ANALYSIS OF THE SCIENTIFIC WORKS CONDUCTED ON THE USE OF FIBER WASTE

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Annotatsiya:
Ushbu maqolada yigiruv korxonasining ishlab chiqarish jarayonida chiqadigan chiqindilar va ulardan foydalanish holati tahlil qilingan.

Kalit so‘zlar: tozalashdagi tugunaklar, tarashdagi tugunaklar, shlyapka tarandisi, momiq, pilik uzuqlari, michka.

Аннотация:
В данной статье анализируется состояние отходов и их использование в производственном процессе прядильного предприятия.

Ключевые слова: узлы в уборке, узлы в расчесывании, шляпочный очёс, ворс, рвань ровница, мычка.

Abstract:
This article analyzes the state of waste and their use during the production process of the spinning enterprise.

Key words: knots in cleaning, knots in combing, hat lint, fluff, pill rings, michka.

The demand for cotton fiber products is increasing in the world. Raw materials form the basis of the cost of textile products. Therefore, the full and effective use of raw materials in the industry is an important task for the textile industry today. It is possible to increase the range of textile products by fully and effectively using fiber products.

A number of decisions and decrees related to the textile industry have been adopted by the government of our republic. For example, in the "Strategy of Actions of New Uzbekistan" for 2022-2026, a number of tasks are set for the textile industry [1]. Accordingly, a plan of activities for the rapid development of the textile and knitting industry has been given. In addition, the task of increasing the volume of production of ready-made, export-oriented products that can withstand competition in foreign markets has been determined through deep processing of cotton fiber and wide attraction of foreign investments. High-quality yarn is

produced using the waste produced in spinning enterprises. This brings profit to the enterprise and at the same time helps to satisfy the needs of the population in relation to the necessary products. At the spinning enterprise, waste is produced at every step. These wastes are divided into 6 groups [2]. The first group includes spinning waste, i.e. re-combing yarn, pile rings and slivers with a linear density of 333.3 tex or less. They can be used for spinning yarn produced in the carding system according to the type classification. The second group also includes spun waste, i.e., knots from cleaning, a collection of colored fibers, card waste and clean trash. They are used to produce spun yarn (pre-cleaned) produced in the carding and hardware system according to the type classification. The third group includes cotton, that is, knots in cleaning, knots in combing, dusty lint, hat lint and lint. Their field of use: They are used in the production of non-woven materials. The fourth group includes low-grade, i.e., filter lint, second-stage cleaning lint, contaminated lint, sheared fluff and lint, and lint lint. They can be used in the field of use: production of furniture cotton and plastics, agriculture, construction, etc. The fifth group is used for cleaning; includes tangled yarns, yarn remnants from bunching. Area of their use: They are used in the development of non-woven and other materials. The sixth group includes the remnants of thread from knitting. These wastes are used for the production of fishing rods, nets and cords.

Today, research has been conducted by scientists on the production of high-quality yarn using waste from spinning and good results have been achieved. The authors have studied the possibilities of pneumomechanical yarn spinning with a higher linear density using fiber waste rationally. It is based on the fact that by adding the waste of the second group to the mixture, it is possible to produce yarns with a high linear density. Maximum cleaning and dedusting, using semi-finished product as a result of highly uniform mixing, is based on the presence of waste treatment systems in rotor spinning machines. It has been studied that the modern equipment installed in the existing enterprises fulfills the above requirements [3]. The authors have researched the addition of waste to the composition of the mixture and the change in the amount of yarn in the spinning process transitions, and this work has been studied in 3 different variants at the spinning plant, and the following information has been found, that is, the yarn output decreases due to the increase in the amount of waste in the mixture. In this case, the test results obtained from the output of the amount of waste from different mixture composition compared to the indicators of the 4-I-70%, 5-I-70% mixture composition, the amount of waste in the 4-I-60%, 5-I-40% mixture is 3.8% increased, the amount of thread output decreased, the amount of waste in the 4-I-60%, 4-II-40% mixture decreased by 3.9% and the thread output increased by 1.4% [4]. The authors determined the change in the unevenness indicators of yarns and the amount of impurities according to the layers of garam, and it was found that the indicators obtained from the upper part of the garam are lower than the unevenness of the threads taken from the middle and lower layers, and the neps do not increase.[5]

In conclusion, it can be said that the classification and rational use of waste in textile industry enterprises has a significant impact on the economic indicators of the spinning enterprise.

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