Periodic checking of weigh jars/vessels

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# Table of Contents

1. Introduction ................................................................................................................................ 3
2. Checks ........................................................................................................................................ 3
3. Reference value .......................................................................................................................... 3
4. Required equipment .................................................................................................................. 3
5. Testing liquid ............................................................................................................................. 4
6. The principle of the test and evaluation observations/measuring .............................................. 4
   6.1 For new installations ........................................................................................................... 4
   6.2 For periodic/routine check ............................................................................................... 4
7. Deviating weigh jars/vessels ....................................................................................................... 4
8. Replacement of weigh/jars/vessels ............................................................................................ 4
9. Reporting of the results ............................................................................................................. 4
1 Introduction

This document describes guidelines for the periodic checking of weigh jars/vessels. The frequency of periodic or routine checking of jars/vessels should be at least once every 24 months.

2 Checks

Check on:

Height:
- Mounting.
- Stand.
- Content.
- Lighting in the milking parlour.
- Readability of calibration.
- Accessibility.
- Leaking of sample draw-off valves.

Height conditions:
- 10 kg-line between 120 - 175 cm (height preference).
- 10 kg-line lower than 120 cm: sample draw-off valve on minimal 60 cm.
- 10 kg-line lower than 120 cm and draw-off valve lower than 60 cm (measuring glass under wellhead): use of sample taking equipment and mirrors.

3 Reference value

- Water test: none - see below for the principle of the test and for evaluation of measured observations.
- Check with digital protractor that provides the angle in measured degrees.

4 Required equipment

- A sucking set.
- Electronic weigh scale or bascule.
- Two buckets of at least 10 and 15 litres capacity.
- Digital protractor (including box).
- Calibration standard.
- Grab.
5 **Testing liquid**

- Clean tap water.
- No addition of reagents to water.

6 **The principle of the test and evaluation observations/measuring**

6.1 **For new installations**

In this test, water is used and the measurement principle of the weigh jar/vessel is volumetric. Compensation for density should be calculated, based on the assumed density of milk of 1.030 for cows, 1.032 for goat and 1.036 for buffalos and sheep.

**Water test:**

- Sucking of 5.8 kg water. The results must be: 6 kg +/- 0.1 kg.
- Sucking of 12.6 kg water. The result must be: 13 kg +/- 0.2 kg.
- Recording of angle in degrees with a digital protractor (bottom on 6 kg-line is the reference value).

6.2 **Farms for periodic/routine check**

- Record degrees with a digital protractor on 6 kg-line (bottom) and at 16 kg-line (top).
- Compare the degrees to reference value with a tolerance +/- 0.130 degrees (0.090 degrees = 0.1 kg).
- Check sample draw-off valves for leaks.
- Check air inlet for mixing the milk.

7 **Deviating weigh jars/vessels**

When not coming up to this standard, the weigh jar/vessel must be adjusted and re checked. If it is still impossible to come up to this standard, the jar should be replaced.

8 **Replacement of weigh/jars/vessels**

By numbering the weigh jars/vessels with durable numbers, changing and replacing is easily noted. In such cases of replacement, a new water test must be carried out.

9 **Reporting of the results**

The results of the periodic/routine checking, as well as the interim changes and the checks that go with these changes, will be reported to those concerned. This may include the farmer, the main supplier and the national milk recording organization.