

UDC 657.15(100)

DOI <https://doi.org/10.26661/2414-0287-2022-4-56-06>

## FEATURES OF ACCOUNTING PROCESSES AT AGRICULTURAL ENTERPRISES FROM PRODUCTION INVENTORIES

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### Key words:

production stocks,  
classification of stocks,  
accounting registers,  
agricultural enterprise, stocks

The article is devoted to the accounting of production stocks, without the existence of which a production enterprise cannot be effective. Therefore, properly organized accounting and document management is the key to profitable production and efficient use of stocks. Properly organized accounting of production stocks is an information base for making operational management decisions, on issues of production activity, effective management of available production resources.

## ОСОБЛИВОСТІ ОБЛІКОВИХ ПРОЦЕСІВ НА СІЛЬСЬКОГОСПОДАРСЬКИХ ПІДПРИЄМСТВАХ З ВИРОБНИЧИХ ЗАПАСІВ

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### Ключові слова:

виробничі запаси,  
класифікації запасів,  
облікові реєстри,  
сільськогосподарське  
підприємство, запаси

Стаття присвячена обліку виробничих запасів, без існування яких виробниче підприємство не може бути дієздатним. Тому правильно організований облік та документообіг є запорукою рентабельного виробництва та ефективного використання запасів. Належним чином організований облік виробничих запасів є інформаційною базою для прийняття оперативних управлінських рішень, з питань виробничої діяльності, ефективного управління наявними виробничими ресурсами.

### Formulation of the problem

No enterprise can do without the use of production stocks in its economic activity. Reserves are one of the most important factors in ensuring stability and continuity of reproduction. This important role is played by all the constituent parts of the total material stock, including goods and material values located in the enterprise.

Continuity of production requires the constant availability of raw materials and materials to fully satisfy production needs at any time of their use. Control over this ensures correct and timely inventory accounting. The study of inventory accounting is of great key importance for effective financial management.

This may indicate that enterprises are experiencing difficulties with the sale of their products, which in turn may be due to low quality products, violation of production technology and the choice of inefficient sales methods. Violation of the optimal level of production stocks leads to losses in the company's activities, as it increases the costs of storing these stocks, diverts liquid funds from circulation, increases the risk of depreciation of goods and a decrease in their consumer qualities, leads to the loss of customers. Thus, every accountant is inevitably faced with the need to reflect in the accounting operations with production stocks, their comprehensive study and correct

understanding of the essence of stocks of goods and material values, their meaning and role in the economy of enterprises, is one of the most important problems of economy and rational use of material values in production, setting tasks for improving production technologies.

### Analysis of latest research and publications

The theoretical provisions and practical aspects of inventory accounting are substantiated in the works of F.F. Butynets, P.S. Bezrukikh, S.F. Holova, V.I. Yefimenko, A.M. Kovalenko, V.M. Kostyuchenko, M.V.

Among foreign scientists, the issue of inventory accounting was reflected in the works of E. Britton, K. Waterson, I.A. Blank, I.A. Bondarev, G. Mus, R. Hansmann, Richard D. Invin, Inc., V.J. Stevenson, R.Z. Chase, N.J. Equiline, R.F. Jacobs and other researchers.

### Formulation of the purposes of the article

The main tasks of the research are:

- generalization of the current mechanism for documenting operations on receipt and disposal of production stocks;
- investigate the relationship between the quality management of accounting processes and the effective use of production stocks in the course of the agricultural enterprise.

**Outline of the main material of the research**

The accounting of production stocks at the enterprise is important in the process of formation of the production cost. Taking into account the fact that the cost of production makes up more than 60% of the production cost, therefore their accounting and documentation occupy an important place in the accounting process at the enterprise. Determining a sufficient number of production stocks will allow to optimize the indirect costs of their storage. In order to improve the efficiency of production inventory accounting, systematic measures are being taken to establish warehouse and production accounting for individual types of production inventory. To systematize warehouse accounting, each group is subject to coding and fixing the appropriate label [44]. In the process of organizing production stock accounting, responsible persons are divided into 2 groups, which are responsible for the reliability of accounting information:

1. Materially responsible persons who are responsible for the preservation and transportation of stocks.

2. Officials who have the right to sign primary stock circulation documents.

The main documents used in accounting for production stocks of PTAHOFABRYKA «ZARICHNA» LLC

according to the classification features are listed in Table 1.

A large number of primary documents to be processed require a systematic and structured approach to document flow from various structural units. Such a systematic approach is prescribed in the order for the enterprise, which specifies the terms of processing primary documents and the list of responsible persons [1]. In the process of analyzing the documentation process, a document flow scheme for displaying production stocks was developed, which is presented in Figure 1.

The process of processing primary documents can be grouped as follows:

1. Posting of production stocks, the basis of which is a consignment note, an invoice, an act of acceptance of materials, a revenue order of standard form No. M-4.

2. Write-off, based on the goods and transport invoice [1].

In the case of actual receipt and the data of the primary documents, an act of acceptance of materials (form No. M-7) is drawn up in two copies. One is for internal use, and the other to the supplier, to settle disputed issues, is recorded in the «Other data» line. To record the movement of production stocks, a material warehouse accounting card (form No. M-12) is maintained by the materially

Table 1 – Classification of documents used in accounting for production stocks at PTAHOFABRYKA «ZARICHNA» LLC

Name of the document	Classification sign			
	by appointment	in order of assembly	according to the method of displaying operations	at the place of assembly
Bill of lading	justifiable (executive)	primary	one time	external
Material report	justifiable (executive)	primary	one time	external
Invoice	manager	primary	one time	external
Act of acceptance	justifiable (executive)	primary	accumulative	internal
Limit withdrawal card	combined	primary	accumulative	internal
Profit order	combined	primary	one time	internal
Act-requirement for replacement	combined	primary	one time	external
Leave invoice	combined	primary	one time	internal

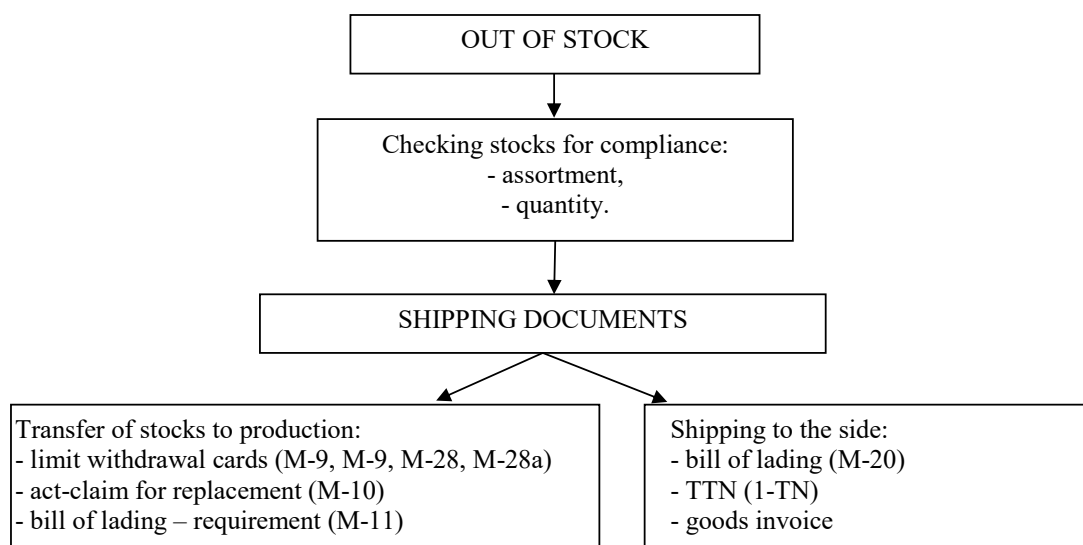


Fig. 1 – Document flow for the disposal of stocks of PTAHOFABRYKA «ZARICHNA» LLC

Source: built by the author based on the analysis of the document flow of the enterprise

responsible person on the day of the specified operation on the basis. primary documents [54].

The internal movement of stocks is formalized with limit withdrawal cards (form No. M-8), a deed-requirement for replacement (form No. M-10) (additional release) of materials, a bill of lading-requirement for release (form No. M-11) in two copies.

Remaining materials in the warehouse are displayed in the following accounting registers:

- accounting record of remaining materials in the warehouse (form No. M-14);
- material report (form No. M-19).

All primary documents that confirm the movement of production stocks together with the register of receipt and delivery of documents (form No. M-13) are transferred to the accounting department for processing and systematization. Information on the movement of production stocks at PTAHOFABRYKA «ZARICHNA» LLC is displayed on account 20 «Production stocks» and listed in Table 2.

Dt account 20 «Manufacturing stocks» is displayed, and corresponding subaccounts display data on the receipt of stocks from various sources (from suppliers, accountable persons, own production, company founders, etc.).

Accounting for the purchase of stocks on account 20 «Manufacturing stocks» and its subaccounts is carried out at the actual cost of acquisition, that is, at the original cost, taking into account the costs of transportation and procurement of stocks. If there is an opportunity, such costs are attributed to a specific nomenclature number in a direct way. In most cases, it is practically impossible to do this. Therefore, transport and procurement costs are grouped on a separate sub-account, which is determined by the enterprise. These are, as a rule, sub-accounts of the second order to the sub-accounts of account 20 [55].

The calculated amount of transportation and procurement costs is debited from the credit of account 20 «Production stocks» to the debit of the same accounts to which the value of stocks at accounting prices is debited. The credit of this account and its sub-accounts shows information on the disposal (write-off) of stocks for various purposes (production and other domestic needs, offloading), as well as the amount of depreciation of production stocks.

The issue of the organization of analytical accounting (by nomenclature numbers) is resolved with the formation of the accounting policy of the enterprise.

Since the enterprise has a large range of stocks, it uses the operational accounting method of accounting. According to this method, the quantitative-sort accounting of stocks in warehouses is conducted by materially responsible persons in warehouse accounting cards (form No. M-12), which are opened by the accounting department for each nomenclature number of stocks.

In these cards, the materially responsible person records each operation on the receipt and release of materials and determines the balance of stocks. The basis for records are the primary documents for posting and releasing stocks.

After such control, the warehouse accounting cards are transformed from operational accounting registers into operational accounting registers, and the accounting department does not need to keep analytical records of the availability and movement of stocks for each nomenclature number. Accounting carries out the determinations only in monetary terms and according to homogeneous groups (ferrous metals, non-ferrous metals, chemicals, etc.) in terms of synthetic accounts, sub-accounts, storage places and materially responsible persons.

They are opened for each materially responsible person separately. Financially responsible persons transfer material balances verified by accounting from warehouse accounting cards to these registers on the first day of each month. Books (information) are filled in according to nomenclature numbers and homogeneous groups.

In the accounting department, these data are evaluated according to accounting prices, which are used to keep analytical records of the movement and availability of materials in terms of homogeneous groups. In this way, information on the cost of materials will be obtained based on warehouse accounting data and accounting information. Such records match because the warehouse and accounting records are based on the same primary documents and are valued at the same prices.

If the data on balances (balances) are not the same for any group, the accounting department checks and detects errors.

In the case of a small nomenclature of stocks, the accounting department can keep an analytical account of the availability and movement of stocks in terms of nomenclature numbers, both quantitatively and in terms of value. On the basis of income and expenditure documents received from materially responsible persons, the accountant prepares information on posting and writing off (issuance) of materials, which are used for the monthly compilation of turnover information in terms of

Table 2 – Subaccounts of account 20 “Manufacturing stocks”

№ sub account	Subaccount name
201	“Raw materials and materials”
202	“Purchasable semi-finished products and component products”
203	“Fuel”
204	“Container and packaging materials”
205	“Building materials”
206	“Materials sent for recycling”
207	“Spare parts”
208	“Agricultural materials”
209	“Other materials”

nomenclature numbers, i. e. quantity and total accounting, where information about the balance of materials at the beginning of the month is displayed, receipts and debits and the balance at the end of the month.

Let's give an example based on the data of PTAKHOFABRYKA «ZARICHNA» LLC of changes in the cost of sales according to different methods of assessing the disposal of stocks. When choosing to estimate inventory disposal using the FIFO or weighted average cost method, a system of periodic inventory accounting is allowed. Primary data are presented in Table 3.

During the conducted research on the organization of accounting for production stocks of ZBRNA, the «Mechanizator» company uses the weighted average cost estimation method. The change in the cost of inventory disposal using the weighted average cost method is shown in Table 4.

But we propose to use the FIFO method to estimate inventory disposal. As you know, the essence of which consists in assuming that the stocks that arrived first at the enterprise are the first to be sold, that is, the units of stocks

that arrived at the enterprise (purchased, produced) first are also released (sold) first (Table 5).

It is believed that the application of this method is justified in the conditions of inflation. Because when using it, the stocks that are in the balance and reflected in the balance sheet will be accounted for at the cost of the stocks that arrived last.

Thus, the valuation of stocks in the balance sheet will be close to their real value. In turn, when calculating the profit, stocks that arrived earlier, the value of which, as a rule, is lower, will be accounted for. As a result, profits will be inflated. This method is simple, prevents the possibility of profit manipulation, ensures that the amount of inventory is reflected in the balance sheet, which approximately coincides with the current market value, and, in our opinion, it is the most appropriate for the specific activity of the enterprise.

However, it also has certain disadvantages, the main of which is the influence of external factors of the economic life of the state on the gross profit indicator of an individual enterprise. Thus, in conditions of constantly increasing prices, the FIFO method gives the highest indicator of gross profit. And if we take into account that in the conditions

Table 3 – Primary data in the accounting of production stocks of PTAKHOFABRYKA «ZARICHNA» LLC for 2020

№	Reserves	Number of units, pcs	Price per unit, UAH	Cost, UAH
1	Balance on 01.01.2020	300	30,00	9 000,00
2	Purchased 10.01.2020	100	31,00	3 100,00
3	15.01.2020	200	35,00	7 000,00
4	20.01.2020	400	38,00	15 200,00
5	All purchased	700	–	25 300,00
6	Implemented 12.01.2020	200	–	–
7	25.01.2020	500	–	–
8	Balance on 01.02.2020	300	–	–

Table 4 – Change in the cost of sales using the weighted average cost method of PTAKHOFABRYKA «ZARICHNA» LLC

№	Reserves	Number of units, pcs	Price per unit, UAH	Cost, UAH
1	Balance on 01.01.2020	300	30,00	9 000,00
2	Purchased 10.01.2020	100	31,00	3 100,00
3	15.01.2020	200	35,00	7 000,00
4	20.01.2020	400	38,00	15 200,00
5	All purchased	700	–	25 300,00
6	Total goods for sale	1000	–	34 300,00
7	Implemented	700	34,30	24 010,00
8	Balance on 01.02.2020	300	34,30	10 290,00

Table 5 – Calculation of disposal of stocks according to the FIFO method (Example according to the data PTAKHOFABRYKA «ZARICHNA» LLC)

№	Reserves	Number of units, pcs	Price per unit, UAH	Cost, UAH
1	Balance on 01.01.2020	300	30,00	9 000,00
2	Purchased 10.01.2020	100	31,00	3 100,00
3	15.01.2020 p.	200	35,00	7 000,00
4	20.01.2020 p.	400	38,00	15 200,00
5	All purchased	700	–	25 300,00
6	Implemented	300	30,00	9 000,00
		100	31,00	3 100,00
		200	35,00	7 000,00
		100	38,00	3 800,00
7	Everything has been implemented	700	–	22 900,00
8	Balance on 01.02.2020	300	38,00	11 400,00

of a general increase in prices, every enterprise seeks to increase the prices of the sold goods as well, then when applying the FIFO method to estimate disposal, the gross profit indicator indicated in the Report on financial results can be considered unreasonably overstated.

Accordingly, in the conditions of a constant decrease in prices, the reverse process is observed: the indicator of gross profit due to the application of the FIFO method to estimate the disposal of stocks and the forced reduction of selling prices for products (goods) sold by the company is unreasonably understated in the Report.

### Conclusions

Since stocks that are purchased in conditions of constantly increasing prices and are valued at disposal by the FIFO method, are written off to sales at the lowest price, then the stocks that remain on the balance sheet of the enterprise will be valued at a value that is close to the market price. Thus, when analyzing the company's balance sheet indicators, information about its working capital, working capital will not just be more optimistic, but more real compared to if the company used another method.

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