



## WORLD-CLASS CALIBRATION SERVICES

FROM THE LEADING MANUFACTURER OF  
METROLOGY INSTRUMENTS

CALIBRATION LAB



# Premium uncertainty at an affordable price.

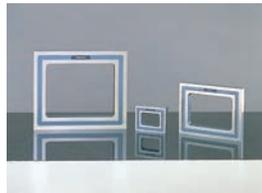
The Mitutoyo America Calibration Lab is accredited to ISO/IEC 17025 by the A2LA (American Association for Laboratory Accreditation). With the broadest scope of any commercial lab in the country, we can calibrate any type of measuring device or dimensional artifact — from small tools to surface finish specimens, gage blocks and step gages, cylindrical squares and roundness hemispheres.

**Length standards up to 60 inch (1,500 mm) long calibrated to highest accuracy and measurement uncertainty as low as 10  $\mu$ m (0.25  $\mu$ m).**



**Unique calibration capabilities include:**

- Step gages
- KOBA bars
- Ball plates
- Ball bars
- Straight edges
- Line standards



**Always a step ahead of the competition, we take roundness calibration to the next level: a measurement uncertainty of 5 nm (0.005  $\mu$ m) or 0.2  $\mu$ m, depending upon the artifact geometry.**



**Unique calibration capabilities include:**

- Glass hemispheres
- Master balls & spheres
- Cylindrical squares
- Ball plug gages
- Roundness masters



As a primary standards laboratory, Mitutoyo America Calibration Lab masters are calibrated directly at NIST (National Institute for Standards and Technology), enabling us to provide the highest accuracy and lowest measurement uncertainty.

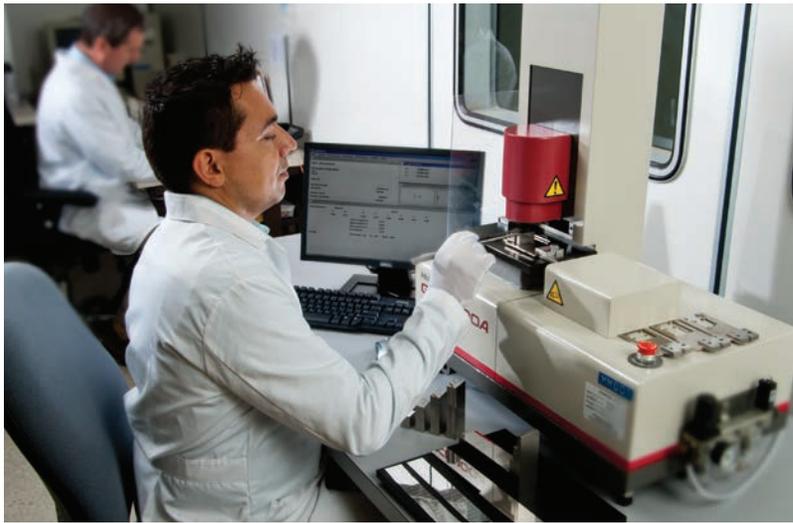
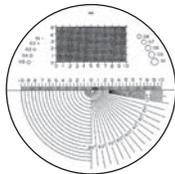
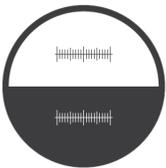
**Visionary optical calibration capabilities**

Our ultra-high precision vision system yields uncertainties as low as 10 µin (0.25 µm).



**Unique calibration capabilities include:**

- Magnification scales
- Magnifier scales
- Glass scales
- Pixel charts
- Line scales
- Overlay charts
- Stage micrometer (glass)



**Offering the lowest commercially available measurement uncertainty for gage block calibration**

Electromechanical dual-head gage block comparator automatically measures a gage block's center and four corners, eliminating human error for highest accuracy and reproducibility. Measurement uncertainty as low as 1.3 µin (0.033 µm).



**Unique capabilities include:**

- Lengths up to 40 in. or 1,000 mm
- Materials (steel, ceramic, tungsten and chrome carbide)



## About our calibration lab

To ensure essential performance, all technology used for calibration must be operated in a contamination-free environment. The Mitutoyo Calibration Lab clean rooms are certified Class 10,000. Clean room temperature is maintained at  $20^{\circ}\text{C} \pm 0.1^{\circ}\text{C}$  with a relative humidity controlled between 40% and 50%. Clean room access is controlled by airlock utilizing positive pressure to prevent the entrance of outside air.

Every aspect of the lab is designed to guarantee results that are of the highest possible quality while at the same time ensuring fast delivery and a great price. This is why a number of our industry competitors use our calibration services, and why you should as well.

## One Lab – Many Great Services

### Accredited Calibrations

- Certificate of Calibration with calibration data, NIST test date and traceability number; artifact serial numbers indicated when available, measurement uncertainty

### Express Service Available

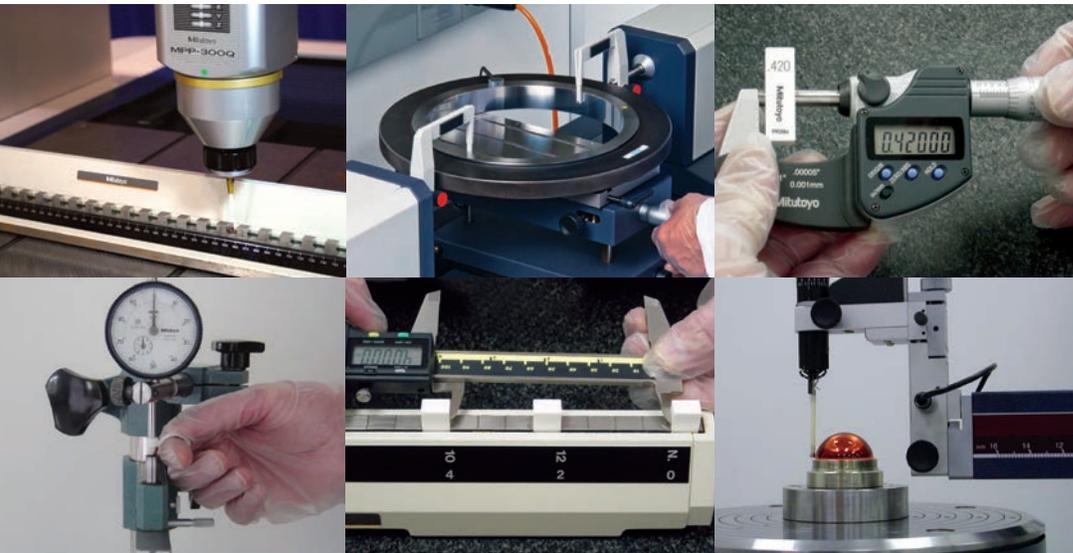
- 5-day and 1-day express service available



## Hands-on calibration courses taught by industry experts.

Presented jointly with the Mitutoyo Institute of Metrology, the Calibration Lab offers hands-on training available in a 3-day format. This course goes beyond the theoretical to actually train participants to perform calibration tasks. Certificates of completion are awarded.

Contact [mim@mitutoyo.com](mailto:mim@mitutoyo.com) for more information.



– Unique dimensional calibration & inspection capabilities

– Accredited to:  
ISO/IEC 17025-2005  
ANSI/NCSL Z540-1-1994  
ANSI/NCSL Z540.3-2006

– State-of-the-art calibration facilities

– Direct traceability to NIST

– Lowest commercially available measurement uncertainties



### Mitutoyo America Corporation Calibration Laboratory

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Find additional product literature  
and our product catalog

[www.mitutoyo.com](http://www.mitutoyo.com)

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# Mitutoyo

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