Intuitive calf feeder

Guiding feeding system for calves, shortened learning phase

DESCRIPTION OF TECHNOLOGY

In dairy farming, calves are usually fed from day one by trained personnel using teat buckets and later also automatic milk feeders. Since calves can often not find the teat of the feeders on their own, they must be intensively monitored and trained during the first days of life. This learning phase is labor-intensive and requires a lot of care. If there is a lack of time, it can have a massive impact on the health and development of the calves.

The new feeding system offers a solution. A simple technical component, which can also be used as a retrofit kit for existing feeding systems, intuitively guides the calves to the teat. This means that intensive training of the calves is no longer necessary, as they learn more quickly and reliably how to find the teat for the first time and how to return to the teat of the feeding system after an interruption.

APPLICATION FIELDS

The new feeding system has been developed for use with calves. Through simple technical modifications, it can also be adapted for use with lambs, fawns or other young mammals.

AT A GLANCE …

Application Fields
- Feeder for calves
- Feeder for lambs, fawns and other mammals

Business
- Agricultural supply
- Dairy farms
- Animal transport

USP
- Shortens the learning phase for calves
- Reduces the working time
- Simple technical solution
- Can also be implemented by sparsely trained personnel
- Can be retrofitted at low costs

Development Status
- Prototype created and tested

Patent Status

REFERENCE NO. TM 1112
ADVANTAGES OVER THE PRIOR ART

The new feeding system encourages the calf to find the teat on its own, without much help from the staff. As a result, calves learn to drink more quickly on their own and can easily find their way back to the teat in case of an interruption, which is essential for the health of the calves, especially in the first days of life or during the short feeding breaks at control posts during calf transportation. In addition, the new feeding system uses an angled teat that supports the calves' natural physiological sucking position. This prevents rumen drinking.

STATE OF THE PRODUCT DEVELOPMENT

A prototype was created and tested with great success in calves (KTBL publication 520).

MARKET POTENTIAL

In rearing calves, a considerable proportion of calf losses and diseases occur as a result of inadequate milk intake in the first few days of life. The new feeding system offers a great reduction in the workload when feeding calves, as the training phase can be significantly shortened. This gives the staff more time for the health monitoring and care of the calf.

In addition, the intuitive nature of the new feeding system allows that its functionality is less dependent on staff motivation, time pressure or poor understanding of the calves' physiological needs. It therefore facilitates the calves' learning phase until successful sucking is established, even in the case of poorly trained or unmotivated employees.

In this way, the new drinking system can promote good calf development, as well as reduced illness and mortality, and is therefore an improvement for animal welfare and farm management workflows.

In Germany, there are about 133,000 cattle farms with about 11.3 million cattle, of which about 2.34 million are calves (Federal Statistical Office, November 2020). The production value of the total cattle farming in Germany is about 13.9 billion Euros, and the sales revenue for calves alone is about 218 million Euros (BMEL 2020).

COOPERATION OPPORTUNITIES

On behalf of its shareholder Justus-Liebig-Universität Giessen TransMIT GmbH is looking for cooperation partners or licensees for further development in Germany, Europe, US, and Asia.