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## RECYCLING OF YARN RETURN IN THE PROCESSES OF YARN SPINNING

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### ABSTRACT

In the article, among the processes of yarn spinning, the technological systems of fiber cleaning, cleaning and combing are very diverse, and it is of great importance to choose them correctly, to preserve fiber properties in technological processes, to use fiber waste and to ensure the specified properties of yarn.

### KEYWORDS

Layers, weaving, pryadenie, katsky stanok i postprokhnodnaya kleyka sloev mejdu valami tkatskih valkov.

### INTRODUCTION

After the independence of Uzbekistan, the production volume is increasing in the textile industry among all other sectors.

Among the spinning processes, the technological systems of cleaning, cleaning and combing the fibers are very diverse, and it is very important to choose them correctly, to preserve the properties of the fiber in the technological processes, to use fiber waste and to ensure the specified properties of the yarn.

Purposes of sewage treatment: The main purpose of sewage treatment is to process agricultural and industrial wastes, turn them into useful products, without environmental hazards. A new refined version of the piling processing we have now created. Returned yarns should be returned to the cotton form with the help of this machine, and it should be pressed into an abrobot and put on the level again. For this, it is necessary to put an electric motor that rotates 20



times per 20 minutes on this machine, and two cylinder shafts passing between two redundant cylinders are made. And after passing through this shaft, the gluing plugs are connected to the 20,000 rpm nail cylinder, and the lathe must run at 2,000 rpm. Our second cylinder also works at 2500 rpm, and together with this, it is again sent to bags through FAN. Our bags are made of special sitakapron and can be 2 meters high and 1 meter wide. In this place, a reducer is placed on the supply shaft, and the chain is driven by a chain, and the other two cylinders with a pin and a pin are driven only by a belt.

#### **And two shesters of the same size are placed on the repair cylinder**

As a result, when the right side of the spindle is connected to the chain, both cylinders rotate at the same rate. Because our nailed cylinder is suitable for passing through crushing cylinders to turn into pure grade cotton for good quality when spinning the roll.

What do I mean by this regarding the development of the President of the Republic of Uzbekistan dated February 12, 2019 "On measures to further deepen the reform of the textile and sewing industry and expand its export potential"

According to decision No. 434, high and stable growth in the textile and sewing industry of the Republic is focused on cotton and increasing the efficiency of production.

Then, a large part of the raw materials used in the production of yarn in the fiber spinning factories of the enterprise is separated into fiber waste. In particular, the amount of waste according to the spinning system is on average about 20% compared to the given mixture, and in the snow spinning system it is 12-18% in the re-combing system. will be up to 32%. In the rapidly developing field of textiles, testing equipment included in the Uster system, such as HVI(3) and AFIS PRO(4), which are widely used in world practice, have entered the in-depth analysis of raw material properties.

Currently, it is effectively used in textile enterprises. In these testing equipment, it is possible to obtain information about the quality indicators of the cotton fiber in order to have perfect information about it. By using these indicators, it is possible to introduce the necessary technological parameters for the production of various types of yarn.

All the scientific research works on the development of the textile industry are aimed at improving the quality of the finished product. In this regard, the decrees and assignments of the President are a clear example of this.

In particular, in 2017-2019, the program of measures for the further development of the textile and sewing-knitting industry was adopted in our country. In the future, to continue the structural changes in the



economy, to ensure the modernization and rapid development of the textile and sewing industry, to be competitive by means of deep processing of cotton fiber and silk raw materials, wide attraction of foreign investments,

an appropriate decision was made regarding the expansion of production volumes and types of ready-made, export-oriented products required in foreign markets. Production of high-quality world-standard yarn products at spinning enterprises and their delivery to finished products,

introduction of new techniques and technologies, comprehensive solution to the issues of full use of local raw materials are becoming important in the development of light industry. The textile industry is one of the leading industries of the republic.

In order to achieve the goal set in the scientific research work, it is important to control the capabilities of existing technologies and equipment for cleaning, combing and preparation of wicks for spinning in textile enterprises, quality indicators of cotton fiber grown in the Republic, quality control of semi-finished products coming out of the technological process of equipment for cleaning, carding and preparation for spinning. is considered one of the factors.

The large number of technological transitions, the complexity of the equipment and the discreteness of

the processes in the textile industry production enterprises require quality control of the semi-finished products.

In order to produce high-quality yarn in spinning processes, it is necessary to check the technological indicators and product properties and evaluate their compliance with the established standards. And in the production of fabrics from threads, it requires continuity of technological steps and control of fabric quality

. For this purpose, the laboratories established in the enterprises perform the task of monitoring the machines during operation, as well as the correct selection of indicators. Through the introduction of information technologies, it creates an opportunity to quickly solve the problems that arise in enterprises and to clearly determine the measures for their elimination.

Through software, it covers the technical specifications of all equipment in spinning and weaving enterprises, the processes of transfer to each other, which equipment causes defects, external effects on the quality of finished products, and specific recommendations for their elimination. Currently, as a result of the improvement of production technology and equipment, the product quality control system and, accordingly, new types of equipment are being introduced. As a result of the introduction of the UNicontrol system by the Swiss company Rieter, it

allows to automatically adjust the working processes of the machines in the cleaning unit. This system is used in any machine that is part of the cleaning unit if a malfunction occurs, the information about the process will be signaled on the UNicontrol screen. The process will be automatically deleted. The UNicontrol control system allows to save investment costs of installed machines as well as customer satisfaction. With the help of a simple software system, it is possible to provide cleaning units and combing machines. The Smartfeed system continuously monitors and optimizes the product flow. This reduces electricity consumption. Through this system, the control of the products in the process and the operation of the machines, from the grinding-cleaning unit machines to the combing machines, is established. In addition, each machine has control panels that adjust the movement of the working members. the output and quality of the product is controlled using the panel, the control system coordinates the tasks of all the machines in the cleaning unit and controls the uniform distribution of the incoming product. The problems that occurred in the machines of the unit are displayed on the screen in graphic form.

This determines their fast and targeted service. An online monitoring system, which is all about safety, provides continuous information about the entire production process and quality. As a result, we get information about the production process. This system

is based on web technologies and allows to monitor production in real time from anywhere. Through the mobile system, production control, defects and quality can be identified. Preparation processes for the spinning process Every Truetzchler machine has a control panel, like Rieter, and the workers control the condition of the machine and the quality of the product through this control panel. In addition to the above systems, the quality indicators of the products for each transition are determined using the laboratory equipment of the enterprise. Currently, modern HV1 (High Volume Instrument) 1000 (USA), Uster (Switzerland) and TechTexno GmbH (Germany) system equipment is used in spinning enterprises.

Summing up from the above, it can be noted that the equipment of the German company Truetzchler mainly focuses on the production of products while preserving the quality indicators of the fiber.

It can be noted that the cleaning in this process is more effective and the fiber damage is less. Continuing structural changes in the economy in the future. Production of high-quality world-standard yarn products in spinning enterprises and their delivery to the finished product is new

the introduction of technology and the growth of the volume of use is being achieved. In order to achieve the goal set in the scientific research work, the current cleaning of the textile enterprises and the preparation



of the piles for spinning is the process that is being carried out in connection with our new project for this purpose.

Processing of silk return is a complex and important process in spinning enterprises, the main purpose of which is to obtain quality and competitive products from the produced materials. Precise and effective technologies in this process are important for increasing the efficiency of work and ensuring the quality of products.

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