

Clear Research on Key Points of Cost Accounting Teaching Based on Enterprise Practice

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Abstract—Cost accounting plays an important role in practical work, making cost accounting course the core course of relevant specialties. In order to help learners apply the knowledge of cost accounting to practice, there are several key points in the teaching process of cost accounting that should be clearly explained. For example, the parallel carry-over step method is generalized to calculate the number of products in assembly multi-step production, auxiliary production costs are directly allocated to the type of auxiliary production beneficiaries, variety method and batch method have different durations of basic production cost detailed accounts, the reasons for the different application ranges of the fixed cost pricing method and the fixed proportion method for products are discussed as well as the idea of updating the allocation of manufacturing costs with the times.

Keywords—parallel carry-over and step-by-step method; auxiliary production type; production cost detailed account duration; manufacturing cost allocation

I. INTRODUCTION

Cost determines the profit margin of an enterprise and is the core of competition among enterprises, so cost accounting plays an important role in accounting, which makes the course of Cost Accounting become the core course of accounting and financial management specialty. However, due to its complicated knowledge system and calculation methods, there are some difficulties in cost accounting teaching, and there is a certain gap between the practice of enterprises. At present, several key knowledge points are not clearly listed in most textbooks, which results in that it is more difficult for students to apply cost accounting knowledge to practice. The so-called details determine success or failure, so the key points of teaching must be clear.

II. PARALLEL CARRY-OVER AND STEP-BY-STEP METHOD IN THE CALCULATION OF THE NUMBER OF PRODUCTS IN THE ASSEMBLY MULTI-STEP PRODUCTION

Parallel carry-over and step-by-step method is a simplified form of calculation for step-by-step methods. It is mainly suitable for assembly multi-step production, and is also suitable for continuous multi-step production without calculating the cost of semi-finished products. The parallel carry-over and step-by-step method in most current cost accounting textbooks is based on continuous multi-step production [1]. In particular, the approximate production cost is used to calculate the total

cost of production. When the final finished product is distributed between the final product and the product in a broad sense, the share of the finished product in each step is calculated. This will not focus on the main types of production, so the introduction of parallel carry-over and step-by-step methods should focus on the use of multi-step production in assembly. The products in the parallel carry-over and step-by-step method are products in a broad sense, including not only the products in this step, but also the products that have not been finalized in the subsequent steps, and the semi-finished products that are ready for further processing after storage. In layman's terms, all products that have incurred cost in this step, whether in the product or in the finished product, bear the production costs incurred in this step [2].

For assembly multi-step production, since each process is produced in parallel, each semi-finished product is produced from the input of raw materials, and finally assembled into finished products. So the generalization of each step in the product needs to consider the number of semi-finished products of this step at the end of the month in the product and assembly step in the product and warehouse.

A. The semi-finished products produced in each step are not sent and received through warehouse, and are directly assembled by assembly workshop

Generally speaking, the formula for calculating the end-of-month (generalized) of a step in this case is as follows.

At the end of a certain step (generalized) in the number of products = the number of products in the narrow sense at the end of the step + (the end of the assembly step in the narrow sense of the number of products × assembly steps, the finished product consumes the number of semi-finished products completed in this step)

For example, an enterprise has two processing and assembly workshops and three basic production workshops, which produce a large number of A products. The first workshop produces parts of A 1, and the second workshop produces parts of A 2. Finally, the two parts are assembled into products of A by the assembly workshop. The output of each workshop is shown in TABLE I.

TABLE I. PRODUCTION RECORDS OF WORKSHOPS IN A MONTH

Semi-finished or finished products	Products at the beginning of the month	Commissioning this month	Completed this month	Month end products
A 1 part	25	255	200	80
A 2 part	180	490	400	270
A product	160	200	300	60

Firstly, it can be judged according to the number of parts completed in each processing workshop and the number of parts put into production in the assembly workshop this month. A product is assembled from 1 A 1 part and 2 pieces of A 2 part. In addition to the judgment based on the number of products, the product assembly should be verified according to the actual production situation of the enterprise. Secondly, the number of products in each workshop can be calculated.

The number of parts in the first part of this step is 80 pieces at the end of this step, and the number of products in the assembly shop is 60 pieces, so the first processing workshop is broadly in the number of products = $80 + 60 = 140$ (pieces).

The number of products of the A 2 parts at the end of this month is 270, and the number of products in the assembly shop is 60. Since one piece of A product is composed of 2 pieces of A 2 parts, the second processing shop is broadly defined as the number of products = $270 + 60 \times 2 = 390$ (pieces).

Assembly workshop broadly in the number of products = 60 (pieces)

Finally calculate the approximate equivalent of the product at the end of the month (generalized), the formula is as follows

At the end of a certain step (broadly), the approximate output of the product = the number of products in the narrow sense at the end \times the degree of product completion + (the end of the assembly step, the narrowest quantity in the product \times the assembly step, the finished product consumes the number of semi-finished products completed in this step)

B. The semi-finished products produced in each step are sent and received through the warehouse, and are assembled by the assembly workshop after being taken from the warehouse.

In general, in this case, the formula for calculating the number of products at the end of a certain step (generalized) is as follows.

The number of products at the end of a certain step (broadly) = the number of products in the narrow sense at the end of the month + (the assembly process at the end of the month is narrowly defined in the number of products \times assembly steps, the finished product consumes the number of semi-finished products completed in this step) + (the number of completed semi-finished products in this step - the number of assembly steps to be put into production \times the assembly step, the finished product consumes the number of semi-finished products completed in this step)

If a company produces a large number of B products, the first workshop produces B 1 parts, the second workshop

produces B 2 parts, and finally the assembly shop assembles the two parts into B products. The output of each workshop product is shown in TABLE II.

TABLE II. PRODUCT PRODUCTION RECORD OF EACH WORKSHOP IN A MONTH

Semi-finished or finished product	At the beginning of the month	Put into production this month	Completed this month	At the end of the month
B 1 part	340	1100	1200	240
B 2 part	210	720	700	230
B product	130	580	600	110

First of all, it can be judged according to the number of parts completed in each processing workshop and the quantity of the assembly shop put into operation this month. The B product is assembled from 2 pieces of B 1 parts and 1 piece of B 2 parts, and the product assembly is verified according to the actual production situation of the enterprise. Secondly, the number of products in each workshop is calculated in general.

At the end of this step, there are 240 products in the assembly of B 1 part and 110 in the assembly workshop; 1200 pieces of B parts were completed this month. And assembled 580 products into production. Since one piece of B product is composed of two pieces of B1 parts, the assembled B product consumes $158 \times 2 = 1150$ pieces of pieces. At the end of the month in the warehouse, the B 1 part is $1200 - 1150 = 50$ (pieces). The first processing workshop is broadly defined in the number of products = $240 + 110 \times 2 + 50 = 510$ (pieces).

The number of products in the second part of this step is 230 pieces. The assembly workshop has 110 products in quantity. This month, 700 pieces of B 2 parts were completed, and the assembly of B products consumed 580 pieces of B 2 parts. At the end of the month, warehouse balance B 2 parts $700 - 580 = 120$ (pieces). The second processing workshop is broadly defined in the number of products = $230 + 110 + 120 = 460$ (pieces).

The number of products in the assembly shop in a broad sense = 110 (pieces)

At last, a certain step (generalized), the approximate equivalent of the product is calculated, and the formula is as follows.

At the end of a certain step (generalized) in the product's equivalent production units = the number of products in the narrow sense at the end of the month \times in the finished product + (at the end of the assembly step, the number of products in the narrow sense \times the assembly step, the finished product consumes the number of semi-finished products completed in this step) + (the number of finished semi-finished products in this step - production quantity of assembly steps \times the assembly step, the finished product consumes the number of semi-finished products completed in this step).

III. TYPES OF AUXILIARY PRODUCTION IN WHICH AUXILIARY PRODUCTION COSTS ARE DIRECTLY ALLOCATED TO BENEFICIARIES

The auxiliary production of enterprises is to provide services for the basic production and management departments, and the products are not sold abroad. In the actual production of enterprises, there are generally two types of auxiliary production, one is the workshop for producing tools and moulds, the other is the workshop for improving the supply of power and electricity, repairing and transporting services, etc. There are some differences between these two types of cost accounting procedures for auxiliary production workshop [3].

The first type of auxiliary workshop cost accounting procedure is consistent with the cost accounting of the products produced in the basic workshop, as shown in Fig. 1. After collecting the production cost of the auxiliary production workshop, if there is a finished product, it will be checked and stored. Borrowers are turnover materials or raw materials, and credits are used to record auxiliary production costs. The economic meaning of the entry is that the product has been checked and stored in the auxiliary workshop after completion of production. If there is a product, it will be used as the final balance of ancillary production costs. If the basic production workshop or other management departments use the products produced by the auxiliary production workshop, they will place the products in the warehouse and take them for use, and put them into the corresponding cost account. The corresponding account of the creditor indicates the reduction of the enterprise's assets.

The second type of ancillary production products or services can not be checked and stored. Costs incurred in the production process are allocated directly to the beneficiaries. According to the principle of "who benefits who pays, more benefits and more burdens, less benefits and less burdens" and number of products or services used by the beneficiary departments, one of the five methods of allocation of ancillary production costs is used to allocate ancillary production costs, as shown in Fig. 2.

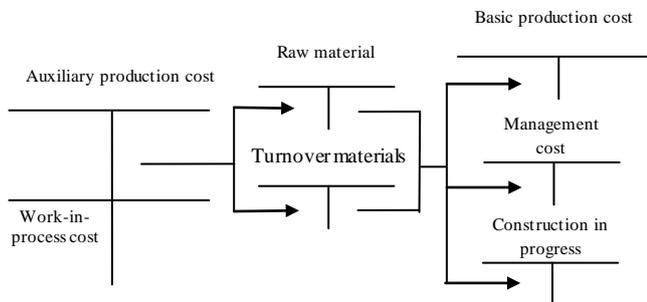


Fig. 1. Auxiliary production cost carry-over

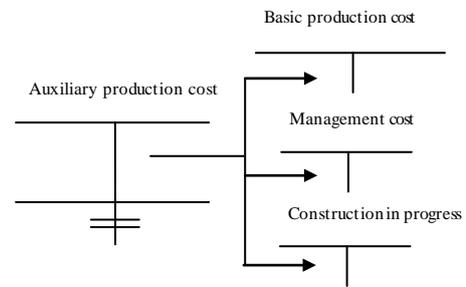


Fig. 2. Assisted production cost allocation

It can be seen that not all the expenses incurred in the auxiliary production workshop should be allocated by five allocation methods. Only those auxiliary production products or services that do not need acceptance and storage need to adopt one of the five allocation methods to determine the unit cost so as to allocate the production cost. This point must be made clear in teaching, otherwise it will easily lead to misunderstanding of the allocation of auxiliary production costs for students, and it will not be distinguished and applied in enterprise work.

IV. THE VARIETY METHOD AND BATCH METHOD BASIC PRODUCTION COST DETAILED ACCOUNT DURATION IS DIFFERENT

Variety method and batch method set up detailed accounts of basic production costs according to product varieties or batches respectively, and then all the expenses incurred this month, including material costs, labor costs, manufacturing costs and ancillary production costs, are aggregated according to cost items. The procedures and methods are basically the same. However, the period for calculating the cost of finished products is not consistent. Variety method calculates the cost monthly and batch method calculates the cost according to the production cycle. The difference between the object of cost accounting and the period of cost accounting also leads to the difference of the duration of the basic production cost detailed account under the two methods. This detail must be clear, otherwise learners will only remember that the object of cost accounting is different in different cost calculation periods, and the application of cost ledger in the actual situation is ambiguous. For example, enterprise A produces a large number of A products for a long time, starts production in February, and adopts variety method to calculate. Enterprise B produces 100 A products in batches, and goes into production in February, and completes all of them in that month, and adopts batch method to calculate. Both enterprises set up production cost detailed account according to A product when they carry out cost accounting. Enterprise B should indicate the number of batches on the account, accounting procedures and methods are basically the same. By the end of the month, Enterprise A will distribute the total cost of production between finished products and finished products, and transfer the cost of finished products. At the end of the month, work-in-process cost was used at the beginning of March. The basic production cost detailed account was used continuously until enterprise A stopped producing A products. At the end of the month, enterprise B will transfer all the production costs incurred this

ensure that the cost to be allocated and the allocation criteria have certain relevance, and the allocation results are more reasonable. That is to say, according to the actual situation of the enterprise, we should consider the costs contained in the manufacturing costs separately. If the amount of money is large and the allocation criteria such as production hours are not relevant, the relevant allocation criteria can be used for allocation. These costs are still consolidated into the manufacturing cost account when they are consolidated. It only uses multi-criteria to distribute, refines the distribution table of manufacturing costs, finds out the different motivations of different costs to distribute costs, and ensures the accuracy of distribution results.

VII. CONCLUSION

Cost accounting is an important part of enterprise accounting work. The classroom teaching of cost accounting should take into account the actual situation of enterprises; enable students to apply what they have learned. In the process of teaching, we should strengthen the teaching of details and pay attention to the following aspects. Parallel carry-over and step-by-step method broadly in the calculation of the number

of products produced in a multi-step assembly, auxiliary production costs that are directly allocated to the auxiliary production type of the beneficiary, different durations of basic production cost of the variety method and the batch method, reason that the product is subject to different scopes of the fixed cost method and the fixed ratio method, and the manufacturing costs are updated with the times to update the distribution ideas.

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