

# Implementation of 5s Technique In Apparel Industry

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**Abstract-** In the global environment of our country the concept of 5s plays an important role where the 5s is a basic foundation of lean manufacturing systems in tirupur garment industries .The 5s is tool for cleaning , sorting , organizing and providing the necessary of house keeping ground work for workplace improvement in the organization .The 5s practice is one of the techniques to improve the quality environment , safety and health at the workplace .In this study the researcher taken the 5S practice can be done in the organization at each division to increase the productivity.

In this Study the researcher analyse the 5s Technique in Garment industry to improve the productivity in the organisation.

**Keywords-** PRODUCTIVITY, 5S CONCEPT, WORKPLACE.

## I. INTRODUCTION

In the organization the factor **5s** gives five concepts to keep the workspace clean, tidy and accessible. It is a fundamental tool to promote continuous improvement process in organizations and represents a transformation in 5 steps of a job , which is characterized by minimum efficiency at the micro level and minimum loss.

The 5s concept are

- **SORT**: Remove unwanted item from workplace and dispose them properly
- **SET IN ORDER** : Arrange every item as per its usage frequency making it easily available for use – “A place for everything and everything in its place”
- **SHINE** : Clean the work place and look for the source, which is adding dirty substance and work towards eliminating that source.
- **STANDARDISE** : Everything in right order as per standards of housekeeping . Each workplace should have proper layout display.

- **SUSTAIN** : Properly trained team / individuals which practice 5S without being told. Series of audits are done to understand the effectiveness.



### 5.1 Sort (Seiri)

- First step towards our PES 5S journey.
- Make work easier by eliminating obstacles.
- Reduce chances of being disturbed with unnecessary items.
- Evaluate necessary items with regard to cost or other factors.
- Remove all parts or tools that are not in use.
- Segregate unwanted material from the workplace.
- Define Red-Tag area to place unnecessary items that cannot immediately be disposed of. Dispose of these items when possible.
- Need fully skilled supervisor for checking on a regular basis.
- Waste removal.
- Make clear all working floor except using material.

### 5.2 Set in order (Seiton)

- Arrange all necessary items so that they can be easily selected for use.
- Prevent loss and waste of time by arranging work station in such a way that all tooling / equipment is in close proximity.
- Make it easy to find and pick up necessary items.

- Ensure first-in-first-out FIFO basis.
- Make workflow smooth and easy.
- All of the above work should be done on a regular basis.
- Place components according to their uses, with the frequently used components being nearest to the work place.

### 5.3 Shine/Sweeping (Seiso)

- Clean your workplace on daily basis completely or set cleaning frequency time to time
- Use cleaning as inspection.
- Prevent machinery and equipment deterioration.
- Keep workplace safe and easy to work.
- Keep workplace clean and pleasing to work in.
- When in place, anyone not familiar to the environment must be able to detect any problems within 50 feet in 5 sec

### 5.4 Standardize (Seiketsu):

Establish procedures and schedules to ensure the consistency of implementing the first three 'S' practices.

- Develop a work structure that will support the new practices and make it part of the daily routine.
- Ensure everyone knows their responsibilities of performing the sorting, organizing and cleaning.
- Use photos and visual controls to help keep everything as it should be.
- Review the status of 5S implementation regularly using audit checklists.
- Ensure standardizing color codes for usable items.
- workshop shed should be sufficient natural light provision at day time i.e provision to be incorporated with "Light Pipe" fitting.

### 5.5 Sustain (Shitsuke)

Also translates as "do without being told".

- Perform regular audits.
- Training and discipline.
- Training is goal-oriented process. Its resulting feedback is necessary monthly.
- Self-discipline
- To maintain proper order, ensure all defined standards are being implemented and heard.
- Follow the process, but also be open to improvement.



Fig: no:1

## II. SPECIFICATION

1. Organised work place
2. Improved employee performance
3. Improved product / service quality
4. Better visual management
5. Improved safety
6. Less space used for storage
7. Related resources
8. Time consuming
9. Location accuracy improvement
10. Minimizing required inventory level

## III. EVOLUTION

The 5S method was created and developed in Japan in 1980s with list of Japanese words: **SEIRI**, **SEITON**, **SEISO**, **SEIKETSU** and **SHITSUKE**. As an important part of **TOYOTA PRODUCTION SYSTEM (TPS)** this system was promoted by two Japanese experts, **OSADA** and **HIRANO**, as a way to keep the workplace clean, tidy, and accessible, influencing self-esteem and morale.

**HIROYUKI HIRANO**, in a case study on manufacturing systems, had firstly integrated production data. Many Western managers have considered that the phenomenon belongs to rational knowledge.

## IV. OBJECTIVES OF 5S

1. **PRODUCTIVITY:** 5S increase the productivity of the organisation. Specially, it works in both personal and working life. The face of undisciplined office becomes discipline because of 5S
2. **SAFETY:** when a man follows the 5s then it increases the safety issues of the organisation.

**3. REDUCED WASTE:** 5S teach to clean upon the process by arranging the materials in discipline way. Unwanted materials are reduced from the place by 5S methods.

**4. WORKER COMMITMENT:** Worker commitment becomes increase by applying 5S.

## V. IMPLEMENTATION OF 5S

ACCORDING TO THE QUOTES : “**QUALITY STARTS WITH YOURSELF**” is the motto and as far as we know ,the proper functioning base of a company are the trust and the climate of the working environment. The confidence is developing if each employee carries out correctly his duties and respects the existing rules. If there is a certainty that each individual will do the right thing , the next step of analysis is done more efficiently and with confidence. **QUALITY** begins with people and therefore ,with order and cleanliness , that one can use the 5S methodologies to reach a high quality level.



**Fig:no:2**

## VI. DESCRIPTION OF 5S METHOD:

Each stage includes inputs objectives related to the efficiency and effectiveness of the process , but also subjective, which refers to moral values ,education ,training ,culture .Initial implementation should fast and simple, which lasts one or two days , followed by a second phase a few months later by applying specific techniques .First the focus is on selecting ,cleaning and handiness of an individual workplace ,so it can be seen improving the efficiency and effectiveness of a specific activity. The 5s team must have 5 to 12 members, who work in the same sector of the department ,while the steering committee is formed by 10 persons from all stages and reveals.

The tools which can be used for implementing could be the kaizen circles for training ,analysis and implementation ,as well as visual elements ,posters or graphics ,which are visual control tools also to improve the Productivity.

## VII. CONCLUSION

In the current scenario the 5S concept will solve the today's competitive challenges, it does provide a solid foundation for achieving operational excellence. In fact, some world-class companies claim that there can be no improvement without 5S. The teamwork and discipline built through 5S improve worker-to-worker and worker-to-manager relationships. When people see that what they do makes a difference, and when they see that they have eliminated wasteful practices, their pride grows. This is perhaps the greatest benefit of 5S.

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