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Evaluation of the elasticity of yarns in fabrics analysis of the work carried out on

Abdulazizov Shakirjon Abdurashid Ogli
Assistant of Namangan Institute of Engineering and Technology
Email: shokirjonabdulazizov73@gmail.com
Tel:+99894130-90-09

Annotation: In this article, the optimal strength of the three factors to maximize the penetration of the surface location. and it was determined that the supported surface is observed during the descent.

Keywords: Exploitation, mobility, Mowing, Surface, lean, Body.

There are fabrics that, by determining the surface salinity, can determine the a group of satin weave fabrics woven from silk threads. During operation, one of the parameters that determines the mobility of the threads, its shearing is calculated.

In order to increase the strength of the surface of the products, it is necessary to carry out research as much as possible under any conditions. Optimizing them in terms of fit should be done by ensuring that the thread placement on the fabric does not change after washing. The elasticity depends on the composition and wear of the raw yarn fiber, on the weaving and finishing of the fabric. In almost all conditions, properties such as the conditional diameter of the thread, the density of the fabric on the body and the warp, the support surface, the phase of wear play a special role in achieving the reduction of the displacement of the threads. Currently, the demand for satin fabrics is increasing. In particular, in the case of paying attention to their wear, the requirements for reducing the mobility of the threads in the fabric are relevant.

A number of researchers have studied the effects of fabric mowing on the surface.

N.V. Vasilchikova studied viscose fabrics and found out that fabrics with a ratio of 2/2 have less thread displacement when they are folded.

M.M. Dianich conducted a research on fabrics made of viscose fiber and found out that the surface smoothness of mixed weave fabrics is much better than that of twill and mat weave fabrics.

Mixed cuts are part of small pattern cuts.

Lavsan produced by these types of weaving has small patterns of various shapes on the surface of the fabrics.

Their smoothness and smoothness are higher compared to sorghum and mat-spun fabrics.

The radius of curvature increases with increasing coatings, resulting in an increase in the volume of fibers prone to bending and, accordingly, an increase in the amount of work consumed.

V.V.Rakitskih conducted research on lavsan fabrics and I.V.Sabov on acetate and viscose fabrics of various weaves, in order to complete the information on the surface of the fabric by the weave. They reported that the surface of the fabrics is strengthened with the increase of the density coefficient during shearing, and in this case, the density coefficient is equal to 0.6 to 0.7. The observed conditions are related to the influence of 3 factors: thread connection between fabric elements, tangential resistance and supporting surfaces.

All three factors are in an optimal ratio to maximize the strength of the surface. When the density coefficient is from 0.6 to 0.7, the decrease in surface strength is observed when the size between the elements of the composition is small, while its increase is at the level of the density coefficient, the tangential resistance and the support surface is observed during the decline.

B.I.GE Sonok and M.Ya.Mustafev expressed the surface strength of weft yarns in mikal-type fabrics by the linear density Tu and the weft density of the fabric depends on Ru:

51 8,1Ty+26,1 Py =2,91

According to L. G. Leytes, fabrics with a high warp density may have slippage due to the small mass (volume) of the thread system. G.F. Pugachevsky studied lavash-cotton fabrics and found that the decrease

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in density up to 14% on the body does not affect the surface strength enough, while the decrease in the density on the back by 21% is found to cause a significant decrease in the indicator.

Body
a-mowing scheme; b-tane cut of the fabric; v-equal surface fabric cut; g-thin surface fabric cut.

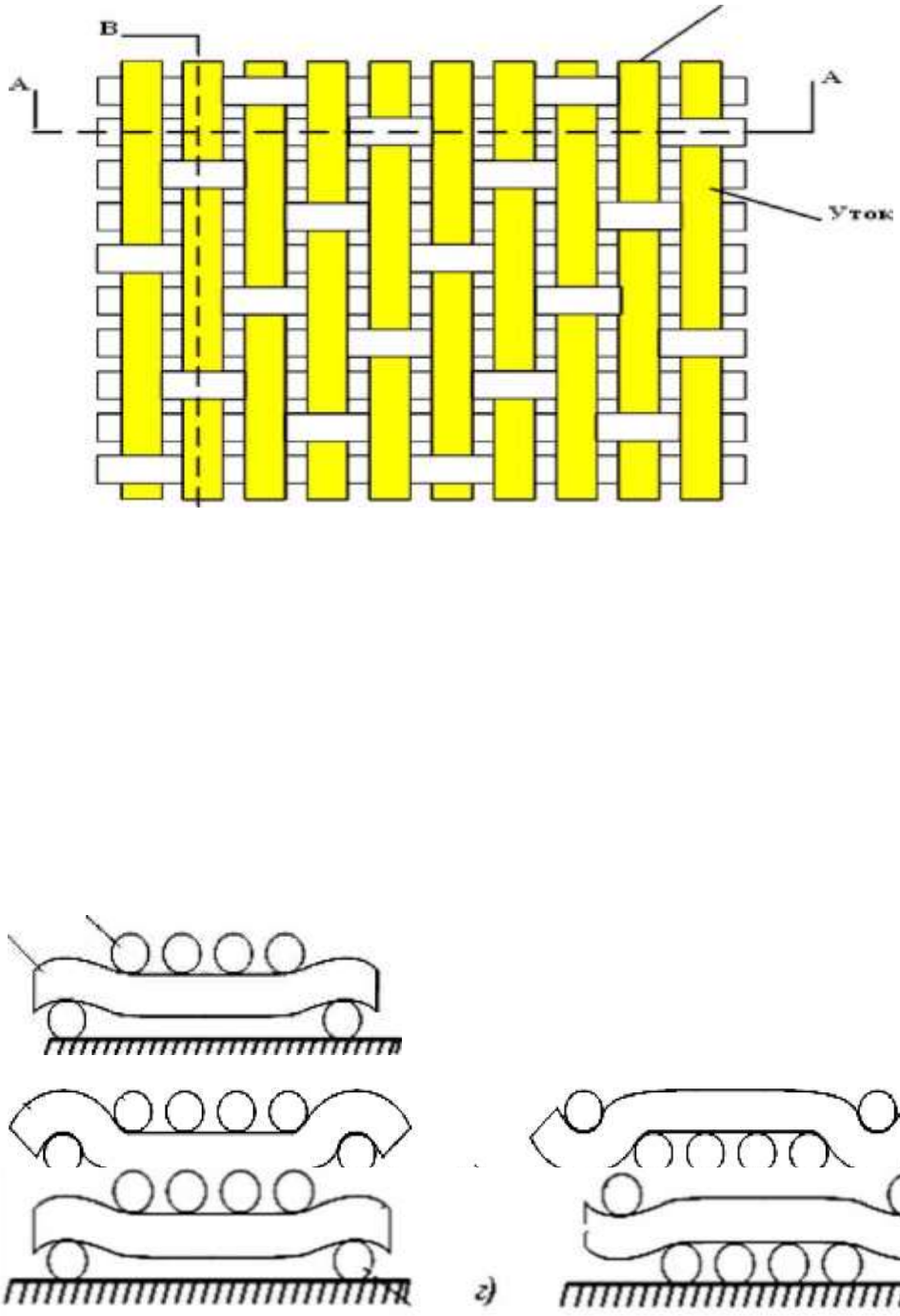

Fig. 1.1. Weaving scheme of satin 5/2 weft fabric and cross sections

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If the properties of the threads in both systems are different, it is required to produce a thread system with high resistance to bending on the supporting surface.

Depending on the condition of the yarn complex on the surface of the fabric, i.e., the location of the complex on the surface, the fabrics can be mainly warp-backed, body-backed and even-backed. Fabrics with equal support are formed by having equal complex wefts (for example, canvas wefts), and thread diameters are equal, and the wear phase is equal to 5, or in the case that the warp and weft are equally exposed on the surface of the fabric. Figure 1.1 shows the cross section of the satin weft fabric with three different base surfaces. cross-section is depicted.

Many researchers point out that there are many difficulties in obtaining fabrics of equal strength because of the many changes in fabric wear caused by finishing and operation. In particular, many researchers have proved in their works [21,22,23,24] that it is possible to form fabrics with equal support by precisely increasing the density on the warp compared to the density on the warp.

The ratio of body density to warp density should be:

According to L. G. Leytes, it is 1.05 - 1.2;

according to F.V. Vasilev - from 1.08 to 1.24;

according to I.V. Dukovsky - from 1.16 to 1.26;

I.S. According to Margolin-1.2 - up to 1.3;

V.I. according to Smirnov - from 1.1 to 1.18;

V.P. According to Sklennikov, it should be within the range of 1.1 to 1.12.

It is appropriate to note that these data were obtained during the formation of fabrics from yarn spun on smooth, loop-shaped spinning machines.

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