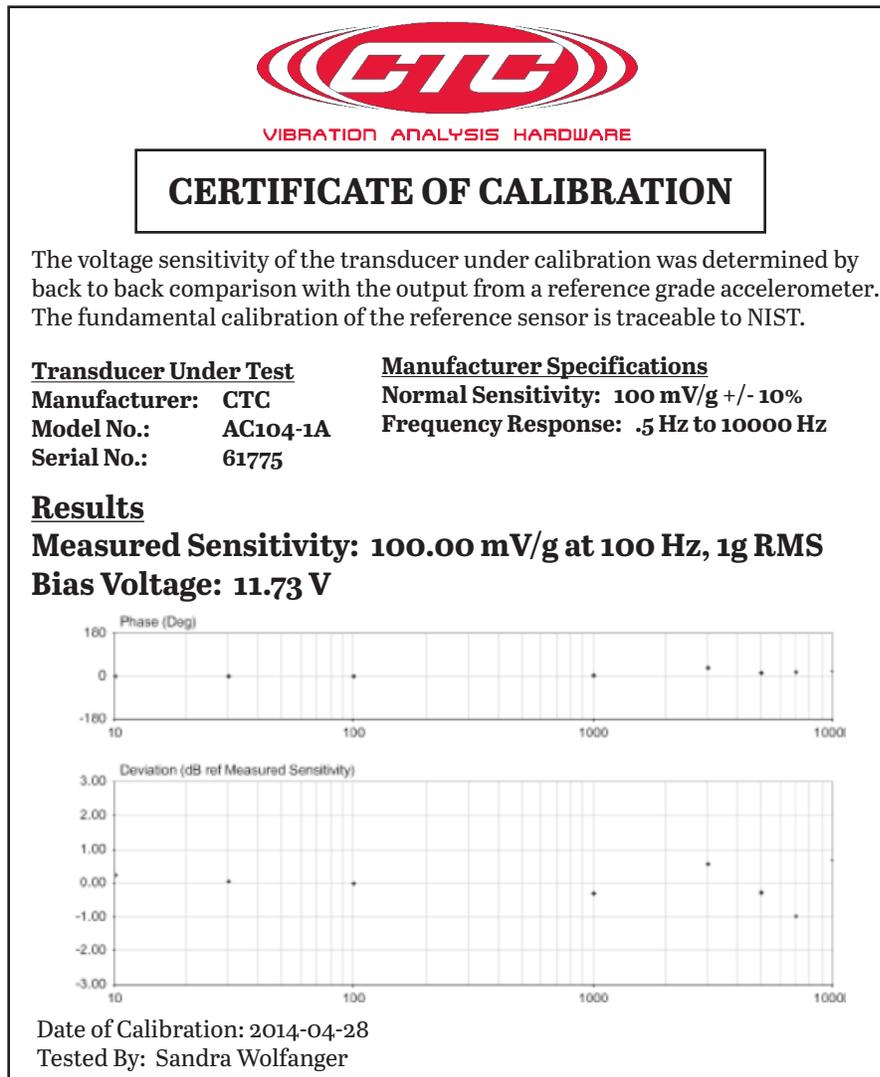
## CALIBRATION OPTIONS

CTC provides every sensor with a standard CA10 single point calibration sticker enclosed with the sensor when shipped. Single point CA10 calibration sheet PDFs are available through customer service up to approximately one year after the original date of shipment. The model number and serial number of the sensor are required to ensure accuracy.

To ensure the reliability of your CTC Line products, CTC offers an annual, single point calibration for all CTC Line Sensors, at no charge other than shipping costs.

## OTHER CALIBRATION SERVICES

CTC offers more detailed calibration options for an additional charge. Multiple points are processed and plotted and graphed against frequency, as shown below. This information can be valuable for advanced analysts.



CTC is the world leader in the design and manufacture of industrial accelerometers, piezo velocity transducers, 4-20 mA vibration sensors, and proximity probes as well as all related mounting hardware, cabling, and junction boxes. Our products enable efficient vibration monitoring for predictive maintenance in a wide variety of industries. Industries served include cement, mining, petrochemical, food & beverage, auto, steel, wind, paper & pulp, power generation, water & wastewater treatment, pharmaceutical, hospitals, bottling, and more. Our mission is to offer the widest variety of accelerometers and vibration hardware products, which are compatible with data collectors and online monitoring systems, as well as the tools for installation.



The CTC product line features vibration analysis hardware for heavy industry.

All CTC products are backed by our unconditional, lifetime warranty. If any CTC product should ever fail, we will repair or replace it at no charge.



The PRO line offers the industry's most reliable proximity probe sets.

All PRO products are backed by a lifetime warranty on materials and workmanship. PRO will repair or replace any of our products as long as the product was not subjected to misuse, neglect, natural disasters, improper installation, or modification.

All stock products may be returned for a 25% restocking fee if returned in new and unused condition within 90 days of shipment. Built-to-order and private-label products qualify for a 50% refund if returned in new and unused condition within 90 days of shipment. Custom products are quoted and built specifically to the requirements of the customer, which may include completely custom product design or private-labeled versions of standard products for OEM customers. Custom products are non-cancellable, non-returnable, and non-refundable.

