

Inventory Management at Aringar Anna Sugar Mills, Kurungulam

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Abstract— Inventory is a list of goods and materials believed and available in stock by a business. Inventory is also continued to take care of difference in appeal and lead time. In some cases, it takes care of cumulative price leaning of materials. Inventory control and management must be designed to meet the orders of the market place and care the company's strategic plan. The greatest important objective of inventory mechanism is to maintain a best level of investment in the inventory which diminishes the cost and to categorize the several constituents based on their value. The main objective of the study is to assess the efficiency of inventory management in Aringar Anna Sugar Mill, Kurungulam using the costing techniques like ABC Analysis, Inventory revenue ratio and Economic Order Size. The study was conducted for a period of five financial years from 2008-2009 to 2012-2013. The secondary data were collected from the inventory maintenance records maintained by the company for the past five financial years. From the analysis, it is indirect that the company should strictly follow the Economic order quantity for optimum purchase. It can also maintain safety stock for its components in order to avoid stock-out condition and help in continuous production flow. The company must implementation tight control on stock levels based on ABC Analysis and maintain high proportion in inventory turnover ratio for well-organized management of the inventory.

Key words: Inventory Management, Raw Material, Done Goods and Work-in- Progress

I. INTRODUCTION

As on 2012, around 160 million tons of sugar are produced every year. The largest producers are Brazil (22%), India (15%) and the European Union (10%). The top five consumers of sugar use 51% of the world's sugar. They include India, the EU-27, China, Brazil and the US. Sugar is one of the most important cargoes and is produced and consumed around the world. Sugarcane is primarily grown in nine states of India: Andhra Pradesh, Bihar, Gujarat, Haryana, Karnataka, Maharashtra, Punjab, Uttar Pradesh and Tamil Nadu. More than 50 million farmers and their families are dependent on sugarcane for their livelihood. The sugar industry caters to an estimated 12% of rural population in these nine states through direct and indirect employment. The sugar industry in Tamil Nadu is an important agro-based next to textile industry. It plays a major role in the economic development of rural areas in Tamil Nadu.

A. Statement of the Problem

A study of inventory management at Aringar Anna Sugar Mill, Kurungulam (India) Ltd Company is undertaken in order to know the inventory presentation and location of the business and to identify the strength and weakness and to assess the success of the business. Inventories constitute most important share of assets of great common of the businesses

in India. Inventory a dual framed foil is regularly an asset of an organization, if not used accurately it will develop liability. It is therefore absolutely very important to succeed inventories professionally and effectively in order to overcome needless investment. And "To classify the problems/challenges involved in the Inventory Management process at this company. Aringar Anna Sugar Mill, Kurungulam, a unit of Tamilnadu Sugar Corporation Ltd Chennai has won the best sugarcane increase award for the year 2012-13 from South Indian Sugarcane and Sugar Technologists' Association (SISSTA).

B. Objective of the Study

- To study inventory management techniques.
- To find out the economic order quantity of the various products of the company.
- To classify evaluate the inventory components through ABC analysis.
- To offer suggestion based on the find out the study.
- The main objective of the study is to evaluate the efficiency of inventory management in Aringar Anna Sugar Mill, Kurungulam.

II. SCOPE OF THE STUDY

- This study is to find the facts and opinions of inventory management and control at the Aringar Anna Sugar Mill, Kurungulam.
- This study gives the brief information about the inventory management of the company.
- The study was done by using annual reports, inventory manual...etc.

A. Sources of Data and Tools Used

The secondary facts were collected after the inventory keep records conserved by the company for the previous five financial years. The study meant to considers the proficiency of inventory management of the company using the price methods like ABC Analysis, Inventory turnover ratio and Economic Order Quantity. The study was conducted for a period of five financial years from 2008- 2009 to 2012-2013.

B. Analysis and Discussion

The secondary statistics were collected from the inventory maintenance records maintained by the company were analyzed using the costing methods corresponding ABC Analysis, Inventory turnover ratio and Commercial Order Quantity in the resulting tables.

C. Inventory Turnover Ratio

Inventory turnover ratio designates the speed with which the inventory fluctuations over the business. It creates the correlation among the price of merchandises and usual inventory for a quantified period. It shows whether the inventory is competently used or not. Inventory management

of the company is spirited part aimed at the sustainability and existence. Good inventory control guarantees suitable output and success with sufficient acknowledgment score. Inventory must be achieved successfully also wherever likely in order to decrease the register land period.

Year	Cost of goods Sold (Rs)	Average stock (Rs)	Ratio
2008-2009	38,19,73,147	77,88,43,961	0.490
2009-2010	33,52,90,417	70,22,29,030	0.477
2010-2011	40,59,06,184	81,60,26,938	0.497
2011-2012	62,85,32,784	87,83,80,964	0.716
2012-2013	68,85,32,879	78,74,77,038	0.874

Table 1: Inventory Turnover Ratio
Source: Secondary Data

The overhead table shows that the inventory turnover ratio is collective throughout the period. It is depending that the ratio in the year of 2008-2009 is 0.490 and it is somewhat diverse in the year of 2009-2011. The ratio is improved quickly from 0.477 to 0.716 in the year of 2011-2012 and it has bigger commonly from 0.716 to 0.874 in the last year. The company's turnover ratio has increased during the period presentation the productivity of the company in handling the inventory.

III. ABC ANALYSIS

ABC analysis is a careful credit control used in leading the inventory. It is a mechanism for identifying the significance of inventory cost on the overall waged capital of an alarm. It states that dissimilar kinds of ordinary need changed type of managing control. The lists are grouped as A, B and C items with fitted, reasonable and minimum device respectively. 10-20% of the inventory accounts for 70-80% ingesting value and they are Branded as An items, nearly 30% of inventory accounts for 15 to 25% of consumption value and they are called as B items. C items constitute nearly 50% with the last consumption value of 5%.

S.NO	DESCRIPTION	UNITS	% TO TOTAL	TOTAL	% OF TOTAL COST
1	RUBSEATING450X750 X12	49303.96	6.854125	443435.6	25.64056
2	RUB SEA 680X530X12MM	57569.63	8.0032	402987.4	23.30175
3	STN STEEL SHEET 1.5	37355.65	5.193098	149422.6	8.63999
4	STAIN STEEL PLATES 6	27203	3.7817	108812	6.29178
5	MS PIPE 6"	222223.3	30.89299	88893.36	5.140038
6	CI PIPE 150X1830 MM	34581.33	4.807418	69162.66	3.999159
7	CI PIPE 150X2743 MM	33156.3	4.609319	66312.68	3.834366
8	CI PIPE 150X2000 MM	25841.95	3.592489	51683.9	2.988493
9	CI PIPE 150X2500 MM	17001.88	2.36356	51005.64	2.949275
10	CI PIPE 150X1340 MM	18231.95	2.534564	36463.9	2.108435
11	CI PIPE 150X1460 MM	34755	4.831561	34755	2.009622
12	CI PIPE 100X130X183	15445.33	2.147175	30890.66	1.786176
13	CUR.TOOTHFLEXGEARCU	14852.91	2.064818	29705.82	1.717665
14	CI COUPLING 16"OD	28355	3.94184	28355	1.639558

15	CI CROSS 6" 460X460	12155.55	1.689837	24311	1.405723
16	NEOSYNR.JTJH 2110X10	11866.67	1.649678	23733.34	1.372322
17	INT.FLANEXCEN.RED UCE	10066	1.399353	20132	1.164083
18	CI SLUICE VALVE 4"	12447.68	1.730448	12447.68	0.719756
19	CI SLUICE VALVE 5"	9296.8	1.29242	9296.8	0.53756
20	CI SLUICE VALVE 6"	8582.14	1.19307	8582.14	0.496241
21	CI SLUICE VALVE 8"	7990.46	1.110816	7990.46	0.462029
22	JH.RUB.JOIN 1800X12M	7779	1.081419	7779	0.449801
23	6" TAPER VALVE AUDCO	6285.83	0.873842	6285.83	0.363463
24	CI PULP VALVE 6"	6115.59	0.850175	6115.59	0.353619
25	CI PULP VALVE 10"	5798.68	0.806119	5798.68	0.335294
26	CI RT ANG VALVE 5"	5071	0.704959	5071	0.29321
	TOTAL	719332.7	100	1729430	99.99998

Table 2: ABC Analysis
Source: Secondary data

From the above table, it is plain that the matters of tall value constitute 79.83614 of full cost creating an objects and must be continued with severe regulator. The rate of B-items was 14.988776 and it would be saved below usual controller since these substances are of sensible rate. These articles are check once in three months. The value of C-items was 5.175068 and it can be reserved with less control. As these items are of low-cost, they are must be made obtainable at any period. These items are check once in six months. It can be continued by lesser level management. This way of ABC analysis is to be followed severely in order to reduce the fastening assets in the inventory.

A. Non-Moving Stock

Non-moving stock items are secure items for more than a year. As it is used for only sure purpose, it is suitable to buying only if the present stock is shattered.

Year	Non-moving stock (Rs in lakhs)
2008-2009	363.88
2009-2010	451.69
2010-2011	466.30
2011-2012	432.95
2012-2013	432.35

Table 3: Non-Moving Stock
Source: Secondary data

From the above table it is incidental that the worth of non-moving stocks showing a Cumulative trend till 2010-2011. Then the value of non-moving standard has remained continuous during the last two years see-through the grade of control trained by the company.

B. Economic Order Quantity

EOQ is an inventory-related equation that regulates the optimum order quantity that a company should hold in its inventory given a set cost of production, demand rate and other variables. This is done to minimize variable inventory costs.

Year	Annual consumption (units)	EOQ (units)	Frequency of orders (times)
2008-2009	562980	33116.47	17
2009-2010	480806	28282.70	17
2010-2011	605926	35642.70	17
2011-2012	861339	47852.16	18
2012-2013	576270	33898.23	17

Table 4: Economic Order Quantity
Source: Secondary data

From the above table, it is obvious that the incidence of instructions to be located has remained continuous usually from the year 2008-2011 - 2012-2013.

IV. RECOMMENDATIONS AND CONCLUSION

Inventories are capitals of some caring taking a financial value. It involves of raw resources work in development, complete goods, expendable and stores. These effects are to be achieved in an effective way as it includes a main share of employed money. The basic difficulties of inventory running is to raid a equilibrium among the effective productivity and the charge of asset and other related prices with the neutral of trust the simple fights of the smallest while improving the inventory plot. Inventory must be achieved well also everyplace imaginable in direction to lessen the inventory allotment dated. In command to duck barring of moneys in raw physical stock, a suitable manufacture plan and acquisition strategy are to be accepted. Non-moving standard is to be removed fully. The technique like ABC, EOQ are to be tailed severely in order to diminish the standard. The choice has to which article to brand and once to save records in stability requires appeal of varied range methods. The company can too smear the various events of handling list similar the upkeep of standard level, FSN Study, VED Examination in adding to the study now working. As inventory running of the corporation is energetic role for the sustainability and existence, good record control must be accentuated to guarantee suitable efficiency and Viability with satisfactory praise grade.

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