



Interlaboratory Comparison (ILC) on laboratory balances

Swedish Metrology and Quality AB in coordination with MNE-Konsult

The ILC is dedicated to calibration laboratories that calibrate laboratory balances having capacities in the range 0-30kg.

A special focus is to perform the intercomparisons as required by the new ISO/IEC 17025:2017 and by using the principles in ISO/IEC 17043 on the pilot laboratory and the reporting.

Purpose of the comparison

The performance on this ILC should be a base for the participating laboratories to fulfil the detailed requirements issued by the guidance in EA-4/18 and Swedac DOC 06:9 revision 10. The participants could be accredited laboratories, laboratories applying for accreditation or laboratories that want to confirm their quality performance in general.

Information on the balances in the ILC:

- Max= 30kg d=1g
- Max= 4100g d=10mg
- Max= 220g d=0,1mg
- Max= 2-10g d=0,001mg

Participants:

Laboratory staff who is doing calibrations on balances independent if you:

- Are already accredited
- Are in the process to be accredited
- Want to check the quality in general in your calibrations

Dates and place:

February 17-24.

Adress Fagerstagatan 18A, vån. 2

SPÅNGA

Address where to send weights when necessary:

VWR International AB

ATT: SMQ

Domnarvsgatan 2B, Port 11

SE-163 53 SPÅNGA

Sweden

The calibration scheme or the intercomparisons

Will be published on January 27.

Applications until January 17.

There are 20 participants from 4 countries now and some more laboratories can be included.

Calibration instructions

The laboratories should not use more than 1,5 hours on each balance to do the calibrations.

The laboratories should use their calibration procedures with the focus on the points below that will be the base for the report on the intercomparison. **The laboratories should not do any type of adjustment on the balances.** The pilot laboratory will do the necessary adjustments that allow the laboratories to use EURAMET Calibration Guide No. 18 Version 4.0 (11/2015) uncertainty calculations as described in (7.1.2-5c)

The laboratories are allowed to use the calculated uncertainty values even if those are not the same as the CMC values that are decided by the accreditation bodies.

The pilot laboratory will do calibrations before the ILC starts and at the end of the ILC. In addition to those calibrations stability checks will be done between each participant.

The laboratory should hand over the original data either on paper or by e-mail before leaving the site. The final calibration certificate should be sent to the organizer within one week.

The following points shall be used by the laboratories and will be reported in the ILC report:

Measuring points (preliminary)

Balance >	Max 30 kg d=1g	Max 4,1 kg d=10mg	Max 220 g d=0,1mg	Max 10 g d=0,001mg
Point 1	1 kg	200 g	500 mg	1 mg
Point 2	5 kg	1 kg	5 g	2 g
Point 3	20 kg	4 kg	200 g	10 g

Evaluation of the results and issuing of the report

The results will be evaluated by using the principles in ISO/IEC 17043 and ISO 13528:2015 and EURAMET Calibration Guide No. 18 Version 4.0 (11/2015)

The report will take care of the anonymously by a code of the laboratories and the laboratories will receive their code by separate e-mails.

The final report will be published on April 15.

Organiser of the ILC is:

Swedish Metrology and Quality AB

Borås Sweden

www.smquality.se

Price

Basic charge for laboratories having less than 4 laboratory technicians 4 000 SEK
All other laboratories 8 000 SEK
And a fee for each participant/balance 1 400 SEK

Application

Application to hakan.kallgren@smquality.se .

Application before 15 January 2020.

You may change the details in an application you have sent but not later than February 1.

Detailed planning on the ILC

Planning on dates and reporting is as follows:

We inform you more about the detailed planning on January 27.

The sequence is:

- Allowed time on calibration 1,5 hour/balance
- Hand over the reference data to the organizer on site either on paper or sent by e-mail before leaving
- Calibration certificate should be sent to the organizer within one week after the calibration
- Draft report on the ILC latest March 16 (in English)
- Comments on the draft report by the participants latest March 23
- Final report within 1-2 weeks after receiving all information from the participants

Technical planning

The pilot laboratory does the reference calibration before and after all participating laboratories.

Intermediate checks are done on some calibration points between all participants

There will be a possibility to place the weight sets in a room (for tempering) on site from Monday February 17 or contact us if you want to send the weights in advance.

