CALIBR<mark>ation o</mark>f test and measurement equipment

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TECHNICAL MAINTENANCE, INC.

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Colorado Update

Colorado is shaping up to be a perfect gateway to the West. Our beautiful location allows us to continue to meet our National customers' needs throughout the United States, and is another great step towards the National presence we have envisioned.

New Capabilities

In a continued effort to expand our capabilities and support our customers, TMI has purchased multiple new standards including the Modal Shop 9350C High Accuracy Sound Level and Microphone Calibration Workstation. Both of these standards will be added to our Scope of Accreditation.

The Modal Shop 9350C High Accuracy Sound Level and Microphone Calibration Workstation is located at our Rockford, IL laboratory. This standard has been carefully designed to provide consistent, reliable and accurate microphone calibrations and conformance tests. In addition it calibrates preamplifiers and sound sources from 20-100,000Hz. System verification procedures function to assure a stable, consistent operating environment and reduce systematic and random errors.

The Fluke 6105A Power Calibrator with the 50A option is located at our Peachtree Corners, GA laboratory. The 6105A electrical power calibrator provides the highest accuracy available for calibrating secondary standard meters, energy revenue meters and type test applications. The 6105A provides the accuracy required to verify the performance of secondary standards such as those produced by Radian Research, Zera, and MTE.

The 6105A can do all of the energy testing for the "Energy Star Compliance" noted on many new appliances. Any customers that manufacture or test appliances, electrical fixtures, environmental heating and cooling systems, refrigeration systems and even electrical safety testing will have to meet that standard.



Modal Shop 9350C Sound Level and Microphone Workstation



The Fluke 6105A Power Calibrator with the 50A option

Colorado Update

David Arevalo

We are excited to provide an update on our Colorado Lab. As we announced previously, we opened our newest full service ISO 17025 accredited calibration laboratory in Colorado Springs, CO. in January of this year. With our initial ANAB accreditation Audit complete, we are servicing the Colorado Region from our lab Located at 1355 Garden of the Gods Rd. Ste. 100 Colorado Springs, CO 80907.

Colorado is shaping up to be a perfect gateway to the West. Our beautiful location allows us to continue to meet our National customers' needs throughout the United States, and is another great step towards the National presence we have envisioned.

With the continued hard work from; Glenn Curtis, our veteran Branch Manager with over 20 years of calibration experience, David Arevalo, one of our newest Account Managers with extensive practical experience in the calibration field, and our experienced team of technicians, we are excited to support Colorado and surrounding States. Our growing capabilities from RF to Clean Room services, our complete commitment to customer service, and our competitive pricing are just a few characteristics that helps us stand out in the Colorado Region.

We thank our existing customers and we look forward to our future business relationships in Colorado. If you have any questions or would like a quote for your calibration needs, please contact David Arevalo at david.arevalo@tmicalibration.com or call 719-358-3964.

Cleanroom Certifications

Glenn Curtis

Over a decade ago, Technical Maintenance Inc. started certifying cleanrooms, cabinetry, and HEPA filters. Customers, primarily in pharmaceutical and medical device fields, require regular testing of their cleanrooms to ensure that the proper room environmental conditions are maintained within their facility. Indepth testing of your cleanroom by a third party, can provide valuable supporting documentation to your clients and demonstrates your devotion to product quality and safety. Today, TMI continues to invest in training staff and purchasing standards to expand these capabilities throughout the company.

Recently, several more staff members were formally trained on the testing of pharmaceutical cleanrooms including the testing of HEPA filters, measuring air flows, room-to-room differential pressures, room classification with discrete particle counters, and airflow pattern visualization. In-house and on-the-job technical training are also a part of the continuous improvement that TMI management is committed to. We strive to provide our customers the technical resources that they can rely on.

In addition, to support our ever increasing equipment needs and the demands of our customers, TMI has purchased an additional full set of cleanroom certification equipment include a new Beckman Coulter 3400

series discrete particle counter. It has a particle size range of 0.3µm to 10.0µm and is compliant to the requirements of ISO 21501-4:2007. Also, a new state of the art, ATI 2i photometer was acquired to scan HEPA filters for leaks and is used in conjunction with an aerosol generator placed upstream of the test filter.

Technical Maintenance Inc. has the staff and equipment necessary to provide our customers with high quality and reliable cleanroom services. TMI management is committed to continuous improvement of technical staff training and purchasing the resources for our local and national customers.



Levels of Calibration

Gary Lindom

ISO 17025 is a Quality Management System and is the main standard for testing and calibration laboratories. ISO 17025 shares many commonalities with ISO 9000 but ISO 17025 also evaluates the technical competence of lab testing and calibration services as it applies to Calibration Labs. An ISO 17025 accredited lab would also meet the ISO 9000 guidelines for a calibration program.

What does accreditation mean?

To achieve ISO 17025 accreditation, the laboratory's quality management system and technical competence is evaluated thoroughly by a third-party. Audits are conducted on a regular basis to maintain accreditation. ISO 17025 accreditation can only be granted by an authorized accreditation body. Accreditation means that the laboratory has met the Management Requirements and Technical Requirements of ISO17025 and is deemed technically competent to produce calibration and testing results stated on their scope of accreditation.

Continued Investments

To support our ever increasing equipment needs and the demands of our customers, TMI has purchased an additional full set of cleanroom certification equipment include a new Beckman Coulter 3400 series discrete particle counter.



Levels of Accreditation (continued from pg. 2)

Gary Lindom

Why is it important to calibrate your instruments in an ISO 17025 Accredited lab?

S017025 Accreditation ISO 17025 Accreditation proves a laboratory has an acceptable quality management system in place, and it has the ability and competence to provide testing and calibration results. Accredited labs perform tests against the international standards (ISO 17025) and results are mutually acceptable between different governmental and regulatory organizations.

TMI offers Four Levels of Calibration that are all traceable to NIST:

Accredited labs perform tests against the international standards (ISO 17025) and results are mutually acceptable between different governmental and regulatory organizations.

ANSI/NCSL Z540-1:1994

Calibration Certificate with Cal Date and Cal Due Date

Traceability Statement

List of Standards used in the calibration

OOT Data only provided when an Out Of Tolerance condition is found

ANSI/NCSL Z540-1:1994 with As Found/As Left Data

Calibration Certificate with Cal Date and Cal Due Date

Traceability Statement

List of Standards used in the calibration

Before and After adjustment data readings are provided for all measurements that are tested



ISO IEC 17025 Accredited Calibration

Calibration Certificate with ANAB logo

Calibration Date

Calibration Due Date only when the customer requests it

Traceability Statement

List of Standards used

Before and After Data readings and uncertainties for each parameter listed on their scope of accreditation

ANSI/NCSL Z540.3:2006

Calibration Certificate with ANAB logo

Calibration Date

Calibration Due Date only when the customer requests it

Traceability Statement

List of Standards used

Before and After Data readings for each parameter tested

Guard Banding is the process of analyzing the probability of False Acceptance readings

When selecting your calibration service provider it would be a good idea to make sure the lab is ISO 17025 Certified and has a broad range of capabilities on its Scope of Accreditation.

Many organizations confuse the requirement for needing a calibration services provider that is 17025 Accredited with needing 17025 Accredited calibrations and that is not always the case. Make sure you select the level of calibration that satisfies your corporate quality guidelines. For additional information please contact us at www.tmicalibration.com.

New and Used Equipment Sales

Through our partnerships or our direct distributor programs TMI is now able to provide you with new and used equipment sales. Contact Brian Floyd at neworders@tmicalibration.com











INITIATIVE TO IMPROVE COMMUNICATIONS AND ORDER PROCESSES

Kim Cantrell

Improving Communications

TMI's goal is to complete the entire calibration process in the most efficient way from start to finish.



TMI is continually striving to improve our customer relationships through process improvements and improved communications. This communications is important not only for information exchange with our technical contacts but also for maintaining accurate information with our contacts in purchasing and accounting. The process for placing a purchase order and accurately processing the invoices is critical to maintaining timely order placement and fulfillment but it also helps us to maintain a solid relationship.

Many of our contacts have changed because reassignments, reorganizations, turnovers, acquisitions, and mergers with many of our customers so TMI is making a special effort to keep all customer information and points of contact up to date. TMI will be making a special effort to meet with our current technical contacts to make sure we have not only accurate calibration and quality requirements but we will also be verifying points of contact, process changes, and any changes to shipping addresses. We will also now be meeting with our customer's purchasing and account departments to make sure we have the correct contacts in our database and verify that proper processes are in place to efficiently process the purchase orders and invoices so that the entire process flows smoothly and effectively. Having the proper processes with the correct contacts, emails, phone numbers, PO requirements and AP Requirements is critical to help prevent service and processing delays. TMI relies on this information to provide calibration due notices, service delay notifications, capability changes, invoicing and billing inquiries.

TMI's goal is to complete the entire calibration process in the most efficient way from start to finish. We appreciate the relationships built with our customers and always welcome your feedback and recommendations. Feel free to contact your local TMI Account Manager for any needs.

CAREER OPPORTUNITIES

As TMI continues to experience tremendous growth throughout our company we are adding new labs to our network and placing new OTS Operations in customer facilities. In addition, many of our labs are experiencing tremendous growth also so TMI is looking for additional employees at many of our current locations. There are openings for all levels of calibration technician, PMEL experience is a plus. Advancement opportunities are also available at many of our locations. We need qualified Branch Managers, Lab Supervisors, and Lead Technicians. There are also openings for administrative people and delivery drivers at some locations.

TMI offers a very competitive benefits package which includes industry leading medical, dental and insurance packages which includes a 401K matching program. Salaries are very competitive based on experience and there are many opportunities for fast track advancement within the company. Relocation packages are available for the right people.

There currently are openings in our Illinois, Ohio, Connecticut, Alabama, Georgia, and Florida labs.

Please forward your resume to Michael Floyd, <u>michael.floyd@tmicalibration.com</u> or you may visit our website www.tmicalibration.com/careers/ and reply through the career tab.

Michael Floyd

