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«LITERATURE ANALYSIS ON THE RESEARCH AND DEVELOPMENT OF THE METHOD OF DESIGNING SPECIAL CLOTHES FOR WORKERS OF METAL CASTING AND METAL PROCESSING ENTERPRISES»

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and concluded that fiber quality scores are higher at low raw material density.

According to them, reducing the density of the raw material will improve the coating of the fibers and reduce the frictional forces acting on the surface of the working chamber and columns, thereby improving the quality of the fiber. In existing fiber separation machines, the efficiency is directly proportional to the density of the raw material. [2]

R. Sulaimanov [3] obtained an algorithm for solving the problem of seed movement dynamics and mathematical models that allow theoretically determining the optimal parameters of cantilever columns, the distance between columns and spacers in the production of additional seeds. Basically, the distance between the saws has been reduced, a new method and device for obtaining additional seeds has been proposed.

In the study by J. Ergashev [4], a notch was made in the lower part of the pipe installed in the working chamber of the genie machine. When air is forced into the pipe, the air flow exiting through this slot is directed towards the saw cylinder. As a result, it is possible to increase the amount of fiber sticking to the teeth of the saw cylinder under the influence of air. The air flow directed towards the saw cylinder accelerates the exit of saws separated from the fiber from the working chamber.

Studies have shown that by reducing the saw speed from 730 min^{-1} to 550...620 min^{-1}, the amount of waste and fiber defects can be reduced by an average of 20%.

Conclusion. The main parameters that cause damage to seeds in a cotton gin are determined. Among the parameters to be determined, the stability of the raw material and the speed of its rotation, which are considered the most important, have been carefully studied.

Analyzed studies conducted by scientists to accelerate the stability and turnover of raw materials. Based on the analysis, the rotation of the raw material shaft is accelerated by a rotating disk with piles installed on the side of the working chamber. It was also proposed to prepare the surfaces of the grates with grooves so that the seeds separated from the fiber could be released in a timely manner from the working chamber of the gin.

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LITERATURE ANALYSIS ON THE RESEARCH AND DEVELOPMENT OF THE METHOD OF DESIGNING SPECIAL CLOTHES FOR WORKERS OF METAL CASTING AND METAL PROCESSING ENTERPRISES

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Abstract: In the article different field worker - worker release for special clothes project on scientific the work take went opportunities and From Uzbekistan of researcher's news learning and books analysis transfer for.

Keywords: industry, worker, special, clothing, classification, model, climate, heat, temperature, particle, dust, fire.

Introduction. Many scientists of foreign countries and Uzbekistan carried out scientific work on the production and design methods of special clothes intended for employees of various fields, the use of materials and the creation of new constructions.

We will analyze the scientific works of scientists from the CIS countries and Uzbekistan, who conducted research on special clothing in various fields for the design of special clothing for workers of metal casting and metal processing enterprises.

R.O. JISLIBAYEVA [1] - In his scientific work, it was studied that he proposed a new concept of designing work clothes based on the application of the theoretical basis of combustion processes to the methodology of designing new types of fire-resistant materials from local raw materials that provide high performance characteristics of work clothes for workers working in the metallurgical industry.

L.G. STUPALOVA [2] - The characteristics of the materials needed to create special clothing that can be used in the design of clothing for workers in various fields are studied, and the possibilities of using them in special clothing models in combination with new materials from leather raw materials, which were rarely used in special clothing before The use of leather raw materials in the process of designing special clothes was proposed and implemented. He worked mainly in the way of designing special clothes for an agricultural enterprise.

E.I. ELAZALI [3] - nomenclature of the most important indicators of quality and safety for insulating non-woven materials used in sewing clothes from low temperatures used in the fuel and energy complex. conducted work on the methodology of determination of conductivity.

In addition, he proposed a method of optical determination of the thickness of non-woven insulating fabrics used in sewing work clothes, and based on the theory of similarity, the change of quality indicators during the washing process of non-woven fabrics used as insulation in work clothes (discontinuity in length and width load, hygroscopicity, total heat resistance) were studied and for the first time in the organizational standard it was proposed to give the values of protection indicators corresponding to 50 washes and reasonable, we used IPS to sew special clothes from low temperature..

T.V. GUSHINA [4] - the laws of the kinetics of the permeability of concentrated and water emulsion forms of pesticides through film polymer materials, numerical values of the durability, permeability and cleaning indicators of film polymer materials after exposure to liquid toxic substances, protection of personal protective equipment against cuts and vibrations comparative data on efficiency, the dependence of protection efficiency on

the presence of a metal core in the glove material, methods of rapid assessment of changes in the protective properties of film polymer material under the influence of pesticides.

N.V. AFINOGENTOVA [5] - taking into account the rheological properties of special materials, physical and mechanical priorities, developed a system of optimal combination of the values of quality criteria with the values of design parameters of overalls in the main informational sections of clothing design.

D.A. SOVETNIKOV - a new nonwoven heat-insulating material was developed. Bicomponent fusion staple with high heat protection properties obtained by combined method has worked on the heat protection properties of packages and top elements to make the tape of suppliers more accurate.

E.E. IGOROVNA - In his scientific work, during the study of the protective, hygienic and operational properties of non-woven fabrics, changes in the physical-mechanical properties of insulation materials, especially the state of fibers during washing, were analyzed. In the course of scientific research, experimental studies were conducted in order to study the protective, hygienic, and operational characteristics of non-woven fabrics using standard laboratory methods. As a result of experimental research, the most important nomenclature of indicators was determined, non-woven insulation materials were recommended for sewing clothes for workers working at low temperatures, and their impact on human life and health was studied.

M.C. NEXOROSHKINA [6] - developed a method of comprehensive assessment of the effectiveness of clothing designed to protect the worker's hands from impact and determined the impact energy with hand tools in production conditions and divided the energy absorbed by the fabric into two components developed a proposal . The first is related to the formation of the fabric, and the second is the impact on the protective ability of the fabric based on the theoretical analysis of the impact energy absorption by the fabric located between the impacting bodies, determining the deformation of the threads in the places where the base and the fabric overlap. the main factors were determined. In addition, he worked on an experimental method for assessing the ability of fabric and material packages to absorb shock energy, and he worked on the proposal of a unit index, which describes the ability of the fabric of special clothing to protect the worker from shock, expressed as a percentage of absorbed shock energy.

Taking into account the specific shape of the structure, an experimental method for determining the flexibility of the structural elements of hand protection equipment was developed, and the hardness of the product was proposed as a comprehensive index describing the relative hardness and quality of hand protection equipment.

In addition to the researchers of foreign countries, many researchers of Uzbekistan also conducted scientific research on the topic of designing special clothes and created optimal options of special clothes for workers in various fields [7].

S.U. PO'LATOVA [8] - The mathematical problem of designing special clothing protecting against high air temperature has been formulated and theoretically solved, and the theoretical basis of heat exchange processes between the hot air environment and the thin layer of clothing has been developed.

S.X. QODIROVA [9] - on the basis of the analysis of the topography of the harmful effects of the production of the special clothing, the connections representing the physico-mechanical and hygienic properties of the antistatic fabrics were developed for the special clothing, which was designed taking into account the opinion of consumers, and for the preparation of the special clothing of the

electrical supply workers. the best option is recommended.

G.D. ULKANBOYEVA [10] - on the basis of biokinematic studies of the builders' movements, the values of the angular parameters of the movements were determined, the relationships between the dynamic effect and the angular parameters were obtained to ensure the dynamic fit of the special clothing structure, and the construction of the builders' safety belt was improved by adding a protective vest. Based on the theoretical possibility of reducing the dynamic load of the safety belt during a fall from a height, at the expense of the recommended safety device, the package of materials was formed in order to increase the operational reliability of the safety vest, and the technological processing ensures its strength by retaining the air inside the vest. introduced the proposal of methods of giving.

N.N. BEBUTOVA [11] - worked on the optimal constructive solution of the "sleeve-o-umiz" structural node, which includes the functional requirements that ensure the freedom of movement of workers during the work process and rationally ensures the air exchange of the underlayer of clothing in hot climatic conditions. created methods for assessing the state of tension of the seams of special clothing details based on the analysis of the failure of the seams with the elastic thread under the influence of loads.

Based on the analysis of the deterioration of the thread connections of special clothing details under the influence of operating loads, recommendations on effective processing technology based on the binding of equal strength thread connections and ensuring the equal strength of the fabric and thread connection, which helps to increase the service life of the special clothing, have been developed .

Conclusion. The above scientific works are focused on the works of foreign researchers on special working clothes in various fields, taking into account the analysis of materials, physical, mechanical, and biomechanical properties, work was carried out to create an optimal option in the design of special clothes. The conducted studies have given importance to the temperature changes of workers in different fields during the production process in different climatic conditions in the process of designing special clothes [12]. But as a result of my studies, there was no work on designing special clothes for workers of metal casting and metal processing enterprises taking into account the climatic conditions of Uzbekistan and the real work process in the enterprise [13].

On the basis of the research, the special clothes of employees of "MEXMASH", "NAMANGANMASH" and "Zamin Metall Sanoat" LLC located in Namangan region were investigated, and defects such as sparks flying from the collar and sleeve parts to the body, accumulation of various particles in the pockets were found [14].

As a result of the conducted scientific analysis, the main goal is to design high-quality special clothing for workers by identifying defects in existing work clothes, taking into account the harmful factors that seriously affect the morale and health of employees of metal casting and metal re-casting enterprises in the work process. was obtained [15].

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