ICAR Guidelines for periodic checking of the milk meters

JM 100 Milk Meter
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Frequency of periodic checking at least once in 12 months.

1 General
   a. In practice, the JM milk meter is used in three different situations:
      • JM 100, Super Servo; the basic equipment. The JM 100 is linked with the control
        panel for milking, sampling and cleaning functions. The JM 100, Super Servo has
        no digital reading-off.
      • JM 100, Alfa display: digital reading-off. The control panel for the various functions
        is linked with a display panel for digital reproduction of the measured milk quantity.
      • JM 100, Alfa Display system. The digital reading-off is connected with a computer
        system.
   b. In all situations where a JM 100 milk meter is installed, there has to be an airinlet of
      0.85 mm for obtaining the right contents.

2 Periodic checking of a “JM 100, Super Servo”
   Periodic checking is the same as used for jars:

   Periodic checking       JM 100, Alfa Display
                           JM 100, Alfa Display System

3 Reference value
   Instead of a “reference value”, a fixed standard (9.7 - 10.1 kg) is used for all JM 100 milk
   meters. Moreover, when proceeding to periodic checking, results of former checks are
   handed over for support.

4 Required equipment
   a. No specific sucking set.
   b. A milk tube is used for sucking the water.
   c. The outlet tube from the meter to the receiver must be provided with a tube clip, with
      which the outlet can be slowed down.
   d. Electronic weigh-beam/bascule.
   e. Some receivers for collecting testing liquid.
   f. Some buckets of sufficient capacity.
   g. Thermometer.
5 Testing liquid
   a. Water with a temperature of 20°C ± 5°C.
   b. No addition of salt or acids.

6 The principle of the test
   a. Fill the jar with ±15 kg of testing liquid.
   b. Empty the jar by means of the JM 100 pump till 10 kg is shown on the display and collect this quantity of testing liquid in the receiver.
   c. This quantity of testing liquid is weighed and should be between 9.7 and 10.1 kg.

7 Quality of the observations/measuring
   a. If the first measured value lies within the area between 9.8 and 10.0 kg: meter = correct. If the first measuring has a value of 9.7 or 10.1 kg, a second measuring should be carried out.
   b. If both measuring give values within the area between 9.7 and 10.1 kg: meter = correct.
   c. The difference between duplicate measuring should not be bigger than 0.2 kg.

8 Deviating meters
   Meters that do not come up to the standard of 9.7 - 10.1 kg should be tested with water after checking and, if necessary, dismantling of the meter. If it is still impossible to come up to this standard, then the meter should be replaced.

9 Replacement or repair of meters
   New meters have to be tested during milking, after which the water test should be carried out twice.

10 Reporting the results
   The results of the periodic checking of the milk meters, as well as interim changes and the checks that go with these changes will be reported to those concerned, among others to the farmer, to the main supplier and to the national milk recording organization.

11 Sampling equipment
   Check the sampling equipment for cleanness and parts.