

A Study on Material Handling and Its Maintenance with Respect to Solara Active Pharma Sciences Limited.

Ajay A

MBA student, School of Management Studies, Sathyabama Institute of Science and Technology, Chennai, Tamil Nadu, India.

Dr. Shetty Deepa Thangum Geeta

Assistant Professor, School of Management Studies, Sathyabama Institute of Science and Technology, Chennai, Tamil Nadu, India.

ABSTRACT:

Material handling and its Maintenance is the combination of all technical and associated administrative actions intended to retain an item in, or restore it to, a state in which it can perform its required function. Many companies are seeking to gain competitive advantage with respect to cost, quality, service and on-time deliveries. The effect of maintenance on these variables has prompted increased attention to the maintenance area as an integral part of productivity improvement. Maintenance is rapidly evolving into a major contributor to the performance and profitability of manufacturing systems.

INTRODUCTION:

The Solara Active Pharm Science Ltd industry involves the extraction, processing, and sale of natural stone materials used In a study on material handling and Its maintenance. Material handling refers to the process of moving, storing, and controlling materials throughout the production process in a manufacturing or industrial environment. In the pharmaceutical industry, efficient material handling is crucial to ensure that raw materials, semi-finished goods, and finished products are moved and stored in a safe, efficient, and compliant manner.

INDUSTRY PROFILE:

The medicinal industry develops, produces, and markets drugs of medicinal licensed for use as medications medicinal companies are slowed to deal in generic or brand medications and medical devices They are subject to a variety of laws and regulations regarding the patenting testing and ensuring safety and efficacy and marketing of drugs. India is the largest provider of generic drugs globally and is known for its affordable vaccines and generic medications.

REVIEW OF LITERATURE:

- Esa nopenen, Taina piispa, Anita lukka (2005) Objectives of study is new operation model for maintenance material logistics. New operation models for decreasing fixed costs and transforming into variable costs in the field of marble industry. The report illustrates two cases- a new operation model for material logistics in maintenance and an examination of Forklift truck fleet outsourcing solution.
- Zakaryasoufi, Pierre david, Zakaria yahouni (2021) Level of automation plays significant role in the success of a material handling system definition, which influences the manufacturing performance. the proposition of analytic hierarchy process is implemented in a demonstrator software tool and illustrated on simple example.

- Mohan Jha (2003) Objectives of the study is maintenance types, procedures and evaluation of performance. the work request format gives the maintenance personnel the basic inputs required for analyzing the breakdowns and aiming at minimizing them. the work request acts as F.I.R for planning, scheduling, priority fixing, cost controlling and fixing of an objective for the department.

OBJECTIVES OF STUDY:**primary objectives:**

The primary objective of this study is to analyze the material handling and maintenance practices within the pharamedical industry.

Secondary Objectives:

To examine the recurring problems faced in material handling and its maintenance. To identify potential risks associated with preventive maintenance strategies, in pharamedical manufacturing industry.

To study the overall operational efficiency and maintenance protocols in the pharamedical industry ultimately leading to a smoother production process and improved profitability.

NEED FOR STUDY:

An equipment is an important resource which is constantly used for adding value to products. so it must be kept in good operating condition otherwise interruption of production if it is used a mass production line. This project has been undertaken to assess the material handling and its maintenance management Solara Active Pharma Sciences Limited at in order to avoid the breakdown and improve the productivity.

SCOPE OF THE STUDY:

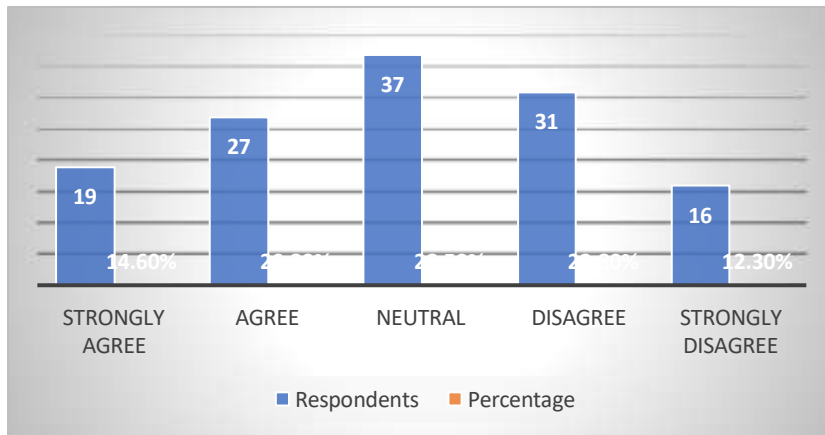
- Its helps to analyze the problems of materials handling in Solara Active Pharma Sciences Limited
 - To identify the potential risks reliable to the quality of product and process.
- To enhance the Improves of preventive maintenance system in marble manufacturing industry.

DATA ANALYSIS:

1. The Preventive maintenance means the schedule followed at correct time

S.no	Particulars	Respondents	Percentage
1.	Strongly agree	19	14.6%
2.	Agree	27	20.8%
3.	Neutral	37	28.5%
4.	Disagree	31	23.8%
5.	Strongly disagree	16	12.3%
Total		130	100%

Source: Primary Data

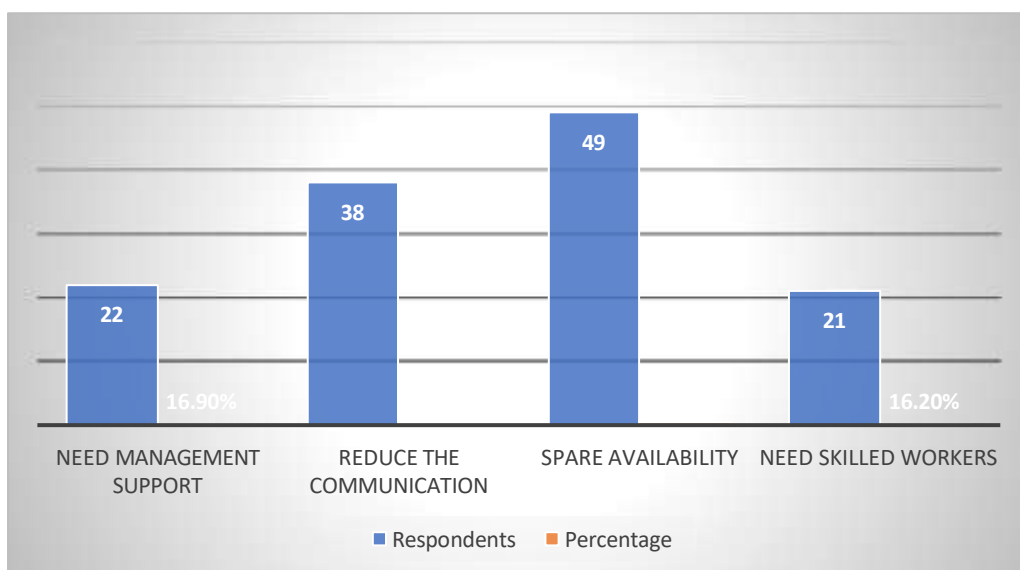


INTERPRETATION:

From it is interpreted that the number of respondents were 14.6% says Strongly agree, 20.8% says agree, 28.5% says neutral, 23.8% says disagree, 12.3% says strongly disagree.

2. what you suggest to improve the maintenance in the company

S.no	Particulars	Respondents	Percentage
1.	Need management support	22	16.9%
2.	Reduce the communication	38	29.2%
3.	Spares availability	49	37.7%
4.	Need skilled workers	21	16.2%
Total		130	100%



Source: Primary Data

Interpretation

From it is interpreted that the number of respondents were 16.9% are need management support, 29.2% are reduce the communication gap, 37.7% are spares availability and 16.2% are need skilled workers.

STATISTICAL TOOLS AND ANALYSIS CHI- SQUARE TEST I

Chi-square is the sum of the squared difference observed (o) and the expected (e) data (or the deviation, d), divided by the expected data in all possible categories.

Null hypothesis (Ho):

There is no relationship between the age wise classification of respondent and experience wise classification of respondent.

Alternate hypothesis (H1):

There is a relationship between the age wise classification of respondent and experience wise classification of respondent.

Chi-Square Tests

	Value	Df	Assumption Sig. (2-sided)
Pearson Chi-Square	175.111	9	.000
Likelihood Ratio	163.863	9	.000
Linear-by-Linear Association	90.100	1	.000
N of Valid Cases	130		

INFERENCE:

Since the calculated value is greater than the tabulated value, we accept the alternate hypothesis and hence there is a relationship between the age wise classification of respondent and experience wise classification of respondent.

Null hypothesis (Ho):

There is a significance difference between the effectiveness of the maintenance team and 24*7 maintenance available.

Alternate hypothesis (H1):

There is no significance difference between the effectiveness of the maintenance.

Descriptives

EFFECTIVENESS OF THE MAINTENANCE TEAM

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
1	16	1.00	.000	.000	1.00	1.00	1	1
2	33	1.91	.294	.045	1.82	2.00	1	2
3	40	2.74	.452	.104	2.52	2.95	2	3
4	32	3.80	.414	.107	3.57	4.03	3	4
5	9	4.72	.461	.109	4.49	4.95	4	5
Total	130	2.65	1.268	.121	2.41	2.89	1	5

team and 24*7 maintenance available. **Calculated value = 318.883 Tabulated value = 2.46**

$F = F_{cal} > F_{tab}$ $F = 318.883 > 2.46$

Hence, the Alternate hypothesis [H1] is accepted.

INFERENCE:

The calculated value of F is greater than the tabulated value. Hence, we reject the null hypothesis and conclude that there is no significance difference between the effectiveness of the maintenance team and 24*7 maintenance available.

SUGGESTION:

- The company need to understand the working Requirements and they should appoint the skilled workers.
- The management need to monitor the maintenance activities, and fulfil the spares requirements that avoids delay of production.
- The maintenance department should follow the preventive maintenance schedules that avoids the high level of breakdown maintenance.
- The company should appoint the skilled workers of each department.

CONCLUSION:

The maintenance department of the company needs to follow the maintenance schedules and use the good skilled workers to do the jobs. The management should give good support to maintenance department, and the company

need to monitor the maintenance activities, and if the company is reducing the spares availability that will give a good result. The company take a step to reduce the communication gap between the contract and permanent labours. It will give a good result to the maintenance activities.

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- ✓ GUPTHA. S.P, STATISTICAL METHODS, sulthachand & sons, New Delhi, 1995.