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ANALYSIS OF TECHNOLOGICAL PERFORMANCE OF TAPPET ARK

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ABSTRACT

This article describes some of the technological features of STBU (universal loom). The achievements of scientific development in the world textile industry are widely used, and new techniques and technologies are being introduced. The creation of promising fabrics is especially important in a market economy, given the changing trends in clothing fashion. As the working width of the machine increases to 3 meters and above, it is possible to observe a decrease in the rotational speed of the main shaft. Such decisions are aimed at further development and reform of the textile industry, diversification of production, increasing the production and export of products in accordance with world standards, improving the skills of workers in enterprises, linking the knowledge of students with the production process did.

KEYWORDS: *Cotton Fiber, Wool Fiber, Silk, Pure Chemical Fiber And Mixed Fiber, Flax, Jute Fiber, Complex Yarns, Tappet*

INTRODUCTION

As a result of the growing demand for textile products in the world, the range of textile products in the world market is expanding. The high level of competition in the world market for fabrics, the need for modern looms and high-quality products, as well as the quality and design of our national fabrics are important.

We know that in Uzbekistan, the main focus is on the correct selection of technological processes and the establishment of optimal indicators for the production of textile products and ensuring the competitiveness of products. As a result, measures taken to increase the efficiency of technological processes, the creation of new fabrics, and the introduction of modern equipment improve the quality of fabrics and reduce the cost of production. To this end, the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan dated January 8, 2019 No. 5 "On additional measures to reduce production costs and reduce production costs in industry", February 12, 2019 PP- Resolution No. 4186 "On measures to further deepen the reform of the textile and clothing industry and further expand its export potential" was adopted. Such decisions are aimed at further development and reform of the textile industry, diversification of production,

increasing the production and export of products in accordance with world standards, improving the skills of workers in enterprises, linking the knowledge of students with the production process did **[1,2]**

In the world practice there is a lot of scientific research on the preparation of yarns for weaving, the development of new techniques and technologies for the development of normative technological parameters of the weaving process. V.A. Gordeev, E.D. Efremov, P.V. Vlasov, S.D. S.Adanur, Y.Gloy, W.Renkens, M.Herty, E.Sh.Alimbaev, BKKhasanov, OAAkhunboboyev and other scientists have conducted research and made a worthy contribution to the development of science.

The achievements of scientific development in the world textile industry are widely used, and new techniques and technologies are being introduced. Machines and equipment used in advanced weaving technology are equipped with computers and the process is controlled automatically.

Equipment of a number of foreign companies is widely used in Uzbek textile enterprises. In the field of spinning, Rieter, Trutchler, Marzoli, Italy's Somet and Vamatex, Belgium's Picanol, Switzerland's Zulser, Russia's STBU, Zulser-Ruti. »Modern equipment of the company.

The efficiency of textile production depends not only on the modernity of the equipment installed at the enterprise, their high efficiency, but also on the diversity of the range of products produced by the enterprise. The creation of promising fabrics is especially important in a market economy, given the changing trends in clothing fashion. One of the main factors in increasing the export potential of the textile industry in our country is the full use of the range of new equipment and machinery installed at our enterprises.

There is a huge disparity in the range of fabrics produced by our enterprises in the range of fabrics listed in the existing normative literature - reference books [**3,4].** The new equipment is currently mainly used for the production of raw fabrics. However, modern machines are characterized by high assortment capacity, the rate of transition from one type of assortment to another, the width of the working width.

Assortment capabilities of the advanced STBU (universal multi-spindle loom) looms under the Swiss license "Zulser" installed in most weaving enterprises were studied and analyzed. STBU looms are designed for the production of everything from simple household fabrics to large knitted fabrics.

Also, single-color, multi-color, single-layer and multi-layer surface density from cotton fiber, wool fiber, silk, pure chemical fiber and mixed fiber, linen, jute fiber, complex yarns, polypropylene and polyethylene tape or monoip. Capable of producing up to 300g / sq.m.

In addition, there are specially manufactured types of STBU type looms, including STBM or STBUM - for the production of soft fabrics, STBT or STBUT - for the production of technical fabrics, STBD or STBUD - filling coefficient 1.3 STBU-SHN is designed for the production of smooth or crepe fabrics from natural silk and artificial, synthetic yarns for the production of fabrics with a density of up to 450 g / m.

The results are given in Table 1.

TABLE 1 SOME TECHNOLOGICAL PARAMETERS OF STBU TYPE LOOMS

№	Indicators	Working width up to 2 m	Working width 3 m each	Working with greater than 3 m
1.	Workbench width of the workshop	180; 190	220; 250; 280	330; 360; 390
2.	Main shaft rotation speed, rpm	360; 350	325; 310	300;285; 270
3.	Linear density of body threads, tex -wool and wool blended yarns -cotton and cotton blended yarns -silk and chemical yarns -lub fiber yarns	15,6-330 5,9-330 2,2-100 16,7-110	15,6-330 5,9-330 2,2-100 16,7-110	15,6-330 5,9-330 2,2-100 16,7-110

As can be seen from Table 1, it has a working sleeve of 180 cm to 390 cm, which allows the production of the most common width fabrics in our domestic markets today. In addition, high-width (over 2.5 m) fabrics have production conditions. The speed of the main shaft ranges from 270 rpm to 360 rpm, and the working width is 350-360 rpm on machines up to 2 meters wide. As the working width of the machine increases to 3 meters and above, it is possible to observe a decrease in the rotational speed of the main shaft. With the installation of a two- or four-color mechanism on the machine, the rotation speed of the machine's main shaft is reduced by 5-15%.

STBU type weaving looms are designed to work with a wide range of yarns, with a linear density of 15.6-330 teks of wool and woolen yarns, up to 5.9-330 teks of cotton and cotton blends, 2 , 2-100 teks of silk and chemical yarns, 16.7-110 teks of lub fiber yarns. Depending on the linear density of the yarn in the fabric, it can provide a density of 3.6-180 yarns / cm on the yarn, which allows the production of a wide range of fabrics.

Equipped with a knitting machine, this type of loom works with up to 14 skeins. Shoda lifting carts are electronically controlled, allowing up to 18 shods to weave a wide range of fabrics with a report on the back up to 8,000. Equipped with a multi-colored mechanism that provides up to 4 types of back yarn, it allows you to throw back yarns of different linear densities, different colors and textures, with different twisting directions or properties.

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