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CHANGES IN QUALITY INDICATORS OF YARNS WITH A VARIETY OF FIBER CONTAINING SHIRTS FABRICS

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Abstract
In this article, 5% wool + 65% lavsan + 30% cotton fiber, 6% wool + 17% lavsan + 67% cotton fiber at the enterprise "Osborn Textile" LLC; 3-12% wool + 10% lavsan + 78% cotton fiber; 4-50% bamboo +50% polyamide fiber; 5-90% acrylic + 10% polyamide fiber; Yarns obtained from 6-50% acrylic +50% wool fiber mixtures were obtained and their unevenness indicators were determined and the optimal option for obtaining quality yarns for production was recommended.

Keywords: thread unevenness, coefficient of variation, -40% thinning areas, -50% thinning areas, +35% thickening areas, +50% thickening areas, +200% thickening areas, quadratic unevenness in hairiness.

I.INTRODUCTION

The production of suitable for new assortment from local raw materials is one of the top important issues of today's suitability of modern assortment in the development of modern weaving industry.

Providing high and stable growth rates in the Republican Textile and Sewing Industry, attracting and attract foreign investment, Creating high-tech new jobs due to the implementation of strategic imported projects of competitive products, modernization of the strategic importance, ystematic work is being carried out to further deepen the structural reorganization of enterprises, technical and technological upgrading of enterprises, introduction of an advanced "cluster model".

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At the same time, the comprehensive analysis of the textile and garment and knitting industry, the changing conjuncture of the world market in the context of intensive conditions of competition, It requires the development and implementation of more sustainable and rapid development mechanisms.

The quality of textile products is largely dependent on the quality of ip When the market is fully covered by the offer, the consumers are being set for the evaluation of IP quality indicators. f you have previously been the unevenness of the IP in terms of the main quality indicator, and now it is paying special attention to the following indicators: Availability of flaws in appearance (small and thick places, papators), the unthinkation of yarn and the malaulology of yarn and the mild of risual modal, elasticity resistance [1].

Expansion of the quality of the product and expansion of their assortment is one of the main tasks of the current market economy. Recently, the demand for consumers to textiles is increasing day by day. Because at the moment, the domestic regions of the country are highly demanded for quality products imported. Our main goal is to fill our domestic markets together with the produced quality of clothing, and increase the export potential of the republic.Демак, тўқимачилик маҳсулотлари дунё ва ички бозорларда рақобатлаша оладиган бўлиши керак. The product quality indicators not only complicate not only to the level of all forms of the product or the exact size of the product, but also depends on the level of demand for these properties. Most importantly, as a result of correct selection and sufficiently substantiation of quality indicators, it ensures its processing on the use of the product.

It is necessary to produce high-quality yarn for the production of high-quality fabrics from cotton fiber. For high quality, spinning enterprises should be technical control of well-organized and constantly functioning operations in spinning enterprises. The negative properties of production products at the uneven spinning enterprise have a negative impact on technical and economic indicators at the enterprise, as well as physical and mechanical properties of yarn. It is important to test and control the uniformity of products in spinning production and determines the causes and time of unevenness. The greater the weight of the threads in spinning machines, and the more the time of the formation of the formation, the higher the uneven. As a result of increasing yarn cutting, employment of workers will increase, as well as leading to a decrease in work productivity of machines.

There will be no scope of defeating character during the processing and separation and separation of the fiber in the cars.In addition, a uneven pattern is formed.

If the product is uneven in the stretching device of different cars or an uneven product in line density it is changed the size of the stretching force and friction strength.

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If the unevenness of the ripy density is high, shortages are formed in the appearance and structure of the fabric, resulting in the surface of the fabric, chipor, male or frame.

These defects can also be observed on knitted fabrics.

If the unevenness of yarns on strength and other properties is high, then there is a lot of consistency, elongability and solution in fabrications in fabric and knitted fabrics. The insecurity of the product by fiber basement, length and mature determination determines the uneven IP in terms of strength.

The unevenness of the lining density of the product at a spinning enterprise is one of the main conditions of quality. This indicator affects the level and unevention of different properties of yarns.In addition, the influence of fiber content is also grown to uneven stories. While yarns are taken from more chemical synthetic fibers, their uneven level is reduced.

II.METHODOLOGY

In order to study the factors affecting the quality indicators of yarn, samples from threads varying and their physical and mechanical properties were identified.

The following conditional symptoms were used in the construction of the received research: 1-6% wool + 17% wool + 67% cotton fiber;2-% wool + 65% lacsan + 30% Cotton fiber;3-12% wool + 10% lacsan + 78% cotton fiber;4-50% bamboo + 50% polyamide fiber; 5-90% acrylic + 10% polyamide fiber;6-50% acrylic + 50% threads from fiberglass mixture.

The results of the study are given in Table 1.

Changes in quality indicators of yarns with a variety of fiber containing shirts fabrics

т/р	Fiber content	U,%	CVm,%	-40%	-50%	+35%	+50%	+200%	H	Sh
1.	6% wool+17% lavsan+67% cotton fiber	13,72	17,57	640	40	2133	607	464,5	7,64	2,07
2.	5% wool +65% % lavsan +30% cotton fiber	9,78	12,41	24,5	0	364,5	43,0	62,0	5,84	1,47
3.	12% wool +10% lavsan +78% cotton fiber	11,74	14,84	282	19,5	731	107,5	126	6,83	1,77
4.	50% bamboo +50% polyamide fiber	10,56	13,33	116,5	3,5	438,5	54	63	6,87	1,68
5.	90% acrylic +10% polyamide fiber	10,90	13,73	233	16,0	393,5	30,0	4,5	10,01	2,67
6.	50% acrylic +50% wool fiber	16,81	21,31	246,0	615	2973	1046	375,5	9,12	2,74

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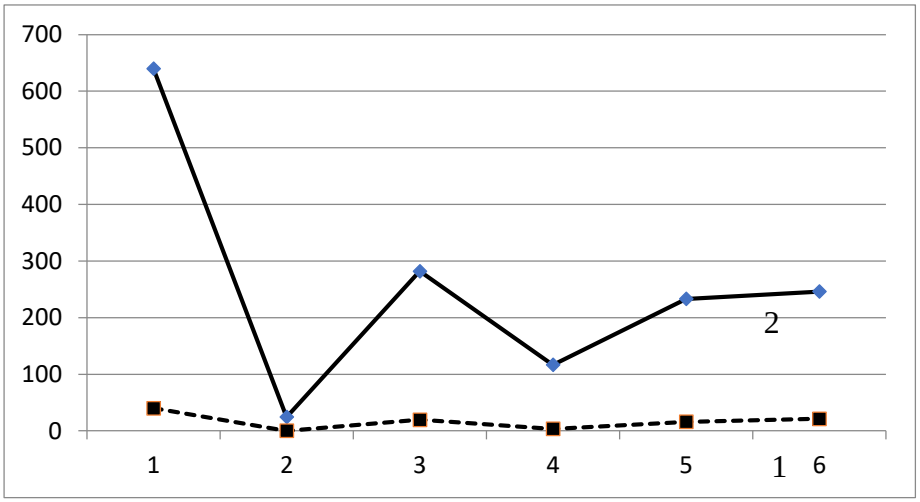
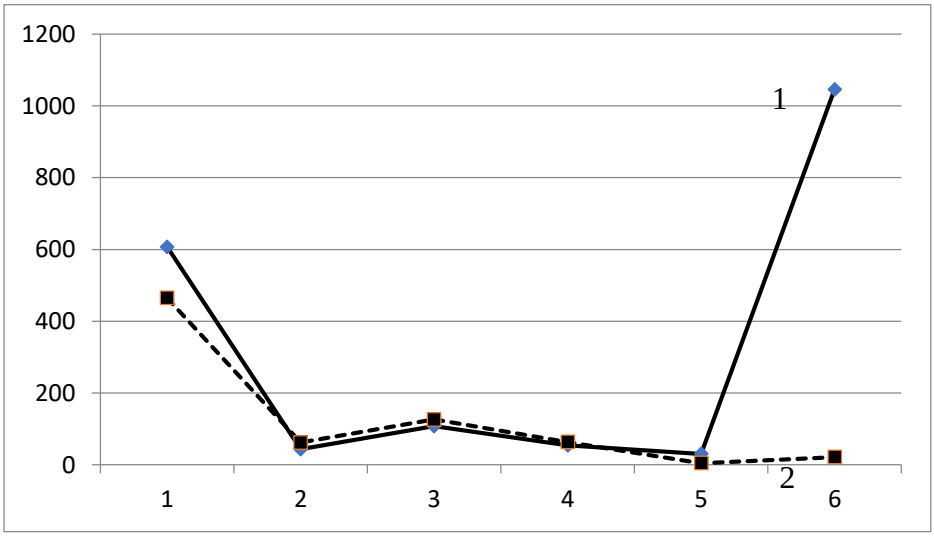
Based on the results of the study, 10 and 4 Change graphs of yarns of different fiber were brough



Unevenness of 1st; 2nd square insolvency 1-50% thin area; 2-40%

Figure 1.Change of -40% and -50% sliching areas of cotton contained for shirts fabrics for shirts fabrics.



1- + 50% stolen;2- + 200% tough.

Figure 2.Changes in +5% and + 200% of cotton vaguely with fiber contents for shirts fabrics.

The results of the study are 6% wool + 17% wool + 67% compared to yarns derived from cotton fiberglasses, 5% wool + 65% lavsan + 30% unevenness of yarns obtained from cotton fiber mixtures decreased by 29.8%, coefficient of variation by

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30.4%, -40% thinning areas decreased by 99.7%, -50% thinning areas remained unchanged, + 35% thickening decreased by 83.0%, + 50% thickening decreased by 99.9%, + 200% thickening decreased by 87.7%, hair decreased by 24.2%, and quadratic unevenness by hair decreased by 29.0% decreased, 12% wool + 10% lavsan + 78% unevenness of yarns obtained from cotton fiber mixtures by 15.5%, coefficient of variation by 16.6%, -40% thinning areas by 56.0%, -50% thinning areas by 52, 3%, + 35% thickening areas to 66.8%, + 50% thickening areas to 83.3%, + 200% thickening areas to 73.9%, hairiness to 11.7%, and quadratic inequality to hairiness to 15, Decreased by 5%, unevenness of yarns from 50% bamboo + 50% polyamide fiber blends by 24.1%, coefficient of variation by 25.2%, -40% thinning areas by 82.8%, -50% thinning areas by 99.9 %, + 35% thick shgan areas decreased by 80.0%, + 50% thickening areas decreased by 99.9%, + 200% thickening areas decreased by 87.5%, hairiness decreased by 11.1%, and quadratic unevenness by hairiness decreased by 19.1%, 90 The unevenness of yarns obtained from% acrylic + 10% polyamide fiber mixtures increased by 21.6%, the coefficient of variation by 22.9%, -40% by 64.6%, -50% by 99.6%, + 35% thickened areas decreased by 82.6%, + 50% thickened areas decreased by 99.9%, + 200% thickened areas decreased by 99.5%, hairiness increased by 24.7% and quadratic inequality by hairiness increased by 33.5%, The unevenness of yarns obtained from 50% acrylic + 50% wool fiber blends increased by 19.4%, the coefficient of variation increased by 18.6%, -40% thinning decreased by 62.6%, -50% thinning increased by 99.4%, + 35% thickening increased by 29.3%, + 50% thickening increased by 42.0%, + 200% thickening decreased by 20.2%, hairiness increased by 17.3% and quadratic inequality by hairiness increased by 25.5% increased.

The structural unevenness of different types of products and their unevenness in terms of properties have different characteristics. Depending on the nature of the product, the inequality in the nature of changes in structure and properties is as follows: periodic, random, functional, ie one-sided incremental deviation (quality indicators are constantly increasing or vice versa); local (random, sudden increase in product linear density); combined (the sum of several types of inequality).

It is very difficult to analyze the unevenness of spinning products. There are many types of irregularities for spinning products: they are formed in the first stage of spinning and change in later stages, and new types of irregularities are added to it.

The unevenness of the yarns can be seen by adding several components to itself and affecting the different stages of unevenness in spinning production. The irregularities of different appearances are interrelated.

These factors make it difficult to change the causes of inequality.

III.CONCLUSIONS

The analysis of the obtained results showed that the unevenness of yarns with different fiber content ranged from 15.5% to 29.8%, the coefficient of variation from 16.6% to 30.4%, -40% from 62.6% to 99.7%. to -50% thinning areas from 52.3% to 99.9%, + 35% thickening areas from 29.3% to 83.0%, + 50% thickening areas from 42.0% to 99.9%, + 200% thickening areas were found to vary from 20.2% to 87.5%, hair thickness from 11.7% to 24.2%, and quadratic unevenness in hair thickness from 15.5% to 33.5%.

The results of the study showed that the quadratic inequality of yarns in terms of coefficient of variation, coefficient of variation, fluff and fluff was found to be lower in yarns derived from 5% wool + 65% lavsan + 30% cotton fiber blends than yarns obtained from other fiber blends.

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REFERENCES

1. Пономоренко Д.Н., Лыс Л.Х. и др. Исследования по определению оптимального соотношения степени очистки хлопкового волокна на хлопкозаводах и хлопкопрядильных фабриках с учетом сохранения прядильно-технологических свойств волокна. Отчет ЦНИИХпрома. Т.: 1975.
2. Ванчиков А.Н. Справочник по переработке химических волокон по хлопчатобумажной системе. Легкая индустрия, М.:,1970.
3. Бурнашев Р.З., Очилов Т.А., Муратова Д.А., Волкова О.В. Кинетика изменения показателей массодлины хлопкового волокна в технологии прядении //Проблемы текстиля, №2, 2002, 30-32 с.
4. А.Н.Соловьев, С.М.Кирюхин. Оценка качества и стандартизация текстильных материалов. М., Легкая индустрия, 1974.
5. Соловьев А.Н. Выбор показателей качества и оценка их значимости.- «Технология текстильной промышленности», 1972, №2, с.134.

ISSN: 2776-0987 Volume 3, Issue 9, Sep. 2022

6. Виноградов Ю.С., Соловьев А.Н. О довертительных интервалах при оценке генеральных статистических характеристик по малым выборкам.-«Технология текстильной промышленности», 1973, №5, с.15.
7. Симоненко Д.Ф., Соловьев А.Н. Неограниченный выбор и оценка значимости показателей качества.-«Технология текстильной промышленности», 1973, №3, с.19.
8. Ochilov Tulkin Ashurovich, Khalmatov Davronbek Abdalimovich, Shumqorova Shamsiya Pulatovna, Usanov Mustafaqul Maxmud ugli, Korabayev Sherzod Ahmadjanovich. Analysis of Quality Indicators of Mixed Spun Wool Yarns. Annals of R.S.C.B., ISSN:1583-6258, Vol. 25, Issue 4, 2021, Pages. 779 – 786.
9. M.M.Ismatova, T.A.Ochilov, Sh.F.Mahkamova. Change of mechanical properties of the yarns depending on the layer of reiler. International Journal.