

Fact sheet of the interlaboratory comparison:

Mass calibration – 2021/2022_v1

Context and objectives:

As every year since 2018, CT2M (Mediterranean Technological Center of Metrology, in France) is organizing in 2021 a European interlaboratory comparison in mass calibration. If you are a calibration laboratory or a test laboratory performing its own calibration, this inter-laboratory comparison is organized for you!

The aims of this proficiency testing are to:

- ✓ Determine your performance by positioning yourself in relation to others,
- ✓ Ensure the quality of your calibration results,
- ✓ Meet the normative and accreditation requirements,
- ✓ Validate your calibration method.

CT2M guarantees:

- ✓ Confidentiality of results, respect for anonymity,
- ✓ Organization and treatment of results according to the recommendations of applicable standards (ISO 17043, ISO 13528),
- ✓ Advice and support of participant.

Proficiency testing item:

Masses of nominal values (OIML class: E2):

2mg, 20mg, 200mg, 2g, 20g, 200g, 2kg and 20kg

Calibration Method:

The preferred calibration method is the reference method of comparing the mass to calibrate with a standard mass of equivalent nominal value, using a weighting machine. Each laboratory uses its procedure and then is free to choose the number of repetitions and the number of calibration cycles.

It is not mandatory to calibrate all masses provided for this proficiency testing.

A detailed protocol will be provided to each participant at the beginning of the campaign.

Organization of the proficiency testing:

Each laboratory will have to calibrate the masses within 2 weeks (transportation is included). The masses will go from one laboratory to another.

CT2M will send to the participants a results file to complete at the beginning of the campaign. The participants will have to transcribe their results in this file. For each mass, the participants will have to indicate at least:

- ✓ Conventional mass
- ✓ Expanded uncertainty of the conventional mass

It is not mandatory to calculate the **calibration uncertainty** to participate in this comparison (for example for non-accredited laboratories).

Accredited laboratories will give their **uncertainty according to their CMC**.

Final report:

At the end of the round, the results will be statistically treated, and a final report will be sent to the participants. It will contain the results of all the participants (with codification system in respect for anonymity), the study of normality and outliers, the assigned values and their associated uncertainties (reference values determined by a laboratory accredited according to ISO 17025), the performance scores of the participants and all the other elements useful for the interpretation of the results.

Intermediate reports may be provided as the round progresses if the number of participants would result in a round duration longer than 6 months.

Important dates:

Key steps	Estimated deadline
End of registration	June, the 30 th 2021
Emailing of the detail procedure and the file of results to complete	July, the 20 th 2021
Launching of the round	August, the 23 th 2021
Publication of the final report	Dependant on the number of participants

Participation fees: 475 € net total

This price includes the weights loan, the transport to your laboratory, the results file to complete, the final report containing the treatment of the results and any intermediate reports according to the number of participants.

The transport costs to the next laboratory are the responsibility of the participants, the choice of the carrier remaining free.

However, as mentioned in the registration form, the transport of proficiency test item outside the European Union must be organized and paid for by the participating laboratory.

Registration and contact:

If you are interested in this proficiency testing, we invite you to complete the registration form and send it by email at eil@ct2m.fr or by fax at +33 (0)4.90.50.89.63.

For further information please contact us by:

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- ✓ Phone: +33 (0)4 90 50 90 14