CALIBRATION



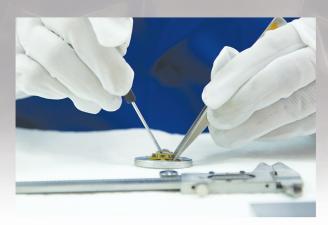
MICRO QUALITY CALIBRATION INC.

Calibration • Repair • Inspection • Testing • Sales





WHEN OUALITY AND PRECISION MATTER





microqualitycalibration.com • (818) 701-4969



OUR CAPABILITIES

(including but not limited to the following):

AC/DC Low Frequency

Accelerometers

Aerodynamics

Chemical (Ph/Conductivity)

Dew Point

Fiber Optic

Flow (Gas/Liquid)

Force

Gas Monitors*

Gauss Meter

Hardness

Infrared/Pyrometry

Inspection/Testing

Luminescence / Photometry

Mass

Particle Counter

Physical Dimensional

Pipettes

Pressure

Radio Frequency (RF)

Relative Humidity

Scales / Balances

Temperature

Time & Frequency

Torque

Vacuum

Overview

Since 1978, MQC has specialized in Calibration, Repair, Testing, and First Article Inspection for everyone from small business owners to major industry leaders in the fields of Defense, Aerospace, Automotive, Biomedical, Electronics, Medical Engineering, and Communications. Join the more than 2,000 companies that have made us the largest privately-owned metrology laboratory on the West Coast.

The MQC Difference

Most companies offer what MQC calls "typical" calibration services, these services include calibration of instruments combined with a pick-up and drop-off service. MQC has a much more full-service and consultative approach to calibration service by including the following:

Accredited To The Highest Level

Our accreditation mandates that we uphold the highest level of quality assurance, documentation, and accuracy

 ISO/IEC 17025, ANSI/NCSL Z540.3, ANSI/NCSL Z540-1 and more...

Broad Capability and Service Offering

MQC boasts one of the largest capability and service offering in the country for a single facility

A Fast and Reliable Turnaround

Over the past 10 years, MQC has achieved a 98% success ratio in adhering to our 5-business day calibration turnaround time

A Robust and Versatile Technology Package

MQC mines more data fields than any other vendor in the market, allowing for more comprehensive reports and real time data analytics.

- Customer Portal provides full access to our customer's database
- Customer Tool Crib provides 360° visibility (with Check In/Check Out features) and documentation over instrumentation/artifacts
- Calibration certificates, report writing, query search, customization and more...

A Dedicated Point Of Contact

In depth knowledge of your customer account results in timely responses to inquiries and the ability to offer recommendations for process improvements





*Not covered by the scope of accreditation

*For accredited ranges and CMCs, please refer to our ISO/IEC 17025 scope of accreditation, A2LA Calibration Cert 2348.01 at www.a2la.org



OUR SERVICES

Calibration / Repair Services

MQC has the ability to calibrate Primary, Secondary and Working Standards in each category, as well as, the ability to repair almost any instrument we calibrate to the component level and certify to Manufacturer, Federal, Military and Industrial specifications.

Sales

MQC represents over 160 different lines of Precision Measurement Equipment, all at an affordable cost to the customer (initial calibration certification with data provided at no additional charge). Contact one of our experienced and friendly sales representatives to answer any questions you may have, as well as, provide you with a quote.

Calibration Portal / Tool Crib Software

Inspection / Testing

Video, Temperature, Electronic, Force and Pressure Measurement Equipment, enabling us to achieve difficult verifications of unique features.

Data Management / Analytics

Utilize real-time Data Analytics to drive financial and instrument - level decisions. MQC's Analytics Team will work closely with your team to create customized reports that can identify: financial spend, success ratios, identify poorly performing department, determine training needs and offer recommendations to develop a more efficient effective process.

MQC's current technology package is validated and the most robust and technologically advanced system in the market. Our operations platform can be almost entirely customized by our customer. Customers can customize fields, screen layouts, the order information is presented, memorized reports and custom queries to mine our database for almost any attribute (information). Queries can include but are not limited to the following; Custom Recalls, Equipment Lists, Pass / Fail events, Search the database for instruments that share a particular attribute (i.e. range, model, manufacturer, etc.). Customer can also download, view, print, zip almost any and all documents in our database including certificates. MQC also offers a Tool Crib Platform that provides the ability to actively manage, maintain, check-in, check-out and create reports and recalls down to the location, owner, drawer level. The Customer Web Portal and Tool Crib Software can run complimentary and if needed, independently from one another.





Dimensional Calibration, Test & Inspection

Measuring Equipment

- Angle Blocks from up to 90° accuracy of 0.25 arc seconds
- Crimping Tools
- Cylindrical Plug / Ring Gages from 0.1 inch to 20 inch ±2 ppm
- Length from 0 to 100 inch accuracy of ±5ppm
- Optical Comparators up to 60 inch accuracy of 71 µin
- Precision Levels up to 15 inch
- Protractors / Clinometers up to 180° accuracy of 20 arc seconds
- Surface Plates up to 72 inch accuracy of 28 ppm
- Thread Measuring Wires from 4 TPI to 80 TPI
- Thread Plug Gages from 0.1 inch to 17 inch ±5 ppm
- Thread Ring Gages from 0.1 inch to 17 inch ±20 ppm

Inspection

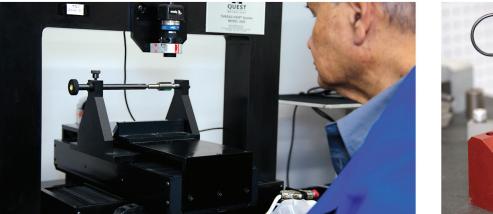
Contact

- Touch Tip Probe (TTP) Contact ±10 ppm
- Surface Finish ±2 ppm

Non-Contact

- Laser 0 to 280 foot ±5 ppm
- Optical CMM ±50 ppm







Dimensional Calibration & Repair Laboratory

Hand Tools

- Dial/Digital Calipers from 0 inch to 40 inch with accuracy at 40 ppm
- Dial/Digital Height Gages from 0 inch to 60 inch with accuracy at 60 ppm
- Dial/Digital Indicators 0 inch to 5 inch with accuracy at 20 ppm
- Dial/Digital Micrometers from 0 inch to 40 inch with accuracy at 40 ppm
- Bore Gages from 0.5 inch to 24 inch with an accuracy at 50ppm



Standards (Dimensional & Mass)

Dimensional

- Cylindrical Pin Gages Class XXX
- Gage Block up to 20 inch
- Optical Flats from 1 inch to 8 inch

Mass

- Balances from 0.001 mg to 40 kg
- Mass Comparators 1 mg to 40 Kg (Echelon 2) accuracies ASTM Class 0 -7, OIML E-1 thru M-3
- Pipet from 1 µL to 300 mL
- Scales from 100 g to 40 kg
- Weights ASTM Class 0 to 7, OIML E-1 thru M-3



Thermodynamics, Aerodynamics & Illuminance

Thermodynamics

- Dewpoint from -65°C to 100°C
- Environmental Mapping / Profiling (Chamber/Oven/Furnace/Freezer, etc.)
- IR / Pyrometry ambient to 1,600°C
- Humidity 5% to 95% RH, -40° to 60°C accuracies starting from 0.5% up to 80% RH,1% >80%; 0.1°C to 60°C
- Temperature Measure from -196°C to 1,600°C
- Thermocouple, Liquid-In-Glass Thermometer, Thermistor, RTD, PRT and SPRT calibration

Aerodynamic

- Anemometry from 25 fpm to 9,000 fpm
- Vane, Hotwire, Differential Pressure and Straight Pipe

Accelerometry

- Pressure from 0 PSI to 15,000 PSI
- Shock from 0 g to 10,000 g
- Vibration / Frequency from 0.5 Hz to 15,000 KHz

Illuminance

• Light 5 fc to 20,000 fc







Electromagnetics, Time & Frequency & Optical Quantities

Electrical

- AC/DC Volt
 - Generate up to 70 KV / Measure up to 70 KV
- AC/DC Current
- Generate up to 1,000 A / Measure up to 1,000 A
- Angle Position Synchro / Resolver 0 to 359.00° with accuracy up to ± 0.005°
- Capacitance from 1 pF to 110 mF
- Electrical Thermodynamic Simulation (Type J, K, T, N, E, B, S, R, RTD,...)
- Fuel Quantity Test Set 1 to 20,000 pF with accuracy up to $\pm 0.1\%$
- Inductance from 10 µH to 100 H
- Magnetism from 0 to 200 Gauss
- Oscilloscopes up to 20 GHz
- Resistance
 - Generate up to 100 T Ω / Measure up to 100,000 T Ω
- Tachometer 10 RPM to 99,999 RPM
- Timer / Clock / Stopwatch

Radio Frequency

- Frequency / Time
 - Generate up 40 GHz / Measure up 40 GHz
- Power
 - Generate from 0.1 MHz to 40GHz / Measure from 0.1 MHz to 40GHz

Fiber Optic

• Optical Quantities

Electrochemistry & Bio Environmental

Bio Environmental

- Particle Counter
 - Sampling Size: 0.1 to 10 um; Counting Efficiency: 0 to 100% / 0.3 to 10 um, ± 1.1% of reading; ± 2.4% of count
 - \pm 1.1% of reading, \pm 2.4% of count
- Microbial Air Sampler up to 100 slpm
- Sterilizers, Incubators and Lyophilizers

Electrochemistry

- Conductivity / pH / Oxidation Reduction Potential (REDOX) / TDS
- Gas Monitors Calibration: Oxygen (O₂), Carbon Monoxide (CO), Nitrogen (N₂), Hydrogen Sulfide (H₂S) and Ammonium (NH₄)
- Gravity Monitors
- Laboratory Biosafety Cabinets and Fume Hoods





CALIPRAT

Mechanical & Flow (Mass & Volumetric) Quantities

Mechanical

- Force
 - Compression and Tension calibrations from 0.25 lbf to 60,000 lbf with accuracies starting at \pm 0.002%
 - Onsite Press calibrations up to 300,000 lbf with accuracies starting at $\pm 0.25\%$
- Hardness
 - Rockwell Hardness Tester (Regular) Scale A-H, K-M, P, R, S, V
 - Rockwell Hardness Tester (Superficial) Scale 15 (N,T,W,X,Y), 30(N,T,W,X,Y) 45,(N,T,W,X,Y)
 - Hardness Test Blocks (All Scale) \pm 0.10 to \pm 0.50
 - Durometers from 0 to 100 Type A, B, C, D, DO, O, OO $\pm 0.5\%$
- Pressure / Vacuum
 - Operating range from -15 to 40,000 psi with accuracies starting at \pm 0.0001%
 - Extended range capability from 2000 to 72,500 psi with accuracy at \pm 0.003%
 - Low Pressure Operating range from 0 to 200 in H_2O with accuracies starting at \pm 0.01%
 - Hi Vacuum Operating range from 0.03 mTorr0 to 200 in H_2O with accuracies starting at \pm 0.03 mTorr
- Torque
 - Torque Tools from 0.1 ozf/in to 2,000 lbf/ft with accuracies starting at \pm 0.25%
 - Torque Analyzers from 10 ozf/in to 2,000 lbf/ft with accuracies starting at \pm 0.05%
 - Impact Torque Tools from 25 lbf/ft to 2,500 lbf/ft with accuracies starting at ± 1.0%
 - Torque Multipliers from 150ft/lb to 7,500 lbf/ft with accuracies starting at 0.5%

Flow Quantities

- Gas Flow 0.5 sccm to 2,500 slm with accuracies starting at ± 0.02%
- Liquid Flow 0.6 gpm to 160 gpm with accuracies starting at \pm 0.05%
- Ultra Sonic Liquid Flow on pipes 2 inch to 48 inch with very high flow rates and with accuracies starting at $\pm 0.5\%$







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MQC services its customers from our 22,000 square feet, seven laboratory, environmentally-controlled, state-of-the-art facility located at 9168 De Soto Avenue, Chatsworth, CA 91311

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MQC's success can be attributed to our relentless pursuit of providing the highest quality work product, timely execution, exceptional customer service, flexibility to meet each customer's business needs and most of all, repeatability. MQC follows this motto with razor sharp focus and the one rule of never sacrificing quality.



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