E-ISSN: 2997-9382
American Journal of Technology Advancement
https://semantjournals.org/index.php/AJTA

| Research Article

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Application of Complex Wrap in Fuel Gasket

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Abstract
This article presents the production of a new directional mixed shearing method of the national feather wool, which is different from the production of the existing wool yarns.

Keywords: fabric, national, design, pattern, avrov, pharynx, pharynx formation, pharynx height, tension, color, fabric, edging fabric.

Since one of the current issues is the production of textile products that meet the demand and demand of the people, the need to work on new assortments of our national avr fabrics is obvious. Therefore, the study of the development of avr fabrics production enterprises, the creation of methods that reduce the structure of warp threads and eliminate the defect of density variation along the warp, i.e., the unevenness of the density along the weft, and the possibility of predicting the properties of the fabric are highly promising. Scientific research on the production technology and standardization of avr ring-pile fabrics is aimed at the issue of measures being taken [1]. The solution to the problem involves the elimination of the slackness of the warp thread in the fabric due to the unevenness of the avr yarn binding the weft in the avrband. By eliminating the gaps, we are able to improve the quality of the fabric.

The finished fabric is cleaned of various waste, the gaps are eliminated, that is, it is cut and connected again. “Kalay”, that is, the defect in which the thread in the round does not wind in its own direction, is eliminated. This is explained by the fact that as a result of the even arrangement of the threads in the rounding process, the unevenness of the threads in the fabric is reduced, and high-quality costume fabrics are produced from the threads.

As a result of the studies conducted, it became clear that, based on the capabilities of textile machines, it is possible to obtain and apply fabrics of various complexity. The work carried out on mypakkab fabrics allows us to express the opinion that it is possible to expand the range of velvet, velveteen, plush, velor and other costume fabrics, to use complex weaves. The capabilities of Avr fabrics prove that it is possible to expand the assortment of fabrics from fabrics of various patterns and different mypakkab weaves [2].

In order to design a complex ring pile assortment in national Avr fabrics, the theory of the structure of fabrics and their design according to the intended properties is studied on the basis of information from a large number of existing literature on the general issues of the structure of

fabrics and their design, and their application in production requires the production of necessary goods for public consumption [3].

As a result of the study of the physical, mechanical, and chemical properties of Avrli fabrics and the conduct of experiments, the assortment of Avrli fabrics has expanded mainly due to the change in patterns created by craftsmen. In the scientific work of A.U. Popovsky, Ph.D., one of the first scientific studies, we can see that the relaxation processes in the process of making fabrics from natural silk were studied [4]. The processes of multiple hot water treatment of the threads and mechanical action were mentioned to some extent. The nature of the penetration of natural threads after boiling was studied and their effect on the quality of the fabric was studied. In A.U. Popovsky's research, the main part of the general work was focused on traditionally produced Avrli fabrics. Also, Professor S.P. Siddikov [5], in a pilot study of the conditions for producing warp-knitted fabrics on shuttleless and shuttle-knitted looms, developed a thread tension control device, which is designed to ensure the evenness of the tension of individual threads in the process of forming a warp along the width of the frame. These works were designed to be carried out mainly on warp-knitted fabrics.

As a result of the study of the physical, mechanical, and chemical properties of Avrli fabrics and the conduct of experiments, the assortment of Avrli fabrics has expanded mainly due to the change in patterns created by craftsmen. In the scientific work of A.U. Popovsky, Ph.D., one of the first scientific studies, we can see that the relaxation processes in the process of making fabrics from natural silk were studied [4]. The processes of multiple hot water treatment of the threads and mechanical action were mentioned to some extent. The nature of the penetration of natural threads after boiling was studied and their effect on the quality of the fabric was studied. In A.U. Popovsky's research, the main part of the general work was focused on traditionally produced Avrli fabrics. Also, Professor S.P. Siddikov [5], in a pilot study of the conditions for producing warp-knitted fabrics on warp-knitted and warp-knitted looms, developed a yarn tension adjustment device, which is designed to ensure the evenness of the tension of single warp threads in the process of forming a warp along the width of the frame. These works were developed mainly for the control of warp-knitted fabrics.

The production of loop-knitted fabrics in weaving requires complex technological processes of its own. When creating complex fabrics, warp and weft yarns of three or more systems can be used. As a result of the placement of the yarns of each system above or below each other, a fabric layer is formed. Such weaves are called double-layer or double-sided (two-faced) fabrics. Complex fabrics include double-faced, double-sided, two and more layered, pile-cut and uncut (loop) pile-cut and other types of fabrics. Double-sided weaves have the same appearance on the right and wrong sides, while double-layer weaves have different appearances on the outside and inside. The advantages of double-layer and double-sided weaves over plain weaves are the wide range of possibilities, namely the possibility of having the same appearance on both sides without changing the linear density in the warp and weft, or the possibility of weaving both sides in different ways, as well as the increase in thickness and weight. In addition, double-layer and double-sided weaves have a higher tendency to have a dark surface. Three system (system) yarns are involved in these weaves. Usually two system yarns are for the warp and one system yarn for the warp. Or vice versa, two system yarns can be for the warp and one system yarn in the warp. Double-layer fabrics are woven as a result of the participation of five or more system yarns.

A complex weave is a fabric with a large number of threads. The development of some complex weaves requires a large number of warps, a special type of “shearing” and a specially designed loom. Complex weaves are obtained as a result of basic, formed and mixed weaves. Depending on the structure and formation, complex weaves are divided into one and a half layers, two layers and multi-layer, variegated (weft variegated and warp variegated), openwork [3].

To create warp variegated fabrics, one warp set of threads and warp system threads are required. In the process of creating warp variegated fabrics, warp threads form a ground weave with ground (weft) threads.

Special attention is paid to the theory of complex weaves and their structure [4]. In a loom, the warp performs two functions: on the one hand, it forms a plain or twill weave (2/1, 2/2) with warp threads, forming a ground weave; on the other hand, it is covered with thick pile due to warp threads in satin (5/3, 5/2, and others) weaving.

The rapport of the warp yarn $R_{t.a.}$ is equal to the total warp yarns $n_{t.a.}$ In this case, a pile cover is formed on the ground warp yarns and the warp yarns n.q. are determined up to:

$$R_{t.a.} = n_{t.a.} + n_{a.q.} \quad (1.1)$$

Tanda bo‘yicha rapport zamin arqoq $R_{z.a.}$ tanda bo‘yicha tuk arqoqdan bir necha rapportga kam bo‘lishi kerak, ya’ni $R_{t.a.}$ =6 bo‘lganda $R_{z.a.}$ =2 yoki 3 bo‘lishi kerak [5].

The rapport of the ground arkog $R_{z.a}$. in tanda should be several rapports less than the hair arkog in tanda, that is, when $R_{t.a.}$ =6, Rz.a. should $R_{z.a.}$ =2 or 3 [5].

Weavings are divided into two groups. The first group is simple weaving, formed by the main and small pattern weaves in one system and the participation of one system of warp threads.

The second group is complex weaving, in which at least two warp threads or two warp threads in one warp thread or two or more system threads are involved in both warp and warp threads. When producing such weavings, two or more weaving reels or a mechanism for throwing warp threads of different qualities, mechanisms for forming pile on the surface of the fabric, etc. can be installed on the loom at the same time.

Complex weavings are formed on the basis of main or small pattern weaves. Complex weavings are divided into the following subclasses depending on the structure of the weaving class and the methods of formation on the loom:

- bi-layer weaving;
- double-layer weaving;
- multi-layered weave;
- “Pike” weave;
- various weaves;
- openwork weave with a warp.

When studying complex weaves, one must first know how many warp and weft systems are used in the fabric woven with this weave, what weave is used as the basis for the weaves of these threads, what kind of loom can weave such a fabric, or what additional mechanism or device the loom must be equipped with to obtain such complex weaves, etc. [6].

In the production of one-and-a-half-layer fabrics, one system of warp yarns and two systems of weft yarns or two systems of warp yarns and one system of weft yarns are involved. The purpose of producing these fabrics is to obtain double-sided fabrics or to increase the thickness of the fabric, to achieve the necessary physical and mechanical properties.

One-and-a-half-layer fabrics are double-sided and double-sided. If two systems of warp yarns and one system of weft yarns are involved in the production of one-and-a-half-layer fabrics, these are called additional warp fabrics.

If only two systems of warp yarns and one system of weft yarns are involved, these fabrics are called additional warp fabrics.

The purpose of producing additional warp and additional warp fabrics is, firstly, to increase the weight and thickness of the fabric without increasing the linear density of the yarns, and it is important that the linear density of the additional yarns is higher than the linear density of the base yarns.

Secondly, it is possible to obtain a fabric with a tan sheen and a warp sheen on the surface and the back side of the fabric. In fabrics with two tan systems and one warp system, the tan sheen is on the surface, and the weft is on the back side, or vice versa. In addition, the surface and back sides of the fabric can be woven with different weaves, for example, the surface side is twill, the back side is satin, such a fabric is called double-sided, and when the weaves are the same, it is called double-sided fabric. Finally, the structure of one and a half layers of fabrics provides increased heat retention (for example, in drapes) and filtering ability (in technical filtering fabrics).

In the weaving of additional warp fabrics, two systems of warp and one system of weft threads are involved. In each warp, the system of threads can be woven with a warp, a main or a small pattern weave. The number of threads in the total warp rapport is equal to the sum of two warp rapports.

The weft rapport of this fabric is equal to the smallest multiple of the two main rapports.

When constructing a one-and-a-half-layer weave of additional warp fabrics, the following should be taken into account:

1. the ratio of the density of the threads in the upper layer to the density of the threads in the lower layer can be $P_{T_1} : P_{T_2} = 1:1;\ 1:2;\ 2:2;\ 2:4;$
2. the weave has more warp on both sides, that is, the main weave should be warp.

The side-by-side arrangement of long warp layers on both sides of the weave ensures a full layer of short layers on the opposite side.

Conclusion. In order to obtain complex weaves, all types of weaves can be used, and fundamental weaves, derivative weaves, and mixed weaves can be used to the maximum.

It is advisable to use the density of warp and weft threads on the loom depending on the purpose for which the fabric is used. In the production of loop pile fabrics, the density of the fabric in the weft is important. Because it is necessary to take into account the great influence of the cut or loop on the firm fit of the fabric.

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