# ANALYSIS OF OVERHEAD COST ASSIGNMENT TO PRODUCT (CASE STUDY AT PT. SEMEN PADANG)

**THESIS**

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## THESIS APPROVAL LETTER

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*Try not to became a man of success,*
*but rather try to became a man of value,*
*(-Albert Einstein-)*

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"Without heart you can't love and without love there would be no happy ever after"

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Stephani Notarissa

# Analysis of Overhead Cost Assignment to Product

## ( Case Study at PT. Semen Padang)

*(By Stephani Notarissa, Accounting Department, Andalas University. 66 pages)*

**ABSTRACT**

*Handling of factory overhead costs become serious and crucial is the problem of assignment into each products appropriately and accurately. Accuracy of the assignment cost can produce high quality information and can be used to make a good decision. The purposes of research are: (1) To know cost accounting approach used by PT. Semen Padang, (2) To evaluate the factory overhead cost assignment in PT. Semen Padang.*

*Type of research is a field research with descriptive study. The data of this research are taken from primary data is obtained from interview to people and secondary data are obtained from cost production report, factory overhead budget per department, report cost of factory overhead in 2009 year period.*

*The study result show that up to 2009, PT. Semen Padang is still using traditonal costing, because PT. Semen Padang assigned factory overhead cost to product by using unit level driver (machine hours) because all of factory used machine intensively. Cost pool which is used by PT. Semen Padang to assignment factory overhead cost to product is department.PT. Semen Padang divided production department into 4 department, those are: raw mix department, kil and coal mill department,cement mill department,and packing department. The dividing of service department in PT. Semen Padang was inappropriate, because the workshop should be included into service department, workshop also gives service to production department and other service departments and assign of service department cost to production department not accurate because allocation of service department cost to production department still using direct allocation method. The allocation of service department cost to production department should be used the step allocation method, cause service department doesn't only give service to production department but also to other service departments. Now, The calculation of factory overhead costs in PT. Semen Padang uses software(Oracle E-Business Suite Manufacturing & Supply Chain Management) to assigned factory overhead cost to products since 2007.*

**(Keywords :** *Overhead Assignment, Cost Driver, Cost Allocation)*

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# CHAPTER I

# *INTRODUCTION*

## 1.1 Background

At this time Indonesian government is carrying out development in all aspect. It was directed to the industrial sector in order to develop for the stable and strong industries. It proved by the companies which is deal with industry aspect. Each industrial enterprise constitute one of the economic institutions which is perform manufacturing activity, furthermore in that manufacturing systems will grow production with a high efficiency level within the management role requirement.

In the company which included industry type, their activities related to the calculation of management and control production costs. As we know, the cost which involved into the production consists of raw material cost, direct labor cost, and factory overhead cost.

Factory overhead costs are all the production cost that can not easily and accurately traced by a product, therefore it requires a proper treatment for the achievement toward cost of goods sold determination accurately.

Handling of factory overhead costs become seriously and crucial is the problem of assignment into each products appropriately and accurately. Assignment costs accurately to object cost is essential. The accuracy is a relative concept, and should be done fairly and logically in using the methods

of assignment cost. The assignment costs which get distortion can produce the wrong decision and bad evaluation.

Accuracy of the assignment cost can produce high quality information and can be used to make a good decision. The accuracy of assignment cost to object is influenced by the accuracy of the election basis allocation. If the allocation basis inaccurate, so the assignment costs to the cost object also inaccurate. The main problem in calculating the object cost is assignment of indirect cost because of selection in the allocation cost basis inappropriate can make the object cost of good sold is too high *(over costing)* or too low *(under costing)*. If the cost is too high, so the products become less competitive because the selling price will be higher than competitors. On the contrary, if the cost of good sold is too low, so the product is very competitive because prices would be lower than competitors. However, if the product would be profitable, but in fact even loss *(Riwayadi, 2006:23)*.

The bad financial situation often occurs because of mistakes which are made by management in production costs calculation. This mistake can be caused by using inaccurate factory overhead cost calculation. This Factory overhead cost is difficult in determining mean while the number and the influence are relative large while compared by the costs of direct material and direct labor costs.

Factory overhead cost has specific characteristic that should be considered in the assignment of the products appropriately. The first characteristic concerned with the relationship between the factory overhead costs and the product itself. Factory overhead costs are costs that can not be

followed and indirectly related to the product. There is no evidence or proof of worker's working time which used to declare the amount of overhead costs such as supporting materials or indirectly wages included in a job or the outcome of a production. In connecting the overhead costs with a job or a particular outcome, then it should be a clear allocation of overhead costs.

The second characteristic concerns with the changing some elements of overhead costs because there is changing of production volume, that is overhead costs can be fixed, variable or semi variable. Overhead costs remain relatively constant, although there is a changing in production volume, mean while fixed overhead cost per unit will vary in contrast to volume production. Semi-variable overhead costs vary, but incomparable toward the production units. If the volume of production changes, the combined effects of various patterns of this overhead can result in plant costs per unit of a large fluctuation, unless it sought a method to stabilize the cost of overhead in the production unit.

With the three properties inherent to these overhead costs, the assignment of factory overhead costs to products become complicated a problem. In addition there are various kinds of base that can be used to charge overhead costs to products, such as product unit, the cost of direct materials, direct labor costs, direct labor hours and machine hours.

According to Mulyadi *(2009:212)*, factory overhead rate determination can be implemented through the following three stages:

1. Arrange Factory Overhead Budget.
2. Selecting the basic assignment factory overhead costs to products..

3. Calculate the Factory Overhead cost rates,.

Based on the description above, it can be assessed importance of implementing accounting system for assignment factory overhead costs to products. PT Semen Padang as the object of study is one of the largest manufacturing company located in West Sumatra. PT Semen Padang is the oldest cement company in Indonesia which was established in 1910 under the name NV *Nederland Indische Portland Cement Maatschappij* (NV NIPCM). At this time PT Semen Padang assignment of factory overhead system to product is apply the traditional volume-based costing or functional based costing is more units produced, the factory overhead costs will be higher and the contrary, smaller the unit that produced the lower factory overhead .

As stated above, the intense competition forced by the company to strive more efficient and effective in carrying out its activities.

Based on that reason, the writer is interested to develop the research which entittle **"Analysis of Overhead Cost Assignment to Product in PT. Semen Padang."**

## 1.2 Problem Definition

Based on the background explained above, the writer considers the following research questions:

1. What is cost accounting approach used by PT. Semen Padang?
2. How does PT. Semen Padang assign the factory overhead cost to product?

## 1.3 Purpose and Benefits of the Research

In doing the research, the writer have two purposes, there are :

1. To know cost accounting approach used by PT. Semen Padang
2. To evaluate the factory overhead cost assignment to each type of cement product in PT. Semen Padang

The benefits of this research are:

1. For the writer is to explore the cost accounting system to assignment factory overhead costs.
2. For the company is to assist management in the form of proposals and suggestions to improve the company's cost accounting system and management company in the future.
3. For Academic, this research can be a reference for future research.

## 1.4 Writing Systematic

This research is divided into several chapters, those are:

Chapter I, introduction. This chapter explains about backgrounds, problem definition, purpose and benefit of the research, and order of the research. Chapter II are consists of theoretical framework which explains about the concept and theory related to the problem that have been discussed in the previous research. Chapter III is discussing about research methodology. This chapter explains about the method of the research, scope of analysis, technique in analysis, and also measurement. Chapter IV consists of the discussion and analysis of the problem. This chapter also explains a short of history of the company and the object of the research. Chapter V consists of the conclusions

that have been taken and also consist of suggestion from the writer as a result form the problem that hopefully will be useful for certain people.

# CHAPTER II

# *THEORITICAL FRAMEWORK*

## 2.1 Cost Concept

### 2.1.1 Definition of Cost

The term cost is perhaps the most widely accepted accounting term used in daily life. It can result in understanding the costs vary between one person and another.

Based on Hansen and Mowen (2003:4) definition *cost* and *expense* are:

"Cost is the cash or cash-equivalent value sacrifices for goods and services that are expected to bring a current or future benefit to organization. As costs are used up in the production of revenues they are said to expire. Expired costs are called expense".

From the definition above, it can be said that the cost is cash equivalent value sacrificed for goods and services that are expected to provide benefits in the present or the future to the company. While the expense shows the cost is expended in the process of generating revenue or the sacrifices that are given to a particular accounting period.

Mulyadi (2009:8) describes meaning of costs, in a general sense and in the narrow term:

"In general terms the cost is the sacrifice of economic resources, which measured in units of money that occurs or is likely to occur for a particular purpose. In the narrow term can be interpreted as the cost of economic sacrifice to acquire assets or called with the cost of goods"

Ikatan Akuntansi Indonesia (IAI) defines the expense, in the framework for the preparation and presentation of financial statement, financial statement standard (2002:70), the following:

"Expenses is the declining of economic benefit in one accounting period in the form of outflow or the decreasing of asset or the existing of and obligation which is influence to the decreasing of equity outside the shareholder right"

Sometimes the calculation is simple. Cost of goods and services are offered by the seller and the agent can be directly obtained by asking the seller or his agent. However, when costs of goods and services we get are not obtained by purchase, but by determining way the cost of produce the goods or services becomes difficult. In building such a construction of many other costs needed between raw material costs, labor costs, depreciation expenses and equipment costs other costs associated. It would be difficult to determine the cost of manufacture of goods or services that we produce furthermore it needs a good cost accounting system.

### 2.1.2 Cost Classification

In cost accounting, costs are classified into various ways. This classification is generally determined on the basis of goals to be achieved by such classification, the cost accounting concept known as "*Different cost for purpose*", Example for different purposes we need to use different cost concepts. No single concept of cost that can be used for all purposes.

According to Riwayadi (2001:3) the classification of costs divided 4 (four) groups, there are:

1. Cost in relation to the main organization fuctions
2. Cost in ralation to the activity
3. Cost in relation to an accounting period
4. Cost in relation to a decision, action, or evaluation.

According to Mulyadi (2009:13) there are five cost categorization of them are as follows:

1. The classification of costs by object of expenditure
2. The classification of costs according to the company's principal functions:
3. The classification of costs according to a relationship with something that finances
4. The classification of costs according to relation behavior in relation to change the volume or activity
5. The classification of costs on the basis of the benefit period

Definition production cost based on Mulyadi :

"Production costs are costs incurred to manage the raw materials into finished products ready for sale, consisting of raw material costs, labor costs and overhead costs." *(Mulyadi, 2009: 14)*

According to Supriono definition production cost is :

"Production costs are all costs related with the production function or activity of processing raw materials into finished products consisting of raw material costs, direct labor cost and factory overhead costs."
*(Supriono,2002: 19)*

And according to Hammer and Usry definition production cost is :

"Production cost or factory cost is usually defined as the sum of three cost elements : direct material, direct labor and factory overhead."
*(Hammer, 2002 : 30)*

From the three definitions above we can see that the production cost consists of three parts of costs, there are:

*1.* Raw material cost

*2.* Direct Labor cost

*3.* Factory Overhead cost

Raw material cost and direct labor costs are called by the prime cost, while direct labor costs combined with factory overhead is called the conversion cost, meaning the cost is used to convert or to change raw materials into finishing products

**2.1.2.1. The classification of costs by object of expenditure.**

In the way of this classification, expenditure object is the basis of expenditure costs, such as the name of the object is the fuel expenditure, all expenditures related to fuel are called *"cost of fuel"*

**2.1.2.2 The classification of costs according to the company's principal functions:**

a. Production costs.

Represents the costs incurred for processing raw materials into finished products ready for sale.

Example: Cost of machine depreciation, equipment, raw material costs, direct labor costs and factory overhead costs.

b. Marketing costs.

Represents the costs incurred to implement product marketing activities.

Example: Advertising cost, promotional costs, transportation costs from the company warehouse to warehouse customer, salaries of employees who carry out the marketing activities, sample cost

c. General and administrative costs.

Represents the costs of coordinating production and marketing activities.

Example: the cost of employee salary of finance department, accountant, and public relations department, Auditor fees, and photocopy costs

**2.1.2.3. The classification of costs according to a relationship with something that finances the cost**

Something be either funded can form of product or department. In connection with something that is founded, the cost can be classified into two categories:

a. Direct costs, are incurred that one of causes which is caused by something being founded.

b. Indirect costs.

Indirect costs are incurred not only caused by something finances. Indirect costs in relation to products referred to as indirect costs or overhead costs.

In relation with the product, production costs are divided into two: direct production cost and indirect production costs. In connection with the department, the cost is divided into two

groups; those are direct costs of departments and indirect costs of department.

a. Direct production costs consist of raw materials and direct labor costs. Direct cost department is all costs incurred within a certain department.

   For example: the cost of labor that works in the department of maintenance and depreciation costs of machinery used in the department is a direct cost to the department.

b. Indirect production cost or overhead costs are not easily classified with a particular product.

   For example: Salaries foreman to supervise the manufacture of certain products and others.

   In connection with departments, indirect costs are incurred in a department, but the benefits are enjoyed by more than one department.

   Examples: for departmental users of electric, electricity cost allocation received from the electric power department costs are indirect costs department

**2.1.2.4 The classification of costs according to its behavior in relation to change the volume of activity**

In the relationship with changes in the volume of activity, costs can be classified into:

1. Variable costs.

Variable cost is the sum of changing total cost is proportional to the volume change activities.

Example: Raw Material Cost, Direct Labor

2. Semi variable costs.

Semi variable costs are costs that change is not proportional to change in volume of activity. Semi-variable costs contain elements of fixed costs and variable cost elements.

3. Semi fixed costs.

Semi fixed costs are fixed costs for certain activities and the volume level changes with a constant amount at a certain production volume.

4. Fixed costs.

Fixed costs are costs that remain in the rotation the total volume of a particular activity.

Example: production director salary

**2.1.2.5 The classification of costs on the basis of the benefit period**

1. Capital expenditure.

Capital expenditure is the cost of having the benefit of more than one accounting period (usually during the accounting period is one calendar year).

Example: expenditure for the purchase of fixed assets, for major repairs of fixed assets, for the promotion of large scale, and spending for research and development product, depreciation cost, amortization costs or depletion cost.

2. Revenue expenditure.

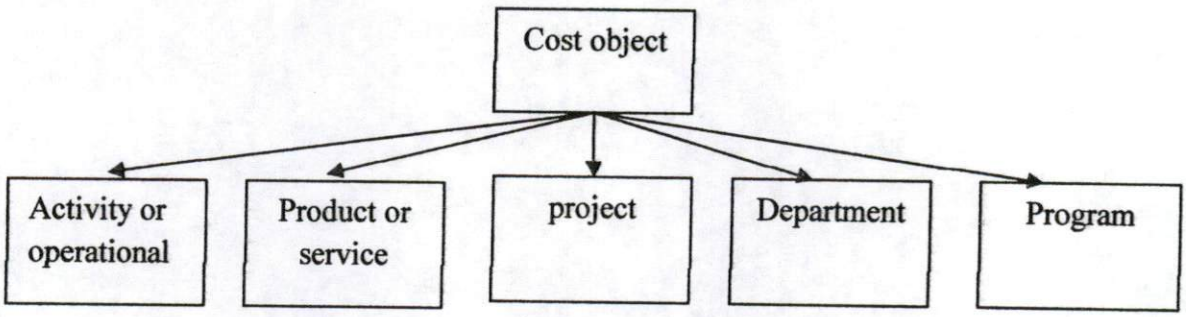
Revenue expenditure is the cost which only has benefits in the accounting period incurred such expenditure.

Example: Advertising Cost and Labor Cost

### 2.1.3 Cost Object

In the event which determines decisions, managers are demanding data that relate to a range of purposes. They want the cost of something. We call this something as a cost object and define that as some activity or the desire portion size of the fee separately. Cost object is an important key in management accounting. It can be something the activities or operations where resources are consumed or received.

**Cost Object** could be a product or service. In addition the project could also be department and program (Charles T. Horngen ,2002:41*)* :




**Picture 2.1 Cost Objects**

Measurement costs should be fixed on at least one object. Of course, some costs could be included in the cost of an object simultaneously. Briefly material costs could be included or become part of running a department or product.

### 2.1.4 Element Cost Production

Element in the cost of a product is a mixture of raw material costs, labor costs and factory overhead costs. Information on these costs for the management plays an important role in determining the cost of production and selling price. Basically, the elements of production cost can be defined as follows:

1. **Raw Material Cost**

   Represent all the raw materials used in the production process which changed its form into goods end of the additional labor and manufacturing overhead. Raw material cost can be categorized into direct raw material costs and indirectly with the following explanation:

   **a. Direct Cost Raw Material**

   All of the raw materials that can be identified directly from the final product, it can be traced from the product and the main part of the product. In this case, the recognition of the cost of raw material are including freight charges, taxes, sales and customer service.

   **b. Indirect Cost Raw Material**

   All of the supporting materials involved in the production of something the product.

2. **Labor**

   Labor is the physical and mental effort for undertaken in the production process are charged on a product. Labor can be divided into two:

**a. Direct Labor**

The entire workforce is directly involved in the production process of a product, which can be traced to the product and represent the majority of labor costs in the production process of products.

**b. Indirect Labor**

Constitutes the entire labor advocates involved in the production process of products.

**3. Overhead Cost**

Overhead cost is expenses not included in the cost of raw materials and direct labor costs. Costs usually contain all of costs that are indirectly involved in the production process of a product. Overhead costs are costs which important in production costs but it's difficult to identify the specific product.

## 2.2 Factory Overhead Cost

### 2.2.1 Definition of Factory Overhead Cost

Factory overhead costs, also called indirect costs, supplementary or manufacturing overhead cost. All those terms basically have the same understanding of costs not charged directly to a work or production; these costs can be traced directly to the product or the result of a specific job.

According to Usry, Hammer and Lawrence definition Factory Overhead Cost is:

"Factory overhead costs are generally defined as indirect materials, indirect labor, and other factory expense that are not easily identified or

charged directly to work or the product or the final destination costs such as the government contracts." *(Usry, Hammer and Lawrence,2002: 354)*

### 2.2.2 Assignment Factory Overhead Cost To Product

In the calculation of cost function based, factory overhead costs assign to the first time to the function of cost pool, and subsequently of the cost function for the product. Functions can be either factory or department.

If cost pool is factory, the factory overhead rate is called by the plant wide rate or single rate. Plant wide rate calculated by the formula:

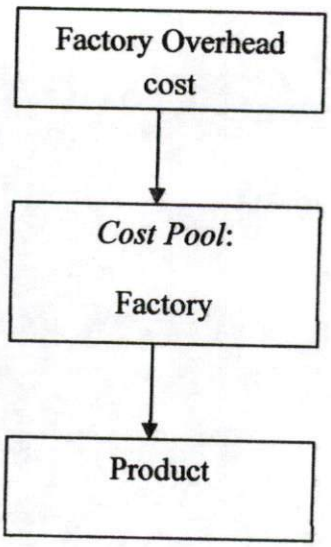
$$\text{Factory Overhead Rate} = \frac{\text{Factory Overhead Budgets}}{\text{Application Bases}}$$

If cost pool is department, the factory overhead rate is called department rate

$$\text{Factory Overhead Rate} = \frac{\text{Budget Factory Overhead Cost production Department After Allocation}}{\text{Application Bases}}$$

In traditional cost accounting, Assignment factory overhead cost or department cost to product unit or volume product driver. Unit volume level or the drivers are direct labor hours, machine hours, direct materials cost, direct labor costs and production unit.

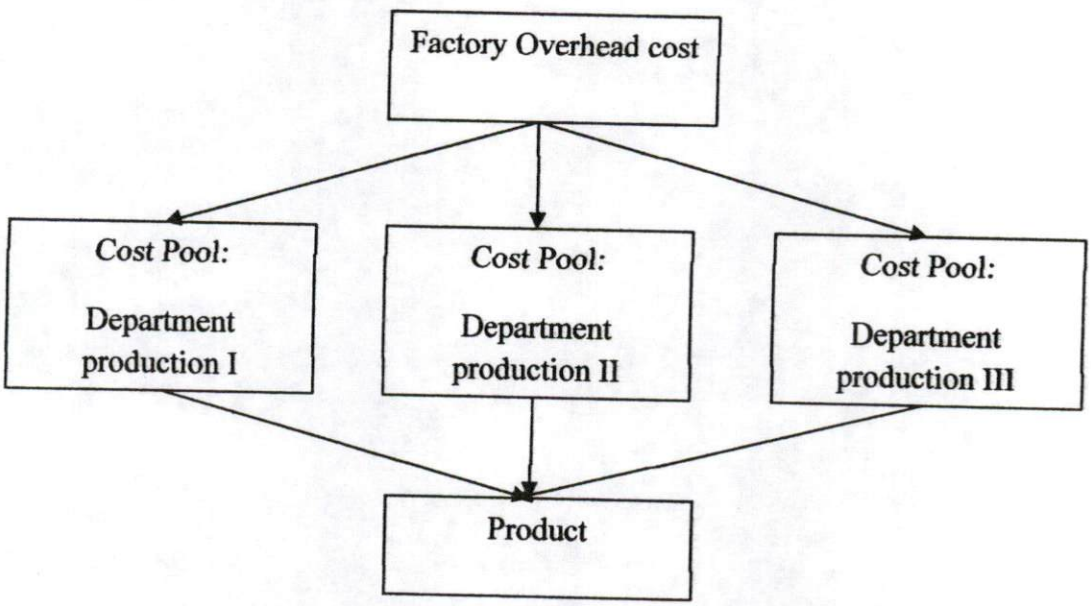
Assignment of factory overhead costs to products using a plant wide rate can be described as follows:




**Picture 2.2**

**Assignment of Factory Overhead Costs to Products Using a Plant Wide Rate**

Assignment of factory overhead costs to products by using department rate can be described as follows:




**Picture 2.3**

**Assignment of Factory Overhead Costs to Products Using Department Rate**

From the picture above is known that the assignment of factory overhead costs to products through two stages. The first stage of factory overhead assignment or production department. The second stage assignment factory overhead or production department costs to products. Assignment factory overhead costs to product calculated by formula as follows:

**Assignment Factory Overhead Cost = Actual Capacity X FOH Rate**

### 2.2.3 Step to Determine the Plant Wide Rate Factory Overhead Costs

Determination of the factory overhead cost rates are implemented through the following three stages:

1. Arrange Overhead Cost budget

   In arrange the factory overhead budget should be consider the level of activity (capacity) which will be used as the basis for the assessment of factory overhead costs. There are three different levels of activity (capacity) that can be used as the basis for the manufacture of factory overhead budget these are practical capacity, normal capacity and actual capacity is expected. Determination of practical capacity and normal capacity can be done by the first determining of the theoretical capacity is the maximum production volume can be produced by the factory.

2. Selecting the basic assignment factory overhead costs to products

   Selection of basis which most appropriate to charge overhead costs is a matter, that is very important because the cost of the system

should provide a fairly accurate cost data and the management must get meaningful and valuable the data. Therefore there are two objectives in choosing base assignment of factory overhead costs, there are :

To ensure that the assignment of factory overhead, comparable in terms of benefits or causal, with jobs, products or labor. Because the factory overhead rates as well it the purpose of estimation (assessment), the basic quantity is, need in the distribution of overhead costs will be able easily and efficiently described into the factory overhead costs to get the estimated total production costs.

To minimize costs and administrative labor. Where there are two or more base provide assignments of factory overhead these are similar to unit production, then it be uses the simplest assignment base.

3. Calculate Factory Overhead Rate

After the capacity can be achieved within specified budget period, and factory overhead cost budget has been prepared and the basic assignment is estimated and selected, and the last step is to calculate factory overhead costs tariff with the following formula:

$$\text{Factory Overhead Rate} = \frac{\text{Factory Overhead Budgets}}{\text{Application Base}}$$

### 2.2.4 Step to Determine the Departmental Rate Factory Overhead Costs

Departementalization means dividing the plant into segments, called departements, to which overhead cost are charged. For accounting purposes, dividing a plant into separate departments provides improved product costing (different departments will have different overhead rates) and promotes responsible control of overhead cost (supervisor or manager are responsible for cost of their department).

Most of the industrial company divided into several department. Rayburn (2000;10) classify department generally into production and service department. Production department is the department which is responsible in processing raw material into finished good. Example of production department are fabricating, assembling and finishing. While service department gives supporting to production department are repairing and material handling. The costs from service department are repairing and material handling. The cost from service department will be allocated to production department to determine total factory overhead cost.

In this stage, overhead cost allocation process conduct as follows:

1. Total overhead cost is divided and allocated to each department using the driver cost and allocation
2. Calculating the department rates using the unit-based driver such as direct labor hour or machine hour

Factory Overhead Application Rate :

Budgeted Factory Overhead Cost After Allocation

Application base

3. Allocation the departmental overhead cost to product by the departmental rate with the summary of driver used by related department.

Total overhead cost allocated to product is the value received by each department.

### 2.2.5 Cost Driver

Cost driver is the factors that can explain the consumption of factory overhead costs.

Cost driver is divided into 2 (two) :

1. Cost driver based on unit

   Cost driver based on unit to assign of factory overhead cost to product, through the use of a single factory overhead rate by the department.

2. Cost driver based on non unit

   Cost drivers based on the non-unit is the factor that explains the cause besides units of consumption factory overhead.

### 2.2.6 The Factors to be Considered in Determining Rate of Factory Overhead Costs

#### 2.2.6.1 Selection of Base Assignment Used

There are several kinds of drivers that can be used for factory overhead to products are as follows:

1. **Unit of Production**

This method is the most simple and direct overhead costs assign to the product. The formula for determining the factory overhead rate, using the units of production :

Factory overhead rate per unit of product =

$$\frac{\text{Estimated Factory Overhead Cost}}{\text{Estimated Unit}}$$

Real size in production activity is the output. If we are only producing one product in determining the overhead consumed by such products is not difficult. But the fact is most companies produce more than one type of product, so of course different product will consume a number of different overhead costs. Therefore that the output approaches become inaccurate.

2. **Direct Materials Cost**

When the donimant overhead costs vary with the value of raw materials, the the nasis used to assign overhead costs to products are the raw materials used.

Factory Overhead rate of Direct Material Cost used :

$$\frac{\text{Esrimated Factory Overhead Cost}}{\text{Estimated Material Costs}}$$

This method is rarely used. A product may be made from expensive material while other products made from cheap raw materials. If the process of both products are equal,

then the first product will receive a higher overhead costs than the second.

3 **Direct labor costs**

If most of the factory overhead cost element has a close relationship with the number of direct labor (example income tax liability of the company employees who are), then the basis used to charge overhead costs are direct labor.

Factory Overhead Rate Using Direct Labor Cost :

$$\frac{\text{Estimated Factory Overhead}}{\text{Estimated Direct Labor Costs}}$$

**4.Machine Hour**

If the basis of factory overhead costs vary with time of use of machinery such as fuel or electricity used to run the machines then the basis used for the charges it is the engine.

Factory Overhead Rate Using Machine Hours :

$$\frac{\text{Estimated Factory Overhead Cost}}{\text{Estimated Machine Hours}}$$

**5.Direct Labor Hours**

If many factory overhead cost relate to the use of labor hours, as in labor paced manufacturing settings, direct labor hours is an appropriate base. however, the use of

direct labor hours may require additional computataions, because some must compute these hours for each job using information on labor time ticket.

Factory Overhead Rate Using Direct Labor Hours :

$$\frac{\text{Estimated Factory Overhead Cost}}{\text{Estimated Direct Labor hours}}$$

### 2.2.7 Allocating Service Department Cost to Producing Departments.

Service department render a service that contributes in an indirect way to manufacture of the product but does not change the form, assembly, or nature of the material. Service department, such as cafetaria, maintenance, material handling, storage, receiving department and repairs.

Service department should be allocated either to producing deparments and service departments, or just to producing departments, on the basis of a common unit of measure that correlates closely with the causes of service department costs. The allocation can be based on number of employee. KWH consumption, direct labor hours, floor space, asset value, or cost of material to be requisitioned. The cost of service departments utimately are allocated to producing department to establish predetermined factory overhead rates.

There are saveral methods for allocating service department overhead cost to benefiting department are :

1. Direct method

Service department cost allocated only to producing departments.

2. Step method

   Service department costs allocated to some other service department and to producing departments that have received their service.

3. Algebraic method

   The linear algebra method uses simultaneous equations to recognize that service department render reciprocal services.

# CHAPTER III

# *RESEARCH METODOLOGY*

## 3.1. Type of Research

This research is a *field research* with descriptive study. It explains about a research method that focuses on a current issue in based on real condition. In this research, the writer analyzes of overhead cost assessment to product by using the factory overhead cost report in PT. Semen Padang.

## 3.2. Sources and Kinds of Data

The data of this research are taken from both primary and secondary data. Primary data is obtained from interview to people and secondary data are obtained from cost production report, factory overhead budget per department, report cost of factory overhead in 2009 year period.

## 3.3. Data Collection Method

In collecting the data, the writer uses two methods, they are:

1. Direct observation to the company as the object to research through :
   a. Interviewing with the people in cost accounting staff.

      Interview is conducted to get more details data regarding to the factory overhead cost assignment of product in PT Semen Padang.
   b. Getting, studying and analyzing the company document related with the research (as well primary or secondary data)

c. Library Study, collecting the information and data which relevant with the factory overhead cost assignment to product from books and journal.

## 3.4 Scope of Analysis

The writer limits the scopes of this research which are:

1. This research assignment factory overhead to company product by using the production report approach in 2009 year period.
2. This research focuses on department production indarung V in PT Semen Padang in 2009 year period.

## 3.5. Data Analysis

The writer uses qualitative and quantitative method in analysis the data, the writer will do an analysis of data comparing these data with theory has been learned, and makes calculation factory overhead cost assignment to product. The results of this analysis are used as a basis for conclusion and give suggestions.

The evaluation steps of factory overhead assignment cost to product are:

1. Evaluating the production and service department
2. Evaluating cost to each classification into direct and indirect cost
3. Evaluating the allocation of indirect cost to each department.
4. Evaluating the allocation of service department cost to production department.
5. Evaluating the calculation of factory overhead rate
6. Evaluating the assignment the factory overhead cost to product.

# CHAPTER IV

# *DISCUSSION AND ANALYSIS*

## 4. 1. Company History and profile

### 4.1.1 Company at glance

The history of Indonesia cement industry originated from West Sumatera, commenced by the construction of Semen Padang in Indarung Padang, in 1910. The Government of the Republic of Indonesia on July 5, 1958 nationalized bearing the name of NV Neverlansche Indische Portland Cement Maatschappij, the oldest cement plant in the Archipelago. Then its capacity grew to 170.000 tons/ year, known as Pabrik Indarung I

Later, through its shares acquisition, Semen Padang becomes a member of PT. Semen Gresik (Persero) Tbk since September 15, 1995.

**Table 4.1 Production Capacity**

| **Plant** | **Capacity** |
|---|---|
| Indarung Plant –II | 660.000 Ton |
| Indarung Plant –III | 660.000 Ton |
| Indarung Plant –IV | 1.620.000 Ton |
| Indarung Plant –V | 2.300.000 Ton |
| Total | 5.240.000 Ton |

***Source: Internal Data of Company, 2009***

PT Semen Padang is well-known as a special type cement producer in Indonesia offering wide-ranging types of cement. Type of products:

1. Portland Cement Type I
2. Portland Cement Type II
3. Portland Cement Type III
4. Portland Cement Type IV
5. Portland Cement Type V
6. Super Mansory Cement (SMC)
7. Oil Well Cement (OWC)

The traditional market of Semen Padang is in West Sumatera and other provinces in Sumatera. However, the Company also ships its products to West Java, Banten, Jakarta and Central Java, and Kalimantan. In addition, the Company also exports some products, among others to Bangladesh, Ceylon, the Middle East, Africa, Madagascar, and Germany.

The company is prioritizing to establish a warm relationship with its distributors, sales agents and customers, for both national and international markets, as well as to continue to enhance customer service. To ensure timely delivery of a continuous supply of products to its customers, the company is committed to continually enhance its system services and effectively manage its network of distribution facilities which include packing plants, buffer warehouses and wharfs that are supported by the ample availability of land and sea

transportation armadas. In 2007, 68% of cement was distributed by ships and 25% was exported. This achievement is supported by the continuing synergies with the Semen Gresik Group (SGG) that the company's brand, marketing networks and internal business process is strengthened to meet the demands of Sumatera, Java and international markets, ensuring the company can continue to grow.

The company is 99.99% owned by PT Semen Gresik Tbk., with the remaining 0.01% in the hands of the Semen Padang employee Cooperative. The Semen Gresik Group (SGG) is currently owned by the Indonesian government with 51.01% share, Blue Valley Holdings Pte. Ltd with 24.90% share and the balance of 24.09% share in the hands of the public.

**Table 4.2 Semen Padang shareholders:**

| **Shareholders** | **Issued capital and fully paid up** | **Percentage** | **Total** |
|---|---|---|---|
| | **Share** | **%** | **Rp 000** |
| PT Semen Gresik (Persero) Tbk | 332.000.000 | 99,99 | 332.000.000 |
| Koperasi Keluarga Besar Semen Padang | 1 | 0,01 | 1 |
| Total | 332.000.001 | 100,00 | 332.000.001 |

***Source: Internal Data of Company, 2009***

The company also has subsidiaries within the industry that includes PT Igasar (12% shareholder ownership), PT Sepatim

Batamtama (85%), PT Bima Sepaja Abadi (80%), and PT Sumatera Utara Perkasa Semen (10%). PT Semen Padang also has interests within a number of supporting organizations, such as the Semen Padang Pension Fund, the Igasar Foundation, the Semen Padang Family Cooperative, the Semen Padang Hospital Foundation, PT Pasoka Sumber Karya and PT Yasiga Sarana Utama. Through its subsidiaries, Semen Padang involves in the business of packaging, distributing/transporting cement, and cement trading. In addition, through its R&D Department, the Company also offers engineering services, industrial equipment, and other products.

**Table 4.3 Subsidiaries Companies**

| **Name of company** | **Semen Padang shares** |
|---|---|
| PT Sepatim Batamtama | 85% |
| PT Bima Sepaja Abadi | 80% |
| PT Igasar | 12% |
| PT Sumatera Utara Perkasa Semen | 10% |

***Source: Internal Data of Company, 2009***

### 4.1.2 Company's Vision & Mission

***Vision***

To become a reliable, excellent and eco-friendly cement company.

***Mission***

1. To improve the Company's value for the stakeholders, to grow and to provide the best services to the customers.
2. To develop an environmentally conscious industry.
3. To develop competent and professional human resource

### 4.1.3 Resources in the Production Department

1. Raw Material

   a. Lime Stone

   This material is obtained as a deposit on the Bukit Karang Putih (mined) and used as a source of calcium oxide. The content of calcium oxide in lime stone is about 50% and this material is used about 81% in basic materials processing.

   b. Cilica Stone

   Material as a mineral found in the Bukit Ngalau (mined) and used as a source of Silicon Oxide, Aluminum Oxide and Iron Oxide. This material contains about 65% silicon oxide, 13% Aluminum Oxide and Iron Oxide 7%, so the requirement in the processing of basic materials around 10%.

   c. Clay

   Clay contained in the form of deposits on the hill around Indarung (mined), but there are some of the clay purchased. This material is

used as a source of aluminum oxide and iron oxide, which respectively each contained 29% and 10%. Use clay as raw material about 10%.

d. Iron Sand

In 1972, for Portland cement that is darker colored added a fourth raw material that is iron sand brought from Cilacap (purchased). This material contains round 83% iron oxide and used round 1% in basic materials processing. Theoretically, iron oxide in production Portland semen function as flux in the combustion and affect the color of the Portland cement.

Provision of raw materials was conducted by the Ministry of Mines PT. Semen Padang, specifically the Bureau of Mining of Raw Materials. Before the Bureau of Mining of Raw Materials mining of the first, conducted preliminary work by the Bureau of Mine Planning and Development

e. Gypsum

To fulfill the needs of the factory, gypsum imported from Gresik, which is synthetic gypsum, while natural gypsum imported from Australia. Gypsum consumption of approximately 90,000 tons per year.

2. Indirect Material

a. Explosives, consist of Ammonium Nitrate, Power Gel, detonators, Leg Wire

b. Grinding Balls

c. Fire Brick, consist of Basic Brick, Spinal Brick, Alumina Brick and Castable

d. Chemicals

3. Packing Material

a. Regular Paper

b. Extensible Paper

c. Tape Paper

d. Patch Value

e. Multifilament Thread ( red and White)

f. Polymida Rope Thread ( White and Blue)

g. Ink ( Red and Blue)

h. Tapioka Glue

i. Solvicor Glue

j. PP Woven Bags

4. Fuel

a. Coal

b. Diesel Fuel

5. Electricity

Electricity consumption is divided into four sections, that is:

a. Usage Factory

b. Usage Teluk Bayur

c. Usage of Bukit Putus

d. Usage of Representative Office

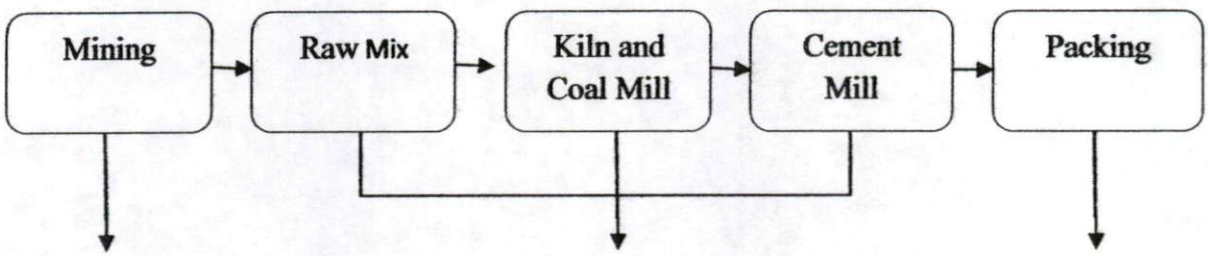
6. Bulk Cement Transport

This cost represents the cost of transportation of bulk cement by truck and rail from the packing unit, consumption measured by the ton and the tariff per ton Rp. 6.600 To train and Rp. 8.250 For truck

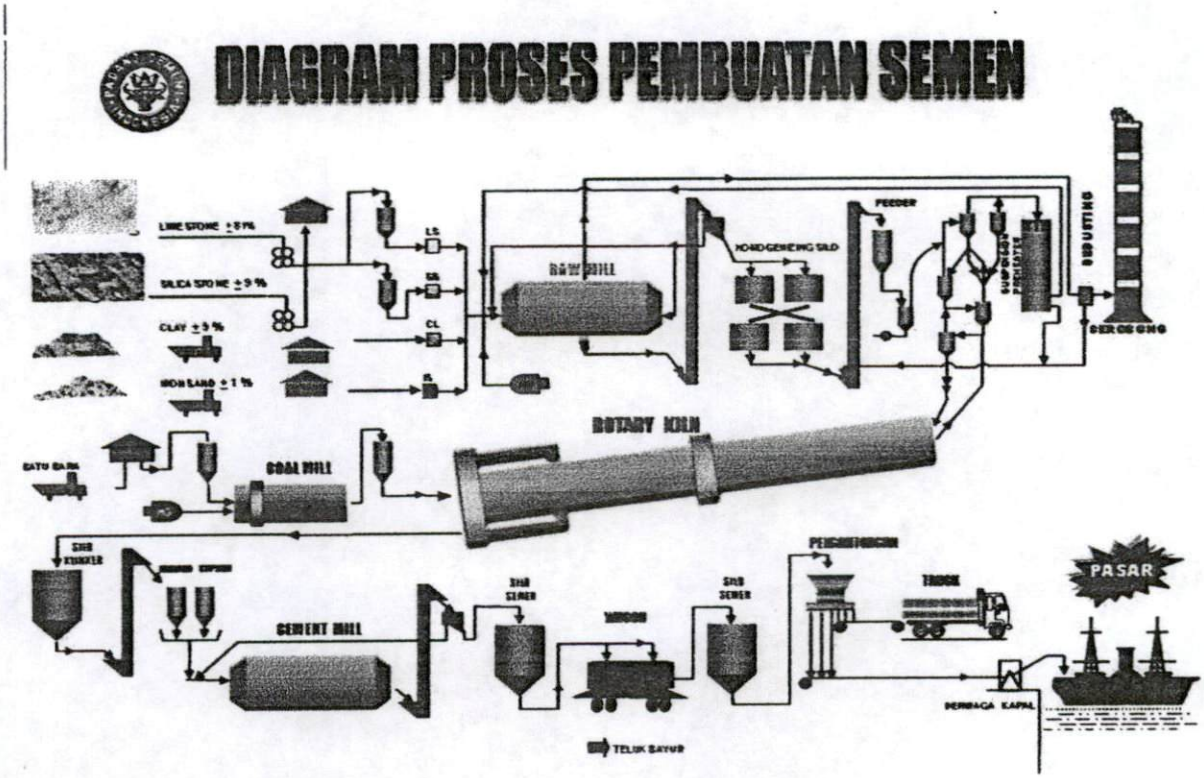
7. Labor
8. Maintenance Cost
    a. Installation Factory
    b. Heavy Equipment
    c. Depreciation Expense
    d. Installation Factory
    e. Heavy Equipment

### 4.1.4 Production process

**Picture 4.1 Stage of Production Process**




**Stage 1** **Stage 2** **Stage 3**




*(Source : PT Semen Padang)*

### 4.1.4.1 Mining Stage

Preparation of raw material is lime stone, silica stone, clay and pozzoland conducted by the division of the mine. Raw materials are mined from deposits that were around the factory site called quarry. this activity is done for the main raw material:

**a. Lime Stone Mining**

Lime stone mined from deposits located in the Bukit Karang Putih distance of 2 km from the location of the factory. The Stages are :

1. Clearing, is to clean up bush or tree using saw type chainsaw.

2. Stropping, aims to clean and separate the surface from mining areas, in order to obtain raw materials with high purity. For this use tool bulldozer.
3. Benching, is making levels by using a bulldozer
4. Drilling, is useful for the preparation of the blasting. The tools used are Crawler mill.
5. Charging is the filling of explosives into the hole drilling
6. Blasting is blasting the way electrical detonation
7. Dozing, is pushing the material with a bulldozer and collected at the loading area, these materials are transported by dump trucks.
8. Sliding Rock, is dropped the material according to gravity.
9. Loading , is transports limestone from the loading area to crusher by using the wheel loader.
10. Crusting, is breaking machine limestone. This tool is a hammer used crusher.
11. Transporting, is transportation of an existing mill into storage at the plant by using a belt conveyor to Indarung I, II, III, IV, V and lorry hanging for Indarung I.

**b. Silica Stone Mining**

Location Silica stone Mining in Bukit Ngalau approximately 1.5 km east of the factory location. Mine is similar to limestone mining. Solver tool used is the type of Roller Mill. The result of solving transported to the factory by using a lorry hanging for Indarung I and belt conveyor for Indarung II, III, IV and V

**c. Clay Mining**

Clay is mined from deposits that were around the plant that is in Bukit Atas. Mining system is different from silica and lime stone mining. Location of factory milled clay with a roller crush and later in the mix with other raw materials for cement production.

**4.1.4.2 Cement Production**

Cement production in PT. Semen Padang have done in two ways, there are wet process and dry process. Stages of the process are:

1. Preparation of slurry / Raw mix for bait kiln,

   The process of preparation of raw material is intended for making bait in the form of pulp from raw materials that have been mixed with a certain measure inserted into the raw mix for milling. At this stage of milling raw materials, the basic materials that have been mixed with a certain measure and into powder, which is done in the drum (raw mill) in the milling process, it is used the raw materials as follows: 80% limestone, 10% silica stones, 9% clay, and 1% iron sand. The results milling of raw mill is called a slurry.

   Subsequently, it was conducted phase mix homogenization of raw materials in order to get the slurry with chemical composition corresponding to that desired. For that, it is inserted into the correction tank. Homogenization was done with a mechanical mixer or compressed air.

2. Formation of slurry / raw mix into clinker,

   It will be process with slurry combustion process in the kiln (kitchen swivel). For the purpose of this combustion, the fuel is the coal form of coal is dried and milled in the first drum dryer charcoals which have drying rooms and milling rooms. Furthermore it used for fuel in the kiln. The temperature which needed for combustion is between 1440 °C to 1460 °C. These processes through five stages: evaporation, drying, calcinations, heater and cooling.

3. Clinker milling with gypsum to be cement,

   The next steps, clinker mixed with gypsum and incorporated into the cement mill and milled. The processes of milling are as follows: the clinker which coming out from the cooler is carried out by transportation tools to the clinker silo for further cooling. Pulling the clinker from silo have been done by conveyor Cyclops and forwarded to the chain drag to be brought into the elevator buckle as transferring into the hopper clinker in cement mill area. Gypsum is transported by dump trucks and inserted into the gypsum storage. From here the gypsum are carried out by conveyor belt to elevator bucket that would take it into the hopper gypsum to the cement mill area, contiguous with the clinker hopper.

   In each hopper complicated with a rotary feeder hopper which regulate feeding for cement mill at an appropriate comparison.

The mixture of clinker and gypsum are milling that, after it passed into the cement silo and this is categorized as Portland cement. Mean while, the result of rough milling is returned to the cement mill to be ground again.

#### 4.1.4.3. Packing

Bulk cement in the silo is inserted into the packing tool (Pecker) and packed with a size of 50 kg. This packing machine works automatically and cement can be delivered to truck or ship into the hold with a truck loading crane or overall the production, production manager makes a production report on the reached volume production.

## 4.2 Analysis and discussion

### 4.2.1 Assignment Factory Overhead Cost to Product in PT. Semen Padang

PT. Semen Padang have 4 (four) production departments, those are: raw material department, kiln and coal mill department, cement mill department, and packing department.

**Table 4.4 Production Department Indarung V PT. Semen Padang**

| Account Description | Cost Driver |
|---|---|
| 1. Raw Mix Department | Machine Hours |
| 2. Kiln and Coal mill Department | Machine Hours |
| 3. Cement Mill Department | Machine Hours |
| 4. Packing Department | Machine Hours |

***Source: Internal Data of Company, 2009***

Most of production department in PT. Semen Padang are using the machine, the cost of production department is influenced by the number of machine hours, furthermore the cost driver used for assignment cost of raw material department, kiln and coal mill department, cement mill department, and packing department to product are machine hours.

PT. Semen Padang have 3 (three) service departments, those are : raw material handling department, storage department, and electricity power generator department

**Table 4.5 Service Department Indarung V PT. Semen Padang**

| Account Description | Cost Driver |
|---|---|
| 1. Raw Materials Handling | The Estimation Cost of Raw Material requested |
| 2. Storage | Floor Area |
| 3. Electricity Power Generator | Kilo Watt Hours (KWH) |

***Source : Internal Data of Company, 2009***

Cost driver is used to allocate the cost of raw material handling department is the estimation cost of raw material requested. The storage cost department is influenced by the total of floor area that used at storage. For that, the cost driver that used to allocate the storage cost to production department is floor area. Electricity power generator cost department is influenced by the estimation of kilo watt hours consumption. Then, cost driver is used to allocate the cost of electricity power generator department is kilo watt hours

The cost happened at production department in PT. Semen Padang can be classified as direct cost and indirect cost. Direct cost of production department is the resource which is only consumed by one production department and the cost is assigned to each production department. Indirect cost of production department is the cost which is consumed by several production departments and service departments together.

**Table 4.6 Direct Cost Production Department Indarung V**

| No | Account Description | Total Cost |
|---|---|---|
| 1 | Raw Material Cost | Rp. 43.750.560.000 |
| 2 | Milling Supporting Material Cost | Rp. 5.461.330.000 |
| 3 | Packing Material Cost | Rp. 245.222.293.000 |
| 4 | Packing Production Cost | Rp. 41.619.702.000 |
| 5 | Fuel Cost | Rp. 192.944.070.000 |
| 6 | Electricity Cost | Rp. 239.572.495.000 |
| 7 | Water Cost | Rp. 11.316.699.000 |
| 8 | *Chemical Material Cost* | *Rp. 504.000.000* |
| | **Total Cost** | **Rp. 780.397.149.000** |

***Source: Internal Data of Company, 2009***

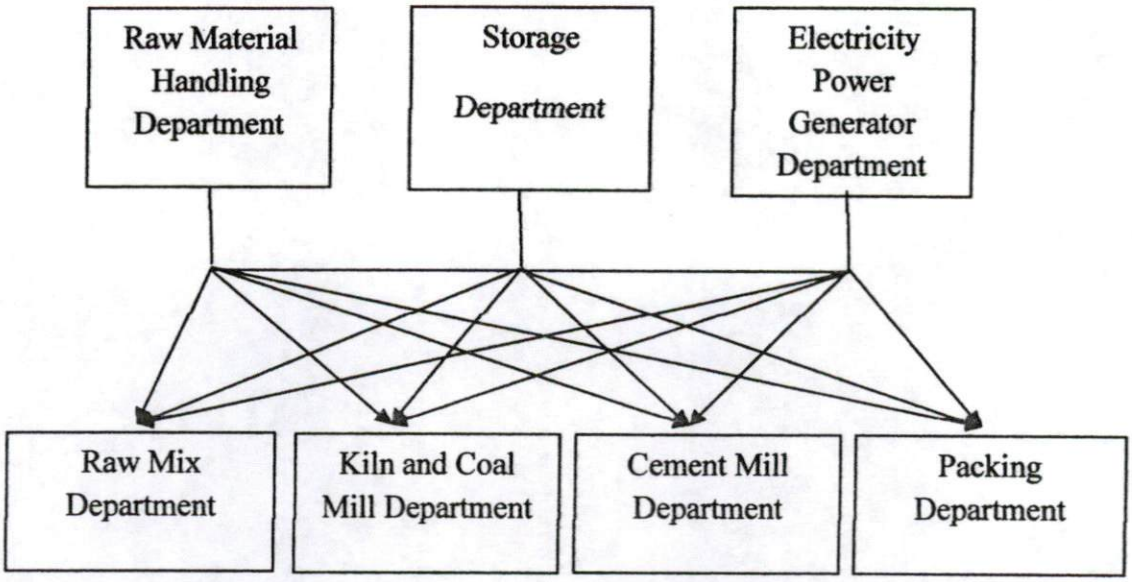
**Table 4.7 Indirect Cost of Production Department Indarung V**

| Account Description | Cost Driver | Cost |
|---|---|---|
| 1. Labor Cost | Number of Indirect Labor | Rp. . 67.370.440.000 |
| 2. Tax and insurance cost | Land and Building Value | Rp. 29.166.667.000 |
| 3. Maintenance and Equipment Cost | Machine Hour | Rp. 9.452.344.000 |
| 4. Depreciation | | |
| - Building | Floor Area | Rp. 506.160.125.000 |
| - Machine | Machine Hours | Rp. 2.498.748.963.000 |

***Source: Internal Data of Company, 2009***

The allocation of indirect cost to production departments in PT. Semen Padang by using the allocation basis. Labor cost is allocated to each production departments based on the number of indirect labor. Machine hours is used as the basis to allocate the maintenance and equipment cost to each production department. Land and building value is used as the basis to allocate the tax and insuarnce cost to each production department. Depreciation cost of building based on the floor area and depreciation of machine based on machine hours.

Cost allocation of service department to production department in PT. Semen Padang based on the factor of cost driver. Cost driver used to allocate the cost of raw material handling department is the estimation of raw material request. The storage cost is influenced by the total of storage floor that used. Futhermore, the cost driver used to allocate the storage cost to production department is floor area. Electricity power generator cost is influenced by the estimation of kilo watt hours (KWH) consumption. Therefore, cost driver is used to allocate the cost of electricity power generator department is kilo watt hours (KWH). PT. Semen Padang allocates the service department cost to production deparment by using direct allocation method.




**Picture 4-2 Cost Allocation Service Department to Production Department by Using Direct Allocation Method**

By using results of survey data of factory and service department costs allocated to production departments as follows:

1. Raw Material Handling Cost

$$= \frac{\text{Total of Raw Material Handling Cost}}{\text{Total Estimation of Raw Material Request}}$$

= Rp. 43.750.560.000/ 567140 ton

= Rp. 77.142

For that, the allocations of service department cost to production department are:

a. Raw Mix Department

: 283071 ton x Rp. 77.142 = Rp. 21.836.663.080

b. Kiln and Coal mill Department

: 157039 ton x Rp. 77.142 =Rp. 12.114.302.540

c. Cement Mill Department

: 64015 ton x 77.142 =Rp. 4.938.245.130

d. Packing Department

: 63015 ton x 77.142 =Rp. 4.861.103.130

Total Rp . 43.750.560.000

2. Storage Department Cost

$$= \frac{\text{Total of Storage Department Cost}}{\text{Total of Floor Area}}$$

$$= \text{Rp. } 1.98.700.000 / \ 35000 \ m^2$$

$$= \text{Rp. } 56771$$

For that, the allocations of service department cost to production department are:

a. Raw Mix Department

: 6500 $m^2$ x Rp. 56771 = Rp. 369.011.500

b. Kiln and Coal mill Department

: 6000 $m^2$x Rp. 56771 = Rp. 340.626.000

c. Cement Mill Department

: 7000 $m^2$x Rp. 56771 = Rp. 397.397.000

d. Packing Department

: 6500 $m^2$x Rp. 56771 = Rp. 369.011.500

Total Rp. 1.98.700.000

3. Electricity Power Generator Cost

$$= \frac{\text{Total of Electricity Power Generator Cost}}{\text{Total of Kilo Watt Hours}}$$

= Rp. 126.488.466.000/ 263.609.820 KWH

= Rp. 479

For that, the allocations of service department cost to production department are:

a. Raw Mix Department

: 66.239.170 Kwh x Rp. 479 = Rp. 31.728.562.430

b. Kiln and Coal mill Department

: 65.030.015 Kwh x Rp. 479 =Rp. 31.149.377.190

c. Cement Mill Department

: 76.146.585 kwh x Rp. 479 = Rp. 36.474.214.220

d. Packing Department

: 56.140.050 Kwh x Rp. 479 = Rp.26.891.562.950

Total Rp.126.488.466.000

**Table 4.8**
**Allocation of Indirect Cost to Production Department Indarung V**
**PT. Semen Padang**
**2009**

| No | Account Describtion | Production Department | | | | Total |
|---|---|---|---|---|---|---|
| | | Raw Mix Department | Kiln and Coal Mill Department | Cement Mill Department | Packing Department | |
| 1 | Labor Cost[x)] | Rp. 10.105.565.985 | Rp. 10.105.565.985 | Rp. 11.228.406.650 | Rp. 10.105.565.985 | **Rp. 41.545.104.590** |
| 2 | Tax and insurance Cost[xx)] | Rp. 5.104.166.900 | Rp. 4.739.585.500 | Rp. 5.833.333.600 | Rp. 5.468.750.500 | **Rp. 21.145.836.500** |
| 3 | Maintenance and Equipment Cost[xxx)] | Rp 1.592.970.960 | Rp 1.592.970.960 | Rp. 1.592.970.960 | Rp. 1.592.970.960 | **Rp. 6.371.883.840** |
| 4 | Depreciation Building[xxxx)] | Rp. 94.001.167.000 | Rp. 86.770.308.000 | Rp. 101.232.026.000 | Rp. 94.001.167.000 | **Rp. 376.004.668.000** |
| 5 | Depreciation Machine[xxxxx)] | Rp. 421.105.061.000 | Rp. 421.105.061.000 | Rp. 421.105.061.000 | Rp 421.105.061.000 | **Rp. 1.684.420.244.000** |
| **Total** | | **Rp. 531.908.931.800** | **Rp. 524.313.491.400** | **Rp. 540.991.798.200** | **Rp. 532.273.515.400** | |

***Source: Internal Data of Company, 2009***

x) allocation used cost driver : Number of Indirect Labor, Labor rate = Total of labor Cost/ Total of Number Indirect labor
xx) allocation used cost driver : Land and Building Value, Tax and Insurance Rate = Total of Tax and Insurance Cost/ Total Land and Building Value
xxx) allocation used cost driver : Machine Hour, of Maintenace and Equipment Rate = Total of Maintenace and Equipment Cost/ Number of Machine Hours
xxxx) allocation used cost driver : Floor Area, Depreciation of Building Rate = Total of Depreciation Building Cost / Total of Floor Area
xxxxx) allocation used cost driver : Machine Hours, Depreciation of Machine Rate = Total of Depreciation Machine Cost / Number of Machine Hours

**Table 4.9**
**Allocation of Indirect Cost to Service Department Indarung V**
**PT. Semen Padang**
**2009**

| No | Account Description | Service Department | | | Total |
|---|---|---|---|---|---|
| | | Handling of Raw Material Department | Storage Department | Electricity Power Generator Department | |
| 1 | Labor Cost [x)] | Rp. 10.105.565.985 | Rp. 6.737.043.990 | Rp. 8.982.725.320 | **Rp. 25.825.335.290** |
| 2 | Tax and insurance Cost [xx)] | Rp. 2.916.666.800 | Rp. 2.187.500.100 | Rp. 2.916.666.800 | **Rp. 8.020.833.700** |
| 3 | Maintenance and Equipment Cost [xxx)] | Rp 739.203.990 | Rp. 739.203.990 | Rp. 1.592.970.960 | **Rp. 3.071.378.940** |
| 4 | Depreciation Building [xxxx)] | Rp. 50.616.012.510 | Rp. 36.154.294.650 | Rp. 43.385.153.580 | **Rp. 130.155.460.700** |
| 5 | Depreciation Machine [xxxxx)] | Rp. 195.410.054.000 | Rp. 195.410.054.000 | Rp 421.105.061.000 | **Rp. 735.933.700** |
| **Total** | | **Rp. 259.787.503.300** | **Rp. 241.228.096.700** | **Rp. 477.982.577.700** | |

***Source: Internal Data of Company, 2009***

x) allocation used cost driver : Number of Indirect Labor, Labor rate = Total of labor Cost/ Total of Number Indirect labor
xx) allocation used cost driver : Land and Building Value, Tax and Insurance Rate = Total of Tax and Insurance Cost/ Total Land and Building Value
xxx) allocation used cost driver : Machine Hour, of Maintenace and Equipment Rate = Total of Maintenace and Equipment Cost/ Number of Machine Hours
xxxx) allocation used cost driver : Floor Area, Depreciation of Building Rate = Total of Depreciation Building Cost / Total of Floor Area
xxxxx) allocation used cost driver : Machine Hours, Depreciation of Machine Rate = Total of Depreciation Machine Cost / Number of Machine Hours

**Table 4.10**

**Allocation of Service Department Cost to Production Department Indarung V Using Direct Allocation Method**

**PT. Semen Padang**

**2009**

| No | Service Department | Production Department | | | | Total |
|---|---|---|---|---|---|---|
| | | Raw Mix Department | Kiln and Coal Mill Department | Cement Mill Department | Packing Department | |
| 1 | Handling of Raw Material x) | Rp. 21.836.663.080 | Rp. 12.114.302.540 | Rp. 4.938.245.130 | Rp. 4.861.103.130 | **Rp. 43.750.560.000** |
| 2 | Storage xx) | Rp. 369.001.500 | Rp. 340.626.000 | Rp. 397.397.000 | Rp. 369.011.500 | **Rp. 1.98.700.000** |
| 3 | Electricity Power Generator xxx) | Rp. 31.728.562.430 | Rp. 31.149.377.190 | Rp. 36.474.214.220 | Rp. 26.891.562.950 | **Rp. 126.243.716.800** |
| | **Total** | **Rp. 53.934.227.010** | **Rp. 43.604.305.730** | **Rp. 41.809.856.350** | **Rp. 32.121.677.580** | |

***Source: Internal Data of Company, 2009***

x) allocation used cost driver : The estimation of raw material cost

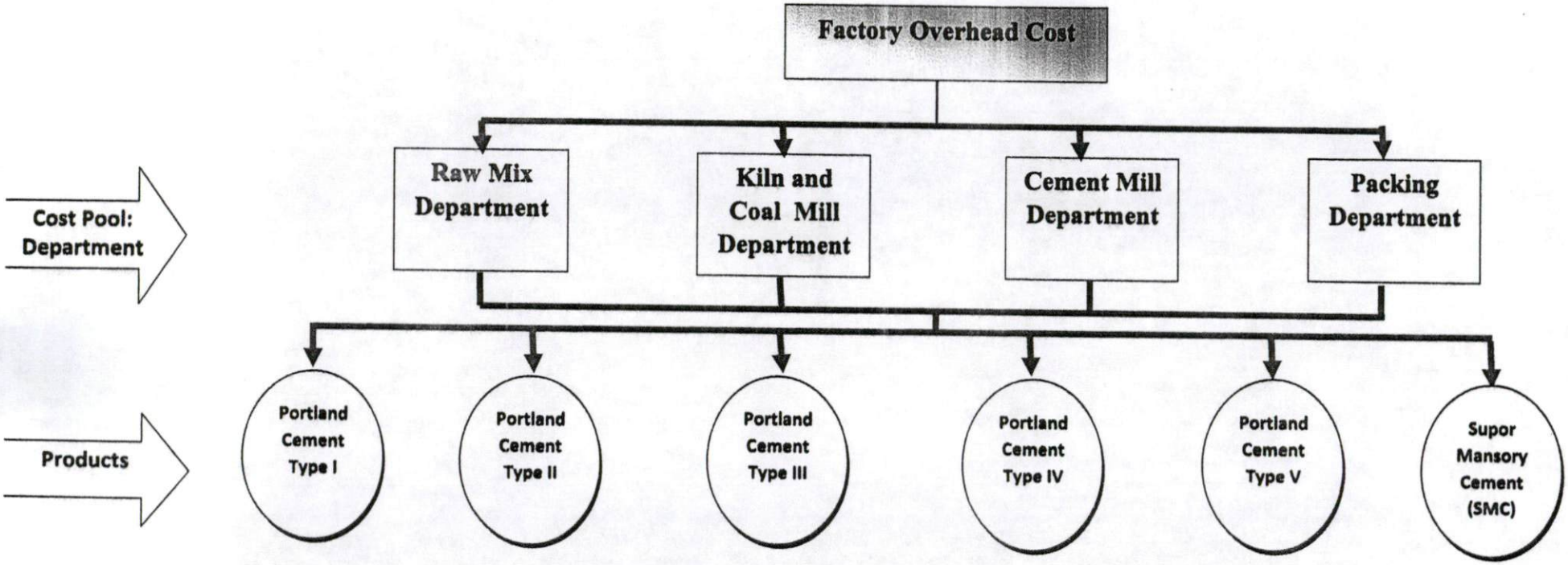
xx) allocation used cost driver : Floor Area

xxx) allocation used cost driver : Kilo Watt Hour

PT Semen Padang is well-known as a special type cement producer in Indonesia offering wide-ranging types of cement. Type of products:

1. Portland Cement Type I *(Ordinary Portland Cement)*
2. Portland Cement Type II *(Moderate Sulfate Resistance Cement)*
3. Portland Cement Type III (*High Early Strength Cement*)
4. Portland Cement Type IV
5. Portland Cement Type V *( High Sulfate Resistence Cement)*
6. Super Mansory Cement (SMC)
7. Oil Well Cement (OWC)

Production Oil Well Cement (OWC) produced based on customer order, because Oil Well Cement is special cement, that is only used for drilling oil well and natural gas. Therefore, oil well cement (OWC) made only if there is order from customer and only produced in Indarung I. Whereas portland cement type I until porland cement type V and Super Mansory Cement (SMC) always produced in Indarung II until Indarung V.




**Picture 4.4 Factory Overhead Cost Assignment to Product**

Cost Pool which is used by PT. Semen Padang in factory overhead cost assignment to product is departmet, So calculate the factory overhead cost to product in PT. Semen Padang is using departmental tariff.

In PT Semen Padang assigment factory overhead cost to product though two stages. The first stage of factory overhead assignment to production department. The second stage assignment factory overhead from production department to product.

The assignment of factory overhead cost from production department to each type of cement product based on machine hours. At raw mix department produces a single product because each type of cement products can not be identified. At kiln and coal department also produces a single product because each type of cement product s can not be identified. Various kind of cement which is produced by cement mill department, this department produces portlant cement type I, portland cement type II, portlant cement type III, portland cement type IV , porland cement type V, and super mansory cement (SMC). Cement mill uses the different total of time final milling process to each type of cement products, for example, the portland cement type I, the milling occurs during ± 2.5 hours, at the portland cement type II, the milling occurs during ± 3.5 hours. Portland cement type III, the drilling occurs during ± 4 hours, portland type cement IV, the milling occurs during ± 5 hours. At the portland cement type V, the drilling occurs during ± 6 hours and super mansory cement (SMC), the drilling occurs during ± 3 hours. Futhermore, for each type of cement products has difference refinement

level. In cement mill department also gives additional sulfate for each type of cement product. Each type of cement product has difference contains sulfat, for example, at the porland cement type I contains sulfat 0,0%- 0,10% , the porland cement type II contains sulfat 0,08%- 0,17%, the porland cement type III contains sulfat 0,15%- 0,60%, the porland cement type IV contains sulfat 0,17%- 0,65%, the porland cement type V contains sulfat 0,17%- 0,67% , and super mansory cement (SMC) contains sulfat 0,0%-0,15%. Packing department uses the same machine hours to packing process for each type of cement product, because each pack of cement has the same amount that is 50 kg each type of cement product and packing department uses the same process to packing each type of cement products.

At this time, the calculation factory overhead costs in PT. Semen Padang uses software to assigned factory overhead costs to products and then staff in cost accounting department only entry the data into the software which is used. the name of sofware which is used is Oracle E-Business Suite Manufacturing & Supply Chain Management.

## 4.2 Analysis of Factory Overhead Cost Assignment to Product

Based on the result of the research which is done by the writer, PT. Semen Padang has appropriately divided the production department into 4 (four) production departments, those are : raw mix department, kiln and coal mill department, cement mill department, and packing department. Mining department is not included into production department because mining department related to the acquisition of raw materials. Division of the production department at PT. Semen Padang is based on the production process from raw materials to finished good.

The cost driver for production department used by PT. Semen Padang was appropriate, since most of the production departments in PT. Semen Padang were using the machine therefore cost of production department was influenced by the number of machine hours. Futhermore, the cost driver for assignmnet cost of raw material department, kiln and coal mill department, cement mill department, and packing department are machine hours.

PT. Semen Padang has 3 service departments : raw material handling deparment, storage department, and electricity power generator department. The dividing of service deparment in PT. Semen Padang was inappropriate. Actually, the workshop should be included into service department, because workshop also gives service to production department, for example, workshop department

gives services like repairing a damaged machine in the production department.

Cost drivers used in the service department were appropriate. The cost driver which is used to allocate the cost of handling raw material department is influenced by estimation cost of raw material requested, the more total of raw material requested from production department, the higher the cost of handling raw material cost. The cost of storage department is influenced by the total of floor area that used at storage. Furthermore, the cost driver that used to allocate the storage cost to production department is the floor area, the higher total of floor area used at storage, the higher the cost of storage department. The cost driver for electricity power generator department is kilo watt hours (KWH), the higher total of electicity (kilo watt hours) consumed, the higher the cost of electricity power generator department. Workshop cost is influenced by the number of machine repaired. Thus, cost driver used to allocate the workshop cost to production department is number of machine repaired, the more number of machine repaired in production department, the higher the cost of workshop department.

The cost happened at production department in PT. Semen Padang can be classified as direct cost and indirect cost. Direct cost of production department is the resources which is only consumed by one production department and the cost is assigned to each production department. Indirect cost of production department is the

cost which is consumed by several production departments and service departments together. Based on the theory, classification of direct cost and indirect cost have been appropriate.

Electricity cost included into direct cost because each production department has electrical substation to distribute the electricity. As the result, electricity just distributed to each production department. Water cost also has central water in each production department to distribute the water. Threfore, water just distributed to each production department.

The allocation of indirect cost to each production departments in PT. Semen Padang has been used appropriate allocation basis. Labor cost is allocated to each production departments based on the number of indirect labor, the more number of indirect labor working in PT. Semen Padang, the higher the cost of labor cost. Machine hour is used as the basis to allocate the maintenance and equipment cost to each production department, the more number of machine hours used in PT. Semen Padang, the higher the cost of maintenance and equipment cost. Floor area is used as the basis to allocate the depreciation of building cost to each production department, the more total of floor area that used at production department, the cost of depreciation of building cost will be higher. The cost driver for tax and insurance cost used land and building value as the basis to allocate tax and insurance cost to each production department, because the larger the land and building used

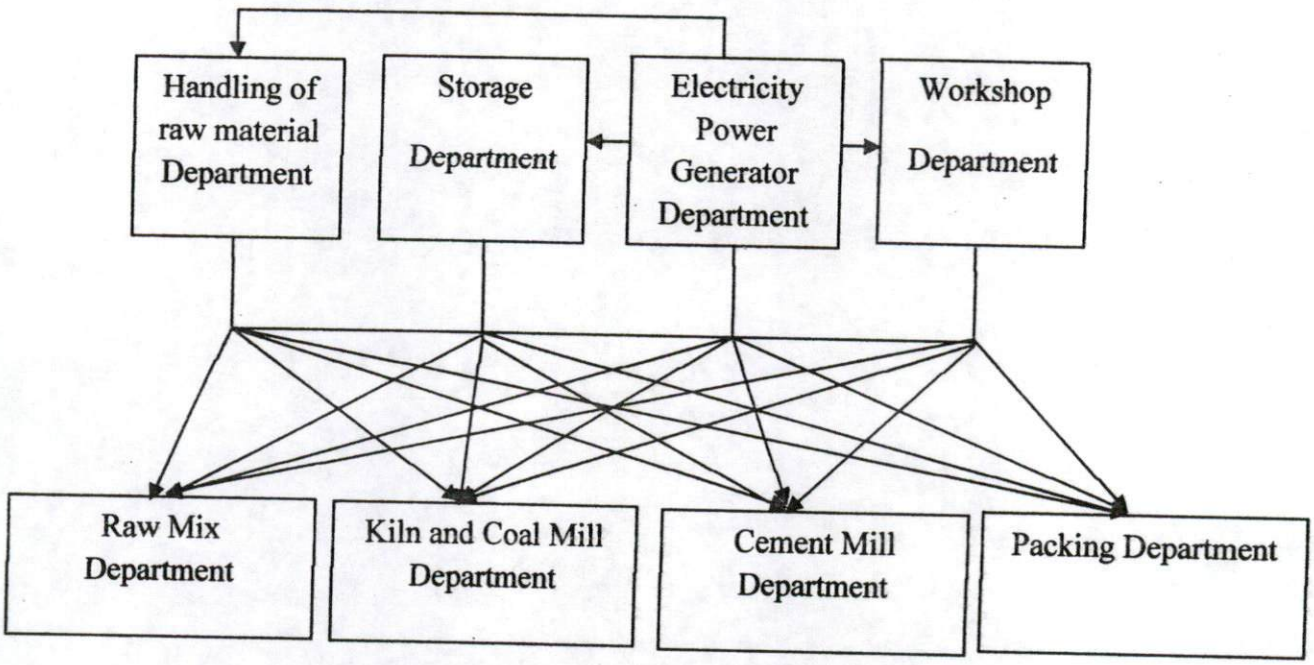
for each production department in PT. Semen Padang, the higher the cost of tax and insurance cost. The depreciation of machine is based on machine hours, the more number of machine hours used in production department PT. Semen Padang, the higher the cost of depreciation of machine cost.

Cost drivers used to allocate the service departement cost to production department at PT. Semen Padang were appropriate. The handling raw material department cost is influenced by estimation of raw material request. Therefore cost driver that used to the cost allocation of raw material handling department is estimation of raw material request. The cost of storage department is influenced by the total floor area that used at storage. Furthermore, the cost driver used to allocate the storage cost to production department is the floor area. The cost driver for electricity power generator department is kilo watt hours (KWH). Workshop cost is influenced by the number of machine repaired. Thus, cost driver that used to the workshop cost allocation to production department is number of machine repaired.

The allocation of service departement cost to production department at PT. Semen Padang has been inappropriate used to direct alocation metod, the allocation of service department cost to production department should be used the step allocation method, because service department doesn't only give service to production department but also to other service departments, for example,

electricity power generator department will supply electricity to other service departments when electricity from PLN is off.

Allocation of electricity power generator department cost to production departments and other services departments can be allocated based on the total of kilo watt hour (KWH) that used.




**Picture 4-3 Cost Allocation Service Department to Production Department by using Step Allocation Method**

Cost pool which is used by PT. Semen Padang to assign factory overhead cost to product is department, because each department have different factory overhead rate. Cost driver which is used by production departments is machine hours, because most of the production departments are using machine.

The assignment of factory overhead cost to product is based on machine hours. The uses of machine hours as cost driver to assign

the factory overhead cost to product is appropriate because all of factory uses machine intensively. At raw mix department produces a single product because each type of cement products can not be identified. Raw mix department uses the same raw material for all type of cement products. Factory overhead cost in raw mix department is directly assigned to product without allocation because this department produces a single product. At kiln and coal department also produces a single product because each type of cement products can not be identified. Factory overhead cost in kiln and coal department is directly assigned to product without allocation because this department produces a single product. Various kinds of cement product which is produced by cement mill department , this department produces cement type I, portland cement type II, portlant cement type III, portland cement type IV , porland cement type V, and super mansory cement (SMC). Cement mill uses the different total of time final milling process to each type of cement products, thus cost driver (machine hours) which is used is the different. Cost driver which is used in cement mill department based on the machine hours consumed, for example, the portland cement type I, the milling occurs during ± 2.5 hours, at the portland cement type II, the milling occurs during ± 3.5 hours. Portland cement type III, the drilling occurs during ± 4 hours, portland type cement IV, the milling occurs during ± 5 hours. At the portland cement type V, the drilling occurs during ± 6 hours and

super mansory cement (SMC), the drilling occurs during ± 3 hours. Futhermore, for each type of cement products has difference refinement level. In cement mill department also gives additional sulfate for each type of cement products. Each type of cement product has difference contains sulfat, for example, at the porland cement type I contains sulfat 0,0%- 0,10% , the porland cement type II contains sulfat 0,08%- 0,17%, the porland cement type III contains sulfat 0,15%- 0,60%, the porland cement type IV contains sulfat 0,17%- 0,65%, the porland cement type V contains sulfat 0,17%- 0,67% , and super mansory cement (SMC) contains sulfat 0,0%-0,15%, so the allocation of factory overhead cost cement mill department to each type of cement product is based on machine hours consumed and the calculation cost of production is different to each type of cement products. Packing department uses the same machine hours to packing process for each type of cement products, because each pack of cement has the same amount that is 50 kg each type of cement products and packing department uses the same process to packing each type of cement products. So the allocation factory overhead cost to each type of cement products are equally distributed and the calculation cost of production is equally to each type of cement products.

At this time, the calculation of factory overhead costs in PT. Semen Padang has used software to assign factory overhead costs to products and then staff in cost accounting department only entry

the data into the software which is used. The name of sofware which is used to calculation factory overhead cost is Oracle E- Business Suite Manufacturing & Supply Chain Management. By using software to assign factory overhead cost to product, it will improve the accuracy and time effeciency of product cost.

Based on the above analysis, the writer can conclude the assignment factory overhead cost to product in PT. Semen Padang still is using traditional cost accounting, because PT. Semen Padang assigned factory overhead cost to product by using unit level driver (volume) as we called volume based assignment. Cost pool which is used by PT. Semen Padang to assignment factory overhead cost to product is department, so the first factory overhead cost assigned to production department and then factory overhead cost assigned to product is using department rate. and cost driver that used is machine hours.

# CHAPTER V

# *CONCLUSION AND RECOMMENDATION*

## 5.1 Conclusion

Based on the discussion that had been presented in the previous chapter, the conslusions are as follows:

1. Up to 2009, PT. Semen Padang is still using traditonal costing, because PT. Semen Padang assigned factory overhead cost to product by using unit level driver (machine hours). Cost pool which is used by PT. Semen Padang to assignment factory overhead cost to product is department.
2. The dividing of service department in PT. Semen Padang was inappropriate, because the workshop should be included into service department, workshop also gives service to production department and other service departments.
3. Assign of service department cost to production department not accurate because allocation of service department cost to production department still using direct allocation method. The allocation of service department cost to production department should be used the step allocation method, cause service department doesn't only give service to production department but also to other service departments.
4. The uses of machine hour as cost driver to assign the factory overhead cost to product is appropriate because all of factory used machine intensively.

5. The calculation of factory overhead costs in PT. Semen Padang uses software to assigned factory overhead cost to products since 2007.

## 5.2 Recommendation

Based on conclusion above, the writer gives some recommendation to the company, as follow:

1. Allocation of service departement cost to production department at PT. Semen Padang is recommended to use the step allocation metod, and not use direct allocation method. because service department cost should be allocated to other service department beside from production department
2. PT. Semen Padang is recommended to consider the assignment of factory overhead cost to product based on Activity Based Costing (ABC) to improve the accuracy, effective and effecient. It's possible because PT. Semen Padang is national level company which requires the high effeciency and accuracy of product cost and has implemented sofware (Oracle E- Business Suite Manufacturing & Supply Chain Management).
3. PT. Semen Padang should improve the capability of the accounting staff about cost accounting because when the writer was doing this research, many of accounting staffs in PT.Semen Padang did not understand about assignment of FOH.

## 5.3. Research Limitation

In doing this reseach, there are saveral limitions that prevented the perfection of the result :

The data used in this reseach is estimation cost, since the real data can not be obtained due to the secrecy of company's internal data.

# REFERENCES


Hansen, Don R. and Maryanne M. Mowen, *Management Accounting*, Fifth edition, South Westem College Publishing, Cincinnati, Ohio, 1999.

Hansen, R. Don and Mowen, M. Maryanne, *Cost Management: Accounting and Control*, Fourth Edition, Ohio, International Thomson Publishing, 2003.

Horngen, Charles T, Foster George & Datar Srikant, *Cost Accounting; A Managerial Emphasis*, Eight Edition, Prentice Hall International, 2003.

Riwayadi, *Akuntansi Biaya*, Cetakan Kedua, Padang ; Penerbit Andalas Universitas Press, 2006.

Mulyadi, *Akuntansi Biaya*, Cetakan Kelima. Yogyakarta : Bagian Penerbit Sekolah Tinggi Ilmu Ekonomi YKPN,2009.

Rayburn Gayle, *Cost Accounting : Using a Cost Management Approach*, Sixth Edition. United States of America : Von Hoffman Press ,2000.

Riwayadi, *Lecture Note Cost Accounting*, Fisrt Edition, Padang ; Penerbit Akuntansi Andalas Universitas Press, 2001.

# Biaya Overhead Pabrik
# Per Departemen
# Tahun 2009

Lampiran 1

| Cost Centre | Account Description | Jumlah |
|---|---|---|
| **Biaya Tenaga Kerja** | | |
| Biro TPM | Biaya Gaji | 10.487.320 |
| Biro TPM | Biaya Tunjangan Jabatan | 4.498.300 |
| Biro TPM | Biaya Tunjangan Prestasi | 6.746.895 |
| Biro TPM | Biaya Tunjangan Uang Makan | 1.056.000 |
| Biro TPM | Biaya Tunjangan Pengabdian | 10.000 |
| Biro TPM | Biaya Tunjangan Olah Raga | 125.000 |
| Biro TPM | Biaya Tunjangan Sewa Rumah | 105.000 |
| Biro TPM | Biaya Tunjangan Lembur | 222.939 |
| Biro TPM | Biaya Tunjangan Cuti | 4.225.540 |
| Biro TPM | Biaya Tunjangan Pengobatan | 1.852.696 |
| Biro TPM | Biaya Tunjangan Keagamaan | 9.939.859 |
| Biro TPM | Biaya Tunjangan Asuransi | 512.830 |
| Biro TPM | Biaya Tunjangan Pensiun,THT Dan PSL | 12.269.573 |
| Biro TPM | Biaya Tunjangan PPh Pasal 21 | 2.732.367 |
| Biro TPM | Biaya Tunjangan Purnabakti | 2.309.473 |
| Biro TPM | Biaya Gaji Dasar Penunjang | 8.344.300 |
| Biro TPM | Biaya Tunjangan Produktivitas & Efisiensi | 46.442.025 |
| Biro TPM | Biaya Tunjangan Jasa Produksi | 71.122.525 |
| Dept Prod II/III | Biaya Gaji | 8.640.780 |
| Dept Prod II/III | Biaya Tunjangan Jabatan | 4.120.600 |
| Dept Prod II/III | Biaya Tunjangan Prestasi | 5.521.113 |
| Dept Prod II/III | Biaya Tunjangan Olah Raga | 75.000 |
| Dept Prod II/III | Biaya Tunjangan Pengobatan | 463.174 |
| Dept Prod II/III | Biaya Tunjangan Keagamaan | 2.073.237 |
| Dept Prod II/III | Biaya Tunjangan Asuransi | 422.534 |
| Dept Prod II/III | Biaya Tunjangan Pensiun,THT Dan PSL | 10.108.104 |
| Dept Prod II/III | Biaya Tunjangan PPh Pasal 21 | 3.463.292 |
| Dept Prod II/III | Biaya Tunjangan Purnabakti | 1.719.716 |
| Dept Prod II/III | Biaya Gaji Dasar Penunjang | 4.838.900 |
| Dept Prod II/III | Biaya Tunjangan Produktivitas & Efisiensi | 3.766.546 |
| Dept Prod II/III | Biaya Tunjangan Jasa Produksi | 7.025.048 |
| Biro Produksi II/III | Biaya Gaji | 135.136.920 |
| Biro Produksi II/III | Biaya Tunjangan Jabatan | 42.557.200 |
| Biro Produksi II/III | Biaya Tunjangan Prestasi | 86.462.941 |
| Biro Produksi II/III | Biaya Tunjangan Uang Makan | 28.944.000 |
| Biro Produksi II/III | Biaya Tunjangan Pengabdian | 1.100.000 |
| Biro Produksi II/III | Biaya Tunjangan Olah Raga | 1.392.500 |
| Biro Produksi II/III | Biaya Tunjangan Sewa Rumah | 5.310.000 |
| Biro Produksi II/III | Biaya Tunjangan Shift | 15.641.300 |
| Biro Produksi II/III | Biaya Tunjangan Lembur | 41.293.972 |
| Biro Produksi II/III | Biaya Tunjangan Cuti | 3.637.200 |
| Biro Produksi II/III | Biaya Tunjangan Pengobatan | 41.222.486 |
| Biro Produksi II/III | Biaya Tunjangan Keagamaan | 53.651.138 |
| Biro Produksi II/III | Biaya Tunjangan Asuransi | 6.608.194 |
| Biro Produksi II/III | Biaya Tunjangan Pensiun,THT Dan PSL | 157.257.312 |
| Biro Produksi II/III | Biaya Tunjangan PPh Pasal 21 | 19.938.631 |
| Biro Produksi II/III | Biaya Tunjangan Purnabakti | 29.762.288 |
| Biro Produksi II/III | Biaya Gaji Dasar Penunjang | 103.636.500 |
| Biro Produksi II/III | Biaya Tunjangan Produktivitas & Efisiensi | 219.558.553 |
| Biro Produksi II/III | Biaya Tunjangan Jasa Produksi | 380.380.201 |
| Biro Pem. Mesin II/III | Biaya Gaji | 103.111.320 |
| Biro Pem. Mesin II/III | Biaya Tunjangan Jabatan | 34.315.100 |
| Biro Pem. Mesin II/III | Biaya Tunjangan Prestasi | 65.859.403 |
| Biro Pem. Mesin II/III | Biaya Tunjangan Uang Makan | 22.560.000 |

| Cost Centre | Account Description | Jumlah |
|---|---|---|
| Biro Pem. Mesin II/III | Biaya Tunjangan Pengabdian | 570.000 |
| Biro Pem. Mesin II/III | Biaya Tunjangan Olah Raga | 1.065.000 |
| Biro Pem. Mesin II/III | Biaya Tunjangan Sewa Rumah | 4.425.000 |
| Biro Pem. Mesin II/III | Biaya Tunjangan Shift | 8.372.900 |
| Biro Pem. Mesin II/III | Biaya Tunjangan Lembur | 67.493.716 |
| Biro Pem. Mesin II/III | Biaya Tunjangan Pengobatan | 31.959.006 |
| Biro Pem. Mesin II/III | Biaya Tunjangan Keagamaan | 38.122.118 |
| Biro Pem. Mesin II/III | Biaya Tunjangan Asuransi | 5.042.140 |
| Biro Pem. Mesin II/III | Biaya Tunjangan Pensiun,THT Dan PSL | 119.495.964 |
| Biro Pem. Mesin II/III | Biaya Tunjangan PPh Pasal 21 | 19.132.225 |
| Biro Pem. Mesin II/III | Biaya Tunjangan Purnabakti | 23.499.171 |
| Biro Pem. Mesin II/III | Biaya Gaji Dasar Penunjang | 80.407.115 |
| Biro Pem. Mesin II/III | Biaya Tunjangan Produktivitas & Efisiensi | 153.754.533 |
| Biro Pem. Mesin II/III | Biaya Tunjangan Jasa Produksi | 264.376.500 |
| Biro Pem. IL II/III | Biaya Gaji | 76.234.200 |
| Biro Pem. IL II/III | Biaya Tunjangan Jabatan | 27.262.800 |
| Biro Pem. IL II/III | Biaya Tunjangan Prestasi | 50.583.291 |
| Biro Pem. IL II/III | Biaya Tunjangan Uang Makan | 28.975.000 |
| Biro Pem. IL II/III | Biaya Tunjangan Pengabdian | 470.000 |
| Biro Pem. IL II/III | Biaya Tunjangan Olah Raga | 852.500 |
| Biro Pem. IL II/III | Biaya Tunjangan Sewa Rumah | 3.825.000 |
| Biro Pem. IL II/III | Biaya Tunjangan Shift | 2.723.810 |
| Biro Pem. IL II/III | Biaya Tunjangan Lembur | 29.556.745 |
| Biro Pem. IL II/III | Biaya Tunjangan Cuti | 8.688.080 |
| Biro Pem. IL II/III | Biaya Tunjangan Pengobatan | 24.085.048 |
| Biro Pem. IL II/III | Biaya Tunjangan Keagamaan | 27.060.030 |
| Biro Pem. IL II/III | Biaya Tunjangan Asuransi | 3.727.851 |
| Biro Pem. IL II/III | Biaya Tunjangan Pensiun,THT Dan PSL | 87.934.404 |
| Biro Pem. IL II/III | Biaya Tunjangan PPh Pasal 21 | 12.478.575 |
| Biro Pem. IL II/III | Biaya Tunjangan Purnabakti | 18.149.836 |
| Biro Pem. IL II/III | Biaya Gaji Dasar Penunjang | 61.988.915 |
| Biro Pem. IL II/III | Biaya Tunjangan Produktivitas & Efisiensi | 111.075.073 |
| Biro Pem. IL II/III | Biaya Tunjangan Jasa Produksi | 188.482.829 |
| Biro Pem. IL II/III | Biaya Tunjangan Apresiasi | 750.000 |
| Dept Prod IV | Biaya Gaji | 22.609.093 |
| Dept Prod IV | Biaya Tunjangan Jabatan | 264.000 |
| Dept Prod IV | Biaya Tunjangan Prestasi | 5.521.113 |
| Dept Prod IV | Biaya Tunjangan Olah Raga | 100.000 |
| Dept Prod IV | Biaya Tunjangan Pengobatan | 926.348 |
| Dept Prod IV | Biaya Tunjangan Keagamaan | 2.204.957 |
| Dept Prod IV | Biaya Tunjangan Asuransi | 536.505 |
| Dept Prod IV | Biaya Tunjangan Pensiun,THT Dan PSL | 12.836.562 |
| Dept Prod IV | Biaya Tunjangan PPh Pasal 21 | 3.77.133 |
| Dept Prod IV | Biaya Tunjangan Purnabakti | 2.175.379 |
| Dept Prod IV | Biaya Gaji Dasar Penunjang | 6.323.800 |
| Dept Prod IV | Biaya Tunjangan Produktivitas & Efisiensi | 6.454.525 |
| Dept Prod IV | Biaya Tunjangan Jasa Produksi | 9.164.138 |
| Biro Produksi IV | Biaya Gaji | 116.787.960 |
| Biro Produksi IV | Biaya Tunjangan Jabatan | 37.446.100 |
| Biro Produksi IV | Biaya Tunjangan Prestasi | 75.514.588 |
| Biro Produksi IV | Biaya Tunjangan Uang Makan | 20.064.000 |
| Biro Produksi IV | Biaya Tunjangan Pengabdian | 970.000 |
| Biro Produksi IV | Biaya Tunjangan Olah Raga | 1.205.000 |
| Biro Produksi IV | Biaya Tunjangan Sewa Rumah | 4.065.000 |
| Biro Produksi IV | Biaya Tunjangan Shift | 16.128.120 |
| Biro Produksi IV | Biaya Tunjangan Lembur | 150.372.386 |
| Biro Produksi IV | Biaya Tunjangan Cuti | 18.533.640 |
| Biro Produksi IV | Biaya Tunjangan Pengobatan | 35.201.224 |
| Biro Produksi IV | Biaya Tunjangan Keagamaan | 41.596.406 |
| Biro Produksi IV | Biaya Tunjangan Asuransi | 5.648.071 |
| Biro Produksi IV | Biaya Tunjangan Pensiun,THT Dan PSL | 136.149.327 |
| Biro Produksi IV | Biaya Tunjangan PPh Pasal 21 | 31.955.648 |

| Cost Centre | Account Description | Jumlah |
|---|---|---|
| Biro Produksi IV | Biaya Tunjangan Purnabakti | 25.509.568 |
| Biro Produksi IV | Biaya Gaji Dasar Penunjang | 89.512.300 |
| Biro Produksi IV | Biaya Tunjangan Produktivitas & Efisiensi | 172.075.138 |
| Biro Produksi IV | Biaya Tunjangan Jasa Produksi | 182.789.311 |
| Biro Perencanaan Teknik Pabrik | Biaya Gaji | 57.050.220 |
| Biro Perencanaan Teknik Pabrik | Biaya Tunjangan Jabatan | 20.909.500 |
| Biro Perencanaan Teknik Pabrik | Biaya Tunjangan Prestasi | 36.479.267 |
| Biro Perencanaan Teknik Pabrik | Biaya Tunjangan Uang Makan | 8.135.000 |
| Biro Perencanaan Teknik Pabrik | Biaya Tunjangan Pengabdian | 300.000 |
| Biro Perencanaan Teknik Pabrik | Biaya Tunjangan Olah Raga | 637.500 |
| Biro Perencanaan Teknik Pabrik | Biaya Tunjangan Sewa Rumah | 1.065.000 |
| Biro Perencanaan Teknik Pabrik | Biaya Tunjangan Lembur | 8.837.002 |
| Biro Perencanaan Teknik Pabrik | Biaya Tunjangan Pengobatan | 12.505.698 |
| Biro Perencanaan Teknik Pabrik | Biaya Tunjangan Keagamaan | 9.939.859 |
| Biro Perencanaan Teknik Pabrik | Biaya Tunjangan Asuransi | 2.789.754 |
| Biro Perencanaan Teknik Pabrik | Biaya Tunjangan Pensiun,THT Dan PSL | 66.430.500 |
| Biro Perencanaan Teknik Pabrik | Biaya Tunjangan PPh Pasal 21 | 11.621.703 |
| Biro Perencanaan Teknik Pabrik | Biaya Tunjangan Purnabakti | 12.515.124 |
| Biro Perencanaan Teknik Pabrik | Biaya Gaji Dasar Penunjang | 43.244.600 |
| Biro Perencanaan Teknik Pabrik | Biaya Tunjangan Produktivitas & Efisiensi | 36.186.165 |
| Biro Perencanaan Teknik Pabrik | Biaya Tunjangan Jasa Produksi | 71.122.525 |
| Biro Pemeliharaan Mesin IV | Biaya Gaji | 105.834.480 |
| Biro Pemeliharaan Mesin IV | Biaya Tunjangan Jabatan | 37.058.200 |
| Biro Pemeliharaan Mesin IV | Biaya Tunjangan Prestasi | 70.218.429 |
| Biro Pemeliharaan Mesin IV | Biaya Tunjangan Uang Makan | 40.880.500 |
| Biro Pemeliharaan Mesin IV | Biaya Tunjangan Pengabdian | 460.000 |
| Biro Pemeliharaan Mesin IV | Biaya Tunjangan Olah Raga | 1.155.000 |
| Biro Pemeliharaan Mesin IV | Biaya Tunjangan Sewa Rumah | 6.645.000 |
| Biro Pemeliharaan Mesin IV | Biaya Tunjangan Shift | 5.175.000 |
| Biro Pemeliharaan Mesin IV | Biaya Tunjangan Lembur | 205.891.506 |
| Biro Pemeliharaan Mesin IV | Biaya Tunjangan Cuti | 43.365.000 |
| Biro Pemeliharaan Mesin IV | Biaya Tunjangan Pengobatan | 34.738.050 |
| Biro Pemeliharaan Mesin IV | Biaya Tunjangan Keagamaan | 35.252.201 |
| Biro Pemeliharaan Mesin IV | Biaya Tunjangan Asuransi | 5.175.305 |
| Biro Pemeliharaan Mesin IV | Biaya Tunjangan Pensiun,THT Dan PSL | 122.315.461 |
| Biro Pemeliharaan Mesin IV | Biaya Tunjangan PPh Pasal 21 | 36.623.327 |
| Biro Pemeliharaan Mesin IV | Biaya Tunjangan Purnabakti | 24.980.580 |
| Biro Pemeliharaan Mesin IV | Biaya Gaji Dasar Penunjang | 86.403.800 |
| Biro Pemeliharaan Mesin IV | Biaya Tunjangan Produktivitas & Efisiensi | 146.958.244 |
| Biro Pemeliharaan Mesin IV | Biaya Tunjangan Jasa Produksi | 249.300.618 |
| Biro Pemeliharaan Listrik & Instrumen IV | Biaya Gaji | 78.114.140 |
| Biro Pemeliharaan Listrik & Instrumen IV | Biaya Tunjangan Jabatan | 27.392.200 |
| Biro Pemeliharaan Listrik & Instrumen IV | Biaya Tunjangan Prestasi | 51.111.747 |
| Biro Pemeliharaan Listrik & Instrumen IV | Biaya Tunjangan Uang Makan | 30.180.000 |
| Biro Pemeliharaan Listrik & Instrumen IV | Biaya Tunjangan Pengabdian | 470.000 |
| Biro Pemeliharaan Listrik & Instrumen IV | Biaya Tunjangan Olah Raga | 852.500 |
| Biro Pemeliharaan Listrik & Instrumen IV | Biaya Tunjangan Sewa Rumah | 3.405.000 |
| Biro Pemeliharaan Listrik & Instrumen IV | Biaya Tunjangan Shift | 867.500 |
| Biro Pemeliharaan Listrik & Instrumen IV | Biaya Tunjangan Lembur | 143.539.923 |
| Biro Pemeliharaan Listrik & Instrumen IV | Biaya Tunjangan Cuti | 7.924.560 |
| Biro Pemeliharaan Listrik & Instrumen IV | Biaya Tunjangan Pengobatan | 24.085.048 |
| Biro Pemeliharaan Listrik & Instrumen IV | Biaya Tunjangan Keagamaan | 30.945.893 |
| Biro Pemeliharaan Listrik & Instrumen IV | Biaya Tunjangan Asuransi | 3.819.780 |
| Biro Pemeliharaan Listrik & Instrumen IV | Biaya Tunjangan Pensiun,THT Dan PSL | 90.143.224 |
| Biro Pemeliharaan Listrik & Instrumen IV | Biaya Tunjangan PPh Pasal 21 | 27.555.583 |
| Biro Pemeliharaan Listrik & Instrumen IV | Biaya Tunjangan Purnabakti | 18.374.206 |
| Biro Pemeliharaan Listrik & Instrumen IV | Biaya Gaji Dasar Penunjang | 62.198.600 |
| Biro Pemeliharaan Listrik & Instrumen IV | Biaya Tunjangan Produktivitas & Efisiensi | 134.215.487 |
| Biro Pemeliharaan Listrik & Instrumen IV | Biaya Tunjangan Jasa Produksi | 221.426.741 |
| Departemen Produksi V | Biaya Gaji | 10.971.480 |
| Departemen Produksi V | Biaya Tunjangan Jabatan | 4.767.500 |
| Departemen Produksi V | Biaya Tunjangan Prestasi | 6.870.113 |

| Cost Centre | Account Description | Jumlah |
|---|---|---|
| Departemen Produksi V | Biaya Tunjangan Uang Makan | 264.000 |
| Departemen Produksi V | Biaya Tunjangan Olah Raga | 100.000 |
| Departemen Produksi V | Biaya Tunjangan Pengobatan | 926.348 |
| Departemen Produksi V | Biaya Tunjangan Keagamaan | 2.204.957 |
| Departemen Produksi V | Biaya Tunjangan Asuransi | 536.505 |
| Departemen Produksi V | Biaya Tunjangan Pensiun,THT Dan PSL | 12.836.562 |
| Departemen Produksi V | Biaya Tunjangan PPh Pasal 21 | 3.775.133 |
| Departemen Produksi V | Biaya Tunjangan Purnabakti | 2.175.379 |
| Departemen Produksi V | Biaya Gaji Dasar Penunjang | 6.323.800 |
| Departemen Produksi V | Biaya Tunjangan Produktivitas & Efisiensi | 6.454.525 |
| Departemen Produksi V | Biaya Tunjangan Jasa Produksi | 9.164.138 |
| Biro Produksi V | Biaya Gaji | 126.834.780 |
| Biro Produksi V | Biaya Tunjangan Jabatan | 41.327.900 |
| Biro Produksi V | Biaya Tunjangan Prestasi | 78.531.707 |
| Biro Produksi V | Biaya Tunjangan Uang Makan | 30.252.000 |
| Biro Produksi V | Biaya Tunjangan Pengabdian | 860.000 |
| Biro Produksi V | Biaya Tunjangan Olah Raga | 1.317.500 |
| Biro Produksi V | Biaya Tunjangan Sewa Rumah | 4.860.000 |
| Biro Produksi V | Biaya Tunjangan Shift | 16.566.313 |
| Biro Produksi V | Biaya Tunjangan Lembur | 66.090.751 |
| Biro Produksi V | Biaya Tunjangan Cuti | 4.483.136 |
| Biro Produksi V | Biaya Tunjangan Pengobatan | 38.443.442 |
| Biro Produksi V | Biaya Tunjangan Keagamaan | 46.263.177 |
| Biro Produksi V | Biaya Tunjangan Asuransi | 6.133.515 |
| Biro Produksi V | Biaya Tunjangan Pensiun,THT Dan PSL | 147.339.606 |
| Biro Produksi V | Biaya Tunjangan PPh Pasal 21 | 20.694.962 |
| Biro Produksi V | Biaya Tunjangan Purnabakti | 27.907.698 |
| Biro Produksi V | Biaya Gaji Dasar Penunjang | 97.466.800 |
| Biro Produksi V | Biaya Tunjangan Produktivitas & Efisiensi | 187.061.091 |
| Biro Produksi V | Biaya Tunjangan Jasa Produksi | 196.938.909 |
| Biro Pemeliharaan Mesin V | Biaya Gaji | 111.277.300 |
| Biro Pemeliharaan Mesin V | Biaya Tunjangan Jabatan | 36.670.000 |
| Biro Pemeliharaan Mesin V | Biaya Tunjangan Prestasi | 69.669.807 |
| Biro Pemeliharaan Mesin V | Biaya Tunjangan Uang Makan | 24.143.000 |
| Biro Pemeliharaan Mesin V | Biaya Tunjangan Pengabdian | 460.000 |
| Biro Pemeliharaan Mesin V | Biaya Tunjangan Olah Raga | 1.117.500 |
| Biro Pemeliharaan Mesin V | Biaya Tunjangan Sewa Rumah | 5.280.000 |
| Biro Pemeliharaan Mesin V | Biaya Tunjangan Shift | 5.550.740 |
| Biro Pemeliharaan Mesin V | Biaya Tunjangan Lembur | 117.547.411 |
| Biro Pemeliharaan Mesin V | Biaya Tunjangan Cuti | 8.421.680 |
| Biro Pemeliharaan Mesin V | Biaya Tunjangan Pengobatan | 33.348.528 |
| Biro Pemeliharaan Mesin V | Biaya Tunjangan Keagamaan | 45.728.229 |
| Biro Pemeliharaan Mesin V | Biaya Tunjangan Asuransi | 5.441.461 |
| Biro Pemeliharaan Mesin V | Biaya Tunjangan Pensiun,THT Dan PSL | 128.800.336 |
| Biro Pemeliharaan Mesin V | Biaya Tunjangan PPh Pasal 21 | 26.162.138 |
| Biro Pemeliharaan Mesin V | Biaya Tunjangan Purnabakti | 25.344.039 |
| Biro Pemeliharaan Mesin V | Biaya Gaji Dasar Penunjang | 85.358.500 |
| Biro Pemeliharaan Mesin V | Biaya Tunjangan Produktivitas & Efisiensi | 200.040.672 |
| Biro Pemeliharaan Mesin V | Biaya Tunjangan Jasa Produksi | 327.198.527 |
| Biro Pemeliharaan Mesin V | Biaya Tunjangan Apresiasi | 3.000.000 |
| Biro Pemeliharaan Listrik & Instrumen V | Biaya Gaji | 73.265.080 |
| Biro Pemeliharaan Listrik & Instrumen V | Biaya Tunjangan Jabatan | 26.874.600 |
| Biro Pemeliharaan Listrik & Instrumen V | Biaya Tunjangan Prestasi | 49.666.843 |
| Biro Pemeliharaan Listrik & Instrumen V | Biaya Tunjangan Uang Makan | 19.980.000 |
| Biro Pemeliharaan Listrik & Instrumen V | Biaya Tunjangan Pengabdian | 370.000 |
| Biro Pemeliharaan Listrik & Instrumen V | Biaya Tunjangan Olah Raga | 840.000 |
| Biro Pemeliharaan Listrik & Instrumen V | Biaya Tunjangan Sewa Rumah | 4.365.000 |
| Biro Pemeliharaan Listrik & Instrumen V | Biaya Tunjangan Shift | 4.846.200 |
| Biro Pemeliharaan Listrik & Instrumen V | Biaya Tunjangan Lembur | 53.424.146 |
| Biro Pemeliharaan Listrik & Instrumen V | Biaya Tunjangan Cuti | 31.765.380 |
| Biro Pemeliharaan Listrik & Instrumen V | Biaya Tunjangan Pengobatan | 23.621.874 |
| Biro Pemeliharaan Listrik & Instrumen V | Biaya Tunjangan Keagamaan | 24.483.227 |

| Cost Centre | Account Description | Jumlah |
|---|---|---|
| Biro Pemeliharaan Listrik & Instrumen V | Biaya Tunjangan Asuransi | 3.582.666 |
| Biro Pemeliharaan Listrik & Instrumen V | Biaya Tunjangan Pensiun,THT Dan PSL | 84.649.836 |
| Biro Pemeliharaan Listrik & Instrumen V | Biaya Tunjangan PPh Pasal 21 | 14.242.870 |
| Biro Pemeliharaan Listrik & Instrumen V | Biaya Tunjangan Purnabakti | 17.503.378 |
| Biro Pemeliharaan Listrik & Instrumen V | Biaya Gaji Dasar Penunjang | 60.859.300 |
| Biro Pemeliharaan Listrik & Instrumen V | Biaya Tunjangan Produktivitas & Efisiensi | 100.952.691 |
| Biro Pemeliharaan Listrik & Instrumen V | Biaya Tunjangan Jasa Produksi | 168.610.587 |
| **Total Biaya Tenaga Kerja** | | **10.493.866.950** |
| **Biaya Umum** | | |
| Biro TPM | Biaya Perjalanan Dinas - Luar Daerah | 3.610.500 |
| Biro TPM | Biaya Supplies Kantor | 390.200 |
| Dept Prod II/III | Biaya Perjalanan Dinas - Luar Daerah | 1.460.000 |
| Biro Produksi II/III | Biaya Perjalanan Dinas - Luar Daerah | 3.968.500 |
| Biro Produksi II/III | Biaya Supplies Kantor | 51.400 |
| Biro Pem. Mesin II/III | Biaya Perjalanan Dinas - Luar Daerah | 5.011.800 |
| Biro Pem. Mesin II/III | Biaya Rapat | 7.546.000 |
| Biro Pem. Mesin II/III | Biaya Supplies Kantor | 1.127.600 |
| Biro Pem. IL II/III | Biaya Supplies Kantor | 4.761.000 |
| Biro Produksi IV | Biaya Sewa Alat-Alat Berat | 26.000.000 |
| Biro Produksi IV | Biaya Supplies Kantor | 1.540.950 |
| Biro Perencanaan Teknik Pabrik | Biaya Perjalanan Dinas - Luar Daerah | 22.393.740 |
| Biro Perencanaan Teknik Pabrik | Biaya Rapat | 1.475.000 |
| Biro Perencanaan Teknik Pabrik | Biaya Supplies Kantor | 2.115.000 |
| Biro Pemeliharaan Mesin IV | Biaya Perjalanan Dinas - Luar Daerah | 2.976.500 |
| Biro Pemeliharaan Listrik & Instrumen IV | Biaya Perjalanan Dinas - Luar Daerah | 3.407.000 |
| Biro Produksi V | Biaya Perjalanan Dinas - Luar Daerah | 20.144.500 |
| *Biro Produksi V* | *Biaya Sewa Alat-Alat Berat* | *241.651.900* |
| Biro Produksi V | Biaya Supplies Kantor | 3.092.960 |
| Biro Pemeliharaan Mesin V | Biaya Perjalanan Dinas - Luar Daerah | 7.483.720 |
| Biro Pemeliharaan Mesin V | Biaya Perjalanan Dinas - Luar Negeri | 29.567.851 |
| Biro Pemeliharaan Listrik & Instrumen V | Biaya Perjalanan Dinas - Luar Negeri | 22.060.110 |
| Biro Pemeliharaan Listrik & Instrumen V | Biaya Supplies Kantor | 390.400 |
| **Total Biaya Umum** | | **412.226.631** |
| **Biaya Pajak dan Asuransi** | | |
| Departemen Produksi II/III | Biaya Pajak Bumi & Bangunan | 62.500.000 |
| Departemen Produksi II/III | Biaya Pajak Air Permukaan | 78.174.950 |
| Departemen Produksi IV | Biaya Pajak Bumi & Bangunan | 13.333.333 |
| Biro Perencanaan Teknik Pabrik | Biaya Pajak Bumi & Bangunan | 64.166.667 |
| Biro Perencanaan Teknik Pabrik | Biaya Pajak Kendaraan Bermotor | 988.000 |
| Departemen Produksi V | Biaya Pajak Bumi & Bangunan | 29.166.667 |
| OPM-PLTA | Biaya Pajak Bumi & Bangunan | 4.938.276 |
| **Total Biaya Pajak dan Asuransi** | | **253.267.893** |
| **Biaya Pemeliharaan Perlengkapan & Peralatan** | | |
| Departemen Produksi IV | Biaya Pemeliharaan Produksi | 29.597.408 |
| Departemen Produksi V | Biaya Pemeliharaan Produksi | 9.542.344 |
| Biro Perencanaan Teknik Pabrik | Biaya Pemeliharaan Produksi | 33.988.488 |
| OPM-PLTD | Biaya Pemeliharaan Mesin - Mekanikal | 8.405.000 |
| **Total Biaya Pemeliharaan Perlengkapan & Peralatan** | | **81.533.240** |
| **Biaya Jasa OutSourcing** | | |
| Biro TPM | Biaya Jasa Pekerjaan Outsourcing | 213.639 |
| Biro Produksi II/III | Biaya Jasa Pekerjaan Outsourcing | 27.325.280 |
| Biro Produksi IV | Biaya Jasa Pekerjaan Outsourcing | 23.407.728 |
| Biro Perencanaan Teknik Pabrik | Biaya Jasa Pekerjaan Outsourcing | 623.113 |
| Biro Pemeliharaan Listrik & Instrumen IV | Biaya Jasa Pekerjaan Outsourcing | (70.540.866) |
| Biro Produksi V | Biaya Jasa Pekerjaan Outsourcing | 56.136.637 |
| Biro Pemeliharaan Listrik & Instrumen V | Biaya Jasa Pekerjaan Outsourcing | 860.473 |
| OPM-PLTA | Biaya Jasa Pekerjaan Outsourcing | 3.129.759 |
| **Total Biaya Jasa OutSourcing** | | **41.155.763** |
| **Biaya Penyusutan** | | |
| Dept Prod II/III | Biaya Penyusutan Bangunan | 1.047.186 |
| Dept Prod II/III | Biaya Penyusutan Mesin | 92.169.916 |
| Biro Produksi II/III | Biaya Penyusutan Bangunan | 14.840.650 |

| Cost Centre | Account Description | Jumlah |
|---|---|---|
| Biro Produksi II/III | Biaya Penyusutan Mesin | 148.566.954 |
| Biro Produksi II/III | Biaya Penyusutan Peralatan & Perlengkapan | 3.782.376 |
| Bidang Produksi Raw Mill Indarung II/III | Biaya Penyusutan Bangunan | 115.144 |
| Bidang Produksi Raw Mill Indarung II/III | Biaya Penyusutan Mesin | 77.850.677 |
| Bidang Produksi Klinker Indarung II/III | Biaya Penyusutan Bangunan | 19.474.710 |
| Bidang Produksi Klinker Indarung II/III | Biaya Penyusutan Mesin | 139.936.093 |
| Bidang Prod. Semen II/III | Biaya Penyusutan Bangunan | 39.340.042 |
| Bidang Prod. Semen II/III | Biaya Penyusutan Mesin | 62.751.306 |
| Bidang Prod. Semen II/III | Biaya Penyusutan Peralatan & Perlengkapan | 41.361 |
| Biro Pem. Mesin II/III | Biaya Penyusutan Bangunan | 1.068.528 |
| Biro Pem. Mesin II/III | Biaya Penyusutan Mesin | 66.486.815 |
| Bidang Pem. Mesin Raw Mill II/III | Biaya Penyusutan Mesin | 2.861.634 |
| Biro Pem. IL II/III | Biaya Penyusutan Bangunan | 41.648 |
| Biro Pem. IL II/III | Biaya Penyusutan Mesin | 23.122.965 |
| Biro Pem. IL II/III | Biaya Penyusutan Peralatan & Perlengkapan | 31.348.017 |
| Dept Prod IV | Biaya Penyusutan Bangunan | 3.451.867 |
| Dept Prod IV | Biaya Penyusutan Mesin | 8.171.771 |
| Biro Produksi IV | Biaya Penyusutan Bangunan | 92.125.650 |
| Biro Produksi IV | Biaya Penyusutan Mesin | 90.767.159 |
| Biro Produksi IV | Biaya Penyusutan Alat Berat | 2.363.780 |
| Biro Produksi IV | Biaya Penyusutan Peralatan & Perlengkapan | 18.583.671 |
| Bidang Prod. Raw Mill IV | Biaya Penyusutan Bangunan | 23.342.944 |
| Bidang Prod. Raw Mill IV | Biaya Penyusutan Mesin | 187.936.298 |
| Bidang Prod. Raw Mill IV | Biaya Penyusutan Peralatan & Perlengkapan | 150.677 |
| Bidang Prod. Klinker IV | Biaya Penyusutan Bangunan | 46.491.541 |
| Bidang Prod. Klinker IV | Biaya Penyusutan Mesin | 282.785.674 |
| Bidang Prod. Klinker IV | Biaya Penyusutan Peralatan & Perlengkapan | 55.059 |
| Bidang Prod. Semen IV | Biaya Penyusutan Bangunan | 30.615.813 |
| Bidang Prod. Semen IV | Biaya Penyusutan Mesin | 184.932.010 |
| Biro Perencanaan Teknik Pabrik | Biaya Penyusutan Bangunan | 33.597.699 |
| Biro Perencanaan Teknik Pabrik | Biaya Penyusutan Mesin | 21.535.409 |
| Biro Perencanaan Teknik Pabrik | Biaya Penyusutan Peralatan & Perlengkapan | 21.147.202 |
| Biro Pemeliharaan Mesin IV | Biaya Penyusutan Mesin | 4.767.180 |
| Biro Pemeliharaan Listrik & Instrumen IV | Biaya Penyusutan Bangunan | 2.755.803 |
| Biro Pemeliharaan Listrik & Instrumen IV | Biaya Penyusutan Mesin | 157.306.166 |
| Biro Pemeliharaan Listrik & Instrumen IV | Biaya Penyusutan Peralatan & Perlengkapan | 11.123.083 |
| Departemen Produksi V | Biaya Penyusutan Bangunan | 506.160.125 |
| Departemen Produksi V | Biaya Penyusutan Mesin | 2.498.748.963 |
| Biro Produksi V | Biaya Penyusutan Bangunan | 80.735.006 |
| Biro Produksi V | Biaya Penyusutan Mesin | 51.437.009 |
| Bidang Prod. Semen V | Biaya Penyusutan Mesin | 768.511.293 |
| Biro Pemeliharaan Mesin V | Biaya Penyusutan Mesin | 33.506.035 |
| Biro Pemeliharaan Listrik & Instrumen V | Biaya Penyusutan Bangunan | 14.912.396 |
| Biro Pemeliharaan Listrik & Instrumen V | Biaya Penyusutan Mesin | 67.903.442 |
| **Total Biaya Penyusutan** | | **5.970.766.747** |
| **Biaya Bahan Bakar** | | |
| OPM-PLTD | Biaya Solar | 86.228.027 |
| **Total Biaya Bahan Bakar** | | 86.228.027 |

Lampiran 2

**BIAYA LANGSUNG DEPARTEMEN PRODUKSI INDARUNG V**
**TAHUN 2009**

| ACCOUNT DESCRIPTION | TOTAL |
|---|---|
| Bahan Baku | Rp. 43.750.460.000 |
| Bahan Penolong Penggiling | Rp. 5.461.330.000 |
| Bahan Kantong | Rp. 245.222.293.000 |
| Bahan Pembuatan Kantong | Rp. 41.619.702.000 |
| Biaya Bahan Bakar | Rp. 192.944.070.000 |
| Biaya Listrik | Rp. 239.572.495.000 |
| Biaya Air | Rp. 11.316.699.000 |
| Biaya Bahan Kimia | Rp. 504.000.000 |
| **Total Biaya** | **Rp. 1.224.864.988.000** |

**PT. SEMEN PADANG**
**BIAYA TIDAK LANGSUNG DEPARTEMEN PRODUKSI INDARUNG V**
**TAHUN 2009**

| ACCOUNT DESCRIPTION | TOTAL |
|---|---|
| Biaya Tenaga kerja | |
| 1. Biaya Gaji | Rp. 22.609.093.000 |
| 2. Biaya Tunjangan | Rp. 264.000.000 |
| 3. Biaya Tunjangan Olahraga | Rp. 100.000.000 |
| 4. Biaya Pengobatan | Rp. 926.348.000 |
| 5. Biaya keagamaan | Rp. 2.204.957.000 |
| 6. Biaya Tunjangan Prestasi | Rp. 78.531.707.000 |
| 6. Biaya Asuransi | Rp. 536.505.000 |
| 7. Biaya tunjangan pensiun | Rp. 12.836.562.000 |
| 8. Biaya Tunjangan Pph Pasal 21 | Rp. 3.775.133.000 |
| 9. Biaya Tunjangan Purnabakti | Rp. 2.175.379.000 |
| 10.Biaya Gaji Dasar Penunjang | Rp. 6.323.800.000 |
| 11. Biaya Tunjangan Produktifitas dan Efesiensi | Rp. 6.454.525.000 |
| 12. Biaya Tunjangan Jasa Produksi | Rp. 9.164.138.000 |
| **Total Biaya Tenaga Kerja** | Rp. 67.370.440.000 |
| **Biaya Pajak dan Asuransi** | |
| 1. Biaya Pajak Bumi dan Bangunan | Rp. 29.166.667.000 |
| **Biaya Pemeliharaan Perlengkapan dan Peralatan** | Rp. 9.542.344.000 |
| Biaya Penyusutan | |
| 1. Bangunan | Rp. 506.160.125.000 |
| 2. Mesin | Rp.2.498.748.963.000 |
| **Total Biaya Deplesi dan penyusutan** | Rp.3.004.909.088.000 |
| **Total Biaya** | **Rp 3.110.388.539.000** |

Lampiran 4

**PT. SEMEN PADANG**

**BIAYA DEPARTEMEN JASA INDARUNG V**

**TAHUN 2009**

| NO | ACCOUNT DESCRIPTION | TOTAL |
|---|---|---|
| 1. | Penanganan Bahan Baku | Rp. 43.750.560.000 |
| 2. | Gudang | Rp. 1.980.700.000 |
| 3. | Pembangkit Tenaga Listrik | Rp. 122.866.266.000 |

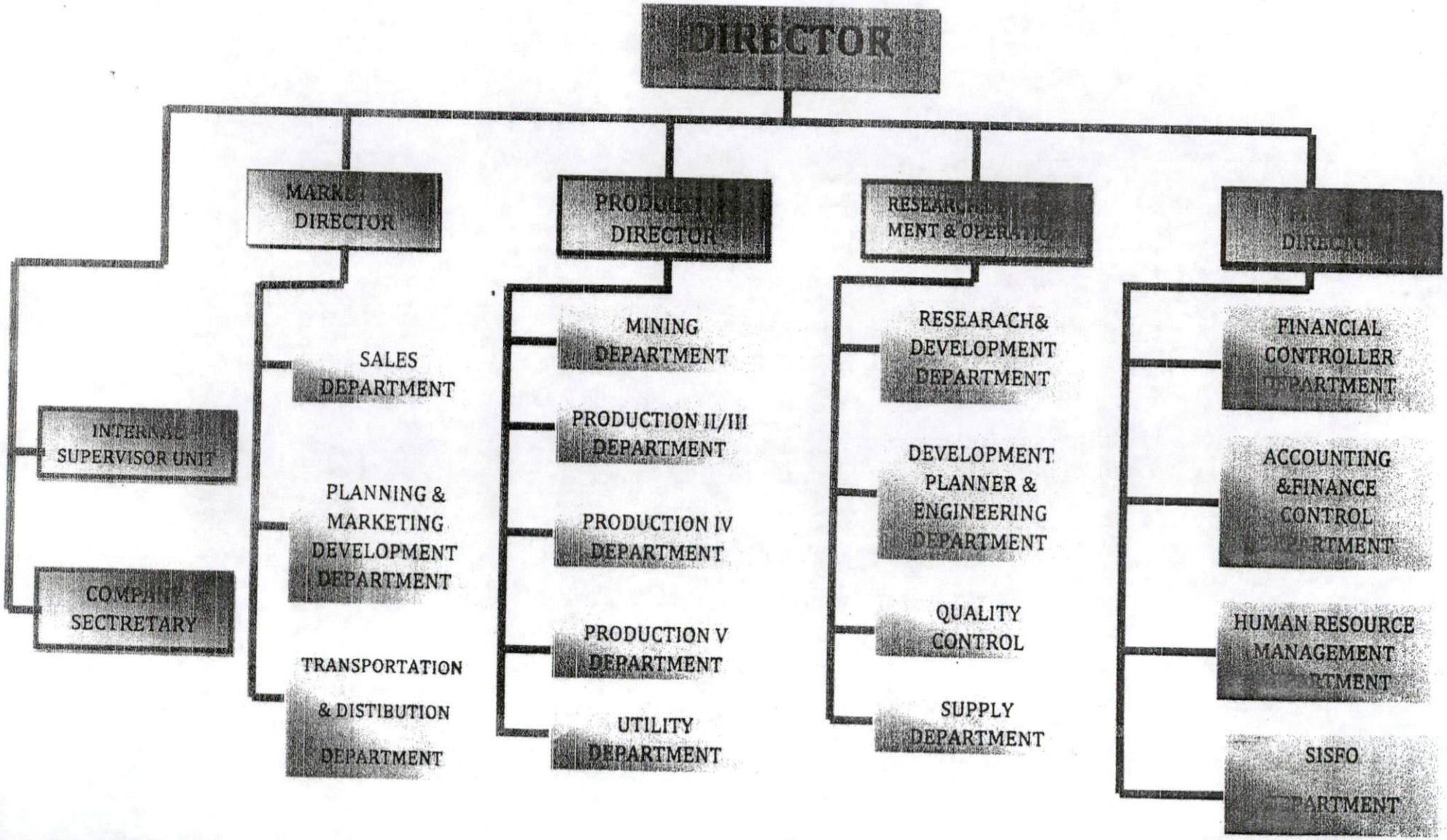
| KETERANGAN | MANAGEMENT PRODUKSI | DEPARTEMEN TAMBANG | PENAMBA & PENGOLAHAN BATU BARA | PENAMBA & PENGOLAHAN BATU KAPUR | OVERHEAD | PENAMBA | PENGANGKUTAN | PEMASARAN | [illegible] | TOTAL BIAYA |
|---|---|---|---|---|---|---|---|---|---|---|
| SALDO AWAL | | | 167.586 | 19.343 | | 39.428 | 19.603 | 134.654 | 14.602 | |
| PRODUKSI | | | 531.219 | 54.241 | | 614.084 | 383.748 | 420.539 | 351.471 | |
| DIBELI | | | | | | | | 63.857 | 3.550 | |
| TERSEDIA | | | 698.805 | 73.584 | | 653.512 | 403.351 | 619.049 | 369.623 | |
| SALDO AKHIR | | | 144.234 | 12.945 | | 57.614 | 36.733 | 152.692 | 21.464 | |
| TRANSFER | | | (554.571) | (60.639) | | (595.898) | (366.618) | (351.471) | 0 | |
| PENJUALAN | | | 0 | 0 | | 0 | 0 | (112.309) | (347.892) | |
| SUSUT | | | 0 | 0 | | 0 | 0 | (2.577) | (267) | |
| (CONTRA) | | | 0 | 0 | | 0 | | | | |
| Saldo Awal TB | | | 4.169.514.102 | 698.266.744 | | 1.678.827.113 | 4.849.831.718 | 38.801.038.865 | 9.037.207.707 | |
| | | | 24.880 | 36.099 | | 42.579 | 247.400 | 288.154 | 618.905 | |
| BIAYA | | | | | | | | | | |
| BIAYA LANGSUNG | | | | | | | | | | |
| Semen dibeli - Curah | | | | | | | | | | |
| Semen dibeli - Bungkus | | | | | | | | | | |
| Bahan baku beli | | | | | | | | | | |
| Bahan penolong peledakan | | | | | | | | | | |
| Bahan penolong tanur | | | | | | | | | | |
| Bahan penolong penggilingan | | | | | | | | | | |
| Bahan kantong | | | | | | | | | | |
| Biaya pembuatan kantong | | | | | | | | | | |
| Biaya kantong jadi | | | | | | | | | | |
| Biaya bahan kimia | | | | | | | | | | |
| Biaya bahan bakar | | | | | | | | | | |
| Biaya listrik | | | | | | | | | | |
| Biaya air | | | | | | | | | | |
| Biaya distribusi | | | | | | | | | | |
| Biaya pelabuhan | | | | | | | | | | |
| Biaya jasa pengelolaan packer | | | | | | | | | | |
| Invoice Price Variance | | | | | | | | | | |
| TOTAL BIAYA LANGSUNG | | | | | | | | | | |
| BIAYA TIDAK LANGSUNG | | | | | | | | | | |
| Biaya tenaga kerja | | | | | | | | | | |
| Biaya umum | | | | | | | | | | |
| Biaya pajak dan asuransi | | | | | | | | | | |
| Biaya pemeliharaan | | | | | | | | | | |
| Pemeliharaan Tanah | | | | | | | | | | |
| Biaya Pemeliharaan Bangunan | | | | | | | | | | |
| Biaya Pemeliharaan Sarana & Prasarana | | | | | | | | | | |
| Biaya Pemeliharaan Mesin | | | | | | | | | | |
| Biaya Pemeliharaan Alat Berat | | | | | | | | | | |
| Biaya Pemeliharaan Kendaraan | | | | | | | | | | |
| Biaya Pemeliharaan Perlengkapan & Peralatan | | | | | | | | | | |
| Biaya Jasa Out Sourcing | | | | | | | | | | |
| Biaya penelitian | | | | | | | | | | |
| Biaya deplesi dan penyusutan | | | | | | | | | | |
| Biaya amortisasi | | | | | | | | | | |
| Biaya penjualan | | | | | | | | | | |
| TOTAL BIAYA TIDAK LANGSUNG | | | | | | | | | | |
| TOTAL BIAYA | | | | | 16.433.463.101 | | | 43.943.004.672 | | |

| | MANAGEMENT PRODUKSI | DEPARTEMEN TAMBANG | PENAMB. & PENGOL BATU KAPUR | PENAMB. & PENGOL BATU SILIKA | OVERHEAD | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SALDO AWAL | | | | | | | | | | |
| BIAYA | | | | | | | | | | |
| TERSEDIA | | | | | | | | | | |
| - SALDO AKHIR | | | | | | | | | | |
| - ALLOCATION - OVERHEAD | | | | | | | | | | |
| - ALLOCATION - TAMBANG | | | | | | | | | | |
| - ALLOCATION - OPERATION | | | | | | | | | | |
| - TRANSFER - BATU KAPUR | | | | | | | | | | |
| - TRANSFER - BATU SILIKA | | | | | | | | | | |
| - TRANSFER - RAW MIX | | | | | | | | | | |
| - TRANSFER - KILN | | | | | | | | | | |
| - TRANSFER - CEMENT | | | | | | | | | | |
| - TRANSFER - PACKING | | | | | | | | | | |
| - HARGA POKOK PENJUALAN | | | | | | | | | | |
| - LOSS | | | | | | | | | | |
| TOTAL CONTROL | | | | | | | | | | |
| SELISIH PERSEDIAAN S/D | | | | | | | | | | |

JURNAL PERSEDIAAN

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| SALDO PERSEDIAAN TB | | | | | | | | | | |
| SALDO AKHIR BULAN INI | | | | | | | | | | |
| SELISIH PERSEDIAAN | | | | | | | | | | |

The Organization Structure



# STRUKTUR ORGANISASI DEPARTEMEN PRODUKSI V

# PT. SEMEN PADANG