

## A STUDY ON INVENTORY MANAGEMENT AND CONTROL

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### ABSTRACT

This propose to get exposure in inventory and it is very important to the company. It is to ensure quality in business that control the transaction between the consumer goods. It is important to do proper inventory management and control in the production company. This project is to analyse the inventory control in the leading brake manufacturing company. This study shows the analysis of ABC items in the inventory, SAP, stock policy followed. It deals with entire process carried in inventory department. Also it was found that there no proper demand forecasting by the company it is done only by suppliers and supply materials to the company along with the demand forecasted in SAP. This affecting the production process in the company. It is suggested that to develop communication between the suppliers and properly forecast the demand. This will result in managing inventory and use man-power according to the demand in order to produce more and control the inventory space. It leads to reduce the inventory of finished products. ABC analysis has shown that the management must have more control on C items than A & B because C class as a highest in number that occupies more space in inventory. This is done through maintaining routine check in orders in SAP, by maintaining proper forecasting it will result reducing the dead stock in inventory.

**Keywords:** inventory, ABC items, demand forecasted in SAP

### 1. INTRODUCTION

Every enterprise needs inventory of smooth running of its activities. It serves as a link between production and distribution process. There is generally, a time lag between the recognition of a need and its fulfillment. The greater the time lags, the higher the requirement for inventory it also provides a cushion for future price fluctuations.

The investment in inventories constitutes the most significant part of current assets/working capital in most if the under taking. Thus, it is very essential to have proper control and management of inventories.

The purpose of inventory management is to ensure availability of materials in sufficient quantity as and when required and also to minimize investment in inventories.

#### MEANING AND NATURE OF INVENTORY

In accounting language, inventory may mean the stock of finished goods only. In a manufacturing concern, it may include raw materials, work-in-progress and stores etc.

#### IMPORTANCE OF THE STUDY

Every company, on average spends 70% on raw materials. Therefore, there is a need to know the raw materials cost and also there is a great importance to understand the inventory management system of this company.

The study helps a lot to the stores department to take remedial step to control the inventory process. These are all the present study observes 'Effective utilization of inventory management.

#### INVENTORY OF OBSOLESCENCE

Obsolete inventories cannot be used or disposed off at values carried on the books. Frequent reviews should be made of all inventories, and when obsolescence is indicated a request for revaluation should be prepared for approval by management. The difference between original and obsolete value should be recorded by a charge to an operating account. Inventory obsolescence and a credit to inventory.

If the material is scrapped, this will be for the full inventory value of the material. If it is anticipated that the material can be sold at reduced value or used in areas where it will be worth less than its original value, the entry would be only for the amount of write down. Some companies carry a solvate inventory and transfer to its materials which may be sold or used at reduced values.

Dr. Solvate inventory

Dr. Inventory Obsolescence

Cr. Raw material inventory or supplies inventory.

## 2. REVIEW OF LITERATURE

**Title: Inventory Management in Pharmacy Practice: A Review of Literature**

**Author: Ayad K. Ali**

**Source: Archives of Pharmacy Practice Vol. 2, Issue 4, 2011**

### **Abstract**

In pharmacy operations, inventory is referred to as the stock of pharmaceutical products retained to meet future demand. Inventory represents the largest asset in pharmacy practice, and its value continues to rise because of the growth in variety and cost of pharmaceutical products. From both financial and operational perspectives, efficient inventory management plays a great role in pharmacy practice. Inventory management aims at reducing procurement and carrying costs, while maintaining an effective stock of products to satisfy customer and prescriber demands. The author reviews methods of inventory management in pharmacy practice, and highlights approaches by which the process of inventory management is evaluated. Factors affecting inventory management, including the role of information technology, are summarized. The author outlines, with recommendations, the impact of inventory mismanagement on patient safety.

### **ARTICLE: 2**

**Title: A literature review on models of inventory management under uncertainty**

**Source: RESEARCH REVIEW International Journal of Multidisciplinary**

**Author: Dr. Pushpender Kumar and 2Anupreet Kaur Mokha**

Inventories are raw materials, work-in-process goods and completely finished goods that are considered to be the portion of business's assets that are ready or will be ready for sale. Formulating a suitable inventory model is one of the major concerns for an industry. The earliest scientific inventory management researches date back to the second decade of the past century, but the interest in this scientific area is still great. Again considering the reliability of any process is an important feature in the research activities. Values of some factors are very hard to define or almost unreal. In such cases, fuzzy models of inventory management take an important place. This paper analyzes possible parameters of existing models of inventory control. An attempt is made to provide an up-to-date review of existing literature, concentrating on descriptions of the characteristics and types of inventory control models that have been developed.

### **RESEARCH GAP:**

Gap between the time of placing order and the receipt of the delivery. This time gap can be due to delay in transportation, loading and many other factors, which are beyond control.

### **OBJECTIVES:**

1. To examine the organization structure of inventory management in the stores of the SCCL
  2. To discuss pattern, levels and trends of inventories in SCCL.
  3. To understand the various inventory control techniques followed by stores in SCCL
  4. To access the performance of inventory management of the SCCL by selected accounting ratios
1. To know the inventory control techniques of SCCL.

## 3. RESEARCH METHODOLOGY

### **Need For The Study**

1. In a normal company
2. The major expenditure of the company is incurred to words the purchase of the machineries diesel, coals (raw materials) and machineries spares, electricity power etc
3. Every company, on average spends 70% on raw materials (inventory). Therefore, there is a need to know the raw material cost and also there is a great importance to understand the inventory management system of this company.

### **Scope Of The Study:**

A significant example concerning inventory management is allocation of responsibilities and authorities. Inventory control problems can easily arise when for instance nobody is in the organization is responsible for the inventory or the responsible person has insufficient authorities to carry out the task.

Likewise, high inventory values indicating a lack of control may just be the result of inaccurate inventory records or of a reporting system that doesn't function well.

### Methodology

Methodology is a systematic procedure of collecting information in order to analysis and verify a phenomenon. The collection is done through two principles sources viz.

**Primary data** The primary data are those which are collected a fresh and for the first time, and thus happened to be original in character. So it is the information collected directly without any reference.

In this it was mainly interviews, with concerned officers and staff, either individually or collectively some of the information had been verified or supplemented conducting personal with observations.

**Secondary data** The secondary data was collecting from already publishing source such as annual reports, returns and internal records, magazines, journals.

The data includes

- Collection of required data from the annual reports of singarani collieries company ltd.
- Collection of required data from magazines, publications, and websites of SCCL.

### Limitations of the study

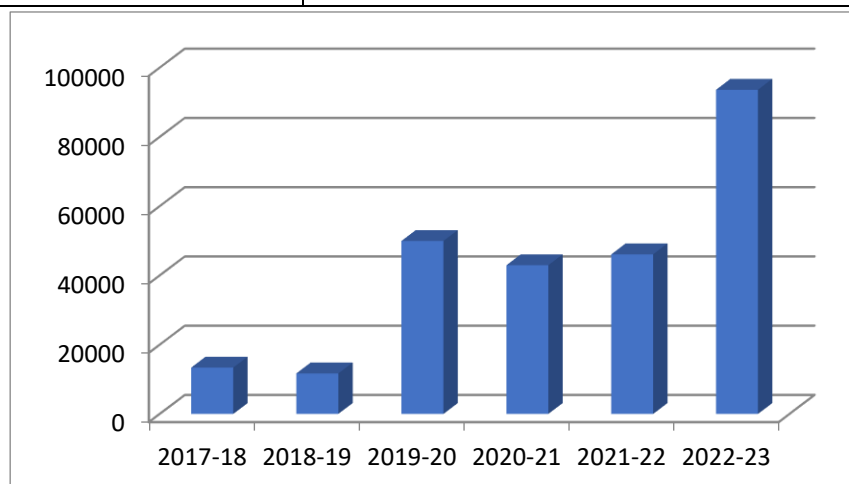
2. The study has the following limitations
3. The study is limited only for a period of 5 years i.e., from 2017-18 to 2022-23.
4. The limitations of ratio analysis can be applicable to the study.

## 4. DATA ANALYSIS & INTERPRETATION

The investment on raw materials over a period of 5 years from 2009 to 2015 is presented in the following table.

### 1.Investment on Raw Materials:

Year	Investment on Raw Material (in crores)
2017-18	13386.80
2018-19	11690.67
2019-20	49950.88
2020-21	42950.66
2021-22	46087.45
2022-23	93605.78

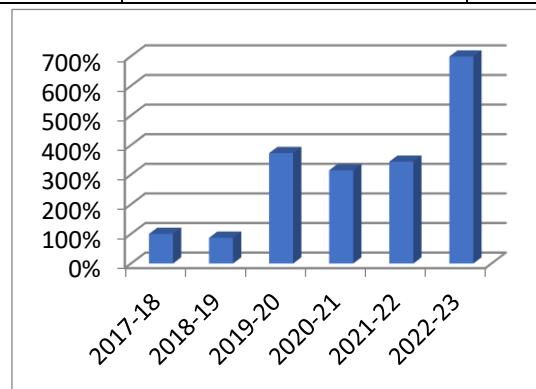


### Interpretation:

- From the above table it can be understood that the inventory of Kesoram Cement was recorded at 13,386.80 during the year 2017-18 and it is increased to 93605.78 during the year 2022-23.
- It shows that there is no increase in the inventory to the more extent of 80218.98.
- The average inventory of Kesoram Cement was recorded at Rs.42945.41.
- The highest investment in inventory was recorded in the years 2022-23.

## 2. Trend Analysis:

Year	Raw Material (in Lacks)	Trend %
2017-18	13386.80	100%
2018-19	11690.67	87%
2019-20	49950.88	373%
2020-21	42950.66	315%
2021-22	46087.45	344%
2022-23	93605.78	699%

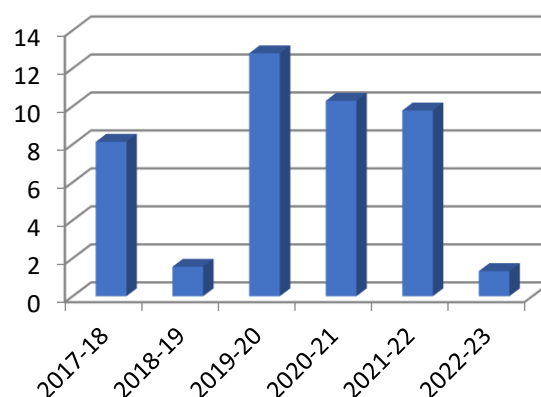


### Interpretation:

1. The investment on investment has increased in the year 2022-23. And the last year investment has declared continuously. The percentage in 2018-19 was 315% as compared to years 2017-18 to 2022-23.
2. The trends in inventories show that inventory have been more in the year 2022-23 and then it has shown a downward trend and again it increased to some extent.
3. The investment in inventories has shown fluctuating trend is initial years and then it raised to 699% and again showing fluctuating trend.

## 3. Inventory Turnover Ratio:

Year	Cost of goods sold	Avg. Inventory	Ratio
2017-18	60150.35	7402.31	8.13
2018-19	59021.41	37975.30	1.55
2019-20	121551.71	95065.28	12.79
2020-21	127533.58	12390.06	10.29
2021-22	130392.68	1333.8.01	9.78
2022-23	311636.92	160035.93	1.32

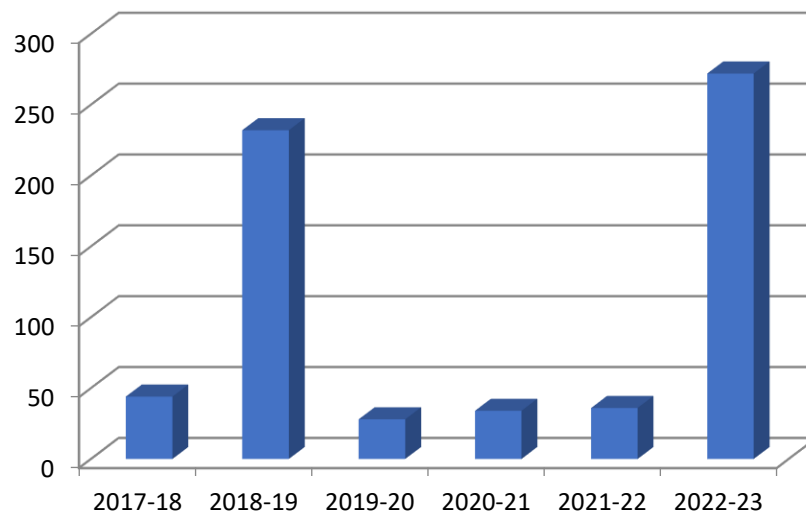


#### Interpretation:

1. From the above table 2009 it can be observed that inventory turnover ratio is 8.13 during 2017 -18 and it gradually decreased to 1.55 during 2018 – 2019.
2. In the year 2022-23 it is clear that the ratio is very less i.e., the stock is not turned into sales quickly.
3. As compared to all the years the ratio is very less in 2022-23.
4. The average inventory turnover ratio was recorded at 7.3 times during the review period.

#### 4. Inventory conversion period:

Year	Cost of goods sold	Avg. inventory	Ratio	ICP (Days)
2017-18	60150.35	7402.31	8.13	44
2018-19	59021.41	37975.30	1.55	232
2019-20	121551.71	95065.28	12.79	28
2020-21	127533.58	12390.06	10.29	34
2021-22	130392.68	1333.8.01	9.78	36
2022-23	311636.92	160035.93	1.32	272



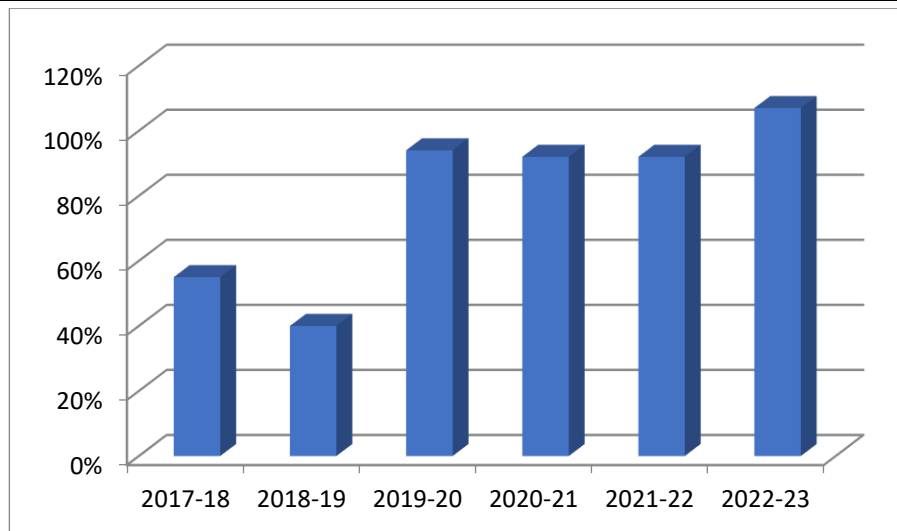
#### Interpretation:

From the above table it can be identified the following observations:

1. The inventory conversion period was 232 days during the year 2018-19 but it declined to 36 during 2021-22, which indicates that the stock has been very quickly converted into sales which mean the company is managing the inventory efficiently.
2. The lowest inventory conversion period was recorded at 28 days in the year 2019-20 and the highest inventory conversion was recorded at 272 days in the year 2022-23.
3. The average inventory conversion period was recorded at 107 days during the review period.

#### 5. Percentage of Inventory over current assets:

Year	Inventory	Current Assets	Ratio (%)
2017-18	13386.80	24172.33	55%
2018-19	11690.67	28770.78	40%
2019-20	49950.88	53063.75	94%
2020-21	42950.66	45598.02	92%
2021-22	46087.45	49713.32	92%
2022-23	93605.78	86811.49	107%



#### Interpretation:

1. From the above table it can be understood that the % of inventory over current assets ratio was showing a declining trend for two years 2017 - 2018.
2. However from the year 2022-23 it is showing an increasing trend.
3. The lowest inventory over current assets ratio was recorded at 40% during the year 2018-19 and the highest inventory over current assets ratio was recorded at 107% during 2022-23.

#### 5. CONCLUSION

1. Overall the inventory of Kesoram Cements is up to the mark.
2. The production of clinker and cement during 2017 – 2018 was 7,47,436 and 7,77,092 respectively which is higher as compared to 2017 – 2019 which is 6,87,373 and 7,27,447.
3. Investment on raw material is 93605.78 lakhs which is very high as compared to 2018-19 which is only 460870.45 lakhs.
4. The inventory turnover ratio shows that the stock has been converted into sales is only 1.32 times.
5. In the year 2019-20 the stock was cleared within 28 days whereas it took 232 days in the year 2017-18 which took more days for clearing stock.
6. Year 2020-21 is not showing sample profits. This is because of cement prices have been continuously under pressure due to persistent mismatch between supply and demand.

#### 6. REFERENCES

- [1] www.sccl.com.
- [2] www.scribd.com.
- [3] www.managementstudentguide.com.