

# “IMPLEMENTATION OF 5s PRACTICES: A CASE STUDY OF ULTRATECH CEMENT PVT. LTD.”

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## Abstract:

5S is a Japanese methodology to organize and improve the efficiency of a shared workspace by incorporating seemingly regular tasks such as cleaning, sorting, and re-arranging the surroundings and method of operation within the workspace. 5S consists of five phases or activities with names starting with the letter S, and provides a basic foundation for any organization's Lean initiative for continuous improvement.

This paper studies the implementation of 5S quality in readymade concrete mixture **Ultratech**. The study focuses on implementing 5S activities in the targeted work area and studies the results in form of work environment. The study also assesses its own approach, recommends alternative strategies for the future and makes recommendations for expanding the scope of this exercise to other areas of the company and serves as a platform for achieving tangible and quantifiable gains in productivity.

Data is collected though both primary as well as secondary sources. The most important barrier for implementation of 5S effectively is poor communication of workers with the employee in Ultratech. Techniques of communication and their efficiency are seldom evaluated and communication faults are rarely addressed in an industrial workplace.

Keywords- 5s Practices, Lean manufacturing, work environment, Ultratech

## Introduction:

In recent years, the practice of 5S is commonly used among the Japanese firms in order to enhance human capability and productivity. Since it was introduced by Takashi Osada in the early 1980s, it is believed that applying the 5S techniques could considerably raise the environmental performance in production line including housekeeping, health, safety and more. The 5S is the acronym of five Japanese words which stands for seiri (organization), seiton (neatness), seiso (cleanliness), (standardization) and shitsuke (discipline). Organizing the 5S team is an important approach in solving many potential problems. In the other hand, the 5S practice is a technique used to establish; maintain quality environment in an organization effectively and promised the employees to be more self-discipline.

The 5S concept is applicable for many industry types or business natures, including service sectors. In their studies, 5S has a significant contribution to the successful of Total Quality Management (TQM) implementation, for example In the United Kingdom, there are 205 manufacturing and 106 services companies and 16 leading companies from Japan become an important base in implementing TQM successfully.

UltraTech Cement Ltd. is the largest manufacturer of grey cement, Ready Mix Concrete (RMC) and white cement in India. It is also one of the leading cement producers globally. UltraTech as a brand embodies 'strength', 'reliability' and 'innovation'. Together, these attributes inspire engineers to stretch the limits of their imagination to create homes, buildings and structures that define the new India. The company has an installed capacity of 93 Million Tonnes Per Annum (MTPA) of grey cement. UltraTech Cement has 18 integrated plants, 1 clinkerisation plant, 25 grinding units and 7 bulk terminals. Its operations span across India, UAE, Bahrain, Bangladesh and Sri Lanka. UltraTech Cement is also India's largest exporter of cement reaching out to meet the demand in countries around the Indian Ocean and the Middle East. .

## Litreture Review :

Basic work environment problem and the compensation power on the choice of implementation of 5s. this paper is simply representation of basic information with all pros and cons about the concept of 5s.

## Harsha Lingareddy (2013)

This research involves the study and change in the work place of a manufacturing industry to implementation of 5s. this strategy helps in minimizing the time of manufacturing and also increases the area of work place. the solution found by 5s approach solely minimizes several kinds of waste in the production process and which finally helps in the development of the organization.

**Ravindra Kumar panchal (2012)**

This paper focused on the methodology adopted in 5s and implementation of the same in the production industry. The 5S rules bring the great change in the company, for example : process improvement by cost reduction , increasing of effectiveness and efficiency in the process.

**Objective Of Study :**

The objective of study implementation of 5s practices in Ultratech cement pvt. Ltd.

To know the implementation of useful tools for creating an effective work environment without bothersome and useless influences to observe proper practices in ultratech cement and also study the employee welfare facility through 5s practices.

**Scope Of Study :**

The scope of the study is only confined to the ultratech cement pvt. Ltd. In dongargaon, Nagpur Only confined in studying about the 5s implementation in ultratech cement (RMC DEVISION) Indian manufacturing industry has witnessed irrepressible competition in the recent times in terms of low costs, improved quality and diverse products with superior performance.

**Limitations:**

The study is limited to data availability, Time and resource constraint. The analysis is done primary data as well as secondary data.

**Research Methodology:**

The present study is investigative in nature and makes use of primary data as well as Secondary data.

The study is limited to specific area in ultratech cement pvt. Ltd. Like, Sort, Shine, Straighten, Standardise, Sustain. The relevant primary data on 5s implementation in ultratech and their facility and safety location (RMC) division in , Nagpur and also relevant secondary data were collected mainly through the database of 5s projects on google. Various journals and research papers have been referred. This section will discuss 5S and its different phases in more detail. After this section the reader will understand the fundamental meaning of 5S and the benefits that it brings to organizations.

**Data Analysis and Interpretation :**

STUDY ON WORKERS SAFETY FACILITIES AS WELL AS 5S IMPLEMENTATION IN ULTRATECH CEMENT CONCRETE LTD., DONGARGAON


- PPE Non compliance register are available in the plant.
- First aid box are available
- Scarp yard is available in the plant
- Settling tank are available
- Daily chipping and cleaning activity followed regularly
- Viability of LOTOTO system
- Fastrack incident reporting

**SAFETY ASPECT OF PLANT**

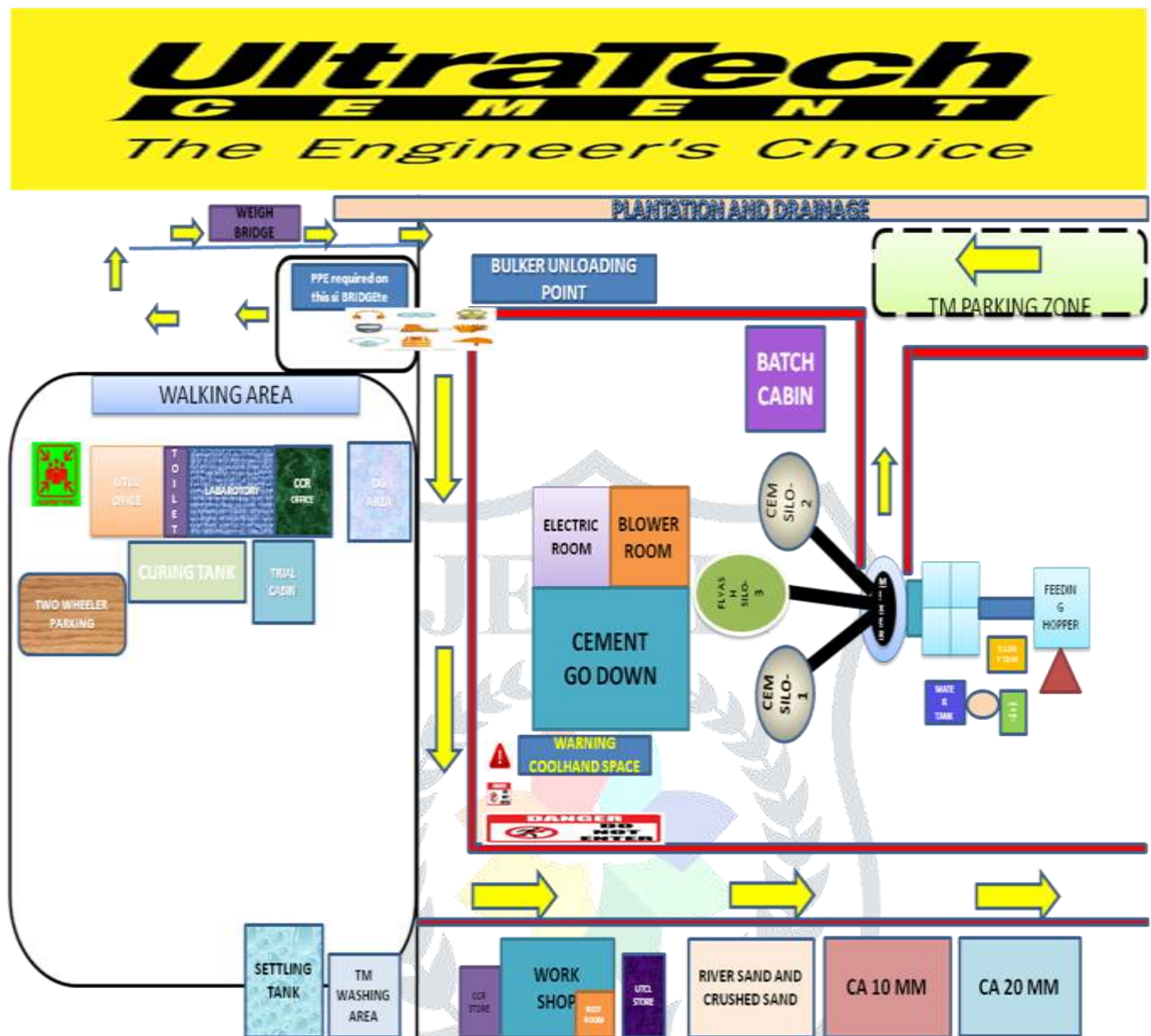
- Plant
- Site

## ➤ Vehicle

## SAFETY AREA OF PLANT

AREA OF CONCERN	DOCUMENT CHECK	DISCRIPTION	CONCLUSION	CORRECTIVE ACTION	ACTION PLAN
Cement godown & Concrete Mixer 	Observation and check non compliance Register	Workers have PPE but they don't use it because of feeling uncomfortable, like nose mask	The training should be continued of safety and they have to always remember hazards and importance of PPE & also the company must make the rules of use of nose mask to the everyone while working in cement area	I gave the information about importance of PPE and also council to each and every person personally for there life safety	We can to arrange the seminar session quarterly. we can practically proof them why we use the PPE Or 5s deciplines.
Tm driver	No any registered entry	Non compliance DDT is not available so there is no entry of DDT	There should be a availability of non compliance register	.....	Availability of non compliance register should be provided so that we can know how many drivers get DDT.

## 5s SET-UP ZONES



- 1) **Seiri :** Remove the all unneeded item in warehouse and office in Ultratech plant area with tagging or apply lototo system.
- 2) **Seiton :** The second step of 5s implementation to arrange the all needed item with tag set in order in office cabin and also quality check lab in plant.
- 3) **Seiso :** clean the all working area and set the all needed item in properly an day to day cleaning activity as well as to check by ultratech safty aur facility audit team.
- 4) **Seiketsu :** After apply the 4<sup>th</sup> step of 5s implementation the workers are able to talk with employee and automatically working standard is up only because of change to workers and employee behaviour about eac ther.
- 5) **Shitsuke :** Maintain all deciplines after analysis and implementation.

#### Findings :

The most important barrier for implementation of 5S effectively is poor communication of workers with the employee in Ultratech. Techniques of communication and their efficiency are seldom evaluated and communication faults are rarely addressed in an industrial workplace.

#### Conclusion :

The most important barrier for implementation of 5S effectively is poor communication of workers with employee in ultratech. Techniques of communication and their efficiency are seldom evaluated and communication faults rarely addressed in an industrial workplace. Poor communication can cause wasting resources, time and money, and lowering moral amongst employees. The results of evolving communication systems in an uncontrolled fashion in industries or business could be confusing and complex. There must be an applicable way for using 5S as an improvement tool for communication system. The



surveys indicate that there are difficulties in the effective 5S implementation. A not her significant barrier is the space between managerial level and shop floor employees and the poor training and awareness of 5S. Since some critical decisions of 5S activities, including time and budget performance must approve and support by ultratech management team, therefore more cooperation is recommended during implementation period. It is concluded that 5S key of success is training. 5S implementation is not possible without proper training and employees are not capable to actively standardize the 5S Organization should pay attention to this fact that resistance to change is one issue which will be occurring during 5S implementation. Therefore, it is believed that continuous training is the key applying to change the organization culture.

#### **Bibliography :**

- 1) ShahryarSorooshian, MeysamSalimi, ShanthiBavani, HastiAminattaheri, "Experience of 5S Implementation", Journal of Applied Sciences Research, 2012, vol. 8(7), 3855-3859
- 2) Gheorghe DULHAI, "The 5S strategy for continuous improvement of the manufacturing process in autocar exhaust", Journal of Management & Marketing, 2008, Vol

