

# Dynamic Milk Tank Weight

Need:

Monitor and record lot and herd production at milking.

Aim:

- Automatically measure and record the weight of the tank at defined time intervals
- Measure the milk production of the herd per milking
- Measures the milk production of each lot per milking
- Monitor the evolution of production during the campaign.

#### Description:

The dynamic tank weighing device automatically measure and record the weight of the milk tank using weight sensors and a recording and transmission box. A display box also allows to read the weight of the tank in live. The data is accessible using dedicated software which allows time-stamped weight data files to be downloaded.

## How to Implement:

A weight sensor is installed under each leg of the tank. The different strain gauges are wired to a junction box then to a weight display box which requires a power supply. And this is connected to a "box", powered by 220 V, which records weight data and transmits it via an internet connection. The user can then access to the recordings from specific software installed on his computer.

The tare function allows to record only the weight of the milk arriving in the tank. Recording can be set at the desired frequency. An option allows you to force a reading using a badge to record weights at specific times. For example, this can make it possible to record the weight of the tank before and after milking a batch of animals to know the production of this group of individuals. Knowing the number of animals being milked can then make it possible to calculate production averages per lot/for the herd and per milking.



#### **Country:**



France

Production System (dairy or/and meat sheep/goat):

Dairy sheep and goat

Category of Animal (ewe, goat, replacement, lamb, kid):

Lactating ewes and goats

Source of Information:

https://techcareproject.eu/

Attachment/links:



### Expected Benefits:

- Automatic recording of production data per milking at the herd and lot level
- Knowledge of milk production levels
- Study of the evolution of production in connection with the feeding of lactating animals, with the environmental conditions in breeding buildings or even information on the health of the herd, etc.

## Costs and Challenges

- One device per milk tank, one weight sensor per tank foot.
- Metal supports for strain gauges, resistant to the weight of the tank but also to washing water (acids, bases).
- · An internet connection accessible
- Access to electrical outlets to power the boxes.
- A measurement at the scale of the herd or lot.
- Requires recording the number of animals per milking to enhance the data with production averages.
- Be careful not to damage the cables leaving the load cells.
- Set up costs ~ XXX Euro
- Subscription required: Yes/No
- Ease of use? Scale 1 (Complicated) 10 (Simple)
- 1 2 3 4 5 6 7 8 9 10
- Value for money (for this type of benchmark farm)? Maybe
- Recommend this tool/technology for use on other types of farm? Yes

FARMER FROM FRANCE



It would take xx years for xx adoption.





