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Determination of different moisture content of seeded cotton in tower drying drum of cotton raw material and improvement of technology.

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Annotation. Preparation of cotton raw material for processing means keeping it free of defects and damage before production. Modern drying drums have unique universality in the processing of cotton raw materials, and are designed for storage and transfer of cotton raw materials to the technological process.

Key word. Saw drum, colosnik grill, air nozzle, dirt removal auger, brush.

At the present time, cotton ginning enterprises use modern technology, i.e. 2SB-10, SBO, SBT brand drying drums are installed in the drying and cleaning department to achieve high levels of drying efficiency. In the direct cleaning department, there are also modern cleaning machines, such as UXK cleaning flow-line unit, Mekhnat cleaning machine and other equipment.

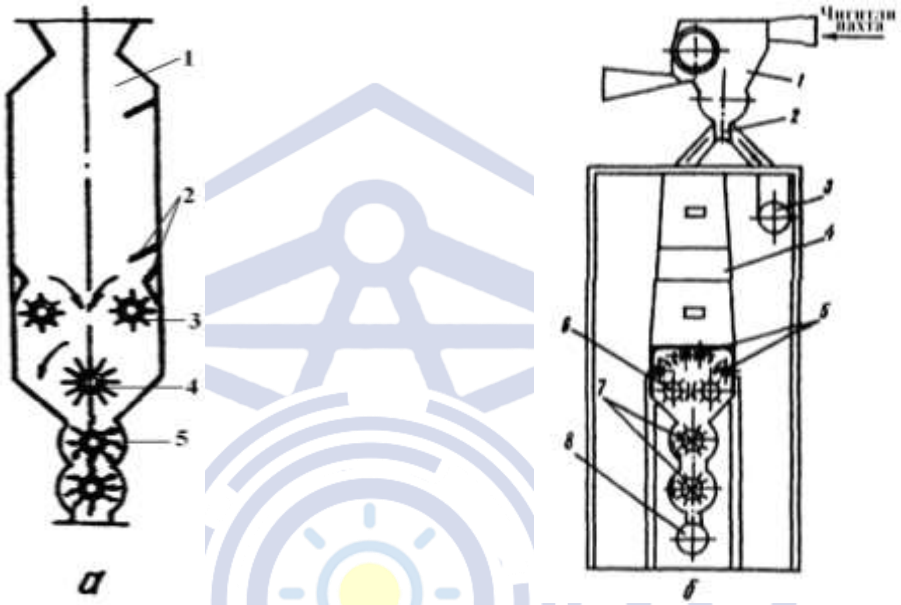
The task of the dryers is to prepare cotton raw materials for storage at the preparation points, to achieve the conditions intended for one-time drying, that is, it should have a high productivity in terms of moisture. Secondary drying has a bad effect on externalization, which has a negative effect on production and costs. The function of the indicators is to transfer cotton raw materials to processing - to achieve productivity of cotton raw materials, to ensure even and smooth drying of fiber and seed, to give fiber properties, to increase their resistance to mechanical impact.

At the present time, cotton ginning enterprises use modern technology, i.e. 2SB-10, SBO, SBT brand drying drums are installed in the drying and cleaning department to achieve high levels of drying efficiency. In the direct cleaning department, there are also modern cleaning machines, such as UXK cleaning flow-line unit, Mekhnat cleaning machine and other equipment.

Ensuring the smooth operation of the equipment in the technological process of the initial processing of cotton and the control of the technological process. At the same time, it is considered one of the main reasons for resource-saving equipment

in the technological process, increasing the F.I.K of the equipment. For this purpose, an automatic bunker feeder is installed so that the equipment in the technological process works smoothly.

Its circuit structure is shown in Figure 3 (a and b)..



1st bunker;
2-holders;
3- supply roller;
4-reel drum;
5-vacuum valve.

1st separator
2nd bypass valve;
3- air flow barrier;
4- bunker capacity;
5-supply roller;
6-guide rollers;
7- vacuum valve;
8- air flow barrier.

Figure 4 (a, b). Scheme of the automatic hopper feeder.

The automatic bunker feeder mainly consists of two parts found: from the lower and upper parts:

The bottom part is the main part, 6 plate transfer drum diameter 270 mm adjustment from 1.14 to 11 rpm, the pile carrier drum is installed under the transfer drum, the performance is automatically adjusted by changing the number of revolutions of the transfer drums .

A hopper is installed in the upper part and serves to collect cotton material in a certain volume.

Technical and technological indicator

T/r	Indicator	Automatic bunker repairer
1	Rotational speed of the supply roller, rev/min	1,14÷11,6
2	Diameter of the supply shaft, mm.	254
3	The distance between the supply rollers, mm.	100
4	Cross-section of the supplier, mm.	508x1824
5	Maximum filling of the bunker,m^3.	2,8
6	Diameter of the grinding drum, mm.	400

Wet cotton raw material goes through a separator into an automatic control hopper, from where the work given from here passes through a productivity screening device and goes into an injection funnel. The flow of the drying agent, coming from the heat generator, moves from the funnel with raw cotton to the dryer and passes through its chamber and enters the air chamber of the separator-cleaner due to the suction created by the fan. The drying agent separated from the cotton raw material is released into the atmosphere, and the cotton is cleaned of small impurities and enters the injection funnel from here, and then the cotton raw material is transported to the second drying equipment.

Conclusion: Ensuring the smooth operation of the equipment in the technological process of the initial processing of cotton and the control of the technological process. At the same time, it is considered one of the main reasons for resource-saving equipment in the technological process, increasing the F.I.K of the equipment.

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