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ECONOMIC EFFICIENCY IN THE PRODUCTION OF WEFT ELASTIC KNITWEAR

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ABSTRACT

In this work, the object of development and research was knitted fabrics of new structures. By introducing them into production, it is possible to organize the release of new assortments of consumer consumption. The use of the proposed technical solutions as fabricated canvases leads to the achievement of an economic effect by reducing the consumption of raw materials.

KEY WORDS: ***production efficiency, economic efficiency, profit, raw material costs, material costs, comparative economic effect.***

I.INTRODUCTION

Production efficiency is a fundamental issue in the functioning of any enterprise. It expresses not only the quantity, but also the quality of management and reflects the ratio between the costs of materialized and living labor and the labor received [1].

You should see the difference in terms of effect, efficiency, socio-economic efficiency.

The effect is a positive result of an enterprise's activities, associated with an absolute increase in the volume of products, profit or income, a decrease in the cost of production, the elimination or reduction of the production of low-quality products. These achievements in kind characterize the production effect, and in monetary form - economic.

Efficiency is a value that characterizes, first of all, the quality side of the enterprise. It is a derivative of the "effect" category and is more complex and complex in comparison with the latter.

Economic efficiency - characterizes the economic feasibility of the decisions made and in all cases is defined as the ratio of the effect to the costs (production resources) associated with the achievement of this effect. The lower the costs (without sacrificing product quality), the greater the effect, and hence the economic efficiency.

Increasing production efficiency is an important requirement of the times and of the market economy. Efficiency reflects the viability and economic sustainability of any enterprise.

For an enterprise in the knitwear industry, the problem of increasing efficiency is also of particular importance, since the main task facing the enterprises of the industry is the release of competitive products.

The competitiveness of products is mainly influenced by two factors:

- Introduction of resource-saving technology and cost reduction
  products;
- Improvement of quality indicators.

Increasing production efficiency is the most important component of the republic's economic policy in a market economy.

Profit, in a market economy, is the most important economic category and the main goal of any commercial organization. The main part of the profit of the enterprise is received from the sale of manufactured products. - one of the main indicators in assessing the results of production activities of the enterprise. This is due to the fact that the amount of profit should reflect the correspondence of the individual costs of the enterprise associated with the production and sale of all products, acting in the form of cost, socially necessary costs, the indirect expression of which is the price of the product.

The work of enterprises in the context of the transition to a market economy and the global crisis is associated with an increase in the stimulating role of profit and the competitiveness of products. The use of profit as the main estimated indicator contributes to an increase in the volume of

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production and sales of products, improving its quality, and improving the use of available production resources.

Thus, profit plays a decisive role in stimulating a further increase in production efficiency, increasing the material interest of workers in achieving high results of the enterprise.

Further improvement in the use of material resources ensures an increase in output and a decrease in production costs, an increase in profits and profitability of the enterprise, and ultimately the production of work.

The knitwear industry is characterized by a high proportion of the costs of raw materials and basic materials in the cost of their products, since their products are very labor intensive.

II. METHOD OF EXPERIMENT

At some enterprises, the cost of raw materials reaches 80 - 90% of the cost of manufactured products. The systematic reduction of material costs is a source of lowering the cost of manufactured products and improving the main performance indicators of these enterprises.

During the study of this work [2] knitted fabrics of new structures were developed.

We have developed seven new versions of knitted fabrics of weft elastic weaves based on the basic weaves eraser 1 + 1, eraser 1 + 2, eraser 1 + 3, partial eraser with one needle off through two working on the front needle bed and with two needles off through two working needles. on the front needle bed [3]. The experiments carried out on the indicators of technological parameters of new weft knitted fabrics gave the following results:

Table 1
Technological parameters of the produced canvases

Variants №	Type and number of yarn of		Surface density, g / m²
	soil	weft thread	
1	ПАН (№32x2x2)	-	1295,2
2	ПАН (№32x2x2)	ПАН (№32x2x1)	1135
3	ПАН (№32x2x2)	ПАН (№32x2x2)	880
4	ПАН (№32x2x2)	ПАН (№32x2x3)	1245
5	ПАН (№32x2x2)	ПАН (№32x2x4)	1255
6	ПАН (№32x2x2)	-	1190
7	ПАН (№32x2x2)	ПАН (№32x2x2)	1093,5
8	ПАН (№32x2x2)	-	993,5
9	ПАН (№32x2x2)	ПАН (№32x2x2)	1060
10	ПАН (№32x2x2)	-	1005
11	ПАН (№32x2x2)	ПАН (№32x2x2)	1243,5
12	ПАН (№32x2x2)	-	945
13	ПАН (№32x2x2)	ПАН (№32x2x2)	965

III. EXPERIMENTAL RESULTS

Based on these results, the expected economic effect of the production of weft knitwear according to options № 2, 3, 4, 5 in comparison with option № 1 can be calculated in the following order:

The weight of one jersey for the children's assortment is 1040 grams. then from 1 ton you can make 1000: 1.04 = 962 pieces of jerseys. According to option № 2 the surface density of the web is 1135 g / m2, according to option № 3 880 g / m2, according to option № 4 1245 g / m2 and according to option № 5 1255 g / m2. This means that for the production of products according to option № 2, 3, 4, 5 less raw materials will be required compared to option № 1:

1295,2: 1135 = 1,14
1295,2: 880 = 1,47
1295,2: 1245 = 1,04
1295,2: 1255 = 1,03

In this case, according to option № 2, you can get 134 pieces, according to option № 3, you can get 451 pieces, according to option № 4, you can get 38 pieces, according to option № 5, you can get an additional 28 pieces of jersey, which is more, compared to option № 1.

Production volume:
by option №1 1000: 1,04 = 962 pcs.

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by option №2 1000: (1,04 • 1,14) = 1096 pcs.
by option №3 1000: (1,04 • 1,47) = 1413,5 pcs.
by option №4 1000: (1,04 • 1,04) = 1000 pcs.
by option №5 1000: (1,04 • 1,03) = 990 pcs.

Δ1= 1096 – 962 = 134 pcs.
Δ2= 1413,5 – 962 = 451 pcs.
Δ3= 1000 – 962 = 38 pcs.
Δ4= 990 – 962 = 28 pcs.

Calculations show that according to the new options, more products can be obtained from 1 ton of raw materials compared to the basic option. If the contractual retail price of a unit of production is 90,000 soums, then with the production of 1 ton of linen according to options № 2, 3, 4, 5, you can get an additional effect due to the receipt of an additional volume of production in the amount of:

by option №2 134 • 90000 = 12060000 сум.
by option №3 451 • 90000 = 405900000 сум.
by option №4 38• 90000 = 3420000 сум.
by option №5 28 • 90000 = 2520000 сум.

The economic effect of the production of weft knitwear according to option № 7 in comparison with option № 6 will be in the following order:

The weight of one jersey for the children's assortment here is 950 grams. 1000 can be made from 1 ton: 0.95 = 1053 pieces of jerseys. According to option № 7, the surface density of the web is 1093.5 g / m2. To produce products according to option № 7, 1.09 times less raw materials will be required compared to option № 6:

1190 : 1093,5 = 1,09

Then, according to option № 7, you can get 95 pieces more knitwear in comparison with option № 6.

Production volume:
according to option № 6 1000: 0.95 = 1053 pcs.
according to option № 7 1000: (0.95 • 1.09) = 1148 pcs.

Δ5 = 1148 - 1053 = 95 pcs.

And here the calculations show that according to the new option № 7, more products can be obtained from 1 ton of raw materials compared to the basic option № 6. When producing 1 ton of linen according to option № 7, you can get an additional effect due to the receipt of an additional volume of products in the amount of:

by option №7 95 • 90000 = 8550000 сум.

When products are manufactured by options № 9, 11, 13, the economic effect is not observed in comparison with the basic weaves № 8, 10, 12, but their new properties make it possible to obtain a new assortment of knitwear with an unusual appearance.

Table 2
Comparative economic effect of the production of knitted products from 1 ton of knitted fabric

Variants №	Indicators				
	Surface density, g / m²	Consumption of raw materials per unit of product, g	Volume of products, pieces	Price of one product, sum	Comparative economic effect due to saving raw materials, soums
1	1295,2	1040	962617	90000	basic weave
2	1135	908	1096	90000	12060000
3	880	704	1413,5	90000	405900000
4	1245	996	1000	90000	3420000
5	1255	1004	990	90000	2520000
6	1190	952	1053	90000	basic weave
7	1093,5	875	1148	90000	8550000
8	993,5	795	1258	90000	7110000
9	1060	848	1179	90000	basic weave
10	1005	804	1244	90000	21510000
11	1243,5	995	1005	90000	basic weave
12	945	756	1323	90000	2520000
13	965	772	1295	90000	basic weave

The raw material base is well developed in our republic, but the saving of raw materials leads to an increase in consumer goods.

IV. CONCLUSIONS

1. New types of knitted weaves have been developed on the basis of the introduction of weft threads into the basic weaves in various quantitative additions.

2. The technological parameters of the worked-out weaves were investigated.

3. Based on the technological parameters of the worked out weaves, an analysis of the comparative economic effect of the production of knitted products from 1 ton of knitted fabric is made.

REFERENCES

1. *Makhmudov E.Kh. Enterprise economy. Publishing house of the Literary Fund of the Union of Writers of Uzbekistan, (Textbook), T., 2004*
2. *Умарова М.Н., Турахужаева Н.Н. Изучение влияния структуры трикотажного полотна на его свойства // Universum: технические науки : электрон. научн. журн. 2020. № 2 (71). URL: https://7universum.com/ru/tech/archive/item/8922*
3. *Umarova M. N., Turahujayeva N. N. Research Of Technological Parameters Of Weft Elastic Weaves., International Journal of Advanced Research in Science, Engineering and Technology. Vol. 7, Issue 9 , September 2020 URL: http://www.ijarset.com/*