5S

5S is a systematic approach to good housekeeping. It is gaining strong support in most progressive industries in India today, and there are an increasing number of companies, which are implementing 5S with greater involvement of people within the organization. 5S, abbreviated from the Japanese words Seiri, Seiton, Seiso, Seiketsu, and Shitsuke, are simple but effective methods to organize the workplace. It is utilized to create a workplace suited for visual controls and lean thinking principles. The 5S', translated into English are: sorting, set in order, cleanup, cleanliness, and discipline. They can be defined as follows:

- **Seiri (Sorting):** Separate needed items from unneeded items. Keep only what is immediately necessary item on the shop floor.
- **Seiton (Set in Order):** Organize the workplace so that needed items can be easily and quickly accessed. A place for everything and everything in its place.
- **Seiso (Cleanup):** Sweeping, washing, and cleaning everything around working area immediately.
- **Seiketsu (Cleanliness):** Keep everything clean for a constant state of readiness.
- **Shitsuke (Discipline):** Everyone understands, obeys, and practices the rules when in the plant.

SEIRI: SEGREGATION

Look around your work place and scrutinize each and every item and ask the question, 'is this thing really needed?'.

Separate unneeded items from the needed ones. Remove all unneeded items that are currently not in use and dispose them off. Identified unneeded items may be disposed in either of the following ways:

- ➢ Place in 'red-tag' area for a period of time to see whether they are needed;
- ➢ Scrap/dispose off
- ➢ Relocate to other place/sections where needed; or
- ➢ Leave exactly where they are.

SEITON: SYSTEMATIC ARRANGEMENT

All needed items should be arranged systematically from where they can be most conveniently retrieved and used. To decide upon the location of the needed items, following points may be considered:

- (i) Frequency of use; frequently used may be placed nearer to work place
- (ii) Quantity/volume of the items

     (iii)   Confidentiality/sensitivity of the items

     (iv)   Items should be easily identifiable by labels, markings, boards, etc.

SEISO: CLEANING

This means sweeping the floors, cleaning the work area including all equipment/facilities thoroughly. As a general rule, all the cleaning work should be done by those who work in that area. Cleaning has relevance only if sorting and systematic arrangements (first 2-S) are strictly adhered to by all concerned. Cleaning should encompass office, toilets, canteens, and libraries.

SEIKETSU: CLEANLINESS

Seiketsu is a state of cleanliness where the smallest variation becomes visible to all. It is the maintenance of Seiri, Seiton and Seiso constantly. It emphasizes that these practices should become a part of life. Even a clean workplace with proper segregation and systematic arrangement will soon become dirty and untidy if the above three are not maintained.

SHITSUKE: DISCIPLINE

Shitsuke is to install work practices that will ensure and enable the implementation of all aspects of 5-S. Every individual should be self-disciplined to strictly follow the rules and standards while working. In addition to adherence to set rules, simple things like wishing colleagues in the morning, submitting working reports, and other gestures should be observed.

The main attribute of becoming disciplined is to be punctual. Punctuality doesn't only mean reaching work place in time, but also following time schedules of the organization. What has been decided must be followed as per laid down standard.

METHODOLOGY

SEIRI (SORTING/SEGREGATION)
Objective

To distinguish between needed and unneeded items/activities and get rid of unneeded through appropriate disposal.

Planning

    a) Establish criteria for wanted and unwanted,

b) Stratify item which include consumable, non-consumable based on frequency of usage and decide wanted and unwanted, and

c) Take photographs of the location (using the technique of Fixed Position Photography) and display the same on a 5S chart. Details of chart are given in Annex A.

Activities : Decide needed and unneeded; (items/activities) by following:

❖ Unneeded items with a red tag,

❖ Gift unwanted items if there are any takers. If no takers, dispose them as per regulatory norms, and

❖ Deal with the causes of unwanted.

Checklist

❖ The checklist for Seiri is given in Annexure C.

❖ A sample red tag is attached in annexure B.

❖ A generic guideline for implementing SEIRI, SEITON, and SEISO has been attached in annexure - A

SEITON (SYSTEMATIC ARRANGEMENT)

ObjectiveEstablishing a neat layout so that one can always get what one needs and when one needs.

Planning

a) Stratify items into different groups according to the followings:
  i.   Frequency of usage,
  ii. Type of item,
  iii. Type of storage required, and
  iv. Regulatory requirements.

b) Decide storage location and type using concept of visual control, depending upon earlier stratification; and

c) Decide for time for retrieval of items

Activities

a) Create storage for needed items,
b) Identify items to be stored,
c) Identify storage area as per criteria for storage laid down,
d) Store items on the basis of decided storage location,

e) Use the concept of visual control (labels, stickers, etc.) while designing and making storage location,

f) All moving parts, components, items that are dust prone should be visible as far as possible,

g) Storage space should be such that when items are removed, empty space is visible and different items cannot be put into the same place,

h) Display lists communicating what is stored where and by whom, when and how.

i) Randomly check if the items are retrievable within the preset time limit and ensure time taken for retrieval is, ideally, less than a minute for items kept.

Check List

Checklist for Seiton is given in Annexure - D.

SEISO (CLEANING)

Objective

❖ Eliminating trash, filth and foreign matter for a cleaner work place.

Planning

a) Observe, record various types of trash, filth and foreign matter around employees and workplace,

b) Brainstorm on causes for various types of trash, filth and foreign matter at different location, and

c) Identify special cleaning tools, material and processes, if required.

Activity

a) Clean trash, filth or foreign matter using special tools, material and processes, if required,

b) Inspect while cleaning to validate potential causes identified by cause and effect analysis. Try and locate causes. Evolve and implement action plan in the following steps:

c) Prevent dust, filth, trash and foreign material to reach the area,

d) Prevent generation of the above in the first place, and

e) Evolve an appropriate monitoring system to check the extent of trash, filth and foreign matter being generated/exists in the specified area.

Checklist

❖ Check list for Seiso is given in Annexure-E.

SEIKETSU (CLEANLINESS)

Objective

To maintain a state of cleanliness that ensures immediate identification of minor variations. Keeping things in operation work area always clean even in our own personal area and also, pollution prone area.

Planning

a) Confirm all appropriate measurements have been identified while implementing third S that is Seiso.

b) Find out innovative ways to institutionalize visible management.

c) Evolve checkpoints on the basis of specific storage process evolved at second S i.e. orderly arrangement or Seiton,

d) Finalize checkpoints for measuring storage, cleaning points. These check points should be unique to specific area. Check points also need to be developed for common area like passages, toilets, canteen and reception.

e) Decide a frequency for measuring different storage, cleaning points.

f) Evolve check sheets combining all points, which need to be measured simultaneously like hourly, daily, weekly, monthly check sheets.

g) Check sheet should also describe if a specific process or tool is to be adopted for measurement.

Activity

a) Decide a schedule for measurement and display the same in the work area. Photograph should be taken after periodic intervals and status also updated by team responsible for internal audit.

b) Set up an organization of senior staff as to conduct audit periodically and write comments as well as give awards as per policy of the organization.

Checklist

A schedule for 3-Ss has been given in Annexure-F. Each employee should identify and enlist all items/locations and set a frequency for conducting the 3-Ss. The frequencies to be set in such a way that prevents disruption of any of 3-Ss, namely Sorting, Systematic Arrangement and Cleaning. The checklist for Seiketsu is given in Annexure-G.

SHITSUKE (DISCIPLINE)

Objective

Unconsciously practicing of the first three Ss of Sorting, orderly arrangement and cleaning. Internalization of habit to the extent that there is pro-action and it becomes a 'way of life' process.

Planning

    a) Evolve management policy to recognize, understand and spread the concept of 5-S

    b) Developing training modules and recognition schemes.

Activity

    a) Provide education/awareness of 5-S to all employees

    b) Publish cases of 5-S success in all areas

    c) Recognize those teams and individuals who have adopted the concept of 5-S for success of self and the organization.

    d) Recognize those who have helped each other to internalize 5-S.

    e) Recognize sustained contributions on 5-S to make it a habit.

Display overall benefits in common areas so that others can see it.

DAILY EXAMPLES OF 5S

The use of 5S can be easily found in our daily life. In fact, many of us already practiced 5S without noticing. Here are just a few actual examples from kitchen, basement, garage, shopping center, classroom etc.

❖ **Hang Hand Towel Close to the Sink.**

Example of Seiton and Visual Control

Locating hand towel and soap closer to the sink for easy access and preventing water from spreading.

❖ **Paste Manual beside the Appliances.**

Example of Seiton

Often we are looking for the instructional manual for a specific home appliance or hand tool. Paste the manual with the help of a tape beside the appliance can prevent from looking for.

❖ **Print instructions inside the cover of Washing Machine.**

Example of Seiton and Visual Control

Printing short operating instruction and safety concerns inside the cover of home appliance allows users to easily find the instruction and prevent from inappropriate use of the appliance.

❖ **Use Letter classifier to sort letters.**

Example of Seiton

Using letter classifier to sort letters helps to organize the letter according to priority and category; thus, preventing us from missing important due date.

❖ **Use Tools Organizer to Organize Tools.**

Example of Seiton and Visual Control

Tools organizer helps to organize the small tools. It can eliminate the need of searching for tools when needed. It can also prevent tools from wearing out and becoming rusty.

❖ **Use Dish Organizer to Organize Dishes.**

Example of Seiton

Dish organizer helps to organize all kinds of dishes. It allows users to quickly access the needed dish, saves spaces, and prevents dishes from cracking or breaking.

❖ **Use Table set Organizer to Organize spoons, etc.**

Example of Seiton

Using table set organizer to organize all kinds of table sets such as knife, spoons, chopsticks, pork, etc. It allows users to quickly find the table sets that are need, saves spaces, and prevents us from possible accidents.

❖ **Use CD Organizer to Organize CD.**

Example of Seiton and Seiketsu

Using CD organizer to organize CDs so as to save desk spaces.
The organizer with door can prevent dusts from accumulating.

Example of Seiton and Visual Control

Putting a label on each CD helps to quickly identify the needed CD and reduce the search time.

❖ **Design a cover for Nail Cutter to prevent Nails from Spreading.**

Example of Seiso and Seiketsu

This is a good example of preventing dirt from the source. Designing a cover for nail cutter could restrict the cut pieces from spreading and prevent them from contamination.

B. Girish, Dy. Director,
National Productivity Council, Chennai

GUIDELINE FOR IMPLEMENTING **SEIRI**, **SEITON**, & **SEISO**

Serial Number	Action Points
SEIRI (SORTING)	
01	Standardize frequency of segregation
02	Only documents that will be used today will be on the table. Others are in its identified location
03	List of records/retention period for records
04	Scrap sorted/categorized
05	Dispose unneeded items by either distributing to others who need or as per regulatory norms. Place undecided items in the red tag area
06	Keep records of things thrown away (quantified)
07	Dispose out of date notices/calendars/displays
08	Record specific benefits achieved on implementation of 5S practices
SEITON (SET IN ORDER)	
01	Prefix number of items, Prefixed location for items, & Items have location names
02	Categorize of based on frequency of use, & confidentiality, ease of storage
03	Place poster/notice/calendar/displays on notice boards
04	Maintain shelves, drawers, racks up to 80% capacity (approx)
05	Check convenience & ergonomics of the present layout and modify
06	Practice visual management – item category display - Color coding; - ear marked zones
07	Prepare a preventive maintenance/sorting /cleaning schedules
SEISO (CLEANING)	
01	Prepare one cleaning schedule and cover all items/locations under cleaning schedule
Typical items may include: table, chair, computer, telephone, printers, jug, glass, cup, other office equipment, fans, A/C, switch box, pipes, fire extinguishers, projectors,	
Typical locations may include: floor, walls, windows, pillars, stairs, toilets, isle spaces, notice boards, etc.	

| 02 | Know respective cleaning responsibilities and get it done as per schedule (may be self) |

RED TAG	
Category	1. Confidential 2. Files 3. Reports 4. Stationeries / 5. Spare parts 6.Equipment 7. Measuring instrument 8.Utensils
Item Name	
Ref. No.	
Quantity:	
Reason:	1. Un-needed; 2. Defective; 3. Not needed soon; 4. To be observed; 5. Other-
Disposal by	Dept/Section, Individual concerned
Disposal Method	1. Distribute 2. Return 3. Move to red-tag site 4. Move to other storage site 5. Other-
Red tagging date:	
Red tag file number:	**(Signature)**

AUDIT CHECKLIST FOR **SEIRI**

S. No.	Check points	System	Result	Max. Marks	Marks Obtained	Remarks
1	Standardized frequency of segregation			3		
2	Disposal of segregation with respect to re-usable, potentially useful, special, done			5		
3	List of records/retention period for records			2		
4	Scrap sorted/categorized			3		
5	Records of things thrown away (quantified)			2		
6	Out of date notices/calendars/displays			3		
7	Records available of specific benefits achieved			2		
	Total Marks			**20**		

CHECKLIST FOR **SEITON**

S. No.	Check points	System	Result	Max. Marks	Marks Obtained	Remarks
1	Prefixed number of items, prefixed location for items, & items have location names			3		
2	Accessibility of items, proper stacking of items, & shelf stratification			3		
3	Categorization of files, storage based on frequency of use, & storage of sensitive, delicate items			2		
4	Placement of poster/notice/calendar/displays			2		
5	Shelves, drawers, racks filled up to 80% capacity			1		
6	Work place layout			2		
7	Visual management – item category display - Color coding; - ear marked zones			3		
8	Space saved for implementing 'set in order'			2		
9	Display of preventive maintenance/sorting /cleaning schedules			2		
	Total Marks			**20**		

CHECKLIST FOR **SEISO**

S No.	Check points	System	Result	Max. Marks	Marks Obtained	Remarks
1	All items covered under cleaning schedule			2		
2	Cleaning responsibilities known			2		
3	System of proper drainage			1		
4	Equipment/machinery/furniture cleanliness			1		
5	Around/behind/under desk/work place			2		
6	Passage ways clean			1		
7	Aisle/section marking			1		
8	Under stairs/against walls/beside or behind pillars			2		
9	Nooks & corners/scrap yards			1		

10	Floor cleanliness			1	
11	Wall cleanliness			1	
12	Ceiling cleanliness			1	
13	Windows and door cleanliness			1	
14	Fan, A/c, light, notice boards			1	
15	Cables, switch boards, pipes, toilets, fire extinguishers			2	
	Total Marks			**20**	

SCHEDULE FOR SEIRI, SEITON, and SEISO

Deptt./Section:

Name: **Date:**

S. No.	Item/Area	SEIRI (SORTING)	SEITON (SET IN ORDER)	SEISO (CLEANING)	
		Frequency	Frequency	Frequency	By Whom

AUDIT CHECKLIST FOR **SEIKETSU**

S. No.	Check points	System	Result	Max. Marks	Marks Obtained	Remarks
1	All items covered under cleaning schedule			2		
2	Cleaning responsibilities known			2		
3	System of proper drainage			1		
4	Equipment/machinery/furniture cleanliness			1		
5	Around/behind/under desk/work place			2		
6	Passage ways clean			1		
7	Aisle/section marking			1		
8	Under stairs/against walls/beside or behind pillars			2		
9	Nooks & corners/scrap yards			1		
10	Floor cleanliness			1		
11	Wall cleanliness			1		
12	Ceiling cleanliness			1		
13	Windows and door cleanliness			1		
14	Fan, A/c, light, notice boards			1		
15	Cables, switch boards, pipes, toilets, fire extinguishers			2		
	Total Marks			**20**		