



**THE RESULTS OF THE STUDY OF THE INFLUENCE OF THE SPRAY AIR ON
THE PROCESS OF TRANSPORTING THE RECEIVED TORQUE TO THE
TORQUE CONDENSER DURING THE LINTERIZATION
PROCESS AND ON THE INTENSITY OF THE LINTERIZATION PROCESS**

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Abstract: In this article, the results of a theoretical study of the effect of dynamic air pressure and velocity changes in the aerodynamic mode of existing 5LP linters on the efficiency of fluff separation from linter saw teeth and the effect of air pressure and velocity in the air chamber on fluff separation from saw cylinder teeth are presented.

Keywords: linter, fluff, air chamber, aerodynamics, dynamic pressure, stand, air density fan, condenser, static pressure, grasshopper speed, seed mixer, saw angle, nozzle, experimental movement, tow, air, flow velocity, aerodynamic force, linter, supercharger, fan, pressure, pipe, aerodynamic system, saw cylinder, working chamber, exhaust pipe, seed comb, grate, drum, feed roller.

Only cases of the use of absorbent air support in the technological process of linters of 5LP, which are used in cotton cleaning enterprises, are failing. In this case, it can be observed that the fluff is spilled on the base of the linters. This means that not all of the torque obtained during the lintering process is absorbed into the torque condenser. In our proposed technological process, we noted that this problem can be solved by applying a resurstejamkor spraying air system on an aloxida to an entire linter. To prove this assumption in practice, experiments were carried out on a laboratory stand. Experiments were carried out by taking the amount of torque obtained during the lintering process of each variant as 100%, concentrating the torque obtained after the torque condenser in the alloy, the torque poured into the base of the linter in the alloy, and pulling on the electronic scales. It was advisable to collect the fluff that spilled on the bottom of the linter with extensibility, without mixing it with the lintered seeds.

The results of the experiments carried out are shown in Figure 1.

As can be seen from the graphs in Figure 1, the aerodynamic mode performed using spray and absorbent fans during the lintering process has a special relevance in organizing the removal of torque from the teeth of the saw cylinder of the linter and the transport to the torque condenser. Of the graphs in Figure 1, 15.3% of the linter's base is deflated during lintering using only a suction fan, and this means that up to 84.7% of the torque is transported to the torque condenser. In this case, a hand cocktail is required when collecting 15.3% of the fluff from the base of each linter. Secondly, as a result of mixing such a large amount of fluff with spilled seeds and impurities, its quality indicators deteriorate. It can be seen from the





graphs in Figure 1 that when the linter was given a spray air of 0.4 m³/s to the air chamber, the amount of torque that was transported to the torque condenser decreased to 99.4%.

Increasing the amount of spray air from 0.4 m³/s is not recommended, since in this case, due to the fact that the amount of spray air exceeds the amount of absorbent air, the saw cylinder sprays the torque removed from the teeth to the base of the linter. So from the results of the experiments carried out, we can conclude that it is possible to ensure that the fluff product obtained in the aerodynamic mode of operation, which is adjusted by installing a spray fan on an Aloxi into the air chamber of the linter, at the rate of 0.4 m³/s, can be transported to a full fluff condenser. This has a positive effect on the increase in quality indicators of fluff and reduces the cocktail of manual work when collecting fluff from the base of linters.

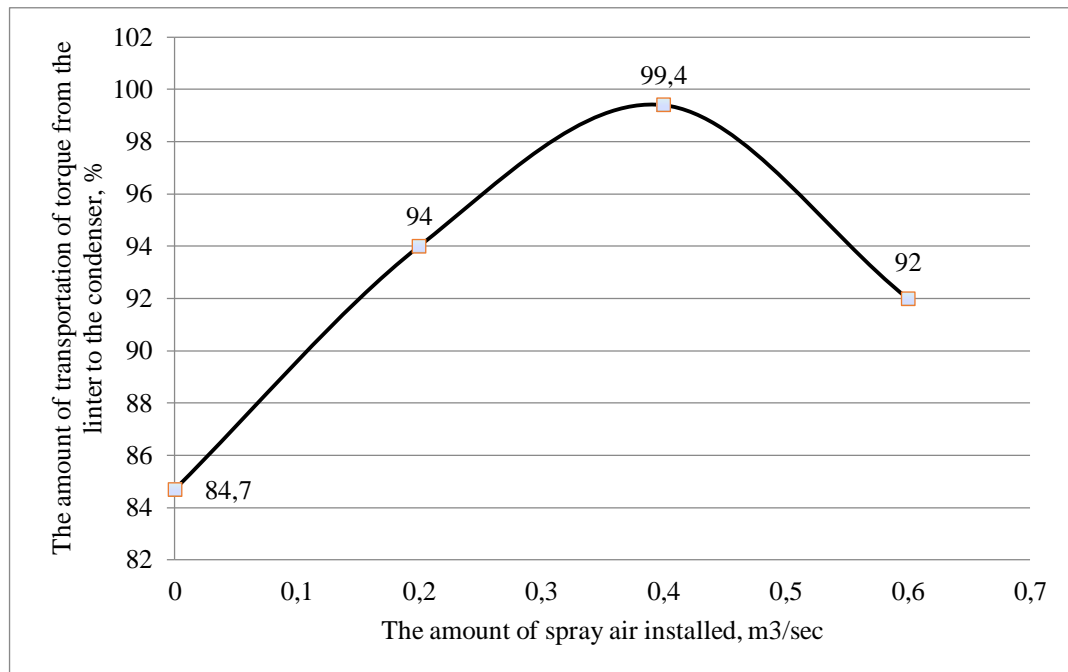


Figure 1. Effect on the process of transportation of torque to the torque condenser, which is obtained during the lintering process of the spray air

Linter believes that if you are not sure of the reliability of the information obtained during the investigation, then most likely we are talking about fraud and fraud committed against linter. If you are intoxicated, you may be placed in a pre-trial detention cell, where you will be tortured and tortured. In our experiments, it was shown that in aerodynamic mode, Poirot affects the controllability of the battleship to some extent, while in aerodynamic mode, Poirot affects the controllability of the battleship to some extent. Chewing gums weighing up to 50 kg were used in animal experiments. The results of the experiments are shown in Tables 1 and 2.

Table 1

The results of the study of the effect of spraying air





on the intensity of the linterization process (C-6524 variety, 1st Industrial variety)

Designation of indicators	Installed amount of spray air consumption, m ³ /s			
	0	0,2	0,4	0,6
The amount of pollen transferred in the Linter equipment, kg	50	50	50	50
Duration of the linterization process by options in Linter equipment, min	13,15	12,6	11,76	11,53
The output of the fluff, %	3,4	3,42	3,5	3,5

As can be seen from the data presented in tables 1 and 2, it turns out that the acceleration of the process of linterization of the seed is ensured by increasing the consumption of spraying air at the same amount of torque output installed for all options from 0 to 0.4 m³/sec. For example, the C-6524 variety was observed to decrease the duration of the linterization process by options in the linter equipment from 13.15 to 11.76 min when the torque output is set at 3.4-3.5% when the spray air consumption increases to 0.4 m³/sec.

Table 2

The results of the study of the effect of spraying air on the intensity of the linterization process (C-6524 variety, 1V-industrial variety)

Designation of indicators	Installed amount of spray air consumption, m ³ /s			
	0	0,2	0,4	0,6
The amount of pollen transferred in the Linter equipment, kg	50	50	50	50
Duration of the linterization process by options in linter equipment, min	14,15	13,51	12,82	12,71
The output of the fluff, %	3,96	3,98	4,0	4,05





It was found that the duration of the linterization process by options in linter equipment did not increase significantly when the spray air consumption was increased from 0.4 m³/sec to 0.6 m³/sec. The effect of spray air consumption on the duration of the lintering process by options in linter equipment can be isochated as follows. In the proposed linter equipment, exposure to spray and absorbent Air provides a more complete removal of the torque being separated from the teeth of the saws in the working Chamber of the linter. Due to the fact that the aerodynamic system of 5LP linters used in current cotton ginning enterprises uses only a fan that provides absorbent air, the lintered seeds are held in the working chamber for a relatively longer period of time to obtain the required amount of torque due to the fact that complete removal of the broken down saw in the teeth.

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