STATE OF ENERGY CONSUMPTION OF TEXTILE INDUSTRY ENTERPRISES TODAY

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The textile industry consists of three main industries, varying significantly in energy intensity, including spinning, weaving and finishing. Compared to other shops, spinning equipment consumes the most electricity. Therefore, it is necessary to constantly develop and implement measures to save energy and improve the efficiency of spinning shops. It is necessary to use modern energy-saving textile equipment, as well as to improve technological processes in accordance with modern requirements. Widespread introduction of combined technological processes of dyeing and finishing in the textile industry, the use of low-waste technologies, the use of pigment dyes, as well as new methods of thermal printing, the introduction of infrared heaters, moisture control and drying processes. issues of achieving energy saving through the utilization of exhaust air were discussed.

Key words: light industry, textile industry, energy efficiency, spinning, weaving and finishing production, energy resources, electricity, thermal energy, technological processes, energy saving.

The main tasks of industrial enterprises, including a textile industrial enterprise, are to improve technological and manufacturing processes, improve the performance of basic technological equipment, and minimize the consumption of energy resources [1].

In the textile industry, which produces various types of gases, the most energy-efficient department is the production of cotton and silk gases, which consumes more than 64% of the electricity generated by this industry and more than 53% of thermal energy [2].

In textile industry enterprises, systematic efforts are being made to reduce the cost of fuel and energy resources per product unit and to introduce a saving regime. The main energy resources of these enterprises are the following:

- technology (equipment, parchment);
- ventilation (ventilation system);
- isitish;
- yoritish;
- yordamchi ehtiyojlar (3-jadval).

3-jadval

Departments of textile industry companies that consume basic energy resources

Basic consumers whose energy resources are consumed	Share of total energy resource consumption, %	
	Electricity	Thermal energy
Technology (including mechanization)	60,0	70,0
Including electrical technology	2,0	-
Isitish ventilyatsiya	13,9	28,5
Yoritish	14,3	-
Yordamchi ehtiyojlar	8,8	1,5

The data presented in Table 3 shows that the main energy resource-consuming part of textile industry enterprises corresponds to this technology.

This technology, in turn, includes the production of all types of gases, the collection, weaving, and parchment of three main networks that differ significantly from each other according to energy insurance. For example, in the mining industry, the share of energy consumption by these industries is cited (Figure 3-4).

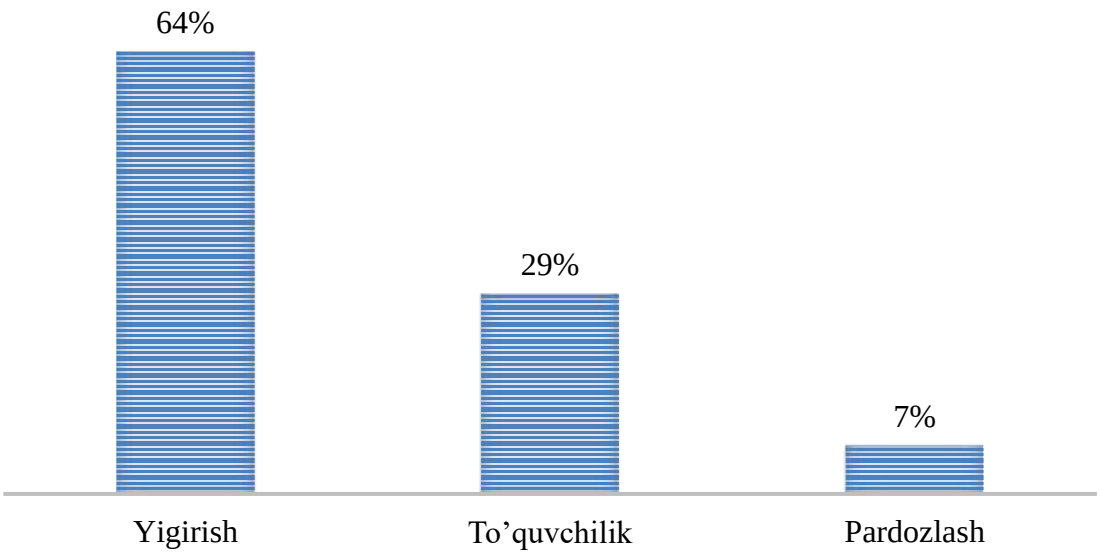

Figure 3. Consumption of electricity in mining industries taqsimlanishi (%) [2].

When analyzing the data presented in Figure 3-4, the thread collection department in the textile industry is a department that requires a lot of electricity and heat enebia. Therefore, the largest reserves of energy resource savings are in the electricity collection and weaving industry, and heat energy is directed to the parchment industry [2].

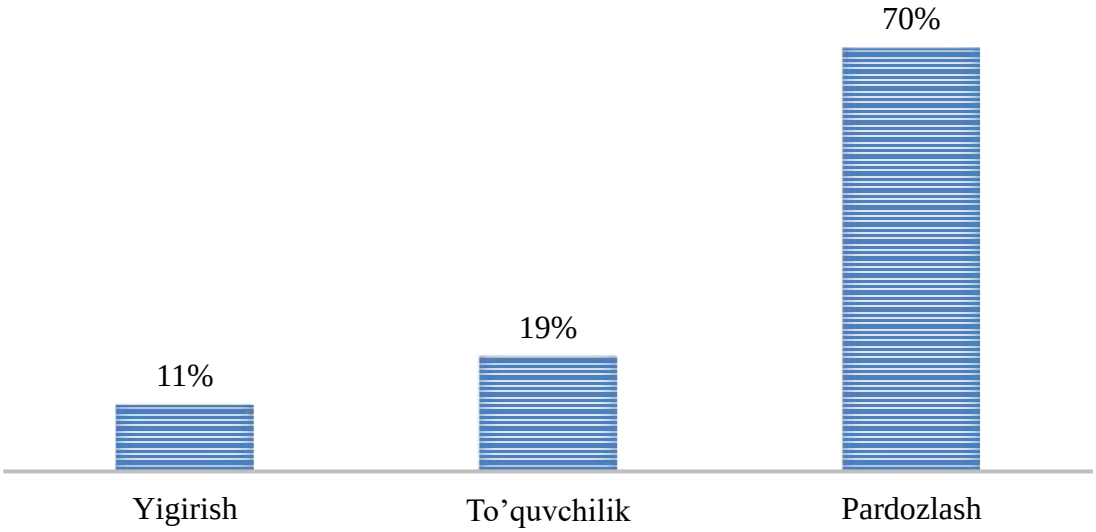

Figure 4. Consumption of heat energy in mining industries taqsimlanishi (%) [2].

The most promising ways to reduce comparative consumption of electricity in the assembly industry include:

- creation and modernization of technological equipment on the basis of a new design in principle;
- texnologik o'tishlarni qisqartirish;
- apply the optimal loading parameters of equipment;
- introduction of high-speed pneumatic machines;
- Installation of light sources with high efficiency [3].

Figure 4, on the other hand, shows that heat energy is more lined up than other networks for painting and parchment.

In the painting and parchment industry, a lot of hot water is spent, so special attention should be paid to the methods of excessive heat use. Energy savings can be achieved by the widespread introduction of combined technological processes, the use of low-waste technologies, the use of pigment dyes, as well as new methods of thermal printing, the introduction of infrared heaters, the utilization of air used in humidity control and drying processes.

Energy savings in general depends on the direction of use of secondary energy resources and the energy supply scheme of the textile companies used. Directions for the use of energy resources include fuel, electricity and combined efficiency.

The complexity of analyzing energy consumption regimes and calculating energy indicators lies in the specific features of the textile industry.

The main characteristics of textile production include:

- multi-stage production;
- periodic interruptions in the work of machines to remove collected products;
- breaks at work to eliminate iPs disruption.

In the textile industry, the rational use of electricity is determined in many ways by technological factors, as it helps to reduce production costs while increasing production, improving quality and reducing energy consumption. It should be carried out in the direction of identification of reserves of saving electricity and heat energy in enterprises and associations, reducing losses in power and heating networks, rationalizing technological processes, introducing new technology and modernizing existing equipment, and making full use of low-potential energy. It is also necessary to work to improve control over the rational consumption of electricity and heat energy [4].

In conclusion, in order to reduce energy consumption in textile industrial enterprises, you do not always have to take complex technical measures, in some cases it is necessary to turn off only the light on time, adhere to the simple regime of electricity use, as well as eliminate the salt processing regimes of the equipment. This, in turn, means the need for the perfect exclation of savings reserves in each enterprise.

In textile industrial enterprises, the use of electricity wisely is determined primarily by technological factors. This leads to an increase in production, an improvement in product quality and a decrease in identification, and at the same time a decrease in demand for electricity.

Adabiyotlar

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