ICAR Guidelines for calibration of the milk meters

DeLaval MM15 Milk Meter
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1.1 Calibration of milk meters

During calibration check and adjust the milk meter setting so that displayed value corresponds to actual weight, sensed by the strain gauge of the milk meter.

However, if there is a leakage or a fault in the milk meter function, the registered milk yield may be wrong, even if the calibration is correct. Therefore, periodical checks must be performed, where the weight is checked by the water test.

1.1 Weight

Be careful always to keep the weight in its case. If it is scratched, e.g. by putting it down on a rough surface, it will not longer be a precise reference weight.

The value is stamped on the weight.
1.2 Calibration in ALPRO system

If the displayed weight is outside of limits for any of the milk meters, these must be recalibrated. The MPC should be in standby mode.

1. Enter [F][8][8]↑ on the MPC. The sign "EP-" for enter password will appear.

2. Enter password [8][2][8][5][1].

3. If the password is incorrect the sign "EP-" will appear again.
   If the password is correct, the MPC shows the sign "EC-" (enter calibration weight).

4. Enter the value stamped on the calibration weight.
   Example: The weight is stamped with the value 142.34 g. Round off to 142.3 g.
   Enter [1][4][2][3][1] on the MPC.

   • The MPC first displays "-----", and then "0.0" for no weight; cup is empty.

6. Carefully place the weight in the milk meter cup.

   • The MPC now senses the weight of the calibration weight, compares it with the entered value, and calculates and stores the correct calibration factor for this milk meter.
When this is ready, the MPC displays "CF-" (calibration finished) for a few seconds and after time-out it exits function. [F][8][8].

7. Remove the weight.
   ⇒ The function closes after time-out.
   Now the milk meter is calibrated. Press [F][8][9][1] to check.

8. Repeat calibration for the other milk meters if necessary.
1.3 Check calibration

Check with a calibration weight that the milk meter displays the correct value.
The MPC should be in stand-by mode (not necessary when coming directly from calibration).

1. Remove meter cover and spoiler on all milk meters.
2. Wait for about 10 minutes (to let the temperature stabilize), or until ambient temperature has been achieved.

3. Enter [F][8][9][1]. This will set the milk meter in check calibration mode.

   - Then “——” is shown on the display.

4. Wait until “0.0” is displayed, and then carefully place the calibration weight in the milk meter cup.
5. Read off the weight. It must be the value stamped on the weight ±0.8 g.

   - If the weight difference is more than ±0.8g a calibration must be done, see section Calibration.
6. Remove the weight.
   ➯ The sign “—” will be shown for a short while.

7. Wait for “0.0” to be displayed, and put the weight back again.

8. Do this at least three times, or until good repeatability is achieved.

9. Exit the function with [F][1], or it will close after time-out.

10. Repeat the procedure on all meters to be checked.