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RESEARCH OF CHANGES IN THE TECHNOLOGICAL PARAMETERS OF T-SHIRTS FABRICS

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Annotasiya: ushbu maqolada turli tolalar aralashmasidan, ya'ni 68,4% paxta+31,6% lavsan tolalari aralashmasi, 42% paxta+58% lavsan tolalari aralashmasi, 6% jun+17% lavsan+67% paxta tolalari aralashmasi, 100% viskoza tolali va 8,5% jun+4% lavsan+87,5% paxta tolalar aralashmasidan iplar olinib, "To'qimachilik matolari texnologiyasi" kafedrasi laboratoriyasidagi zamonaviy to'quvchilik dastgohida ko'ylakbop gazlamalar olindi va ularning texnologik ko'rsatkichlari aniqlandi.

Kalit so'zlar: havo o'tkazuvchanligi va ishqalanishga chidamliligi, ko'ylakbop gazlamalar yengil, havo o'tkazuvchanligi yuqori, mustahkam, tanda va arqoq bo'yicha zichligi, tikuv-trikotaj, to'qimachilik korxonalari

Аннотация: в данной статье пряжа представляет собой смесь различных волокон, т. е. смесь 68,4% ириски+31,6% лавсановых волокон, 42% ириски+58% лавсановых волокон, 6% шерсти+17% лавсана+67% ириски, 100% вискозного волокна и 8,5% шерсти+4% лавсана+87,5% ириски и технологии "в отделе laboratorys в современном швейном цехе получают газообразные цветы и их технологические компоненты.

Ключевые слова: воздухопроницаемость и стойкость к трению, материалы для платьев легкие, воздухопроницаемость высокий, прочные, плотные по основу и утку, швейно-трикотажные, текстильные предприятия

Abstract: in this article, a mixture of different fibers, that is, 68.4% cotton + 31.6% lavsan fibers, 42% cotton + 58% lavsan fibers, 6% wool + 17% lavsan + 67% cotton fibers, 100% viscose, 8, 5% wool + 4% lavsan + 87.5% cotton yarn, and textile fabrics were obtained from textile fabrics in the laboratory of the department of "Technology of textile fabrics" and their technological processes.

Keywords: breathability and resistance to friction, shirt materials are light, air permeability is high, durable, dense in base and flow, sewing and knitting, textile enterprises

Introduction. One of the urgent tasks of the textile industry today is the development of new assortments of shirt fabrics and improvement of quality indicators, meeting the needs of the population in shirt fabrics, development of the republic's economy through the effective use of local raw materials.

The adoption of the decree of the president of the Republic of Uzbekistan "on measures to further deepen the reform of the textile and sewing industry and to expand its export potential" PQ-4186 with the aim of introducing modern forms of Organization of cotton and textile production in the Republic of Uzbekistan and ensuring the production of competitive products serves

New high-tech jobs will be created due to high and stable growth rates of the textile and clothing industry of the republic, attraction and development of foreign direct investment, production and export of competitive products, implementation of strategically important modernization projects. creation, technical and technological re-equipment of enterprises, introduction of an advanced "cluster model". At the same time, a comprehensive analysis of the development of the textile and clothing industry, the changing conditions of the world market in the face of increased competition requires state support for the industry, as well as the development and implementation of more sustainable and dynamic development mechanisms.

The range of dress fabrics produced by textile enterprises is diverse, they differ in structure, fiber composition and properties. Moreover, these fabrics are produced according to the season. Fabrics for seasonal dresses are made from snow and cross yarns.

The range of clothing items includes indoor clothing, bathrobes, casual shirts, blouses, sundresses and party dresses, age appropriate clothing for kids, preschoolers, school children, teens, women and more.

Shirts made for the summer season should be lightweight, have high breathability, durability, shirts made for the winter season should have a high density and thickness, as well as have high heat retention properties.

The structure of textile fabrics is determined by the weave and weave of the warp and back yarns. The appearance, properties and the fact that a textile fabric is used depends on its structure.

One of the indicators characterizing the structure of shirt fabrics is their density, the other is their weaving. The density of a fabric is determined by the number of threads per unit of length, usually 100 mm.

If the density of the tissue on the weft and back is different from each other, the density of those tissues is called uneven tissue. When they are equal, the density is called flat fabric. Usually, the tissues are more dense on the body than on the back. However, with some fabrics (for example, satin, poplin), the opposite is true.

The density of the shirting fabric varies widely. The thinner the yarn of a fabric of the same density, the thinner the fabric, i.e. the less it is filled with yarn.

Methodology. The density of the gaskets varies depending on the purposes for which they are used. For example, with an increase in the density of the gaskets, its elongation strength, air permeability and resistance to friction increase. In addition, the fiber content of the gauze also has a different effect on its properties.

In addition, one of the features of the gaskets is its breaking strength. The power of interruption of the gaskets is also dependent on their fiber content and density.

Research work was carried out on the determination of technological indicators of gaskets. The results of the research obtained are presented in Table 1.

Table 1

Changes in the technological parameters of T-shirt fabrics

t / r	Fiber fabric composition	Linear density of yarn, teks		Mowed	Density, pieces	
		according to the weft	according to the back		according to the weft	according to the back
1.	68,4% cotton+31,6% lavsan fiber	28	28	polotno	420	260
2.	42% cotton+58% lavsan fiber	28	28	polotno	230	190
3.	6% wool+17% lavsan+67% cotton fiber	24	24	polotno	340	220
4.	100% viscose	27	27	polotno	450	280
5.	8,5% wool+4% lavsan+87,5% cotton fiber	26	26	polotno	420	350

The histograms showing the change in the linear density and density of the threads in the composition of the T-shirt fabrics with different fiber content were presented in Figures 1 and 2

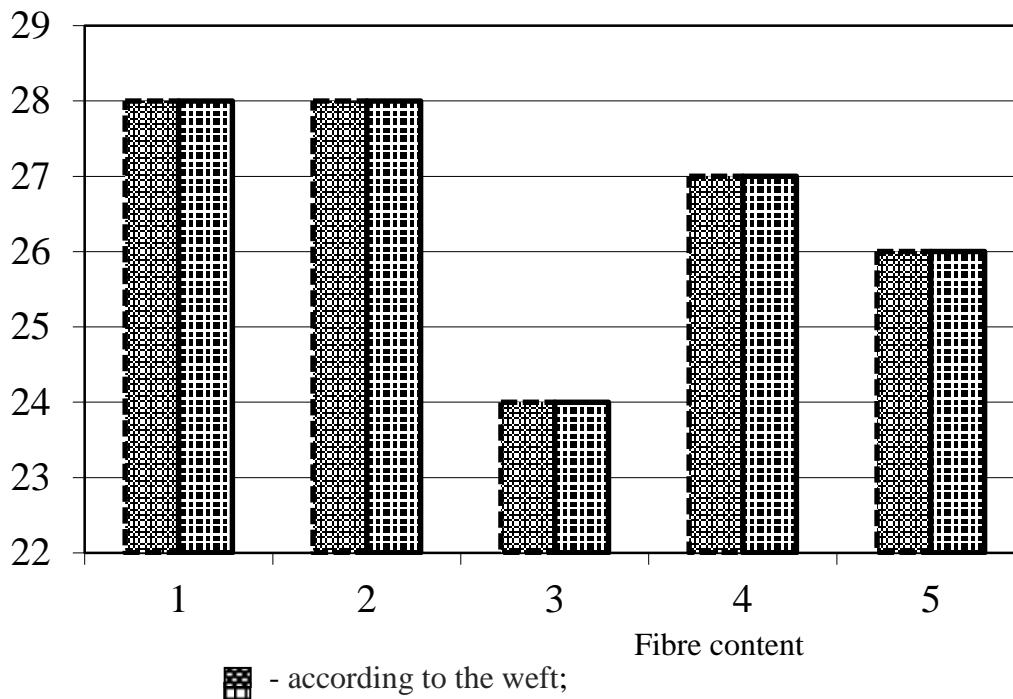


Figure 1. Changes in the linear density of the weft and back in tissues with different fiber content.

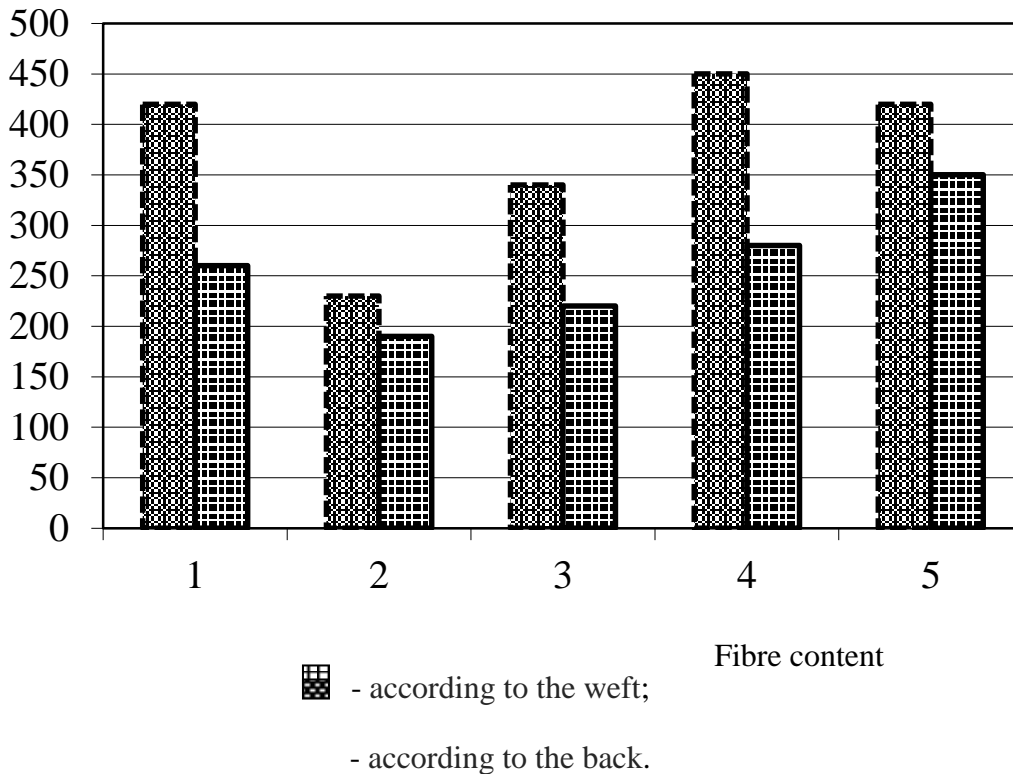


Figure 2. Changes in the density of tissues with different fiber content in the direction of the weft and back.

Technological parameters of clothes with different fiber content show that the linear density of 68.4% cotton + 31.6% lavsan fiber is 28 tex on the body, 28 tex on the back, 420 tex on the back, 420 on the back. % cotton + 58% a mixture of lavsan fibers, linen density 28 tex on the body, 28 tex on the back, 230 tex on the body, 190 on the back, 6% wool + 17% polyester + 67% cotton fabric. Linen has a linear density of 24 tex on the body, linear density on the back 24 tex, density on the body 340, linear density on the back 220 tex, linear density on the body made of 100% viscose fiber 27 tex, linear density 27 tex on the back, density 450 on the torso, 280 on the back, 8.5% wool + 4% lavsan + 87.5 tex on the back.

The results of the study showed that, depending on the purpose of using the tissues, their linear density and the change in density in the direction of the body and back will differ.

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

Research work has been carried out to study the mechanical properties of tissues. For this, samples of shirt fabrics with different fiber content were taken and their mechanical properties were studied. The surface density of the fabric samples obtained, the tensile strength and elongation at break in the body and reverse directions were determined in laboratory conditions using modern devices. The results obtained by the test are presented in Table 2.

t/r	Fiber of gauze composition	The power of interruption of the gassing, N		Finishing face density, g/m ²	Interruption of the gassing, interest	
					base according to	Weft according to
1.	68,4% cotton+31,6% lavsan fiber	588,3	511,7	116,2	36,9	25,9
2.	42% cotton+58% lavsan fiber	639,1	567,3	110,2	24,2	24,6
3.	6% wool+17% lavsan+67% cotton fiber	508,9	425,5	109,4	36,3	21,2
4.	100% viscose	515,3	311,0	115,0	27,2	18,1
5.	8,5% wool+4% lavsan+87,5% cotton fiber	476,8	404,4	102,3	28,2	20,8

Table 2

Different fibers to the quality indicators of T-shirt fabrics effect of composition

On the basis of the results from Table 2, the graphs from a mixture of fibers of different composition were drawn in 3-5 drawings on the basis of the shear strength of the gaskets on the base and the direction of the arc, the displacement U_{zay} and the change in the density of the surface.

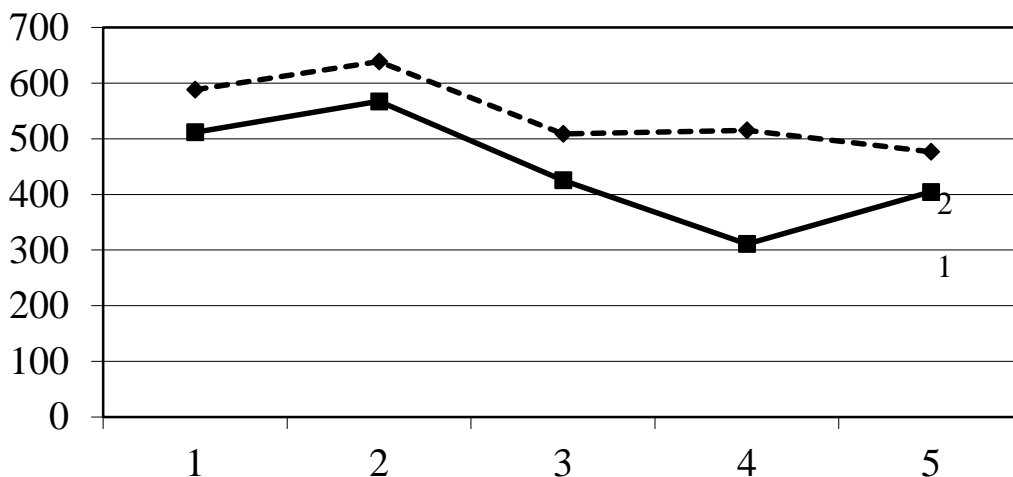


Figure 3. A shirt with a tolatarkib variety, a change in the power of the severance on the base and back directions of the finishing fabrics.

Figure 4. A change in the elongation of the shirt fabrics in the base and weft directions, the fiber content of which is different.

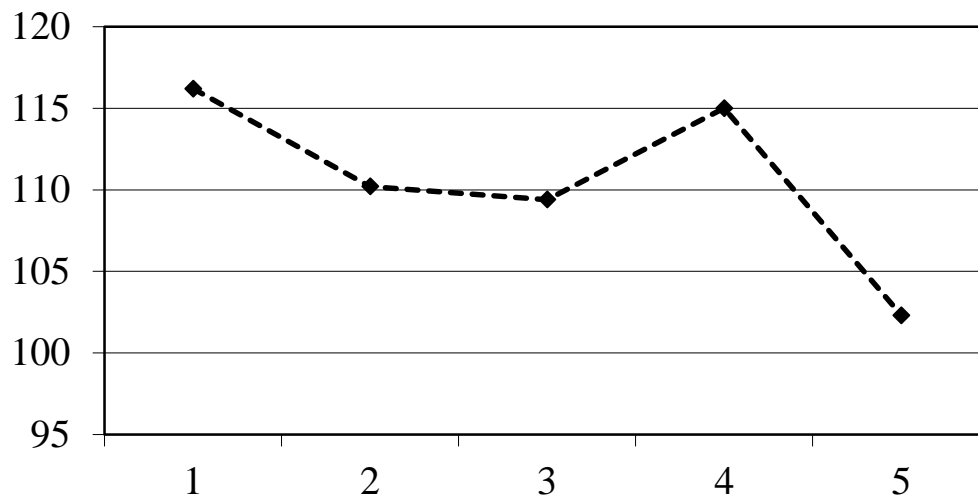


Figure 5. A change in the surface density of T-shirt fabrics, the fiber content of which is different.

Conclusion If we compare the results of the research with the quality indicators of the T-shirt gas obtained from the mixture of 68,4% cotton+31,6% lavsan fibers, the T-shirt gas obtained from the mixture of 42% cotton+58% lavsan fibers, the break-off power of the T-shirt gas obtained from the mixture increased to 8,0%, the break-off% wool+17% lavsan+67% shirt from a mixture of cotton fibers the elongation strength of the gauze in the direction of the base to 13,5% , the power of interruption in the direction of the weft decreased by 16.8%, the density of the surface decreased by 5.9%, the power of interruption in the direction of the body decreased by 1.7%, the power of interruption in the direction of the weft decreased by 18.1%, the power of interruption in the direction of the base by 100% viscose fiber the elongation rate decreased by 30,1%, and the elongation power of the shirtshop gassing obtained from a mixture of 8.5% wool+4% lavsan+87,5% cotton fibers by the direction of the base to 18,9% , the power of interruption in the direction of the back decreased to 21.0%, the density of the surface to 11.9%, the power of interruption in the direction of the base to 23.6%, the power of interruption in the direction of the weft decreased to 19.7%.

As can be seen from the analysis of the results of the study, it was proved that the mechanical properties of the shirt-top gaskets obtained from a mixture of 42% cotton+58% lavsan fibers are higher than those of other fiber-containing gaskets.

The test analysis showed that, depending on the fiber content of the gas, it was determined that the power of the break in the direction of the base varies from 8,0% to 18,9%, the power of the break in the direction of the weft varies from 9,9% to 39,2%.

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