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The effect of the structure of gasses on the quality indicators

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Annotation: In this article, the structure of yarns is studied from a theoretical point of view, and the effect of yarn quality parameters on yarns and yarns is analyzed. The results obtained on the basis of research were theoretically analyzed and appropriate conclusions were drawn.

Keywords: Cotton fiber, flax hemp fibers, wool and silk fibers, stone cotton, nitrone, glass fiber, finishing, fabric density, Wars, Weft, reduction, fabric penetration, shift, mowing.

In this research work, there are several methods of the fiber obtained in gauze weaving, which are as follows. The first method is determined by the appearance of the fiber, if it is not possible to identify (M: dyed), the fiber is identified by burning. Three properties are important in the fiber burning process. 1-flammability, 2-smell; 3-ash from burning

Properties of fibers

The name of the fiber	Combustion properties
Cotton fiber	It burns with a yellow flame, and during the burning period, the smell of burnt paper is felt. Burns when removed from flame. After burning, the fiber produces light ash
Flax hemp fibers	The same properties as cotton fibers occur. Because the main composition of flax and hemp fibers is cellulose, just like cotton.
Wool and silk fibers	It sparks slowly, and if we remove it from the flame, it stops burning. the smell is like that of a burnt branch, and at the end of burning, brittle, pitch-black balls are formed. It is crushed by hand.
Stone cotton	There is no change in the flame. Does not burn.
Viscose and co-ammonia fibers	Since the composition of these fibers is also composed of cellulose, they are similar to the properties seen in cotton fibers, except that the ash is black.
Acetate and diacetate fibers	When we take it from the flame, it flutters, burns with a yellow flame, and the smell is as sharp as vinegar ore (acid). At the end, it forms a round ball of dark color. It does not crush when held by hand.
Casein	It burns, smells like burnt milk, the ash is black, brittle, spherical, crushed.

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Capron	When removed from the flame, it shrinks and melts, burns with white smoke and a blue-yellow flame, it smells of sulfur. When the solution is hot, after cooling it forms a solid ball, it does not crush.
Anid and Lavsan fibers	It burns just like kapron fiber and gives a bright flame. At the end of burning, a black ball is formed. These balls cannot be crushed by hand.
Nitron	Burns quickly with black smoke. At the end, it forms a black residue. does not crush when held by hand.
Chlorine	It only burns in flames. The air burns with colored flames and black smoke, giving off a sharp smell of chlorine. At the end it forms a hard ball.
Vitreous fiber	Does not burn, melts at high temperature.

This is the penetration or pulling of the fabric- Change in size during its finishing. Fabric penetration is determined by the difference in sizes of raw and finished fabric samples.
The stretching or stretching of the fabric in finishing is determined by the formula:

$$U_t = \frac{L_s - L_m}{L_s} * 100 \ ,$$

where, Ls-is the length of the raw fabric sample, m;
L_t, - the length of the finished fabric sample, m.
The width of the fabric in finishing is determined by the following formula:

$$U_a = \frac{B_s - B_t}{B_s} * 100,$$

where, B_s- the width of the raw fabric sample, cm; B_t- width of finished fabric sample, cm.
It is also possible to determine the penetration of the fabric in finishing according to the following formulas:

$$U_t = \frac{P_{ta} - P_a}{P_{ta}} * 100 \ ,$$

$$U_a = \frac{P_{tt} - P_t}{P_{tt}} * 100$$

here, Pa Pt - is the density of the raw fabric on the warp and weft;
P_(ta,P_tt) - is the density of the finished fabric on the warp and weft.

For this, it is necessary to calculate the number of threads per unit length of raw and finished fabric using one of the methods shown in the analysis of fabric samples. Experiments have shown that almost all fabrics have width penetration during the finishing process. In the process of finishing, fabrics change their dimensions depending on their structure and properties. Fabrics made of such wool and worsted will be stretched, and most of the rest will have a pull.
The type of weave is one of the main characteristics of its structure, because it determines the mutual location of threads in the fabric. The warp and weft yarns are woven together on both sides of the fabric and form the front and back sides.
Each thread of the tanda goes over and under one rope in the appropriate order. The area where one system thread overlaps another system thread is called an overlap and is denoted by F. If, on the right side of the fabric during shearing, the warp yarn is placed on top of the hem thread, the hem thread is formed ηF∞, if the hem thread covers the hem thread, the hem thread is formed ηFy .
All types of shearing fabrics consist of warp and weft coverings that are consistently located along the weft and weft directions. The overlay placement sequence repeats after a specified number of threads. The minimum number of threads for which the coating arrangement is repeated is called the shear ratio d and is

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denoted by R. The harvest report consists of the Rt harvest report for the trunk and the Ra harvest report for the safflower.

The number of threads in the warp at which the Rt warp ratio on the warp is repeated, followed by the arrangement of the layers in the direction of the weft. The number of warp threads that repeats the warp ratio Ra after the warp direction of the layers. It is necessary to know the amount of displacement S to draw a shear diagram.

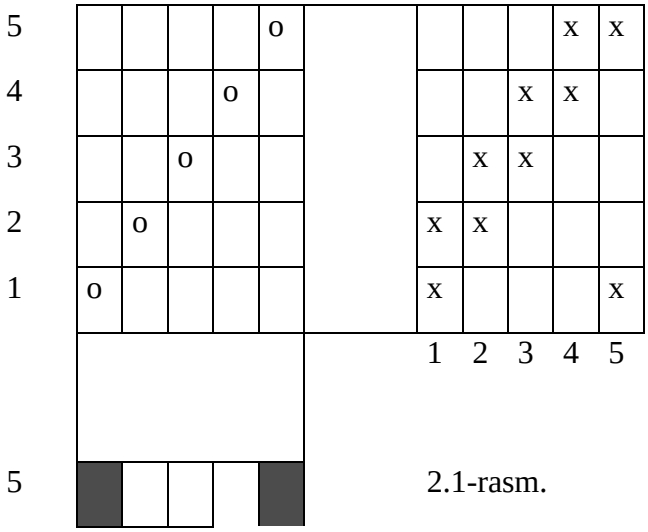
A shift is a number that indicates how many threads the yarn being looked at has moved away from the same weave as the yarn before the single coating. Vertical displacement St and horizontal displacement Sa are different.

St- vertical shift is the shift between the threads of the two threads.

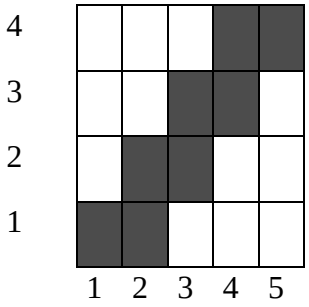
Horizontal shift is the shift-between two warp threads.

So, in order to create a picture of fabric cutting, it is necessary to know the following dimensions: Kt, Ka, St, Sa, ηF∞, ηFy. Each cut type of fabric has structural dimensions that can be determined by fabric sample analysis. All types of mowers are divided into 4 groups according to the size of the structure, the features of the construction and the production:

1. Basic cuts.
2. Cuts with a fine pattern.
3. Complex cuts.
4. Cuts with jacquard or large patterns.



2.1-rasm.



2/3 reinforced

enthronement of sarja picture.

The first argokipi is braided with tanda threads and the 3 tanda cover is composed of 1 aríoí, 1tanda, 1 argoka cover.

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In the second thread, the covers are placed in the same order, but shifted to the right side by 1 thread and so on.

When weaving a reinforced and complex serge weave, the threads of the body are passed through the branches in a row. The number of threads passing through the needle can be different.

The second derivative of Sarja harvesting.

This cutting is obtained on the basis of reinforced or complex sarja. For this purpose, a complete weaving program is created by passing the threads of the base yarn through the branches in a row method. The selected series ratio is set equal to the second derivative series ratio and the necessary cells are prepared for it. In order to make a new cut, the thread of the body is passed through the branches in a way of scattering, and the order of raising the branches is transferred from the basic cut program to the new cut program. The third element, the image of mowing, is determined from the two known elements of the new, i.e., the second derivative of the sarjani, the order of passing the threads of the trunk through the branches and the order of raising the branches.

When making the second derivative of sarjani, the number of threads in the basic warp ratio must be an even number. Figure 42 shows the program for plotting the second derivative of the amplified series.

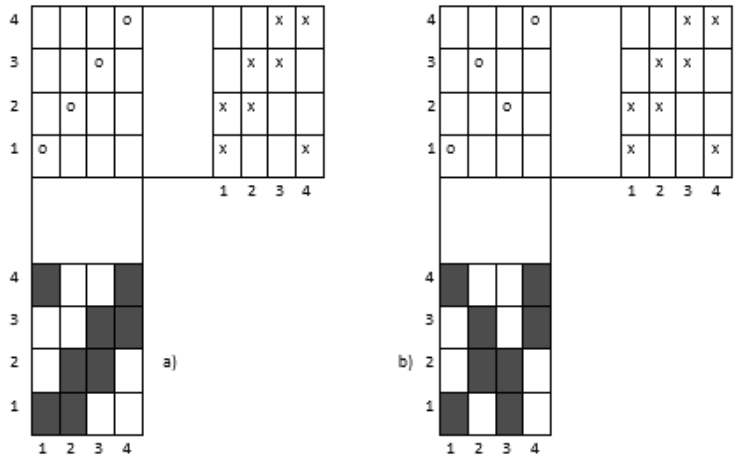
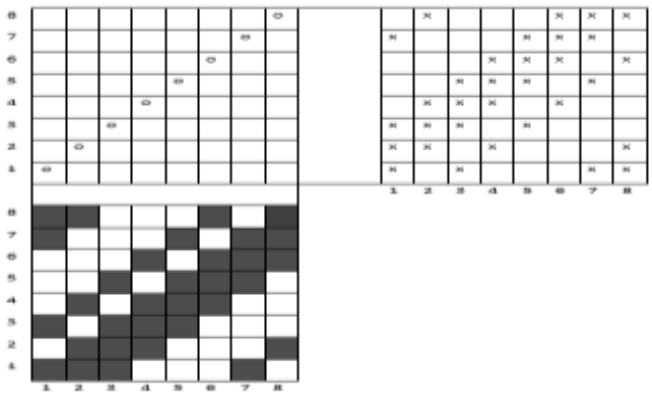


Figure 2.2. Compilation of the second derivative based on S 2/2

a) the program of enthronement of the foundation harvest

b) the second derivative serial cutting program

a program for constructing and plotting the second derivative of a complex series is given.



A)

B)

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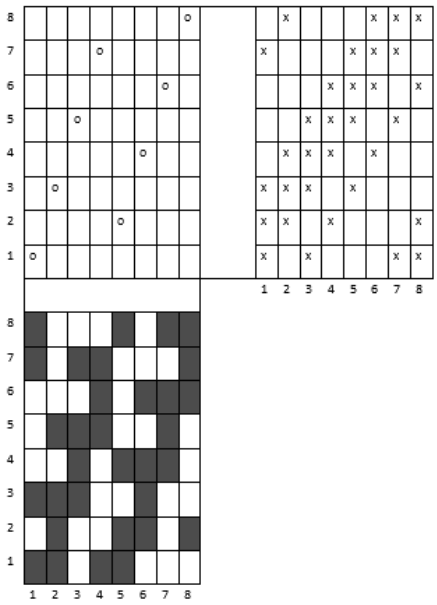

Compiling the second derivative of the complex 3/3 1/1
a) the program of enthronement of the foundation harvest.
b) the second derivative serial cutting program.
To determine the type of fabric cut, the last one should be viewed in an enlarged state and the picture of the cut should be reflected on grid paper. in this case, it should be assumed that the body threads are depicted in vertical rows, and the rope threads are depicted horizontally. Tanda threads should be counted from left to right, and argako threads should be counted from bottom to top. The intersection of vertical and horizontal rows corresponds to the coverings. When depicting a fabric drawing, the skin coverings are crossed out or marked with symbols, and the backs are left uncrossed.
As can be seen from the type of mowing in Fig. 2a
Rt=Ra=2n Ft+ ηFa

$$S_{t=}S_{a=1}$$

And the mowing in Fig. 2b
R Wars =Ra=4= $\eta_{Fa} + 3\eta_{Fa}$ has
For the cut in Fig. 2-v

$$R_t = R_a = 5 = \eta_{Fa} + 4\eta_{Fa}$$
$$S_t = 3 \quad S_a = 2$$

In the existing scientific-educational literature, the third-class cuttings are referred to as complex cuttings. This does not make sense. When an event or thing is called complex? the value of the indicator describing them is connected with the size. The main indicator describing weaving is the number of threads in the rapport. In the third class weaving, for example, weaving a one-and-a-half-layer fabric based on 1/2 sarge, the ratio for the warp is 3, and for the warp is 6. However, in eight-branch satin, the number of threads in the rapport is eight. Therefore, tissues are divided into two groups:
The first group of simple weaves is formed by joining one system of warp and one system of yarns with basic and small pattern weaving.
In the formation of the second group-complex tissues, at least two threads are involved in one thread or two threads in one thread, or two or more system threads are involved in both threads and threads. In the production of such fabrics, the loom can be equipped with two or more weaving spools or a mechanism for throwing off the warp threads of different quality, mechanisms that create feathers on the surface of the fabric, etc. .
Complex fabrics are divided into the following subclasses depending on the structure of the weaving class and the methods of formation on the machine:
-one and a half layers of tissues
- cutting of two layers of tissues

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- cutting of multi-layered tissues
- "Pike" tissue cutting
- mowing of hairy tissues
- openwork weaving with a roll

In the study of weaving of complex fabrics, first of all, how many thread systems and how many warp systems are used in the weaving of this weaving, what kind of weaving is used in the weaving of these threads, he should know what kind of loom can be produced or what kind of additional mechanism or device the loom should be equipped with to get such complex weaves and so on.

Conclusion. From the study of the methods of determining the structure and parameters of fabrics, it was found that its structure affects the surface strength. In the processes of fabric production and exploitation, its main shape, quality, physical and mechanical properties, in addition to the type of weaving, are determined by the structural structure of the thread. Studies have shown that determining air permeability, density, hygroscopic properties in fabrics at the level of demand was based on its shearing and instead on the porosity of the fabric.

Satisfying the demands of consumers and forming affordable fabrics also depends on the quality of raw materials and the parameters of production processes.

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