



Examination of The Fiber Quality Obtained From the Observed Fiber Separation Machine in Other Manufacturing Enterprise Types

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Abstract. A number of works are being carried out in our country to improve the cotton processing industry and to equip it with new technologies in line with world standards. Due to such reforms carried out in the field, cotton fiber marked "Made in Uzbekistan" occupies a worthy place in the world's leading exchanges. Our republic is one of the main countries producing and supplying the most important product - cotton and products made from it - with great export potential. As the President noted: "Uzbekistan is the main producer and supplier of cotton fiber, a product that is in high demand in the world market" [3]. Today, Uzbekistan occupies the sixth place in the world in the production of cotton fiber, and the second place in its export after the USA. One of the main requirements of the market economy is to produce competitive products, to improve the existing technological processes, and to reduce the cost of products. All this requires high knowledge, experience and entrepreneurship from specialists. Our republic considers the development of scientific and technical progress to be an urgent task of increasing production and achieving high product quality.

Key words: Cotton, cotton moisture, cotton dirt, cleaning, cotton fiber.

Introduction. One of the urgent tasks of today is to receive the cotton picked by the cotton-growing farms, by the preparation centers and cotton-ginning enterprises on time and without delay, and to place them in the harvesting fields, taking into account the selective, industrial varieties, class and humidity.

As the selective varieties of cultivated cotton increase, cotton is divided into two groups, difficult to clean and normal to clean, depending on the properties of cleaning.





The hard-to-clean type of cotton is characterized by an increase in impurities in the fiber, as well as the degree of adhesion of waste and impurities to the fiber. Today, the share of difficult-to-clean cotton is 40-50% of the total range of manufactured cotton [1].

Although the problem of increasing the efficiency of the equipment while maintaining the product quality in cleaning machines has been researched by many factors, but this issue has not been fully resolved. Because I think that such cases as fiber damage, hearing, and knot formation during the cleaning process have not been completely prevented.

Materials and method. It is known that the cotton ginning industry is considered to be a sector that has a wide influence on the economy of our republic. As a result of the sale of the exported finished fiber, a large amount of foreign currency comes to the treasury of our republic. The above-mentioned global economic crisis can have a significant impact on this industry. Studying the issues of supply and demand in the foreign and domestic cotton market. Creation of improved industrial and selection varieties of cotton, study of production volume and structure of cotton raw materials [2].

To control the quantity and quality of cotton raw materials prepared at the cotton ginning enterprise, to strictly control the fiber, fiber products, and similar losses of the manufactured cotton products in the set standard [3].

1.91% of the amount of impurities and defects in the fiber is made up of impurities left over from the process of cleaning seed cotton, and 1.89% is made up of defects that appear during the cleaning process [4]. In other words, if the amount of defects in the fiber is 100%, then 55% are impurities that have not been separated during the cleaning process, and 45% are defects that appear during the cleaning process.

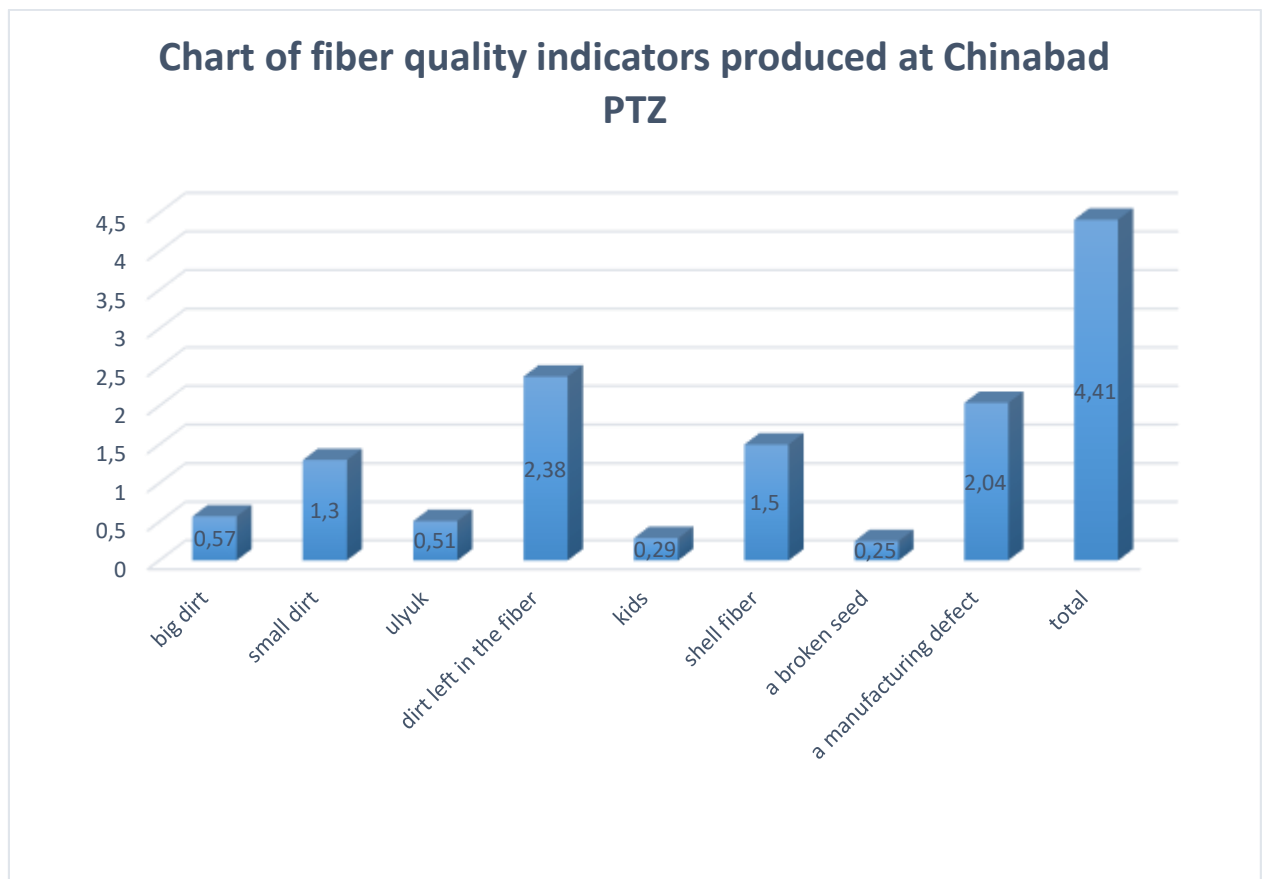
When we analyze the quality indicators of fiber produced in many cotton ginning enterprises, we witness the same indicators [5].

The quality indicators of the fiber produced by Chinabad PTK are shown in the form of a histogram. As can be seen from the histogram, the amount of impurities and defects in the fiber is 4.41 percent. If we analyze the amount of impurities and defects in the fiber, we will see the following.



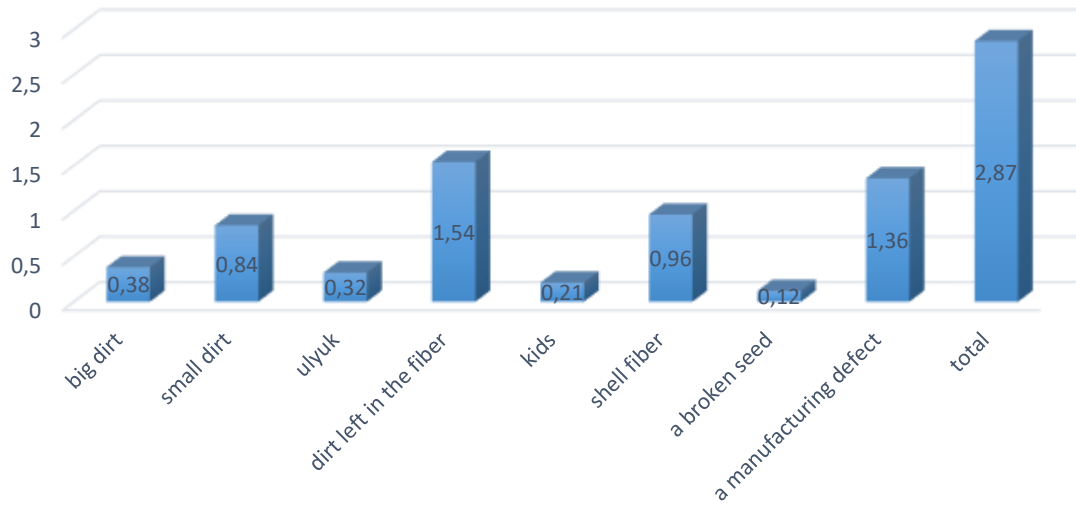


Results and discussion. Large impurities in the fiber made up 0.57 percent, and small impurities in the fiber made up 1.30 percent [6].

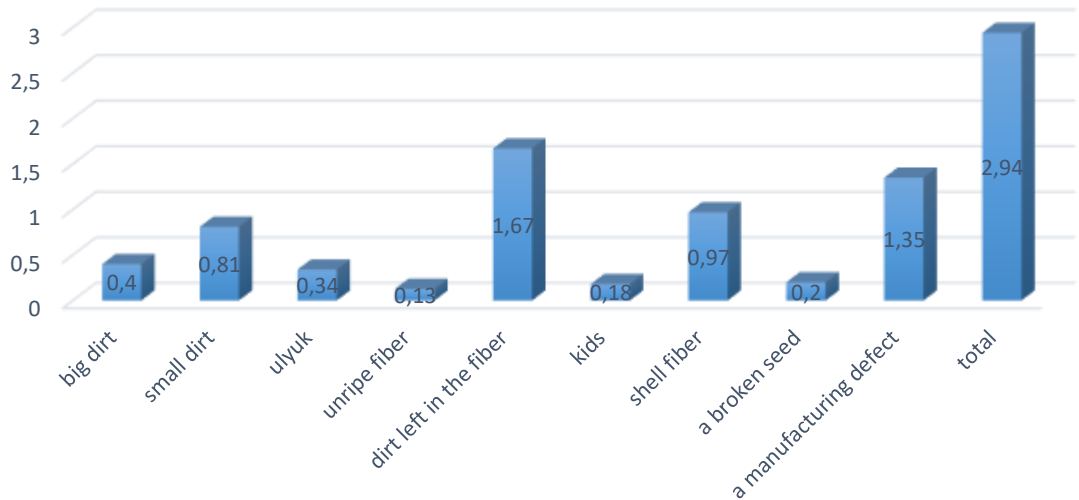




**Chart of fiber quality indicators produced at
Chinaz PTZ.**



**Diagram of fiber quality indicators produced at
Uzbekistan PTZ.**



Conclusion. Assisting in the implementation of market reforms, the production of competitive products on a global scale involves large-scale investment, the involvement of the latest techniques and technology, and the main issue of the initial





processing of cotton is the production of fiber, lint, seed and technical seed in the required standard quantity and quality.

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