



A Study on Inventory Management in Dora Plastics, Pvt Ltd Tirupati

¹*K. Harish Babu*, ²*Dr. N. Chandrika*

¹MBA Student, Annamacharya Institute of Technology & Science Tirupati

²Associate Professor, Ph.D., Department of business administration, Annamacharya Institute of Technology & Science Tirupati

DOI: <https://doi.org/10.55248/gengpi.2022.3.10.24>

ABSTRACT

The aim of the study is to examine the inventory management process. The significance of this research is based on the benefits that can be obtained by identifying the issues of inventory control. The methodology used on-site study, and annual report analysis. Inventory management is an important area of manufacturing industry. If company fails to manage inventory, they will face failure. It is a challenge for the company to maintain fair inventory. There are various inventory management techniques available for maintaining fair inventory level in the company. The basic objective of this paper is to study about inventory management techniques used in Dora plastics pvt ltd. and find out some measures for improvement on inventory management process of the concerned company. The present system of inventory management of the company is good. For improvement of the present inventory management system, company should adopt other inventory management techniques.

Keywords- Inventory, Challenges, Management & Techniques.

INTRODUCTION TO INVENTORY

Inventory in wider experience, is defined as any idle aid of an company. It is a bodily inventory of goods saved dept. For the purpose of future affairs. The time period is normally used to suggest raw materials in manner, completed merchandise, packing, spares and others – stocked on the way to meet expected demand or distribution in the future. Though inventory of substances is an idle resource –it isn't supposed for immediate use – it's far almost essential to keep a few inventories for the easy functioning of an enterprise. For example, let us consider an organization that has no stock of substances at all. When this company gets a income order, it's going to must order out the raw cloth required to complete the order, wait until those arrive and then begin production. This would keep the customers continuously to attend too long for the shipping of the products ordered. Among other disadvantages of no longer maintaining the inventories, the organization may also have. the burden on production shops might vary from length relying upon the orders accessible; the enterprise many not be capable of provide adequate customer support within the remember of completion, ready and price.

INVENTORY ANALYSIS METHODS: -

ABC ANALYSIS

This evaluation is primarily based on the annual consumption fee and at the Pareto's Law. Under this analysis all gadgets in shops are classifies into 3 primary classes' A, B and C. 10% of the full wide variety of objects account for about 70% of the entire consumption fee.

VHP CLASSIFICATION: -

This analysis is based on criticality of inventories. It is used to decide the dricality of an item and its impact on production and other offerings. It is especially used for class of spare elements.

HML CLASSIFICATION: -

The High Medium and Low (HML) class follow the same method as is adopted in ABC class. Only distinction is that during HML, the classification unit fee is the criterion and no longer the once-a-year consumption fee

SDE CLASSIFICATION: -

The SDE analysis is based upon the supply of gadgets and may be very beneficial within the context of scarcity of deliver. In this evaluation. "S" refers to 'scare' gadgets, typically imported, and those which can be in short supply. "D" refers to tough items which are to be had indigenously but are difficult

items to procure. Items which need to come from remote places or for which dependable suppliers are hard to return by using fall into 'D' category. "L" refers to gadgets which might be easy to accumulate and which can be available within the neighborhood markets.

The SDE class, primarily based on troubles confronted in procurement, is critical to the lead time evaluation and in selecting buying techniques.

FSN ANALYSIS: -

FSN stands for fast quantity of months, that have lapsed for the reason that last transaction. The gadgets are commonly grouped during periods shifting sluggish shifting and non-transferring. Here, class is based at the sample of problem from and is beneficial in controlling obsolescence.

To perform an FSN evaluation, the date of receipt or the last date of issue, whichever is later.

V-E-D Analysis: -

The VED analysis is used typically for spare elements. The necessities and urgently of spare components isn't the same as that of materials. A-B-C evaluation may not be well used for spare elements. The demand for spare depends up at the overall performance of the plant and machinery. Spares elements are labeled as Vital, Essential and Desirables.

Research Methodology: -

The observe is primarily based on primary information gathered via finance executive of the Company and secondary statistics that are amassed from the books, journals article annual reviews of the corporation & websites. The strategies used in the look at are ABC Analysis, EOQ, Inventory turnover ratios & Safety Stock.

DATA COLLECTION: -

Sources of data are only from secondary data.

SECONDARY DATA: -

The secondary data are collected from annual reports, manufacturing accounts statements, department manuals, brochures and other printed materials issued by the company.

NEED FOR THE STUDY: -

- This undertaking paintings is an try to get acquainted with various statistics of short-time finance management.
- This challenge paintings is an undertaking to note, take in and imbibe the style of the company quarter, far from the instructional exercise.
- It is vital to take a look at the financial management practices in DORA PLASTICS.

SCOPE OF THE STUDY: -

This look at has been carried out in Dora plastics, Tirupati. The have a look at seeks to find out the factors used in Inventory Management. To behavior this research the researcher has analyzed the Statements, ledgers, and other books of money owed of the concern. The statistics gathered has been analyzed and the researcher has arrived on findings that have proved it really worth to recognize about the areas of Inventory Management.

OBJECTIVES OF THE STUDY: -

- To study at the inventory management process of Dora plastics
- To analyze the inventory manage techniques of Dora plastics
- To recognize the effective usage of stock.

LIMITATIONS OF THE STUDY: -

The information used is primarily from historical annual reports to the public and the same does not indicate the current situation of the firm.

Detailed analysis could not be carried for the project work because of the limited time span.

Since financial matters are sensitive in nature the same could not be acquired easily.

DATA ANALYSIS & INTERPRETATION: -**(1) INVENTORY TURN OVER RATIO**

inventory ratio in blockading of price range in inventory, which may additionally in Inventory turnover or inventory turnover ratio is the indicates the number of times the inventory is turnover (i.E., bought) in the course of the 12 months. In different phrases, it's far relation among the inventory and price of products sold.

ANNUAL SALES / AVERAGE STOCK OF INVENTORY

YEAR	ANNUAL SALES	AVERAGE INVENTORY	ITR
2016-17	27752174	2011204	13.79
2017-18	31546070	1212288	14.8
2018-19	33156905	3145022	10.5
2019-20	46503000	5343749	8.7
2020-21	56265237	64756511	8.6

INFERENCE

From the desk it's miles clean that inventory ratio had growing in 2016-2017 i.e.,13.79 and14.8 respectively, but it barely reduced by way of 4.3, i.e., (14. Eight-10.5). 2019-20 i.e., (eight.7), and 2020-2021 (eight.6) respectively.

TOTAL INVENTORY GROWTH

Hear an attempt is made to study the growth of inventory at DORA plastics for the 5years

YEAR	TOTAL INVENTORY	GROWTH
2016	2011204	13.79
2017	1212288	14.8
2018	3145022	10.5
2019	5343749	8.7
2020	64756511	8.6

INTERPRETATION

From the above graph, it's miles clearly suggests that the inventory turnover ratio fluctuating year over Inventory flip over ratio has a declining fashion from 2016-17. Which indicates that stock applied efficiently without blockading of inventory in inventory and making them obsolete.

(2) RAW MATERIAL TURNOVER RATIO

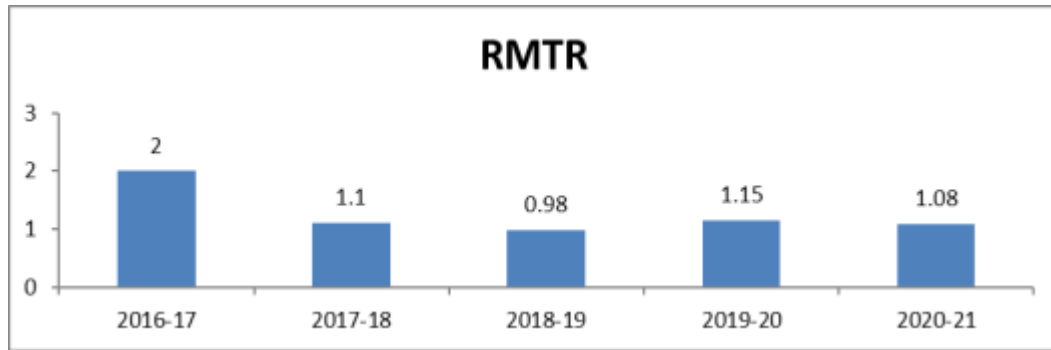
Raw material turnover ratio shows the ratio of inventory based raw material consumed and average inventory. Raw material is those basic input that are converted into finished product through the production process.

Year	Material consumed (Rs)	Average stock of raw material (Rs)	RMTR
2016-17	14951429	7475715	2
2017-18	18586452	16768941	1.10
2018-19	17900310	18243381	0.98
2019-20	24325825	21113068	1.15
2020-21	28565886	26445856	1.08

Inference

From the above table it is clear that raw material was lying in the inventory for a long time when we see the ratio in the year 2014 to 2015. But it has slightly comedown 2015-16 i.e., 0.98, next year it was increase at 1.15 and 2018-19 is come down at 1.08.

Graph (2)



Interpretation

From the above graph, raw material ratio has shown a decline in previous one year giving a good sign of effective use of raw materials for the production process.

(3) INVENTORY HOLDING PERIOD

Inventory holding period should be minimum. Number a day for which inventory is holding is calculated by the following formula.

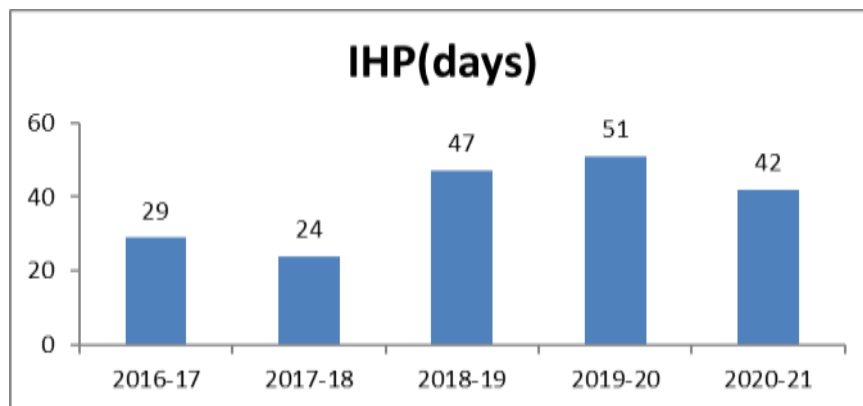
Inventory holding period = inventory / annual sales * 365 days

Year	Inventory	Annual Sales	IHP (days)
2016-17	2200699	27752174	29
2017-18	2041876	31546070	24
2018-19	4248167	33156905	47
2019-20	6439331	46503000	51
2020-21	6511971	56265237	42

Interface

From the above table it is clear that IHP was more in the year 2016-17, 2017-18, 2018-19 i.e. 47, 51, 42 but we see that the year 2019 and 2021 IHP was less.

Graph (3)



ANNUAL SALES/ TOTAL INVENTORIES

YEAR	ITR	RMT	WCTR	IHP
2016	13.79	2	2.45	29
2017	14.8	1.10	1.65	24
2018	10.5	0.98	0.93	47
2019	8.7	1.15	0.78	51
2020	8.6	1.08	9.95	42

Interpretation As we know that IHP should be minimum. Here in the above graph it shows that Dora plastics ltd is holding inventory for longer period in the previous year. This is due to decline in sales and other reasons like change in design, order being cancelled etc.

FINDINGS: -

- The unit has maintained proper data showing full particulars inclusive of quantitative details and situations of constant assets.
- The employer is production same Materials are labeled as 'A', 'B' and 'C' class gadgets.
- The unit has maintained updated information and submitted to respective authorities.
- In fashionable while orders increase robotically EOQ decreases which inversely proportional. As EOQ for past four years suggests that organization is going for much less quantity of orders.
- Inventory has been bodily established during the year through the management. Generally, it's miles acknowledged fact that annual consumption of raw-materials will increase year via 12 months as organization, developing. In this type of way annual consumption from 2016-17 to 2020-21 multiplied.

SUGGESTIONS: -

As in step with my challenge record I recommended like this,

- As corporation converted into personal income it need to have its very own inventory policy which can produce higher results by means of minimizing expenses it most.
- The enterprise need to intention for right individual which can be to be recruited which minimizes stock preservation price.
- The organization inventory management is at slight degree. Hence powerful steps need to be taken to peer that the stock control is made extra efficient in order that the stock may be used for working capital required.
- The company has to pay attention lots on credit coverage for pace collections of bills receivable.
- Even though inventory conversion duration is moderately proper, nonetheless there is lot of scope to improve it.

CONCLUSION: -

After studying the inventories of the agency over the last four years it is clear that, stock of the business enterprise is solid.

- •The agency through strictly following stock control strategies like EOQ, ABC evaluation can growth its income.
- •By presenting the completed products at reasonable prices to the clients and hence boom its duration of lifestyles inside the market.
- •The organization stock function is up to some extent first-class.

References: -

- •Prasanna Chandra, 2002, FINANCIAL MANAGEMENT, fifth Edition, TATA- McGraw HILL, New Delhi.
- •S.P. Jain, K.L. Narang, 2003, ADVANCED ACCOUNTANCY, 10TH Edition, Kalyani Publishers, Lothian.
- •I.M. Pandey, 2002, FINANCIAL MANAGEMENT, eighth Edition, Vikas Publishing House Private Limited, New Delhi.

JOURNALS

- The ICFAI Journal of Applied Finance
- Finance India (Indian Institute of Finance)

WEBSITE

- www.Doragroups.Org