Call for Participation in Round Robin for Quality Assurance in Coordinate Measurement Techniques

The Competence Center Production Metrology, accredited according to ISO/IEC 17025, invites you to participate in an intercomparison for quality assurance of measuring processes with coordinate measuring machines (CMM). This invitation is aimed at anyone who uses a coordinate measuring system*, whether for internal or external measurement services. In particular for accredited bodies, which must ensure the validity of results in accordance with the requirements of ISO/IEC 17025. The interlaboratory comparison is based on the requirements of the international standards ISO/IEC 17025 and ISO/IEC 17043 and offers a valuable opportunity to check and improve metrological capabilities.

* Contact and non-contact measuring systems

Background and objectives

The ISO/IEC 17025 standard sets out the general requirements for the competence of testing and calibration laboratories. This standard requires accredited bodies to participate in “comparison measurements”, so-called proficiency tests, to ensure the validity of their measurement results.

The ISO/IEC 17043standard specifies the requirements for providers of proficiency tests, including the organization and performance of interlaboratory comparisons. With this interlaboratory comparison, we support you in quality assurance in your laboratory.

What is being tested?

The ring comparison focuses on the following geometric properties:

- Size
- Distance
- Form (roundness and surface profile)
- Orientation
- Position
- Perpendicularity

A drawing of the workpiece and all characteristics to be tested can be viewed here. The surface finish (roughness) is not examined in this interlaboratory comparison, but we would like to refer you to our suitability test for surface roughness.

A workpiece (not a standard) is used in this interlaboratory comparison. A total of 16 features are to be characterized. All results are compared, evaluated and shared among the participants in an anonymized form. The participants will be informed which results belong to their measurements.

To ensure that this is not just a “compulsory exercise” to comply with ISO/IEC 17025, we offer to discuss the results and the measurement strategy used, with you and other participants, either together or individually. This allows you not only to check your processes, but also to improve and optimize them. This creates real added value for you and your department.

Your benefits of participating

- **Quality assurance:** Validation of the measurement processes in accordance with international standards.
- **Added value:** There is the option to discuss the measurement strategy and results in detail afterwards in order to determine better measurement results in the future.
- **Accreditation:** Support in meeting the requirements of ISO/IEC 17025.
- **Competence:** Increase in own measurement competence and proof of performance to customers and supervisory authorities.
- **Confidence building:** Through comparative measurements, you build greater trust with your partners by demonstrating and documenting your competence.
- **Network:** Exchange and comparison with other laboratories worldwide

Terms and conditions of participation

- **Target group:** Calibration or testing centers and laboratories worldwide
- **Languages:** English and German
- **Time for measurement:** 2 weeks per participating institution, per measuring device and per person including shipping
- **Participation fee:** CHF 2,500. The costs are per participant for one measuring device. Shipping is organized and borne by the participants individually.
- **Costs per additional measuring device or participant:** CHF 1,000
- **Tasks of the participants:**
    - Create a measurement strategy
    - Perform the measurement of the geometric features under examination.
    - Prepare a report detailing the measurement results and strategy, including a calculation of measurement uncertainty. We request that all Swiss calibration and testing laboratories submit their measurement results as an SCS/STS report.
- **Documentation**
    - **For accredited service providers**: measurement results, details of the measurement strategy including details of task-specific measurement uncertainty
    - **For all other participants:** Measurement results, details of the measurement strategy and optionally with details of task-specific measurement uncertainty
- **Acceptance of the terms and conditions of participation (see below)**

Procedure and timeline

- **Registration:** Open now
- **Start:** As soon as the minimum number of 10 participants is reached
- **Registration deadline:** October 31, 2024
- **Implementation:** The goal is to deliver all results and reports by Q2 2025
- **Measurement time window:** Will be coordinated with the participants to ensure efficient planning and implementation. In addition to the drawing, a 3D CAD model will be provided in STP format. The dates for the measurement time slot for each participant depend on the registration date. Earlier registrations will be given priority.
- **Evaluation:** All participants receive a detailed report with anonymized results.
- **Final report**
- **Final presentation and voluntary discussion round**

Contact and registration

For further information and to register, please contact Dr. Dominik Jaeger directly.

Take the opportunity to optimize your measurement processes and validate your laboratory performance. We look forward to your participation and will be happy to answer any questions you may have.

Best regards,

Prof. Dr. Michael Marxer

Dr. Dominik Jaeger

Conditions of participation

General information

1. Participation in the round robin is on a voluntary basis and is subject to the following conditions.

Minimum number of participants

2. At least 10 participants must take part in the round robin. If this minimum number is not reached, we reserve the right not to carry out this ring comparison. Participation fees already paid will be refunded.

Dispatch of the workpiece

3. The workpiece to be measured must be sent with a tracking number and/or insured. It must be handled with the utmost care. Any damage must be documented and reported immediately to OST.

Compliance with the measurement and shipping windows

4. If the agreed measurement and shipping windows cannot be adhered to, the OST executors must be informed immediately. This enables us to inform the other participants and, if necessary, adjust the next steps. If the time window is disproportionately exceeded, the sample must be returned to OST and there is the possibility of exclusion (without refund).

Withdrawal from the contract

5. It is possible for participants to withdraw from the contract. However, a refund of the participation fees is not possible in this case.

Exclusion of liability

6. We assume no liability for any damage or loss in connection with the round robin test.

Agreement to the OST General Terms and Conditions

7. participants agree to the General Terms and Conditions (GTC) of the OST - Eastern Switzerland Universities of Applied Sciences.

Publication of the results

8. We reserve the right to publish the results of the round robin test. All data will be completely anonymized. Participants will give their consent upon registration.