

EUROPEAN INTERNATIONAL JOURNAL OF MULTIDISCIPLINARY RESEARCH AND MANAGEMENT STUDIES ISSN: 2750-8587 DOI: https://doi.org/10.55640/eijmrms-02-05-10 https://eipublication.com/index.php/eijmrms Volume: 02 Issue: 05 May 2022 Published Date:- 17-05-2022



IMPROVING THE TRANSMISSION UNITS OF SPINNING SHOP MACHINES

Toshtemirov Q.A.

Assistant, Fergana Polytechnic Institute, Fergana, Uzbekistan

Sultonov.S.T.

Assistant, Fergana Polytechnic Institute, Fergana, Uzbekistan

ABSTRACT: - The purpose of the transfer process is to improve the quality of the units by accurately transmitting the movement of the nodes in the spinning of fibres, reducing the cost of production, increasing productivity, and extending the life of the equipment. The essence of extending the operating time of the equipment is to increase the speed of movement of the spinning fibres' efficient use of time and labour in their production.

KEYWORDS: Reducing the cost of production, increasing productivity, and extending the life of the equipment.

INTRODUCTION

High supplement on the basis of deep processing of raw cotton in the country production of finished textile and light industry products of value development, for the domestic and foreign market on the basis of modernization of the ginning industry. Improving the quality and quantity of cotton products, their special emphasis is placed on ensuring competitiveness. Including in 2017-2021 [1-7]. In the Strategy of Actions for the Further Development of the Republic of Uzbekistan, "Nationalincrease the competitiveness of the economy, the consumption of energy and resources in the economy reduction, the widespread introduction of energy-saving technologies in production defined in [1-5].

THE MAIN PART

Spinning in the cotton industry to ensure the fulfilment of these tasks the spinning process

"IMPROVING THE TRANSMISSION UNITS OF SPINNING SHOP MACHINES"

is based on the rational control of the rotational speed of the working cylinder of the machine it is important to create and introduce effective technology and tools into production [8-12]. Most of the machines used in the main technological textile enterprises of the spinning mills are designed to transmit movements through belt drives, and their designs vary. They are arranged mainly according to the transmitted motion, ie high speed medium and low-speed transmission. Their construction is as follows.

- Straps with a recessed single belt.
- Double-belt slings with the deepened surface.
- Multi-belt slotted recesses.
- Flat surface with wide strap.
- Transverse gears and toothed belt pulleys, etc.

The drive belts in the spinning shop are mainly used with pulleys of two different constructions, first of all, the movements are transmitted through the pulley with a deepened surface, ie thin belts. In the second place, the movement is transmitted by a single wide belt drive with wide, flat-drum pulleys [14-19]. In the transmission of these movements must be a high-precision motion transmitter, so the belt drive must be selected with a high-efficiency coefficient. and high-precision operation of the units, ensures the production of quality products, in addition to high productivity, saving raw materials, electricity and long-term operation of equipment [20-23]. Advantages and disadvantages of skiffs.

1. The advantages of the transmission with a deepened pulley are mainly due to the ease of repair work, low cost, etc. rapidly decomposing as a result of overheating and drying as a result of high-speed operation. Erosion causes the shaft to vibrate and reduce movement, and the shape of the belt

is triangular, so the friction increases, causing the belt to overheat and the belt to rotate. As a result of overheating, the belt expands and the transmission is reduced by 6-7%, which disrupts the technological process and reduces the quality of the product. 2. The disadvantage of a flat-surface wide-belt transmission is that it costs more and is more expensive. Its advantages are its wide surface and the width of the belt, which does not heat up, is easy to balance, and as a result of the placement of bearings on both sides, they transmit the movement to 96% accuracy and a certain standard, which allows the process to run smoothly. provides. As a result of the accurate transmission of the movement, the quality of the product will be higher, there will be no additional costs and the product will be cheaper. Therefore, we recommend the use of pulley extensions in the weaving industry, which use a more wide belt with a flat surface.

Balancing the shelves is one of the most important processes to ensure the correct and accurate transmission of the technological process. Scythians must first take into account the strength of the material from which they are made, and their geometry must be taken into account when casting or stamping at the factory, otherwise, their rotation will not provide a standard of movement and may lead to product quality deterioration.

CONCLUSION

When used in the manufacture of equipment, it is possible to increase the quality of the yarn, increase labour productivity and the time of acceleration of raw materials and the use of labour by 7-8%, which will increase the working time of the units increases. Currently, this equipment is used in the technological production of the Tashkent textile group.

"IMPROVING THE TRANSMISSION UNITS OF SPINNING SHOP MACHINES"

REFERENCES

- **1.** Badalov K.I. (1989). Pryadenie khlopka i drugix tekstilnix volokon. Moscow.
- 2. Borzunov I.G. «Pradenie xlopka i ximicheskix volokon», Ch.I 1981.
- **3.** Ivanov S. and dr. (1978). Technical control in xlopkopryadenii».
- **4.** Marasulov Sh.R. (1985). Spinning of cotton and man-made fibres. Part I. In the Uzbek.
- 5. Pavlov Yu.V. and dr. (2000). Theory of processes, technology and equipment for the application of cotton wool and chemicals volokon. M.
- Esonzoda, S., Khalikova, Z., & Ibragimov, A. (2021). Determination of moisture and temperature of cotton from the drying drum with the IT. International Engineering Journal For Research & Development, 6(3), 7-7.
- Odilzhanovich, T. K., Makhmudovna, N. M., & Odilzhanovich, I. A. (2021). The selection of the control parameter of the raw cotton electric sorter. Innovative Technologica: Methodical Research Journal, 2(11), 1-5.
- Shakhnoza, U., Mirpolat, K., Khasan, A., Rustam, A., Tulkin, O., & Islombek, N. (2021). Change of Quality Indicators of Fabric Fabrics. Annals of the Romanian Society for Cell Biology, 25(6), 2869-2874.
- NuraliQudratovich, S., AbdurahmonMuzaffarovich, E., & UlugbekTolibjonogli, T. (2020). To study the main factors influencing fiber quality in the process of sawdust separation and their interdependence. European Journal of Molecular & Clinical Medicine, 7(07), 2020.
- Oripov, N., Komilov, J., Xolikova, Z., & Toshmirzaevk, O. Research on the Introduction of a Double-faced Improved Cotton Separator.

International Journal of Innovations in Engineering Research and Technology, 7(12), 105-110.

- 11. Isaev, S. S., Yu, E., Oripov, N., & Xakimov, I. Study of the Effect on the Natural Characteristics of Fibre in the Process of Application of Cotton Processing Technology. International Journal of Innovations in Engineering Research and Technology, 7(12), 111-116.
- Toshtemirov, Q. A., & Oripov, N. M. (2021). Improvement of ring spinning machine stretching equipment. Innovative Technologica: Methodical Research Journal, 2(10), 61-66.
- Odilzhanovich, T. K., Odilzhanovich, I. A., & Makhmudovna, N. M. (2021). Analysis of FLUFF in the Process of Lintering of Seeds. Central Asian journal of theoretical & applied sciences, 2(11), 26-28.
- Abdulhayevich, T. Q. (2021). Analysis of runners and spinners used in spinning machines. Innovative Technologica: Methodical Research Journal, 2(10), 34-37.
- Nabiyev, Q. Q., Yaqubov, N. J., & Toshtemirov, K. A. (2020). Innovative technology in the production of clothing from natural fibers. ACADEMICIA: An International Multidisciplinary Research Journal, 10(11), 1186-1191.
- Бекмирзаев, Ш., Саидмахамадов, Н., 16. Убайдуллаев, & M. (2016). Получения В Песчано-Литье Глинистые Методом. Теория И практика современной науки, (6-1), 112-115.
- 17. Sharipjanovich, S. O., Umarali og, T. D., & Qizi, B. M. N. (2021). Current State And Analysis Of Equipment For Cleaning And Selection Of Seeds. International Journal of Progressive

"IMPROVING THE TRANSMISSION UNITS OF SPINNING SHOP MACHINES"

Sciences and Technologies, 29(2), 337-342.

- Ergashev, Y., Xusanova, S., & Axmadjonov, D. (2022). Analysis of the fiber quality of cotton varieties grown by region. Gospodarka i Innowacje., 21, 242-244.
- 19. Каримов, Н. М., Абдусаттаров, Б. К., Махмудова, Г., & Саримсаков, О. Ш. (2021). Пневматическая транспортировка хлопка-сырца на хлопкозаводах. In Инновационные Подходы В Современной Науке (pp. 61-70).
- 20. Сидиков, А. Х., Махмудова, Г., Каримов, А. И., & Саримсаков, О. Ш. (2021). Изучение движения частиц хлопка и тяжёлых примесей в рабочей камере пневматического очистителя. Universum: технические науки, (2-2 (83)).
- 21. Sharifjanovich, S. O. (2021, November). The Velocity Distribution over the Cross Section Pipes of Pneumatic Transport Installations Cotton. In International Conference On Multidisciplinary Research And Innovative Technologies (Vol. 2, pp. 29-34).
- Zikirov, M. C., Qosimova, S. F., & Qosimov, L. M. (2021). Direction of modern design activities. Asian Journal of Multidimensional Research (AJMR), 10(2), 11-18.
- 23. Mo'minovich, U. M. (2021). The Importance Of Planting And Processing Of Medium-Field Cotton Varieties Between Cotton Rows In Fergana Region. The American Journal of Agriculture and Biomedical Engineering, 3(09), 26-29.