

PROMOTING THE DEVELOPMENT OF IMPROVED CLEANING TECHNOLOGY

Rakhimjonov Azizbek Ravshanbek ugli

Omonjonova Odinakhon Ahrorjon kizi

Fergana Polytechnic Institute, Fergana, Uzbekistan

Annotation: Improving product quality and maintaining its quality indicators as a result of reducing the cost of cleaning machines and increasing their efficiency due to the introduction of improved technologies into production information about.

Keywords: stewardship, impurities, seed cotton, cleaning machines, mesh surface, revolver, economic efficiency.

Introduction

The reforms implemented in our country to create a stable and efficient economy are showing their results today. Including, in a short period of time, the implementation of deep structural changes in the economy, ensuring the growth of the population's income, strengthening of effective foreign trade and investment processes, agricultural reform, sustainable development of small business and private entrepreneurship, banking and finance significant progress was made in strengthening the system [1-3].

The prestige and position of Uzbekistan in the international economic field is growing significantly and regularly. In this regard, Sh. Mirziyoyev, the leader of our country, carefully developed the strategy of socio-economic development, the goals and tasks of economic reforms, and clearly and correctly indicated the ways of implementation, which contributed to the importance of achievements and milestones on the way to the main goal made it possible [4-7].

In the current period, it is necessary to distinguish between the social and economic development of the countries of the world, its absolute social labor efficiency and comparative economic efficiency. Absolute efficiency can be found separately for each object or for a new technique. It is represented by the total return amount of the expenses spent. Comparative efficiency is determined by comparing these options in the case of two or more production or farms. Therefore, comparative effectiveness shows the superiority of one option over other options and the

alternative of the selected option. Comparative efficiency is carried out at the stage of computational planning and in the design of the objects to be viewed in order to select appropriate options. Absolute efficiency can be known only after the construction of the object [8-11].

Relevance of the research

Taking into account that the insufficiently improved cleaning machines used in cotton ginning enterprises have a negative effect on the quality indicators of cotton in the technological process of cleaning raw cotton, it was suggested to introduce an improved cleaning machine to the technological process.

The following can be included in the list of the main indicators describing the efficiency: unit price of the product, labor productivity, profitability, profit, the payback period of additional tariff funds or the standard coefficient of efficiency.

The payback period (T) is determined by the following formula.

$$T = \frac{K_1 - K_2}{C_1 - C_2} \quad (1)$$

$$E = \frac{C_2 - C_1}{K_1 - K_2} \quad (2)$$

Where K_1 , K_2 are the amount of capital required to implement the options.

S_1 , S_2 - the cost of a unit of production when this option is introduced.

The included costs are an indicator of the comparative effectiveness of capital funds, and are used to select the best options for solving technical and economic situations. The quoted costs are determined by the following formula:

$$C_i + E_n K_i \rightarrow \min \text{ yoki } K_i + T_n C_i \rightarrow \min \quad (3)$$

where K_i is the capital expenditure for each option.

S_i is the price of a product produced according to a specific option.

T_n is the standard payback time of capital funds.

E_n is the standard efficiency coefficient of capital funds.

Annual economic efficiency is determined using the following formula:

$$E = (Z_1 - Z_2) A_2 \quad (4)$$

here, Z_1 , Z_2 - the amount of costs for the production of one unit of product using old and new technology, soums; A_2 - volume of product production using new technology, in natural units [9-14].

Tables 1 and 2 provide the necessary information for calculation.



As a result of the introduction of improved technology into production, the quality indicators of finished products will also be improved. As a result of improvement of the equipment in the main production process and improvement of its working parts in the cotton ginning enterprises, the output of the cotton fiber, passing from class to class, improvement of the quality indicators of products such as fluff, seed, and reduction of the amount of free fiber occurs.

Therefore, when calculating the annual economic efficiency from the introduction of improved technology into production, it is necessary to take into account the additional economic effect from the improvement of quality indicators.

It is necessary to calculate the economic efficiency obtained from the introduction of improved equipment into production

The results of the calculation of the operating costs are given according to the basic and proposed options, thousand soums

2-table

№	INDICATORS	Option	
		Bazis	New
1	Annual production volume	1094533	1094533
2	Number of tools	109453	109453
3	Equipment performance	951149	951149
4	Installed power	-	11240
5	Demand coefficient	951149	962389
6	Consumed electricity	1346659	1348345
	Operating costs, total	572211	543680
	Including:		
	- depreciation allowances	180598	182284
	- daily maintenance	60199	60761
	- edible	331414	300005

	- material pay	-	630
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The economic efficiency obtained from the improvement of quality indicators is determined using the following formula:

$$\mathcal{E}c = (U_2^1 - U_1^1) * A_2 \quad (7)$$

here, U_1^1 - the price of the product in the basic version;

- the price of the product in the new version;

- annual product production in a new version volume.

A total of 33,755 tons of cotton raw materials were prepared at the Toshloq cotton ginning enterprise from the 2022 harvest, of which 25,872 tons were of the 1st grade, 2,757 tons of the 2nd grade, 1,323 tons of the 3rd grade, 2,870 tons of the 4th grade, and 933 tons of the 5th grade. 8435.0 tons of 1st grade, 869.0 tons of 2nd grade, 404.0 tons of 3rd grade, 817.0 tons of 4th grade and 245.0 tons of 5th grade fiber were produced from them, of which 3430 tons were of 1st grade. , 510 tons of 2nd grade, 180 tons of 3rd grade, 387 tons of 4th grade and 180 tons of 5th grade, a total of 4687 tons of fibers were upgraded to 1st grade.

When the results of the research were applied to the production, as a result of the increase in the quality indicators of the fiber obtained from the raw cotton being processed, an economic benefit of 308,795 thousand soums was achieved.

Conclusions:

If we say that the amount of active impurities in seeded cotton obtained from the Garam area is 0.28%, after drying in drying drums, the amount of active impurities increased to 0.5%, and after cleaning aggregates from small and large impurities, the amount decreased to 0.15%. The amount of impurities released in the process of separation of small impurities from the content of seeded cotton fiber was determined. The total amount of impurities released depending on the useful part of the mesh surface and the speed of movement of seeded cotton was determined. The process of separation of impurities from the composition of two or more pieces of cotton moving at different densities in mutual elastic connection was theoretically studied.



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