

IMPROVEMENT OF FIBER CLEANING EQUIPMENT MODEL 1VP

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Abstract

1VP equipment was equipped with louvered gratings, and its fiber purity increased, and productivity increased.

Keywords: dirt, ginning, seeded cotton, fiber.

Introduction

It is effective to clean the fiber from dead and small impurities that remain after ginning before pressing them. When machine-picked seeded cotton is ginned, dead bodies and small impurities sometimes exceed the standard of personal norms. If such fibers are pressed, it will make it difficult for the machines of textile factories [1-4].

In addition, cotton fibers are more frayed and die excessively in textile factories. Some pieces of fibers from gin are 15...20 mg, and the bulk density does not exceed 0.15-0.25 kg/m³. For this purpose, it is indicated that fiber cleaning machines are also installed in cotton ginning factories.

Fiber cleaning machines are divided into mechanical, aerodynamic and aeromechanical types, depending on the method of cleaning the fiber from dead and small impurities [5-7].

The work of cleaning a car field is one step at a time, depending on how many times the street is; depending on the demon battery, the one that cleans the fiber from a demon is made as a private one, and the one that cleans the fibers from a demon battery is made as a battery fiber cleaner [8-10].

Aerodynamic fiber cleaning is capable of carrying loads due to the centrifugal force generated when the fiber installation travels along a curved path with the

aircraft carrying it. if there is, the aerodynamic fiber cleans the wipers because it cleans. The force of adhesion of dead and small impurities to the fiber reaches 0.98...1.47 N, while the centrifugal force generated by the fiber cleaner is at most 0.09...0.11 N.

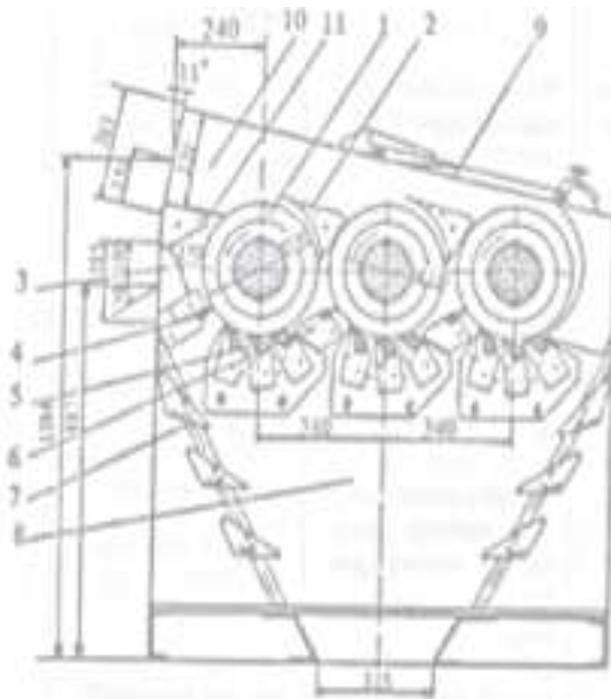


Figure 1. 1VP fiber cleaner.

1-saw cylinder, 2-separator, 3-receiving joint, 4-flat guide brush, 5-column grid, 6- guide brush, 7- blind grid, 8- waste chamber, 9 - upper cover, 10- removal throat, 11- separator knife

Basic technological requirements for the cleaner. They consist of:

- when the working organs of the fiber cleaner affect the fiber, it does not affect its physical and mechanical properties;
- maximum removal of dirt and dead matter in the fiber during cleaning;
- not to reduce fiber quality indicators from the standard norm;
- less amount of fiber added to the waste.

Improved part

The fiber flow from the ginning process is fed to the saw cylinder through a tube. The brush soaks the stream of fiber to the teeth of the saw; the saw cylinder



quality and quantity indicators during the processing of cotton and the fiber, fluff and seeds produced from it. It is known that one of the main factors determining the profitability and net profit of the enterprise is related to the wholesale price determined on the basis of the quality of the produced fiber.

After the fiber is cleaned, it is transferred to the fiber pipe through the take-off throat with the help of air. Inside the machine, louvered grilles 3 are installed to regulate the fiber movement and adjust the aerodynamic mode. Cleaning efficiency The importance of the louvered grill is great, its cleaning efficiency is 16.9 abs. it is seen that it has increased by percent. The amount of fiber separated into waste in the fiber cleaning process is 48 abs. It was found that the length of the waste fiber is 1.3 mm shorter.

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