

A Study on Inventory Management of Kesoram Cements

¹ Sabbani Sai Kiran, ² M. Ramya Sree

¹P.G. Scholar, ²Guide, Assistant professor,

^{1,2}Department : MBA (Finance)

^{1,2}Malla Reddy Engineering College (Autonomous), , Hyderabad

Email : ¹mramyasree004@gmail.com

Abstract: *The study examines the concept of the “Inventory management” in relation to the “Kesoram cements”. Inventory is defined as a usable resource, which is physical and tangible such as material, and our stock is our inventory. Though inventory is a usable resource, it is also a idle resource, unless it is managed efficiently and effectively. Inventory management boils down to maintaining an adequate supply to meet the expected demand pattern subject to budgeting consideration. Effectiveness of materials and production functions depend to a large extent upon inventory management. The investment on raw material should be made as per the requirement. Unnecessary investment may block up the funds. Neither too high nor too may inventory turnover ratios reduce profit and liquidity position of industry. S, proper balance should be made to increase profit and to ensure liquidity. The raw material should be acquired from the right source at right quality and aright cost. The process that was being used by KESORAM CEMENTS with purchasing department should undergo changes, so that, it seeks enhance the celerity of delivery of a product without compromising its quality by improving the utilization of material, labor and equipment. To reduce the work, purchasing department may enter the purchasing orders into a data base and did not send to a copy any one. When the merchandise arrived, the receiving clerk would enter the database and determine whether the order agreed with the electronic purchase order.*

Key Words: ABC analysis, Inventory management, Inventory control, Material Management.

I. INTRODUCTION

Raw material form a major input into the organization. They are required to carry out production activities uninterruptedly. The quantity of raw materials required will be determined by the rate of consumption and the time required for replenishing the supplies. The factors like the availability of raw material and Government regulations etc., too affect the stock of raw materials.

Compared to larger organizations with more physical space, in smaller companies, the goods may go directly to the stock area instead of a receiving location, and if the business is a wholesale distributor, the goods may be finished products rather than raw materials or components. The goods are then pulled from the stock areas and moved to production facilities where they are made into finished goods. The finished goods may be returned to stock areas where they are held prior to shipment, or they may be shipped directly to customers. Inventory management uses a variety of data to keep track of the goods as they move through the process, including lot numbers, serial numbers, cost of goods, quantity of goods and the dates when they move through the process. Almost 60% of cash is allocated

for the stock in an undertaking. Materials Management is identified with arranging, securing, putting away and giving the suitable material of right quality, right amount at correct place in opportune time in order to co-ordinate and calendar the creation movement in an integrative route for a mechanical endeavor. Stock Management is basically the procedure by which an association is provided with the products and enterprises that it needs to accomplish its goals of purchasing, stockpiling and development of materials. Stock administration frameworks are key to how organizations track and control inventories. Being able to quantify stock in an opportune and exact way is basic for having continuous business activities since stock is regularly one of the biggest current resources on an organization's accounting report. Stock is a rundown for products and materials, or those merchandise and materials themselves, held accessible in stock by a business. Bookkeeping stock is viewed as an advantage. Stock administration is required at various areas inside an office or inside different areas of a supply system to item the customary and arranged course of generation against the arbitrary unsettling influence of coming up short on materials or merchandise.

II. REVIEW OF LITERATURE

Bern at de William year 2008 This study tells that the main focus of inventory management is on transportation and warehousing. The decision taken by management depend s on the traditional method of inventory control models. The traditional method of inventory management is how much useful in these days the author tell about it. He is also saying that the traditional method is not a cost reducing, it is so much expensive. But the managing the inventory is most important work for any manufacturing unit.

Jon Schreibfeder 1992 He said that it is easy to turn cash into inventory, the challenge is to turn inventory back into cash. In early 1990's many distributor recognize that they needed help controlling and managing their largest asset inventory. In response to this need several companies developed comprehensive inventory management modules and systems. These new package include many new features designed to help distributors effectively managed warehouse stock. But after implementing this many distributors do not feel that they have gained control of their inventory.

study Mr. W.Bagby 2017 Wolf Bagby, Managing inventory In this explains that by managing the inventory it becomes easier for the organization to meet the profit goals, shorter the cash cycle, avoid inventory shortage, avoid excessive carrying costs for unused inventory, and improve profitability by decreasing cash conversion and adopt JIT system. According to this study companies need to get smart about inventory.

D.Hoopman April 7, 2003 (Article from inventory planning and optimization) In this article he said that inventory optimization recognize that different industry have different inventory profiles and requirements. Research has indicated that solutions are priced in a large range from tens of thousands of dollars to millions of dollars. In this niche market sector price is definitely not an indicator of the quality of solution, ROI and usability are paramount.

D.Hoopman April 7, 2003 In this article he said that inventory optimization recognize that different industry have different inventory profiles and requirements. Research has indicated that solutions are priced in a large range from tens of thousands of dollars to millions of dollars. In this niche market sector price is definitely not an indicator of the quality of solution, ROI and usability are paramount.

Silver, Edward A Dec22, 2002 The existence of budget to be allocated among the stocks of the items and a purchasing production facility having the capability to process at most a certain number of replenishment per year. Because of the constraint the individual replenishment quantities cannot be selected independently.

Delaunay C, Sahin E, 2007. A lots of work has been done but now if we want to go ahead we must have good visibility upon this field of research. That is why we are focused on frame work for an exhaustive review on the problem of supply chain management with inventory inaccuracies. The author said that their aim in this work is also to present the most important criterion that allow a distinction between the different types of managing the inventory

(Das, Bivash , & Onkar , 2012) Incorporation of appropriate inventory management system plays an important role in determining the financial health of a manufacturing company. Since it is difficult to apply proper inventory control model for each item separately because of its huge variety, it is necessary to find out few significant items using ‘Selective Control’ method. ABC and FSN analyses along with XYZ analysis are done. The analysis shows the state of the present inventory management.

(Sharma & Vivek , 2016) Inventory management has to keep accurate records of goods. It is important for keeping cost down. The better inventory management will surely help in solving problems the company would be facing with respect to inventory and will help in reducing huge investment or blocking of money in inventory. There should be tight control over stocks based upon ABC analysis. If we execute and follow the all the techniques of inventory management, we will be able to enhance the profit with minimum cost.

(Smith, 2011) The inventory management practices of six major companies/institutions in various industries were compared with recommendations for improvement by using the ABC analysis inventory management method. The ABC analysis tool was found to be beneficial to most companies. With several companies already utilizing the basic principles behind the method, either manually or with the use of an enterprise resource planning (ERP) system.

III. NEED FOR THE STUDY:

- Every industry 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 industry.
- The study helps as a log to various departments to take steps to control the inventory process.
- Inventory management is a very simple concept – don’t have too much stock and don’t have too little. Since there can be substantial costs involved in straying above and below the optional range, careful inventory management can make a huge difference in the profitability of a business.
- Although the concept is simple, the process of getting the right balance can be quite a complex and time consuming task without the right technology.
- There are two fundamental questions must be answered, in order to manage the inventory of any physical item – when to order and how much to order.

IV. OBJECTIVES OF THE STUDY:

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

V. SCOPE OF THE STUDY

1. The Scope is limited to the operations of “**KESHORAM CEMENT**”.
2. The Information obtained from the Secondary Data of “**KESHORAM CEMENTS**” only.
3. The key Information Performance Indicators from 2016-2020 were only taken.
4. The Profit & Loss, the Balance Sheet was as on last 5 years.
5. Comparison Analysis was done in Comparison of Sister Units.

VI. LIMITATIONS OF THE STUDY:

1. The study is limited only for a period 5 years i.e., from 2016 -20.
2. The limitations of ratio analysis can be applicable of the study.
3. There may be approximation in calculating ratios taking the figure from the annual reports.

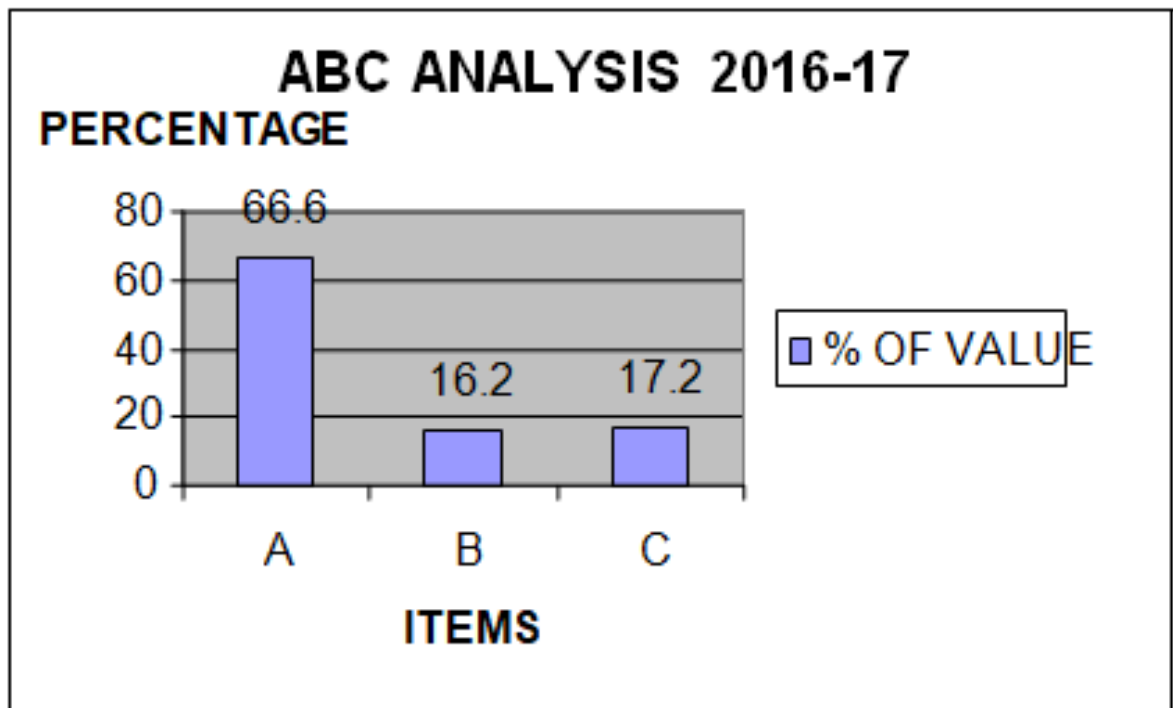
VII. Empirical Results

(A) ABC Classification Of Inventory For 2016-17

CLASS	NO.OF ITEMS	VALUE	% OF VALUE
A	3	69850963	66.6
B	2	17018547	16.2
C	4	1785139	17.2
TOTAL	9	104744649	100

Table No:1.1 ABC Analysis of Kesoram Cements Ltd., 2016-17

Source: Author's Compilation



Graph No:1.a ABC Analysis of Kesoram Cements Ltd., 2016-17
Source: Author's Compilation

From the analysis it is observed that In the indicates in the year 2016-2017, there are 3items in the total value which comes under "A" category, 2 items in the total value which comes under "B" category and 4 items in the total value which comes under "C" category. In the year 2017-2018, there are 2 items in the total value which comes under "A" category, 3 items in the total value which comes under "B" category and 4 items in the total value which comes under "C" category. In the year 2019-2019, there are 3items in the total value which comes under "A" category, 2 items in the total value which comes under "B" category and 5 items in the total value which comes under "C" category.

Further, in the year 2019-2020, there are 3items in the total value which comes under "A" category, 2 items in the total value which comes under "B" category and 3 items in the total value which comes under "C" category, In 2020-2021, there are 2items in the total value which comes under "A" category, 3 items in the total value which comes under "B" category and 5 items in the total value which comes under "C" category. During 2015-20 indigenous items like quick set 520 and quick set 510 are increased annual demand based on the company orders respectively. Further the item wise economic order cost in the year 2016 indigenous items like slag remover and INOPIPE increased based on the company orders respectively. It is observed that In the year indigenous items like 2016 slag remover and 2016 INOPIPE are increased based on the company orders and the EOQ respectively. In the year 2018 silica sand, sieved sand EOQ and company orders are decreased when compared to 2020-21 respectively. The Inventory turnover ratio for the year 2020-21 is 5.00 and there is a gradual decrease to 4.69 and year by year increased. Further, Inventory conversion period for the year 2015-16 is 35 and there is a gradual increase to 2016-17 78, 73 and 58, 47 for the year 2017-18, 2019-20.

VIII. FINDINGS, SUGGESTIONS & CONCLUSION

Findings

- In the above table indicates in the year 2015-2016, there are 3 items in the total value which comes under "A" category, 2 items in the total value which comes under "B" category and 4 items in the total value which comes under "C" category
- In the above table indicates in the year 2016-2017, there are 2 items in the total value which comes under "A" category, 3 items in the total value which comes under "B" category and 4 items in the total value which comes under "C" category.
- In the above table indicates in the year 2017-2018, there are 3 items in the total value which comes under "A" category, 2 items in the total value which comes under "B" category and 5 items in the total value which comes under "C" category.
- In the above table indicates in the year 2018-2019, there are 3 items in the total value which comes under "A" category, 2 items in the total value which comes under "B" category and 3 items in the total value which comes under "C" category.
- In the above table indicates in the year 2019-2020, there are 2 items in the total value which comes under "A" category, 3 items in the total value which comes under "B" category and 5 items in the total value which comes under "C" category.
- In the year of 2015-20 indigenous items like quick set 520 and quick set 510 are increased annual demand based on the company orders respectively.
- In the above table indicates the item wise economic order cost in the year 2015 indigenous items like slag remover and in pipe increased based on the company orders respectively
- The above table indicates the item wise economic order quantity in the year 2017 indigenous items slag remover and 2018 in pipe increased based on the company orders and the EOQ respectively
- In the above year indigenous items like 2015 slag remover and 2018 in pipe are increased based on the company orders and the EOQ respectively.
- In the year 2016 silica sand, sieved sand EOQ and company orders are decreased when compared to 2018-19 respectively
- Inventory turnover ratio for the year 2019-20 is 5.06 and there is a gradual decrease to 4.69 and year by year increased.
- Inventory conversion period for the year 2015-16 is 35 and there is a gradual increase to 2018-12 78, 73 and 58, 47 for the year 2019-20, 2020-21.

Suggestions

- 1) Though the production is higher during the year 2019-20 and the sales were very high that is as per inventory conversion period it took 54 days. This shows that there is demand for cement and the funds unnecessarily tied up. So, proper demand forecasting should be done and according to that it may be manufactured.
- 2) The investment on raw material should be made as per the requirement. Unnecessary investment may block up the funds.
- 3) Neither too high nor too may inventory turnover ratios reduce profit and liquidity position of the industry. So, proper balance should be made to increase profits and to ensure liquidity.
- 4) The raw material should be acquired from the right source at right quality and at right

cost.

- 5) The process that was being used by Kesoram Cement with the purchasing department should undergo changes, so that, it seeks enhance clarity of the delivery of a product without compromising its quality by improving the utilization of material, labor and equipment.
- 6) To reduce the work, the purchasing department may enter the purchasing order in to a data base and did not send a copy to any one. When the merchandise arrived, the receiving clerk would enter the data base and determine whether the order agreed with the electronic purchase order. If it did, payment was authorized to be made at the appropriate time. If it didn't match, the order would be returned until if it is agreed by the Kesoram Cement. If it institutes "invoice less purchasing" where the supplier did not need to send and invoice to be paid. Generally simplifies the process for all concerned. As a result it would be able to reduce the work of its accounts payable department.

Conclusion

Over all the inventory of Kesoram Cement is up to the mark. Investment on raw materials are 2010.10 lakhs which is very high as compared to 2019-20 which is only 65.32lakhs. The inventory turnover ratio shows that the stock has been converted into sales in only 4.69 times. In the year 2017-18 the stock was cleared within 41 days whereas it took 52 days in the year 2019-20 which took more days for clearing stock. Year 2017-18 is not showing sample profits. This is because of cement prices have been continuously under pressure due to persistent mismatch between supply and demand. In this type of process, it requires more number of employees and supplier should also wait for until the accounts are matched. This process takes an input, adds value to it and provides an output to an internal or external customer.

REFERENCES

- [1] Aditya A. Pande, S.Sabihuddin, "Study of Material Management Techniques on Construction Project", International Journal of Informative & Futuristic Research, ISSN: 2347-1697, Vol.2 (3), May 2015, pp.3479-3486.
- [2] S.Angel Raphella, S.Gomathi Nathan and G.Chitra, "Inventory Management- A Case Study", International Journal of Emerging Research in Management & Technology, ISSN: 2278-9359, Vol.3 (3) June 2014, pp.94-102.
- [3] Ashwini R.Patil, Smita V. Pataskar, "Analyzing Material Management Techniques on Construction Project", International Journal of Engineering and Innovative Technology (IJEIT), Vol.3 (4), Jan 2013, pp.96-100.
- [4] Dipak P. Patil, Pankaj P. Bhangale, Swapnil S.Kulkarni, "Study of Cost Control on Construction Project", International Journal of Advanced Engineering Research and Studies, Vol.02, April 2014, ISSN2249-8974.
- [5] P.G. Matsebatlela and K. Mpofu, "Inventory Management Framework to Minimize Supply and Demand Mismatch on a Manufacturing Organization", International Federation of Automatic Control, Vol.3, No.48, Mar 2015, pp-260- 265
- [6] Sayali Shet, Raju Narwade, "An Empirical Case Study Of Material Management In Construction Of Industrial Building By Using Various Techniques", International Journal of Civil Engineering and Technology, Vol. 12 (09), April 2015, pp.393-400.

- [7] 2016 IEEE 55th IEEE Conference on Decision and Control (CDC) 2. 2014 American Control Conference - ACC 2014.
- [8] 2012 Portland International Conference on Management of Engineering & Technology (PICMET).
- [9] "Inventory Management Software". EGA Futura. Retrieved 23 November 2012.
- [10] "Integrations and Apps for Online Inventory Management. SoftwareTradeGecko". www.tradegecko.com. Retrieved 2015-11-24.