

Processes and Technology of Yarn Preparation

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Abstract:

In this article, we will talk about yarns and their types, as well as the processes and technologies used to prepare them for knitting. The textile industry is one of the most widespread and well-known crafts in the world since ancient times. Textiles were of great importance in the life of our ancestors, and every family regularly engaged in textiles. Even today, this sacred craft has not lost its importance.

Keywords: tanda, argok yarn, threads, embroiderer, yarn preparation, ready-made fabric.

INTRODUCTION:

Thread is a continuous line composed of textile fibers and having certain mechanical properties, fineness and softness.

The so-called "yarn" is actually a generic term for "yarn" and "yarn". It is usually defined as follows: yarn is a continuous, linear object made of various textile fibers. It is thin, flexible and long, basic properties necessary for textile processing and final product use. In textiles, it is customary to define "threads" and "yarns" separately. That is, the "yarn" brings many short fibers or filaments close to the surface and is twisted along the axial direction to form a layer with a certain strength and power. Density products, "threads" are products made by combining two or more single threads, they are called yarns or yarns.

The word yarn is not common in English sources, nor in the French language from which the term originates. Instead, they use a combination - embroidery thread. But not all threads are suitable for creating embroidered works. The thread itself is a thin thread, wound on a thread or skein, specially prepared for embroidery or other types of needlework. The length of the skein is 8, 10 or 20 meters, depending on the manufacturer. For embroidery, depending on the canvas, the whole scape is used or divided into parts.

MATERIALS AND DISCUSSION:

The assortment of threads on the market solves the problem of choosing the right threads for your hobby. Each manufacturer creates its own shade palette. At first glance, they are the same, but they differ in strength, characteristics of maintaining the original brightness, degree of twisting. DMC, Madeira and Anchor are famous among the world's yarn brands. Russians are represented by Gamma brands, spinning and yarn factory.

Muline is distinguished from thread by narrow specialization, which lies in the numbering system of colors and shades. This is shown in the keys of embroidery patterns. Manufacturers create their

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own color sets with color maps. Universal cards are available to compare colors and match thread numbers of different brands. If the manufacturer of the threads you choose is not listed in the embroidery key, they will be referred to. Craftswomen, when choosing threads, what happens to the embroidery after washing, whether the colors remain the same or disappear, spoil the thing. Such an idea raises doubts about the cheap material for sewing and encourages the purchase of expensive brands. Despite the fact that any thread can lose color, professional embroiderers wash new threads before using them.

In order not to have problems with the choice of thread, you should follow simple rules:

1. Match the color of the thread to the number on the package. The same colors from different batches from the same manufacturer may differ in saturation, which spoils the work done. You should prefer famous or global brands or initially buy material with a margin.
2. Threads should be bright, evenly dyed without damage. Do not spill or store the color after sun exposure. When using for the first time, soak the threads in hot water, press and transfer to a light colored fabric. There should be no trace left.
3. Not only responsible for the result of embroidery, but also the canvas on which the pattern is depicted. If difficulties arise in the initial stages of mastering embroidery, it is worth buying blanks with printed things and the threads that match them.

It is known that the tanda threads are placed parallel to their length in the inner, therefore, before feeding them to the automatic loom. Their length should be increased and wound parallel to each other on a common tanda shaft.

In the process of weaving, the threads should be tight enough so that the threads are closely interwoven and form a fine mesh. In addition, during weaving, the tanda threads face additional tension forces that change frequently. So that such tension does not cause numerous breaks in the body threads during the weaving process, they are tightened.

In the process of weaving, the tanda threads are passed through the eyes of the remiziyas and between the berdo plates so that the tanda and argok threads do not get confused and are cut as necessary. The work of preparing tanda thread is done in the preparation department of the weaving factory. These operations include:

- Re-winding the thread on the body - for this purpose, wrap the thread in the tubes on Babina or on spools with flares. This work is done in wrapping machines. As a result, the length of the thread increases;
- Twining, twine threads are wound from the twine parallel to the twine rollers. This operation is carried out in sorting machines;
- In order to increase the hardness of the yarn, they are passed through a liquid with a chemical substance, and then they are wrapped in weaving looms. Tanda yarn is carded in carding machines. As a result of calendering, the yarn becomes straight, smooth and ripe, as a result, the threads are less broken during the weaving process, and the productivity of the looms increases;
- Passing the thread between the eye of the remiziyas and the berdo plates is carried out on special machines.

Argoq yarn is produced in tubes that fall into the Mokisi of the weaving loom in spinning factories, so it does not undergo a special preparation operation. It is recommended to moisten or emulsify the yarn before weaving so that it is elastic and smooth and does not form loops.

If the tubes in which the yarn is wrapped do not match the Mokisi of the weaving loom, or if the thread is wrapped of poor quality, the thread is re-wound into tubes with a winding machine or automatic machines. Tanda and argoq yarns prepared for the weaving process are given to the weaving department and looms are woven from them. The fabrics are brought to the department, where they are sorted and sent to the flower-pressing factory. In the finishing factories, the fabrics undergo the same operations and become ready-made fabrics.

Spinning is a set of technological processes of producing yarn of a specified thickness and linear density from short and thin fibers. Each or several of these processes are carried out in special equipment.

According to the method of production of threads, they are divided into types spun from fibers and chemically prepared.

According to their structure, yarns are divided into primary and secondary types.

After the primary yarns are produced, they are sent directly for fabric preparation.

Primary yarns are divided into spun, chemically complex, monoyarns, and spun yarns. Spun threads are divided into uniform and mixed threads according to the composition of raw materials. Yarns spun from any type of natural or chemical fibers are called the same yarn, and yarns spun from a mixture of different fibers are called mixed yarns.

Mixed yarns are spun after mixing one of the natural fibers with some type of chemical fiber or different chemical fibers.

CONCLUSION:

In conclusion, the process of preparing threads for knitting is a bit complicated and requires patience and tolerance. In this case, the correct preparation and correct placement of the threads is very important and the most necessary part. In the technological equipment and processes used in the spinning of cotton and chemical fibers, it is accepted to call the sequence of yarn formation from fibers as a spinning system. According to this system, threads of average linear density are spun. Such yarns are used for the production of a wide range of yarn yarns. Also, non-woven fabrics, knitted products, and technical goods are produced from yarns made in the card system.

REFERENCES:

1. Yengil sanoat texnologiyasi, M.M.Azlarova, Toshkent-2019.
2. Textile science, a practical manual, Dr.Deepal Rastogi, 2015.
3. The fashion designer's textile directory. The creative use of fabrics in design, Gail Baugh, 2008.
4. Textile yarns: technology, structure and applications, B.C. Goswami, J.G.Martindale, 2012.