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STUDY OF EFFICIENCY OF COTTON ON DIFFERENT MOISTURE OF MINORAL DRYING EQUIPMENT

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ABSTRACT: - This article devoted to the working technology of fower drier machines and technological indicators preferable and un preferable sides on the process of first converting of Juma cotton menial forcing factoring and this experiment was directly taken with cotton now selection sorts of Bukhora 102 and Sulton. Machines separating wet rates from cotton, process of being inside, rate of machine expenditure on steaming wet expenditure analysis results are given in this article. In fact, when dealing with high capacity systems. The working efficiency of drying machine on moisture.

KEYWORDS: Cotton swabs, heat generator, air ducts, hot air ducts.

INTRODUCTION

Experiments have shown that a number of shortcomings of the drum dryers currently used for drying raw cotton, especially the high consumption of fuel and electricity, lead to a deterioration of the natural quality of raw cotton, ie the growth of cotton [1-5]. Therefore, in order to study and analyze the techniques and technology of foreign ginning applied to the Juma ginnery in accordance with the program of reconstruction and modernization of the ginning industry, a number of experiments were conducted at the Juma ginnery: The experiments were carried out according to a pre-planned schedule. To do this, we directly analyzed the samples taken from the machines installed in the production process in the laboratory [6-11]. The experiment was carried out on Bukhara 102 and Sultan selection varieties. In the experiment, the movement of raw cotton on the shelves installed in the working chamber of the dryer MGZ 10 towers was controlled by special observation windows,

and its movement was carried out by photo observations [12-19] (Fig. 1).

During the movement of the raw cotton, the process of cleaning the fine impurities in the cotton was observed in the pile cleaners installed on the top of the equipment. Moisture and contamination of raw cotton entering and leaving the equipment were determined in the laboratory [20-27].

Figure 1: General view of the tower dryer

Here: 1- wet cotton drop pipe; 2- observation windows; 3; 4- cotton moving shelves; 5 - observation doors.

The results were supplemented in special tables (Table 1). As a result of the movement of raw cotton on the shelves mounted on the tower dryer, it was found that the time of stay of cotton in the working chamber is 10-12 seconds, depending on the speed of the air in the working chamber [26-30].

Table 1. Moisture and contamination of raw cotton entering and leaving the equipment

№	Air velocity in the working chamber of the tower dryer, m/sek: τ =?	Time of cotton drying in the tower, sec: τ =?	Initial moisture content of cotton, %: $W_{p.b}$ =?	Moisture of cotton after tower dryer, %:$W_{p.q}$ =?	Primary contamination of cotton, %: $Z_{p.b.i}$ =?	Contamination after tower dryer, %: $Z_{p.q.i}$ =?
1	24	8	11,00	10,26	6,46	5,3
2	22	7	10,86	10,46	6,76	5,76
3	25	9	11,20	10,36	6,59	5,47
4	26	8	11,5	10,40	6,76	5,55
5	21	7	10,9	10,51	6,67	5,58
6	24	8	11,09	10,39	6,64	5,53

These results show that the moisture content of the tower dryer is on average 0.7%, 2 consecutive drum drums mounted on the tower equipment as a result of the passage of cotton on the surface of the net, passive fine contaminants in the raw cotton cleaning efficiency was 14.3%.

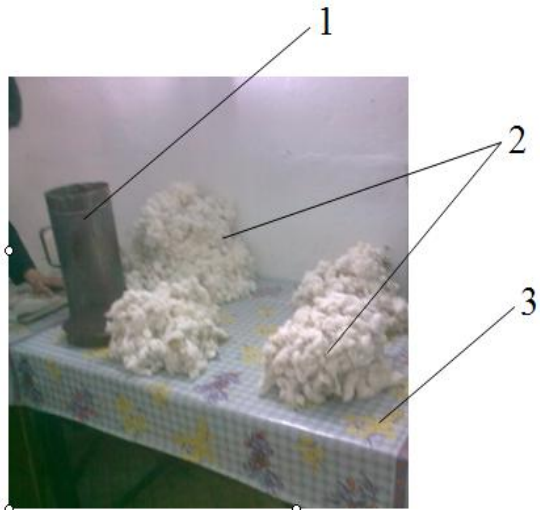

Figure 2. Sampling process in the laboratory room to determine the fine contaminants in the raw cotton.
Here: 1- sample storage box; Sample taken before and after the 2nd tower dryer.

Figure 3. The process of detecting fine contaminants in the raw cotton in the laboratory room.
Here: 1- LKM laboratory equipment; 2- Sample taken for the detection of fine impurities in cotton.

In the tower dryer, the average air flow without cotton is 26 m / s, while the average time of cotton in the working chamber is 8 seconds. This allows you to remove only the free moisture in the fiber, without completely removing the moisture from the cotton. For the drying of low-grade raw cotton, the technological process requires the installation of at least 3 or 4 tower drying equipment in a row. This leads to an increase in the amount of fuel used to evaporate 1 kg of moisture. As a result of determining the total heat consumption in the tower dryer, it was found that the F.I.K of the plant was 17.84%. The results show that the F.I.K of the device is very low. The air velocity in the working

chamber was determined using bowl aniometers and a special stopwatch.

To determine the time of stay of the raw cotton in the working chamber, it was determined by measuring the amount of cotton at the time of release by transferring 10 kg to 50 kg of cotton to the working chamber after the cotton was completely removed from the working chamber.

CONCLUSION

During the movement of the raw cotton, the process of cleaning the fine impurities in the cotton was observed in the pile cleaners installed on the top of the equipment. Moisture and contamination of raw cotton entering and leaving the equipment were determined in the laboratory.

These results show that the moisture content of the tower dryer is on average 0.7%, 2 consecutive drum drums mounted on the tower equipment as a result of the passage of cotton on the surface of the net, passive fine contaminants in the raw cotton cleaning efficiency was 14.3%.

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