

**Conclusion.** The study found that the most rational form holes in the drive pneumatic sowing device for sowing corn is a triangular shape, which has an area of increased suction and directs seed that stuck in a certain direction, which in turn provides a more uniform distribution of seeds line, and thus improves the quality of sowing.

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*Ustanovleny optimalnye konstruktivnye Options otverstyya forms a disk apparatus for Pneumatic vysewayuscheho vyseva semyan kukuruzы.*

**Options vysevnoy drive otverstye, shape, vysevnoy apparatus.**

*The optimal design parameters of the holes in the form of a disk pneumatic sowing seeds for planting corn.*

**Parameters seeding disc, hole shape, seeding device.**

UDC 631

### **IMPLEMENTATION OF MILK TRANSPORT At the stage of pouring in measured capacitance**

**VI Rublev, PhD  
O.V. Devyatko, a graduate  
student \***

**National University of Life and Environmental Sciences of Ukraine**

*Considered common basic elements of milking cows. Detected shortcomings of existing types of machines for bottling milk. On this basis, developed a schematic diagram of filling and closing*

*svizhovydoyenoho milk, taking into account the primary influence on the process of milk production.*

***The system, transportation, milk spill.***

**Problem** The process of milk production is a complex system "operator-machine-animal-environment". Considering organizational and economic trends of milk production in Ukraine for the types of farms, according to statistics, we see that the largest share of its production owned farms and from Ukraine's accession to the World Trade Organization this layer is most vulnerable. [1] After their production technology is unlikely to be consistent with international standards.

**Analysis of recent research.** Made in information retrieval Topics "Livestock Ukraine." Via

\* Supervisor - PhD VI Rublev

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morphological analysis method and the method of stratification was determined that most of paid breeding and production [2]. As for milk production technology [3-6], it was found that all of it can be divided into the technological stage, at different degrees of influence on the quality of the resulting dairy products.

**The purpose of research** is to develop a system of capping svizhovydoyenoho milk producers individual sector without air, to be able to harmonize quality parameters of milk producers to private standards.

**Objectives of research:**

- The main elements of the milking equipment and specify its disadvantages for private producers;
- To analyze existing types of machines for bottling capacity and identify their shortcomings;
- Develop a schematic diagram of technical support pouring in measured capacitance.

**Methods of research.** Patent Information Search on setting priorities logistics milking process, transportation, filling and closing svizhovydoyenoho milk [7]. The analysis of publications in journals "Animal Ukraine" was performed according to the rules of morphological analysis [8].

Among existing methods, the research carried out by individual expertise and by an anonymous survey to determine the shortcomings of existing types of machines for filling and on their basis a device for filling bottles with milk without air.

**Results.** Considering the types of milking equipment, which is now offered to the private sector, regardless of type, brand and design features of the basic elements have clearly defined functions:

- milking cups - vydoiyuyut milk;
- collector - distributes vacuum chamber in mizhstinkovi milking cups, collects them milk, milk makes a hose. In addition, in the case trytaktnoho milking provides periodic supply air chamber in piddiykovi milking cups and thereby creates a fact of rest;
- pulsator - converts a constant vacuum in the pulsating, ie one alternates with atmospheric pressure;
- Milk and air hoses and pipes (set) combine the above components into a single system (milking machine) and is also the backbone for the passage of air and milk.

During milking pails of milk in portable simplest possible set of means, but the biggest labor costs associated with having operations in moving along the front of milking machines milking and transporting milk to the dairy, and unfortunately filled with overflow tank to measuring its open and is a combination of two environments and milk impairs their microbiological characteristics.

The total implementation of the transmission system on the location of the manufacturing process is output milking technology and has the degree of modification and amendments improving performance.

Filling - is the main operation in the bottling of any product. There are two types of machines for bottling:

- simple machines, perform only one operation bottling;
- mono, Triblocks, kvadrobloky: one machine performs several operations.

There are machines for filling milk with multiple filling heads, focused on a large number of bottles and pouring it often partially used different types of chemical preservatives while obtaining milk that has the most long-term storage.

The disadvantage of these machines is a set volume piston dosing, and at closing worker puts his hands on the neck of the bottle stopper, and for twisting it uses high-speed semi-automatic pneumatic, they focused on one standard size tube.

Therefore, the basis was the way a device for filling bottles with milk without air [9]. It was decided that building bottler looks like a tube top lid and bottom threaded basis for regulation, depending on the height of the bottle, and a box to check the quantity poured milk on top of the lid is placed Filling and Capping system in the form of tubes which by means of clamps placed on lid close by which is filled with milk utensils. One side of it is filler system containing valve to regulate feeding milk pipe on which it enters the tank, which is filled and the mechanism that regulates offset by feeding milk from the center to the side, for the possibility of closing the reservoir filled with milk.

Fig. 1 shows a schematic diagram of the machine for filling and closing svizhovydoyenoho milk (front view). According to the figure the machine made a part of the tube, with a lid, which is located in the center closure system consisting of serving the neck, on the inside which screws that secures the cylinder with external thread inside which are on either side screw clamps that adjustable, depending on the diameter plugs for closing, and where the latter is fixed.

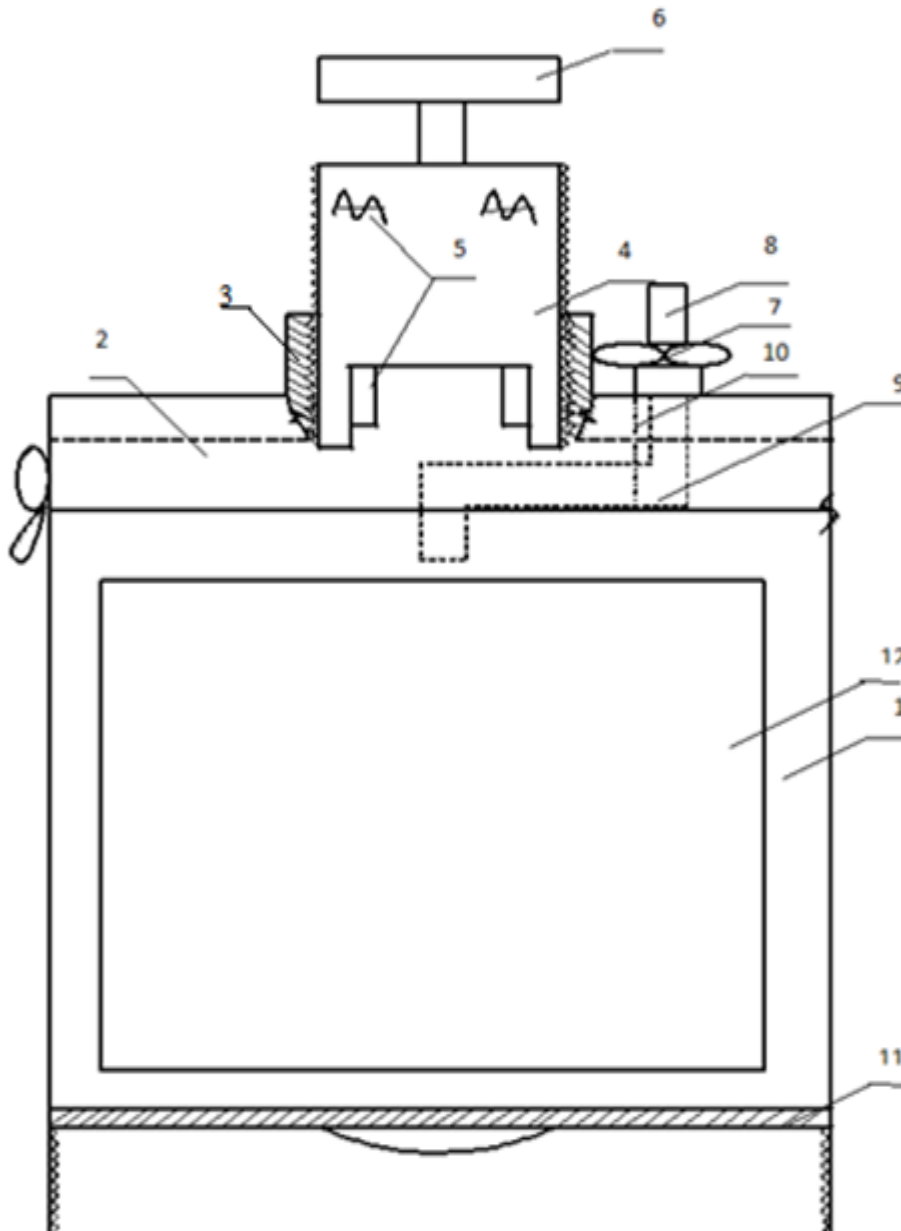


Fig. 1. Schematic diagram of the machine for filling and closing svizhovydoyenoho milk 1 - tube; 2 - a cover; 3 - projecting neck; 4 - cylinder; 5 - screw clamps; 6 - handle; 7 - tap to control the amount of liquid filled in; 8 - trumpet; 9 - filler pipe; 10 - L-shaped hook; 11 - the bottom; 12 - the window to check the amount of milk poured.

On top of the cylinder is pen with which perform the process of closing the filled container. Side of the closure system is overflowing system containing valve to control the amount of liquid filled in on top of it is performance pipe which attach the hose to fill milk, bottom filler pipe that moves to the center of the tube while filling fluid reservoir and a way for its possible closing using L-shaped hook that is attached to one side of the filler pipe and the other to cover where possible regulation and marks specified where at the moment is overflowing pipe. The bottom tube threaded basis for regulation depending on the height of filled tank closer to the top of the tube is a window to check the number of milk poured [9]. This combination of design solutions enables individual producers sector spilling milk without air that meets the requirements of the WTO and creates integrity of milk from cows feeding directly to the consumer. [10] And because the bottom has a threaded connection tubes, allows adjustment depending on the height of the bottle, filled and a window to monitor lets focus on the level of filling bottles with milk.

**Conclusion.** The developed machine for filling and capping svizhovydoyenoho milk in the transportation system. Shows principle of its action, indicating that under the Law of Ukraine of 18.03.2004. №1629-IV "On the National Program of Adaptation of Ukraine to the European Union," the event is a priority in the foreign policy of Ukraine during the integration.

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<http://zakon4.rada.gov.ua/laws/show/1629a-15>

*Sharing Rassmotreny Main elements of the organization doenyya cows. Opredeleny shortcomings suschestvuyuschyh typical machines for bottling milk. On the basis razrabotany s pryntsypalnaya offensive scheme and capping svezhevydoennoho milk uchytivayuschaya Main factors of influence on the process of production of milk.*

***The system transportyrovanye, milk, glaring.***

*The general organization of basic elements of milking cows. Identified shortcomings of existing types of filling machines based on its have developed scheme spill and closing svezhevydoennogo milk, taking into account main factors influencing process of milk production.*

***System, transportation, milk, flood.***

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## **WAVE CUTTING longitudinal oscillations of elastic elements Conveyor**

***VS Loveykin, PhD***

***Y. Chovniuk, Ph.D.***

***OY Kostin, a graduate student \****

*A discrete-continuous simulation and offered reasonable method to reduce wave longitudinal oscillations of elastic elements scraper conveyor. These fluctuations are considered as a superposition of two traveling towards each other weakly damped waves.*

***Discrete-continuous simulation damping device longitudinal vibrations, elastic elements, conveyor.***

**Problem.** Elastic elements of modern scraper conveyors are a closed circuit consisting

\* Supervisor - PhD VS Loveykin

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from compliant sites relatively small mass, separated from each other by a massive hard elements (scrapers laden). Compliance elastic elements results in that when the scraper conveyor belt outline some areas