

A STUDY ON INVENTORY MANAGEMENT

P Shalini¹, Mr. N. Rajender Reddy²

¹Department of Management Studies Aristotle PG College, Chilkur, Moinabad, Ranga Reddy District, Telangana, India.

²Assistant Professor Aristotle PG College, Chilkur, Moinabad, Ranga Reddy District, Telangana, India.

DOI: <https://www.doi.org/10.58257/IJPREMS35008>

ABSTRACT

Inventory Management is the integrated functioning of an organization dealing with supply of materials and allied activities in order to achieve the minimum coordination and optimum expenditure on materials. Inventory control is the most important function of inventory management and it forms nerve centre in any inventory management organization. An inventory management system is an essential element in an organization. It is comprised of series of processes, which provide an assessment of the organization's inventory. Since the inventory turnover ratio shows the increasing trend, there will be more demand for the products in the future periods. If they could properly implement and follow the norms and techniques of inventory management, they can enhance the profit with minimum cost.

Keywords: Inventory Management, Inventory control, inventory turnover ratio

1. INTRODUCTION

INVENTORY MANAGEMENT

INTRODUCTION: Every enterprise needs inventory for 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 lag, the higher requirements for inventory. It also provides a question for future price fluctuations.

The investment in inventories constitutes the most significant part of current assets/ Working capital most of the undertaking. 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 manufacturing concern, it may include raw materials, work-in-process and stores etc.

Inventory includes the following things:

RAW MATERIAL:

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 factories like the availability of raw materials and government regulations etc, to affect the stock of raw materials.

WORK IN PROGRESS:

The work in progress is that stage of stocks which are in between raw materials and finished good. The quantum of work in progress depends up on the time taken in the manufacturing process. Together the time taken in manufacturing, the more will be the amount of work in progress.

CONSUMABLES:

These are the materials which are needed to smoothen the process of production. These materials do not directly enter production but they act as catalysts. Consumables may be classified according to their consumption and critically.

Generally, consumable stores do not create any supply problem and form a small part of production cost. There can be instances where these materials may account for much value than the raw materials. The fuel oil may form a substantial part of cost.

FINISHED GOOD:

These are the goods which are ready for the consumers. The stock of finished goods provides a buffer between production and market. The purpose of maintaining inventory is to ensure proper supply of goods to customers.

SPARES:

The stocking policies of spares differ from industry to industry. Some industries like transport will require more spares than the other concerns. The costly spare parts like engines, maintenance spares etc are not discarded after use, rather they are kept in ready position for further use. All decisions about spare are based on the financial cost of inventory on such spares and the costs that may arise due to their non-availability.

2. REVIEW OF LITERATURE

ARTICLE: 1

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

Author: Ayad K. Ali

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

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 Anupreet 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.

OBJECTIVES:

The objectives of the study are:

- To understand the importance of auto components industries in India.
- To examine the management of Kusalava international ltd.
- To study the inventory management in Kusalava.
- To analyze and assess the efficiency of inventory by using ratio analysis.
- To know the procurement levels of the inventory.
- To examine the problems in inventory management in Kusalava.

3. RESEARCH METHODOLOGY

RESEARCH GAP ANALYSIS

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.

Need For The Study

For the purpose of the study, Kusalava International Ltd. is selected, as being it is a monopoly. Sponge iron manufacturing unit in the country at the time when it was established in 1980 as a public sector unit, specially to meet raw materials requirements of mini steel plants. It seems that one of the important problems faced by public enterprises is ineffective control measures especially out dated and unused inventory control measures. Therefore, it is felt quite appropriate to make a micro study on inventory control methods and policies of the Kusalava International Ltd. So as to find out the responsible factors that caused for high inventory cost.

Scope Of The Study:

1. The study is conducted at Kusalava International Ltd., Vijayawada.
2. The information collected for the study had been taken from documents which had been let out by the public documents such as annual reports of the company.
3. Most of the information has been kept confidential and as such was not passed an as part of the policy of the company.
4. The study of information is mostly depending upon the secondary data.
5. The study covers a period of five years from 2019-2023.

Methodology

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

1) PRIMARY DATA:

It is the information collected directly without any reference. In this study it was mainly through interviews with concerned officers and staff, either individually or collectively. Some of the information had been verified of supplemented conducting personal with observation.

THE DATA INCLUDES:

- Interviews with Kusalava International Ltd. employees.
- Organization chart has been drawn through observation.

2) SECONDARY DATA:

The secondary data was collected from already published source such as Pamphlets, annual reports, returns and international records.

THE DATA INCLUDES:

Methodology under study has been collected from the annual reports of Kusalava International Ltd., in house magazines, Publications, books, Journals on Management and Websites.

PERIOD OF STUDY:

A period of consecutive five years i.e. from 2019 to 2023 has been considered for the purpose of the study.

TOOLS:

Simple analytical tools such as percentage change, coefficient of correlation and method of least square are adopted in this study. Similarly, some strong accounting tools such as ratio analysis and trend analysis have also been used for financial analysis.

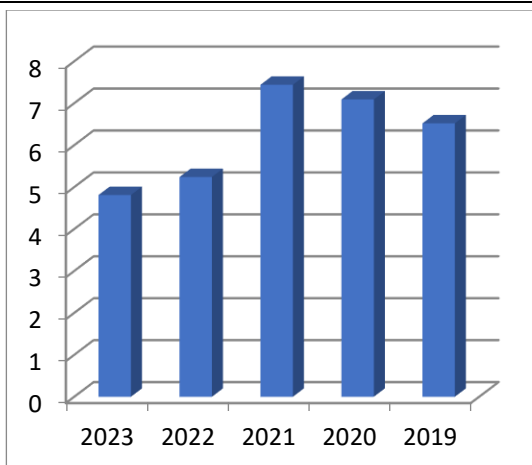
Limitations Of The Study

- The study was conducted with the data available and the analysis was accordingly.
- The analysis is made on the basis of secondary data.

4. DATA ANALYSIS & INTERPRETATION

INVENTORY TURNOVER RATIO

Year	Sales	Inventory	Inventory turnover ratio
2023	593070955	123401386	4.81
2022	512532789	97761460	5.24
2021	500922885	67352546	7.44
2020	484833736	68352276	7.09
2019	370959201	56925237	6.52

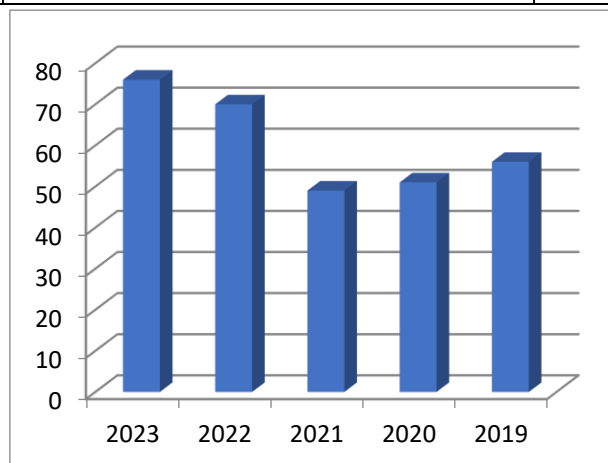


Interpretation:

In the year 2021, the inventory turnover ratio was very high than the rest of the years. It implies good inventory management. In the year 2023, it was 4.81 it was very lower than the other years. It means excessive inventory or it may be overinvestment in inventory. Excessive inventory due to funds locked up, rental of space.

INVENTORY CONVERSION PERIOD

Year	Inventory turnover ratio	Inventory conversion period
2023	4.81	76
2022	5.24	70
2021	7.44	49
2020	7.09	51
2019	6.52	56

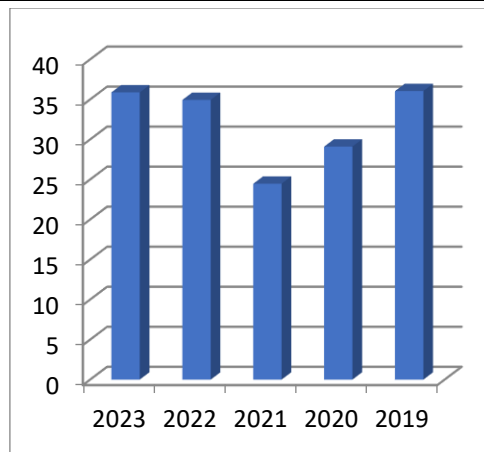


Interpretation:

Inventory conversion period was decreasing from 2019-2021. It was very good to the firm. But in the years 2022 & 2023, it was increased. Being the price of the product was increasing & the sales were decreased. So the inventory conversion period increased. But it should be decreased.

THE PERCENTAGE OF INVENTORY IN CURRENT ASSETS:

Year	Inventory	Current assets	percentage
2023	123401386	344031506	35.87
2022	99826907	285740444	34.93
2021	67352546	275344324	24.46
2020	68352276	234814785	29.1
2019	56925237	157939330	36.04

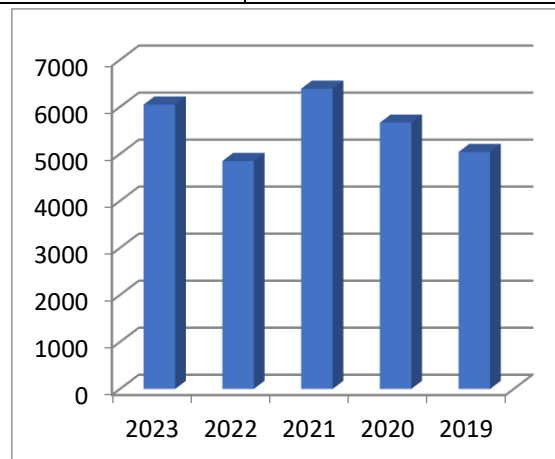


Interpretation:

The Kusalava international limited was giving more importance to inventory in current Assets. In the earlier year gave more preference to inventory. This will show the percentage of inventory in totals Current Assets. More attention has to be played by the management towards inventory as it consists 35% of Current Assets.

RE-ORDER LEVEL:

Year	Re-order level in m/t
2023	6048
2022	4848
2021	6384
2020	5664
2019	5040



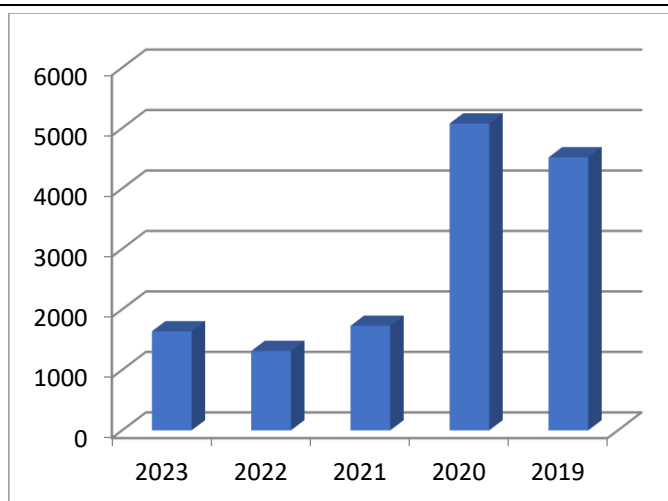
Interpretation:

In the year 2021, at 6384 M/T of raw material, the order should be placed. Because the annual demand is high but the reorder level was decreased. It may be happened due to decrease in the demand of final product.

MINIMUM LEVEL:

RAW MATERIAL:

Year	Minimum level in m/t
2023	1638
2022	1313
2021	1729
2020	5074
2019	4515



Interpretation:

From the above table the minimum level is high in the year 2020. The minimum level is low in the year 2022. The above table reveals that the Minimum level was reduced by reducing the storage cost & to avoid the obsolete goods.

5. CONCLUSION

- Disposal action for absolute and non-moving items to be taken up on priority. Identification of buyers to be done.
- Implementation of buy back clause incorporated in the earlier equipment purchase an order has to be taken up with the suppliers and returning of the unconsumed spare parts to be done. Such items are too identified.
- Orders are released mostly for all the items covered in the open order agreements. Rate contracts immediately on their receipt. This has to be controlled. Only the items required for consumption are to be procured otherwise the items procured will not get consumed and become non-moving.
- Utility of items costing more than 1.00 lakh has to be reviewed to take further action.
- Linking up alternate part numbers and elimination of duplicate code numbers. So that effective utilization of available items could be done and unnecessary purchases could be avoided.

6. REFERENCES

- [1] www.kusalava.com
- [2] www.officeonline.kusalava.com