Affordable way of calibrating milk-meters

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Introduction

Periodic check of milking machines is the basis for reliable milk recording

A.I.A. coordinates SCM (milk machine control service) in order to test all milking devices of recorded farms

Local SCM technicians perform tests in recorded farms

SCM organization

A.I.A. Central SCM

A.P.A. Local SCM

A.I.A. central management

A.I.A. Central SCM

A.P.A. Local SCM

A.P.A. local activity

A.P.A. Local SCM

Identification, setting up and test

• Each milk meter has to be identified …
Identification, setting up and test

- ...tried out ...

- ... periodically checked

SCM technicians tools

Each technician is provided of a testing-kit and an operating manual

Milk Meters Testing Kit

Is composed by

- A complete set of flowmeters (hole diameter from 2.8 to 8 mm) and air inlet pipes (hole diameter from 0.8 to 1.2 mm)

Milk Meters Testing Kit

A specific scheme drives the technician on how to correctly assemble the kit components in order to avoid mistakes in matching device to be tested (brand and type) with the couple flowmeter/air inlet pipe.
• Depending on device to be tested and following the scheme instructions, the technician is driven to assemble the right elements of the kit in the correct way without mistakes, in order to guarantee correct results.

• AIA now supplies directly sticky labels with a printed progressive identification number. Identification number duplication is avoided.

• The tag is made of aluminium and is composed by two parts:
  - the first one has to be stucked on the tested device
  - the other one on the official paper form used by technicians to record data during testing operations.
Evolution of identification activity

The initial growth is mostly due to starting identification of old milk meters. Figures of next years will better show the real trend of technological innovation in Italian dairy cattle parlours. The 2005/2006 figure is likely to be a good estimation of yearly growth in normal condition.

Conclusions

- Experience gained through years leaded A.I.A. to build practical steps of SCM operating methods upon two points:
  1. milk meter univocal identification by printed tags that AIA releases to all technicians
  2. a special testing kit that avoids mistakes in assembling incorrect tools and guarantees the correct application of ICAR rules.
- This activity assures correctness for official milk recording and highly specialized technical support in dairy activity.

At the moment, about 1,800 recorded farms use more than 21,800 tested milk meters.