INTERNAL AUDIT AND CONTROLLING IN METALLURGY

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Abstract

The Internal Audit and Controlling are a part of the overall management process of a metallurgical enterprise. However there are fundamental differences between them. Controlling is primarily a part of business planning and is focused on business objectives, their implementation and evaluation. Internal Audit can work as a tool of controlling on one hand and, it can be the subject of internal audit analysis on the other.

For controlling to serve its objectives and functions the best, it is necessary to verify the accuracy of its setting. From this perspective the audit of controlling should be an important part of the internal audit, which however isn’t carried out in every metallurgical enterprise.

The audit control is controlling the planning, monitoring and evaluation costs. Those mostly are: selected detail of centers, analytical accounts, costing formula and calculation units.

The metallurgical enterprises should apply the rule that the detail of the centers should match the detail of production phases of production, which are defined as technical standards of measured consumptions of inputs (charges). Each product, for which these standards are defined should at the same time be the calculation unit for computation of calculations.

Analytical account in the accounting should be defined for each type of unit inputs, e.g. for each type of metal and nonmetal additives. Unit calculative items within the dynamic calculation formula should be defined in the same way, for more complex technologies the ABC calculations are used.

Keywords

Internal Audit; Controlling; Audit of controlling; Cost controlling; Production controlling; Metallurgical company

1. INTRODUCTION

This article is focused on the importance of auditing the controlling system in metallurgical enterprises, preferably through an internal (but also possibly external) audit of controlling. The correct settings of controlling should be reviewed by means of an internal audit in order for it to be an effective system for increasing efficiency and effectiveness of steel production and fulfill its functions in the best way in this area. Controlling is the subsystem of management, which coordinates and sets targets on planning and supervision, and which supplies information, thus supporting the adaptation and coordination of the company [1].

Controlling doesn’t mean self-management and as a concept of control has its own limits. It doesn’t guarantee the success of business. It only plays a role as an auxiliary tool for managers, offering relevant information, which could lead to better decisions [2].

The subject of audit of controlling in steel production should primarily be the control of definition of subjects of planning, of monitoring and of evaluation of costs. Those are mainly selected detail of centers, analytical accounts, the calculation formula and calculation units [3].

This article therefore also defines the structure of this basic information of controlling in steel production, which due to its importance should be verified by the internal audit.
2. INTERNAL AUDIT AND CONTROLLING OF THE EFFICIENCY AND EFFECTIVENESS OF PRODUCTION

The Internal Audit evaluates not only the compliance of the real state with the prescribed state, but it also tries to verify the compliance of the required state with such state that would yield the highest performance, quality and profit.

Controlling brings the audited evidence as a feedback to a particular form of proposed decisions that should lead to increased efficiency, quality and profit. Controlling isn't, unlike the internal audit, an actual tool of control of these activities.

The Internal Audit can on one hand act as a tool of controlling, however on the other hand, the field of controlling can be observed by the internal audit [4].

The existence of a working controlling, which should define what the required information to be retrieved by the accounting system and the operational records are, is very important to ensure an internal audit which should verify the efficiency and effectiveness of the performance of a metallurgical company.

Accounting records should be organized under the financial centers and detail chart of accounts, so as to facilitate as much as possible not only the planning, monitoring and evaluation of the efficiency and effectiveness in controlling, but also the examination of the internal audit.

Operational records in a metallurgical company should first of all provide information on planned and actual consumption of specific inputs (charges) for the calculation units (products, orders) within individual production aggregates, on planned and actual consumption of variable overhead inputs (particularly energy) for production aggregates and on planned and actual performances (labor intensive) for calculation units (products, orders) in the individual production aggregates. Without this information it is not possible to plan, monitor, evaluate, or verify the effectiveness of the performance of metallurgy in greater detail than in the accounting center.

3. AUDIT OF CONTROLLING

Controlling is a system, which can be well or poorly configured. The controlling settings should be not only examined through an audit of controlling, but also defined as well as possible, taking into account the given company.

Audit of controlling is the diagnosis system of controlling, which allows qualified evaluation of the controlling settings in the given company. The aim of audit is a systematic analysis of the existing controlling’s range of efficiency and performance and developing proposals to ensure its further refinement and to improve its efficiency.

General dimensions of audit of controlling:
- Quality and availability of data from financial accounting, management accounting, payroll, operational records.
- Organizational structure.
- Scope of the controlling’s function.
- Degree of penetration of controlling into the individual corporate activities.
- Status of the used operational-economical tools and methods for providing the individual functions of controlling.
- Use of information systems for support of the automation of controlling.
- Organizational, personal, technical, informational and methodical ensuring of controlling [5].

4. AUDIT OF THE COST AND PRODUCTION CONTROLLING IN METALLURGICAL ENTERPRISES

The efficiency and effectiveness of metallurgical production should be addressed not only by controlling, but also by internal audit. Controlling should primarily ensure the planning and evaluation, and afterwards their
screening should be ensured by an internal audit. Given that the very definition of efficiency and effectiveness is significantly influenced by the settings of the controlling system, it is most appropriate that a controlling audit should be made before internally auditing the efficiency and effectiveness of metallurgical production.

The basic functions of costs controlling include planning the costs and evaluating their actual level by detailing the deviations from the plan; based on this, the management should decide on the elimination of these deviations, or eventually on the adaptation to the reality which the company is not able to change.

The basic functions of production controlling are planning and evaluation of:
- Production and work capacity, including any delays.
- Specific consumption of charge
- Technological and non-technological waste
- Specific consumption of fuel and energy
- Performance of production units (time consumption products).

The biggest influencers on the efficiency and effectiveness of metallurgical production nowadays, in addition to the prices of material and energy inputs and selling prices (including exchange rate effects), are also the use of the company’s own capacity. From this perspective, it is essential to properly plan the inventory to assure the continuity of production, making sure that the stock does not exceed the inevitable and does not block financial resources unnecessarily [6]. Due to the influence of these areas on the efficiency and effectiveness of metallurgical production, it is necessary for controlling and internal audit to give them utmost attention.

5. FUNDAMENTAL DIMENSIONS OF AUDIT OF CONTROLLING IN METALLURGICAL ENTERPRISES

One of the fundamental dimensions of controlling audit of metallurgical enterprises is the existence of internal control guidelines to ensure a methodical controlling, and the verification that they are followed. In many metallurgical companies this methodology is missing in the written form, which can cause big problems if skilled controlling workers leave. These are mainly the following methods:
- Budgeting
- Calculation the material and production time balances
- Computation of the planned and final calculations
- Computation of price calculations (using first of all costs calculation, and then depreciation calculation)
- Planning of direct costs
- Planning and scheduling overhead costs (with the help of the methods of Activity Based Costing)
- Calculation of the adjusted plan of variable costs
- Evaluation of variable and fixed costs
- Planning and evaluation of the use of the company’s own capacities, including delays

Another dimension of audit of controlling in metallurgical enterprises is the examination of the subjects of planning, monitoring and evaluation. Those mostly are: selected detail of centers, analytical accounts, costing formula and calculation units.

Detail of the accounting services should match not only the needs of the centers’ budgets, but also the necessity to perform the product calculations for each stage of production. This means that for each production stage there should be at least one financial center. In this case production stage means a detail of production units for which specific consumption of material and energy inputs and outputs are defined, in detail on the calculation unit (product, product group) or at least for the manufacturing stage.
Detail of the direct analytical account of material costs should correspond to individual items of recipes (charge). Detail of the analytical accounts of variable overhead costs should correspond to each type of variable overhead inputs (mainly energy). Detail of the analytical account credits for returnable material (waste) should match their individual price (or stock) groups.

Calculation units should correspond to production details, for which projected specific energy consumption (standard) charge of each item are defined. Labor input (performance) should also be defined in this detail.

In the calculation formula there should be detailed items defined for:
- Each item’s recipe (charge)
- Each price group of the waste
- Each normalized but not valued, group of waste (remelt loss)
- Each kind of variable input (valued and not valued)

Finally, the control of the existence of internal guidelines for the organizational and methodological auditing, the assurance of the existence of operational records and the verification of its compliance is an important dimension of auditing of controlling in metallurgical enterprises. These are mainly the following methods:
- Creation, review and approval of the planned specific energy consumption (standard) entered into the operational records.
- Monitoring, control and recording of actual consumption of direct inputs in operational records and their reconciliation with accounting records.
- Creation, review and approval of the planned (standard) output (labor input) entered into the operational records
- Monitoring, control and recording of actual performance (labor input) in the operational records
- Methodology of planning, monitoring and evaluation of different types of delays in the operating records

6. CONCLUSION

The know-how of the current controlling system in the majority of metallurgical companies is unfortunately not a part of the written methodology. The carriers are often only key staff (sometimes, only a key worker) of the controlling body. In the recent past, there are often departures of these key personnel, resulting in reduced efficiency of the controlling system in the production efficiency and effectiveness.

For this reason, there is an urgent need to have the controlling system in the metallurgical company to be controlled by an internal (or external) audit, to ensure a binding methodology of the controlling system in written form and then perform auditing for compliance and updates on the new internal and external conditions of the given metallurgical company.

This is mainly for checking the details of accounting centers, analysis of accounts, detail of the calculation items and detail of the calculation units. The departure of experienced controlling staff occurs because of the subsequent simplification of the controlling activities due to a noticeable reduction in the number of calculation units and items in the calculating formula. This leads to a reduction in the explanatory power of the whole controlling.

Not a lot of metallurgical companies use of modern calculation methods (e.g., ABC costing, calculating of depreciation) in their controlling. Using the calculation unit in the form of a broad assortment of product groups and the lack of use of analytical accounts for each type of direct input causes significant effects on the composition of variables, and eventually increased work to remove them.

The problems of the coexistence of controlling and internal audit are common information sources, which are mainly influenced by the requirements of controlling. The role of internal audit, however, must always be above that of the controlling. The requirement for the implementation of an audit on the controlling before an
audit on the production efficiency and effectiveness also follows this condition. Defining the contents of an audit on controlling was therefore the content of this article.

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LITERATURE