

TRAINING ON KAIZEN –IN CEMENT INDUSTRY

Manisha Sharma*

Priyanka Chauhan Indora**

ABSTRACT:

Cement industry is characterised by intensive energy and raw materials, large Work-In-Progress inventories, high breakdown levels, and the need to increase the productivity in order to meet high demands refers Kaizen. The situation of not achieving the expectation of high machine utilisation and production rates, low breakdown rates, and trouble free operation processes within the cement production line has motivated me for research to design an integrated framework by which the cement production line will be improved and enhanced. Training of Kaizen involves in making small improvements on a continuous basis. Small and continuous improvements in quality, cost reduction, efficient delivery, Innovation, Increase productivity and safety are necessary for any organization. These can be achieved by providing training of Kaizen, a different Japanese philosophy. Kaizen involves every employee in making small improvements. Training on kaizen focuses on identifying problems at their source, solving them and changing standards to ensure the problem. Training on kaizen will increase awareness about kaizen which means continuous small improvements and growth of industry.

* (Asstt. Professor in I.I.S Univ)

** (B.E: E&C); M.B.A (HR), Research Scholar I.I.S. University, Jaipur, Rajasthan, India.

INTRODUCTION

Kaizen (Ky 'zen) is a Japanese term that means continuous improvement taken from words 'Kai', which means continuous and 'zen' means improvement. Some translate 'Kai' mean change and 'zen' mean good. Kaizen covers every part of a business. From the tasks of labourers to the maintenance of machinery and facilities, Kaizen plays its role in every part. All improvements will have a positive effect on systems and procedures. Within the Kaizen way of thinking, not a day should go by without some kind of improvement being made somewhere in the company. Kaizen tools give rise to a well organized workplace which results in better productivity and yield better results. It also leads to employees who strongly feel attached towards the organization.

Five S of Kaizen

“Five S” of Kaizen is a systematic approach which leads to standard policies, rules and regulations to give rise to a healthy work culture at the organization. Process of Kaizen plays an important role in employee satisfaction and customer satisfaction through small continuous changes and eliminating defects. Let us understand the five S in Detail:

SEIRI - SEIRI means Sort Out. According to Seiri, employees should sort out and organize things well. Label the items as “Necessary” “Most Important”, “Not needed now”, “Useless”. Remove what all is useless. Keep aside what all is not needed at the moment. Items which are critical and most important should be kept at a safe place.

SEITON – Seition says to Organize. Research says that employees waste half of their precious time searching for items and important documents. Every item should have its own space and must be kept at its place only.

SEISO - The word “SEISO” means shine the workplace. The workplace need to be kept clean. Manage your workstation. Necessary documents should be kept in proper folders and files. Use cabinets and drawers to store items.

SEIKETSU-SEIKETSU means Standardization. Every organization needs to have certain standard rules and set policies to ensure superior quality.

SHITSUKE or Self Discipline Self discipline is essential. Do not attend office in casuals. It gives you a sense of pride and respect for the organization. Employees need to respect organization's policies and adhere to rules and regulations.

PROBLEMS:

Maintenance cost, unexpected breakdown, Waste management, Customer complaints reduction, Transportation and freight costs, Accident rate, more safety, Specific power consumption are some issues which still need improvement, or in the process of improvement in cement industry now.

SWOT ANALYSIS OF THE CEMENT INDUSTRY:

Strengths, weaknesses, opportunities, and threats associated with the cement industry.

Strength:

Availability of cheap raw materials.
Availability of cheap fuels and energy
Need of the cement and absence of
Substitutes materials to replace the cement.

Weaknesses:

High rates of unexpected breakdown and maintenance costs. Un-standard operating process.
Transportation and freight costs. Organisational culture.

Opportunities:

Increase the domestic demands, and potential to export the cement.
Technological changes.

Threatens:

Unstable and sudden changes in political rules and regulations. Economical changes and competition environments.

STANDARDIZATION

To follow the Kaizen strategy means to make constant efforts to improve on standards. Kaizen is really based on constant upgrading and revision. If you don't first set a standard, you can never improve upon that standard. If training of kaizen is given to employees then it would be easy for them to sort and manage the work place. There must be a precise standard of measurement for every worker, every machine, every process and every manager. After the standard is followed, second nature to perform the task to meet the standard. At that point, another standard can be

added. Standardization is a way of spreading the benefits of improvement throughout the organization.

RESEARCH METHODOLOGY

Research aim

1. Identify the areas where kaizen training is needed and then necessary implementation of action.
2. Involvement of supervisors and managers is needed in kaizen training.

Hypothesis (alternative)

H₀: Training on kaizen has no significant impact over employees of cement industry.

H₁: Training on kaizen has a positive significant impact over employees of cement industry.

Determination of Sample Size

a).**The Location:** Ultratech cement, wonder cement

b).**Determination of universe:**

Universe for this study will comprise of employees of cement industry.

c).**Determination of Sample size:**

The sample size is around 100 as it is necessary to get the facts through various employees who belong to the cement industry.

d).**Sampling Technique:** The convenience method of sampling is adopted.

Source of Data

The methods of data collection for this research are from primary and secondary sources of data.

Primary data: For the purpose of this study, primary data comprises responses obtained through interview.

Secondary data: The sources of secondary data for this research consist of mainly published text books, journals like shodh shree, international journal of commerce and management, training and development publications, Magazine and newspaper articles, Annual reports of companies like Reliance industries and ultratech cement etc.

Collection of Data: Data will be collected through personal contact by survey method as well as telephonic interview.

If the employees of cement industries are not known about kaizen then it would be impossible to implement kaizen. So training session of kaizen is necessary.

Few examples where kaizen training sessions were taken by industry and were implemented in cement industries and were beneficial too.

Kaizen 1(need of kaizen)

All the operators, casuals and other employees have to explain repeatedly about general DO and DONTs. They can't revise them in breaks in mines while working.

KaiZen activities (kaizen given by managers) {applied in ultratech cement}

Employees prepare some visual boards explaining general DO and DONTs while working in mines and displayed near rest centre so it became easy for them to remember as well as to revise. (This support hypothesis H2)

Benefits & Results

1. Operator can refer always the general do and don'ts for safety instruction.
2. Other security person and auditors can find them for reference.

Kaizen 2(need of kaizen)

Start switch in working condition while in running of engine of dumper self starter may engage in running of dumper in mines operations.

KaiZen activities (kaizen given by managers) {applied in ultratech cement}

They have fitted relay & oil pressure switch in between self starter and battery disconnect switch. Now, Start switch is disconnected after oil pressure develops in engine oil pressure gauge. There is no chance of engaging self starter in engine running condition. (This support hypothesis H1)

Benefits & Results

- 1.) Start switch is disconnected after oil pressure develops in oil pressure gauge.
- 2.) Supply disconnects through relay fitted in between self-solenoid & battery disconnect switch.
- 3.) Supply always disconnected after built-up engine oil pressure.
- 4.) There is no chance of engaging self-starter in engine running condition.

BENEFITS by Providing Training Sessions and Then Its Implementation.

Kaizen improves: Maintenance cost, unexpected breakdown, Waste management, Un-standard operating process, Customer complaints, and Accident rate.

Kaizen reduces waste in areas such as inventory, waiting times, transportation, worker motion, employee skills, over production, excess quality etc.

Kaizen improves space utilization, product quality, use of capital, communications, production capacity and employee retention.

Kaizen provides immediate results. Instead of focusing on large capital intensive improvements.

Kaizen improve coordination and communication between all of the departments or other subunits within a company.

On top of these benefits to the company, employees knows about Kaizen- generally find work to be easier and more enjoyable—resulting in higher employee morale and job satisfaction, and lower turn-over. With every employee looking for ways to make improvements focuses on creative investments and this happen by the training provided them about kaizen.

LIMITATIONS OF THE STUDY

- 1 Collecting information from people during the working hours will be difficult in an industry.
- 2 Due to work shifts it will be difficult to approach the employees.
- 3 Management do not disclose confidential data.

DATA ANALYSIS

Here we asked about the opinion on our objectives respectively to employees who said yes and no. Some are in the state of confusion too. Survey of employees provides us the details and with the help of this data we prepare this table in percentage form.

Hypothesis	% YES	%NO	State of confusion.
H1	88	7	5

RESULTS

It has been observed by the response of employees that 88% agree that training on kaizen has a positive significant impact over employees of cement industry.

5% employees are sceptical about this and rest 7% do not feel the training of kaizen given to employees of cement industries.

CONCLUSION

Improvement is the goal and responsibility of every worker, from the managers to the manual workers, in every activity, everyday, all the time. Kaizen can be applied to any area for every improvement. Training of Kaizen is interrelated with every machine, every employee, and with every process too. **These continual small improvements** add up to major benefits. So this should be known to every employee and it could happen by providing training to employees of cement industry. They result in improved productivity, improved quality, better safety, faster delivery, lower costs, and greater customer satisfaction. For a business to realize the true benefits of Kaizen it should form a long-term strategy, which accepts that by involving employees in making their processes better by making small changes on a daily basis. One of the main vehicles for involving all employees in training on Kaizen is first find out the problems. It is a goal of managers and supervisors to come up with ways to help generate more suggestions by the workers for the explored problem in training programs. Through the small but continual efforts of everyone, significant reductions in costs can be attained overtime.

SUGGESTION

Kaizen is everybody's job! It is important for management to understand the workers role in Kaizen, and to support it completely and conduct training sessions on urgent basis Training on kaizen is essential for growth of cement companies also, which yields large results in the form of productivity improvement. The idea is to nurture the company's human resources as much as it is to praise and encourage participation in kaizen training. Successful implementation requires "the participation of workers in the improvement". People at all levels of an organization participate in training sessions of kaizen, from the managers down to staff and teaches people how to perform experiments on their and how to learn to spot and eliminate waste in business processes. Training on kaizen should be taken into consideration and the top leaders of cement do conduct training on kaizen.

References

Charles juster, "Quality Circle" (A hand book for QC facilitators, QC members, QC leaders), SECL, Sepat Road, Bilaspur, Chatisgarh-49506, Problem solving techniques.

Imran Ahmad Khan (2011), —Kaizen: The Japanese Strategy for Continuous Improvement|| , VSRD International Journal ,of Business & Management Research, Vol. 1(3), 2011, pp. 177-184

Bassant J and Caffyn S (1994), —Rediscovering Continuous Improvement|| , Technovation, Vol. 14, No. 1, pp. 17-29.

WWW .CITEHR.COM;

WWW. DOCSTOC.COM;

WWW. IUPINDIA.ORG;

WWW. QUESTIA.COM;

WWW. GOOGLE.COM;

WWW. OPPAPERS.COM;

WWW. ARTICLESXPRT.COM;

WWW.HRCREST.COM;