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**Kulmetov Mirpolat, Atanafasov Mukhiddin Rakhmonovich, Laysheva Elmira Talgatovna,
Yuldasheva Mavluda Turamuratovna, Akhmedova Mokhinur Fayzullo qizi**

Tashkent Institute of Textile and Light Industry (Uzbekistan)

Tashkent Institute of Textile and Light Industry (Uzbekistan)

Tashkent Institute of Textile and Light Industry (Uzbekistan)

Jizzakh Polytechnic Institute (Uzbekistan)

Tashkent Institute of Textile and Light Industry (Uzbekistan)

ABSTRACT: In this article, in the manufacture of garments from materials in the garment industry, knitted yarns are processed and yarn is produced from them, and in the laboratory of the Department of "Spinning Technology" yarns are given up to 400, 500 and br / m. 4 different variants obtained for testing, ie 30% cotton fiber + 70% cotton fiber returns, 45% cotton fiber + 55% cotton fiber returns, 20% cotton fiber + 80% cotton fiber returns and 50% cotton fiber + 50% cotton their physical and mechanical properties were determined by taking samples from the yarns taken from the fiber loops.

KEYWORDS: coefficient of variation in linear density, tensile strength, specific tensile strength, monolithic dyed chemical fibers, non-woven fabrics, gang (complex), artificial and natural footwear, fur

I.INTRODUCTION

At present, the garment industry of the republic plays an important role in the production of high-quality, low-cost yarn for the textile industry. Today, the development of a long-term strategy of structural change in Uzbekistan requires taking into account not only domestic but also global processes and problems. From this point of view, the transition to an economy with a new model of development - the efficient use of local resources - is one of the most effective tools for sustainable structural change and sustainable development.

One of the most important tasks facing the Republic of Uzbekistan is to provide the population with quality and beautiful sewing products. Because it is aimed at protecting people from the environment, as well as ensuring their beauty.

For the efficient use of sewing materials and the production of high quality products, the workers of the garment industry are faced with enormous tasks. The properties of different textile materials depend on what fibers and yarns they are made of, the structure of the materials and how they are decorated.

Manufacture of garments includes basic materials, such as knitwear, nonwovens, gang (complex), artificial and natural footwear, fur, used for the surface and main parts of the product.

The garment industry must provide the population with quality and attractive clothing.

Increasing the production and expanding the range of garments depends on the development of the textile industry, as the main sewing materials are yarn, wool, silk and linen. The raw material base of the textile industry is constantly expanding due to the rapid growth of production of artificial and synthetic fibers.

Production of bulky synthetic and artificial spool yarns, staple fiber bindings, monolithic dyed chemical fibers has increased significantly.

There are certain hygienic, technical, aesthetic and economic requirements for garments.

In recent years, the country has developed a large number of sewing shops or private entrepreneurship in the production of goods. However, the returns that come out in the manufacture of items have been discarded. This leads to an increase in the cost of the item.

The main performance indicators of yarns include tensile strength, specific tensile strength, and unevenness.

II. METHODOLOGY

Therefore, in the production of high-quality and low-cost products in the garment industry, first of all, measures have been taken to use them efficiently, without leaving any returns. The garments were processed on the basis of resource-saving technology from the inputs produced during the production of garments, yarns were produced from them, and the test results are given in Tables 1-3.

Table 1

Changes in the physical and mechanical properties of yarns obtained from the return on the basis of resource-saving technology

t / r	Indicators	A mixture of secondary material resources in the yarn,%			
		30% cotton fiber + 70% cotton fiber return	45% cotton fiber + 55% cotton fiber return	20% cotton fiber + 80% cotton fiber return	50% cotton fiber + 50% cotton fiber return
1.	The linear density of the rope, teks	60,8	61,50	60,0	61,10
2.	Coefficient of variation on the linear density of the yarn, %	4,12	3,26	4,57	3,10
3.	The number of twists of the rope, br/m	400	410	405	407
4.	Coefficient of variation in the number of twists of the thread, %	6,7	5,9	6,9	5,7
5.	The breaking force of the rope, cN	323,8	367,5	311,9	398,2
6.	The coefficient of variation in the tensile strength of the rope, %	6,75	6,12	8,80	5,66
7.	The comparison of the rope tensile strength, cN/teks	5,32	5,97	5,19	6,5
8.	Elongation of the rope at break, %	10,76	11,22	11,9	10,98
	The coefficient of variation in the elongation at break of the rope, %	12,44	11,95	13,76	11,87

Table 2

Changes in the physical and mechanical properties of yarns obtained from the return on the basis of resource-saving technology

t / r	Indicators	A mixture of secondary material resources in the yarn,%			
		30% cotton fiber + 70% cotton fiber return	45% cotton fiber + 55% cotton fiber return	20% cotton fiber + 80% cotton fiber return	50% cotton fiber + 50% cotton fiber return
1.	The linear density of the rope, teks	60,3	60,50	60,8	60,7
2.	Coefficient of variation on the linear density of the yarn, %	3,78	3,12	4,12	2,98
3.	The number of twists of the rope, br/m	505	520	515	518
4.	Coefficient of variation in the number of twists of the thread, %	6,2	5,67	6,5	5,44
5.	The breaking force of the rope, cN	360,12	410,30	376,11	465,23
6.	The coefficient of variation in the tensile strength of the rope, %	6,97	6,78	7,45	4,98
7.	The comparison of the rope tensile strength, cN/teks	6,82	7,39	6,19	7,66
8.	Elongation of the rope at break, %	10,56	10,45	10,78	9,56
	The coefficient of variation in the	11,44	10,45	12,5	9,86

elongation at break of the rope, %				
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Table 3

Changes in the physical and mechanical properties of yarns obtained from the return on the basis of resource-saving technology

t / r	Indicators	A mixture of secondary material resources in the yarn,%			
		30% cotton fiber + 70% cotton fiber return	45% cotton fiber + 55% cotton fiber return	20% cotton fiber + 80% cotton fiber return	50% cotton fiber + 50% cotton fiber return
1.	The linear density of the rope, teks	60,6	60,0	60,5	61,0
2.	Coefficient of variation on the linear density of the yarn, %	4,02	3,45	4,47	3,12
3.	The number of twists of the rope, br/m	612	608	610	598
4.	Coefficient of variation in the number of twists of the thread, %	6,12	5,86	6,88	5,67
5.	The breaking force of the rope, cN	330,6	398,8	356,7	420,4
6.	The coefficient of variation in the tensile strength of the rope, %	7,56	7,44	8,12	5,12
7.	The comparison of the rope tensile strength, cN/teks	5,45	6,64	5,90	6,89
8.	Elongation of the rope at break, %	11,8	10,24	10,56	10,1
	The coefficient of variation in the elongation at break of the rope, %	11,78	11,02	12,98	10,8

III. RESULTS AND DISCUSSION

Compared to the performance of yarn from 30% cotton fiber + 70% cotton fiber yarn with the number of twists obtained on resource-saving technology 400 br / m, the coefficient of variation of linear density of yarn from 45% cotton fiber + 55% cotton fiber yarn by 20.87%, the coefficient of variation in the number of torsions decreased by 11.9%, the breaking force increased by 11.89%, the coefficient of variation in the breaking force decreased by 9.3%, the specific breaking force increased by 10.88%, the elongation at break increased by 4.1% , the coefficient of variation in the elongation at break decreased by 3.9%, the coefficient of variation in linear density of yarn from 20% cotton fiber + 80% cotton fiber loops increased by 9.84%, the coefficient of variation in the number of twists increased by 2.89%, breaking strength Decreased by 3.67%, the coefficient of variation in breaking strength increased by 23.29%, the specific breaking strength decreased by 2.4%, the break-in coefficient increased by 9.57%, the coefficient of variation in break-in increased by 9.5%, 50 % cotton fiber + 50% cotton fiber the coefficient of variation in the linear density of the yarn obtained from the loops decreased by 24.75%, the coefficient of variation in the number of twists decreased by 14.9%, the tensile strength increased by 18.68%, the coefficient of variation in tensile strength decreased by 16.14%, specific interference strength increased by 18.15%, elongation at break decreased by 2.0%, the coefficient of variation at elongation at break decreased by 4.5%, compared to 30% cotton fiber with a number of twists of 500 br / m + 70% cotton yarn , 45% cotton fiber + 55% cotton fiber twist, the coefficient of variation in linear density of yarn decreased by 14.17%, the coefficient of variation in the number of twists decreased by 4.24%, the tensile strength increased by 17.1%, the coefficient of variation in tensile strength Decreased by 1.5%, specific tensile strength increased by 17.9%, elongation at elongation decreased by 13.22%, elongation at variance decreased by 6.4%, variation at linear density of yarn obtained from 20% cotton fiber + 80% cotton fiber yarn coefficient of variation increased by 10.06%, coefficient of variation by the number of twists increased by 11.04%, breaking strength increased by 7.3%, coefficient of variation by breaking strength increased by 6.89%, specific breaking strength increased by 7.62%, elongation at break increased by 10 , Decreased by 5%, the coefficient of variation in elongation at break increased by 9.24%, the coefficient of variation in linear density of yarn from 50% cotton fiber + 50% cotton fiber loops increased by 21.2%, the coefficient of variation in the number of twists increased by 12.2% decreased, the breaking force increased by 22.6%, the coefficient of variation in breaking strength decreased by 28.5%, the specific breaking strength



increased by 10.96%, the break-in ratio increased by 9.4%, the break-in ratio increased by 13.81 %, the coefficient of variation of the linear density of yarn obtained from 45% cotton fiber + 55% cotton fiber yarn by 14.17%, compared to the performance of yarn from 30% cotton fiber + 70% cotton fiber yarn with the number of twists 600 br / m, the coefficient of variation in the number of twists is 4.24% k the breaking force increased by 17.1%, the breaking strength coefficient decreased by 1.5%, the specific breaking strength increased by 17.9%, the break-in length increased by 13.22%, the break-in ratio increased by 6.4%. decreased coefficient of variation in linear density of yarn from 20% cotton fiber + 80% cotton fiber yarns by 10.06%, coefficient of variation in the number of twists by 11.04%, breaking strength by 7.3%, coefficient of variation in breaking strength 6.89%, the specific tensile strength increased by 7.62%, the elongation at break decreased by 10.5%, the coefficient of variation in elongation at break increased by 9.24%, 50% cotton fiber + 50% linear yarn from cotton fiber loops The coefficient of variation in density decreased by 22.38%, the coefficient of variation in the number of twists decreased by 7.3%, the breaking force increased by 21.3%, the coefficient of variation in breaking strength decreased by 32.27%, the specific breaking strength decreased by 20.89%. increased, the elongation at break was 14.4%, the coefficient of variation at elongation at break was 8.32% g a decreased.

IV.CONCLUSION

The results of the study show that the tensile strength of yarn obtained from 50% cotton fiber + 50% cotton fiber returns, the specific tensile strength is higher than that of yarns obtained from mixtures of other compositions.

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