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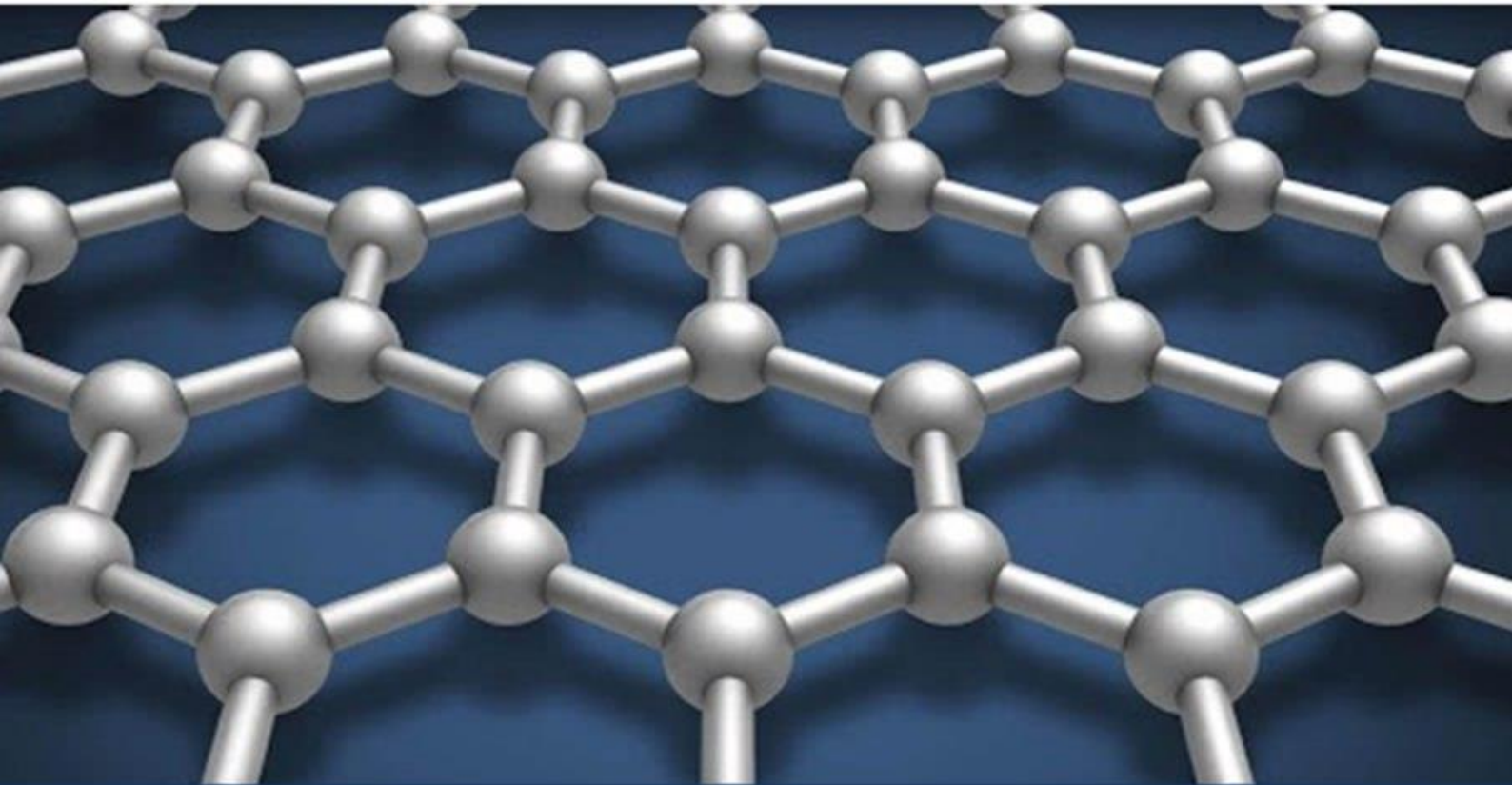
O‘zbekiston

Kompozitsion Materiallar

Ilmiy-texnikaviy va amaliy jurnali



Узбекский научно-технический и производственный журнал

Композиционные материалы

In this paper, we studied the results of studying the IR spectrum of natural bentonite from the Kungurtau, deposit and its samples modified with aromatic and aliphatic quaternary ammonium salts. Peaks of the IR spectrum with a wave number of 3448.32 sm^{-1}, 3443.21 sm^{-1}, 3443.86 sm^{-1}, 3444.18 $sm^{-1}$and 3445.15 $sm^{-1}$of the absorption region of -OH and N-H, it was found that the groups arise due to valence vibrations.

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COMPREHENSIVE ASSESSMENT OF THE QUALITY OF RUBBER-FABRIC JERSEY OF DIFFERENT ASSORTMENT

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Introduction. After gaining independence, the Republic of Uzbekistan, like many other regions, also achieved a number of successes in the clothing industry. The sewing and knitting industry is developed in many countries of the world, including China. Today, countries such as India and Bangladesh are the leading clothing manufacturing countries. The sewing and knitting industry is also developing in our country from year to year. Ensuring high and sustainable growth rates of the textile and clothing industry of the republic, attracting foreign direct investment, production and export of competitive products, modernization. Systematic work to create new high-tech jobs through the implementation of strategically important projects, increasing the technical and technological modernization of enterprises, further deepening structural adjustment aimed at introducing an advanced "cluster model" [1].

In connection with the market economy, the need of the population for knitwear is growing day by day. It also focuses on contemporary fashion in terms of knitwear properties. Large quantities of knitwear sometimes lead to the creation of new types of knitwear. Different conditions for the use of products depend on the quality of the knitwear [2].

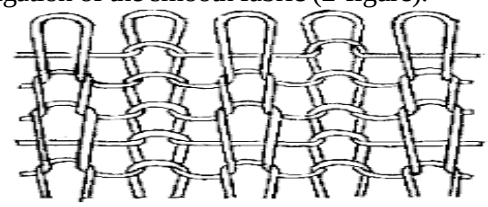
Beauty, attractive appearance, lightness, elasticity, breathability, moisture-absorbing properties of knitwear are gaining more and more popularity.Outer jersey (adult and children) for shirts-suits (women's and children's), sports jersey, underwear assortment (for adults and children), knitted jumpers, jackets, belts and blouses are produced.

Outer knitwear is distinguished by the type of texture, pattern and type of raw material. Various natural and chemical textile threads are used in the production of knitted fabrics [3].

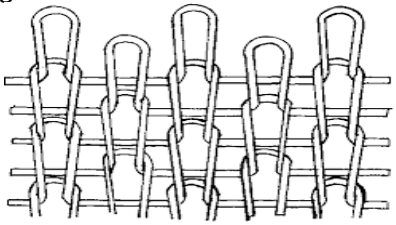
Materials. In the design of the outer jersey, the tailoring is semi-regular and regular methods are used. All top jersey is young in terms of indicators: adults and children are divided into outer jersey. It is important in the development of knitwear for adults that one aspect is the interchangeability of clothing models.

Flexibility. Rainbow fabric is very flexible, which is its core. is a disadvantage, since this feature associated with the knitted fabric negatively affects the viscosity. The knitted fabric of the hoop columns plasticity, the degree of tension, the coefficient of friction between the threads and depends on the density of the knitwear. Smooth tissue is defined as the tissue's ability to curl [4]. The lamellar fabric is twisted from front to back along the longitudinal line of the column of rings, and from back to front - transversely, along the line of a row of rings. The degree of twisting of knitting depends on the density of knitting and the elasticity of the yarn (1-figure)

Elongation. This feature is due to an external force applied to the knitwear. determined by length. This is one of the positive features of gladness. The degree of elongation of a smooth fabric is inversely proportional to the thickness of the thread. It is proportional and directly proportional to the length of the loop thread, i.e. the thinner the thread and the longer the length of the loop thread, the greater the elongation of the smooth fabric (2-figure).



1-figure. The structure of the eraser circuit.



2-figure. The structure of the scheme is smooth

At present, thanks to technological capabilities, expanding the range of underwear and outerwear for children is one of the main requirements of our time [5].

Methods. There are several methods for assessing the quality of textile materials, including experimental, organoleptic, expert, sociological, calculated, differential, complex and mixed.

An experimental method is obtained by measuring the properties of textile materials (instrumental method) or by counting the number of defects.

Organoleptic method - quality indicators are determined based on the sensations and sensitivity of the human body, as well as by comparing the tested textile materials with the standard [6].

The expert method determines the quality of textile materials and products based on expert ratings from 7 to 12, and they form small groups, as well as the use of experimental and organoleptic methods in the evaluation.

Sociological method - the quality of the product is evaluated on the basis of suggestions and feedback from consumers. The calculation method is based on the fact that the quality and structure of textile materials depend on many factors, such as the impact of technological processes, as well as the properties of the starting material.

Of all the methods used in assessing the quality indicators of textile materials, various final conclusions are drawn, therefore, when evaluating product quality indicators, differential, complex and mixed methods are used. The method of differential quality assessment - work on quality assessment is carried out on individual properties of the product, as well as dimensionless indicators of defective parts of the product, while complex and mixed methods of quality assessment have to be applied independently [7].

Results. The method of complex quality assessment - a joint assessment of the material for individual quality indicators sometimes leads to the need for a general assessment of several complex key properties of the material for one indicator. The dependence of product quality indicators on the nature of the comprehensive assessment is divided into actual and indicative comprehensive assessment.

True comprehensive ratings have a specific physical goal, which is often the flexibility of the fiber, as well as the life of the item being used. A real comprehensive estimate is better than any continuous rough estimate. For example, the amount of defects and waste in the composition of cotton fiber is called the real complex property.

The advantage of a comprehensive assessment is that it ends with a series of final assessments. In addition to the advantages of this estimate, it is not without its shortcomings, i.e., we do not have complete information about its individual properties.

Mixed method of quality assessment - The mixed method of quality assessment is used only when the total quality indicators are very high, one complex quality indicator does not fully characterize all the capabilities of the product.

To compare the mechanical properties of fabrics of different structures, indicators such as relative tensile strength and specific amount of work performed in tension are used [8].

The main indicators of a fabric are the fiber content and density of the former, and the latter is its tensile strength.

If the density of the fabric in the warp and weft differs from each other, then the density of such fabrics is called uneven material. If they are equal to each other, the density is called an even fabric. Generally, warp density is greater than weft density. But in some materials (for example, satin, poplin) it happens the other way around.

The density of fabrics for dresses can vary widely. The thinner the threads of the fabric of the same density, the thinner the fabric, the less it will be filled with threads.

The density of the fabric varies depending on the purpose for which they are used. For example, with an increase in the density of a fabric, its tensile strength, breathability and abrasion resistance increase. In addition, the content of fibers in the fabric also affects its properties in different ways.

In addition, one of the features of the fabric is their tensile strength. The strength of tissue tearing also depends on their fiber content and density.

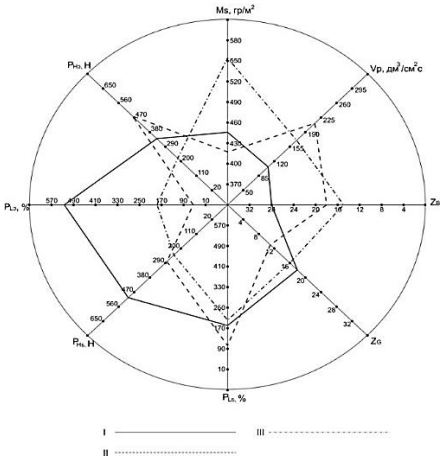
The main parameters of fabrics are, firstly, the content and density of the fiber, and secondly, its tensile strength.

The mixed assessment method uses a comprehensive assessment with several integrated assessments or a separate differential in combination, as well as the possibility of obtaining a product quality stage, variety, etc [9].

Discussion. There are various methods for a comprehensive assessment of the quality indicators of textile materials. For example, n is assigned a dimensionless value for m material in terms of n and is evaluated by a boost factor if it has different boost factors. In order to recommend the most optimal options in terms of geometric, physical, physical and mechanical properties obtained in our research work, we use a graphical method of complex assessment. A comprehensive assessment of the quality of rubber knitted fabrics of various assortments is shown in Figure 3.

1-50x1 textile cotton with textile silk 25x1 on the basis of 1 + 1; 2 - from textile silk 25x2 with textile cotton 50x1 of press weaving at the base of the

tire; 3 - from textile cotton fiber 50x2 in a press weave at the base of the tire.



3-Figure. A wide range of rubber knitwear comprehensive assessment of quality indicators.

Thus, the physical and mechanical properties of textile silk 50x1 with textile silk 25x1 in the base 1 + 1, textile cotton 50x1 in the base of the tire with textile silk 25x2 in the base of the tire and option 3 in the base of the tire based on a press with textile cotton fiber 50x2., their qualitative indicators were assessed comprehensively [10].

Conclusion. Hence, it is advisable to implement the most optimal comparison option for average values through a comprehensive assessment based on the graph.

An analysis of the results of a comprehensive assessment of the research results shows that the fabric was recommended for production based on 1 + 1 rubber with a high surface density of textile cotton 50x1 and textile silk 25x1.

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Kalit so'zlar: ekspert, sotsiologik, sifatni kompleks baholash, o'lchamsiz ko'rsatkichlari bo'yicha sifatini baholash.

Ushbu maqolada 3 xil variantda, ya'ni :1-variantda 50x1 teksli paxta bilan 25x1 teksli ipakdan lastik 1+1 bazasida; 2-variantda lastik bazasida press o'rilishida 50x1 teksli paxta bilan 25x2 teksli ipakdan; 3-variantda esa lastik bazasidagi press o'rilishida 50x2 teksli paxta tolasidan trikotaj to'qimalari olinib, sifat ko'rsatkichlari kompleks baholandi.

Ключевые слова: эксперт, социолог, комплексная оценка качества, оценка качества по безразмерным показателям.

В данной статье представлено 3 варианта: вариант 1 с текстильным хлопком 50x1 и текстильным шелком 25x1 на основе 1+1; вариант 2 с фактурным хлопком 50x1 и текстильным шелком 25x2 на текстильной основе; вариант 3 с размером 50x2 фактура на текстильной основе. Из хлопкового волокна получены трикотажные полотна, комплексно оценены показатели качества.

Key words: expert, sociological, complex assessment of quality, quality assessment on non-dimensional indicators