

# Overview of 5S

*A Place for Everything and Everything in Its Place – Ben Franklin*

**5S** is the name of a workplace organization method that uses a list of five Japanese words: *seiri*, *seiton*, *seiso*, *seiketsu*, and *shitsuke*. Transliterated or translated into English, they all start with the letter "S". The list describes how to organize a work space for efficiency and effectiveness by identifying and storing the items used, maintaining the area and items, and sustaining the new order. The decision-making process usually comes from a dialogue about standardization, which builds understanding among employees of how they should do the work.

5S was developed in Japan and was identified as one of the techniques that enabled Just in Time manufacturing. Two major frameworks for understanding and applying 5S to business environments have arisen, one proposed by Osada, the other by Hirano. Hirano provided a structure for improvement programs with a series of identifiable steps, each building on its predecessor. 5S is part of the Toyota Production System, anglicized in the US as Lean. Although the origins of the 5S methodology are in manufacturing, it can also be applied to knowledge-economy work, with information, software, or media in the place of physical product

This document presents a brief introduction to the 5S concept. More information is available at the EPA Lean Manufacturing and Environment website: <http://www.epa.gov/lean/environment/methods/fives.htm>

### 5s is a Method to:

- Organize
- Clean
- Sustain a productive work environment
- Provide foundation for visual management system
- Create a safe work

### Why do 5S?

- Organize the space around the intended role
- Make more productive use of **space**
- Locate materials
- Avoid un-safe conditions

### Where does 5S apply?

Any process involved in delivering value to the customer

- Factory
- Office
- Hospital

### Who does 5S?

- Anyone involved in delivering value
- Top-down leadership
  - Lead by example
- Bottom up implementation

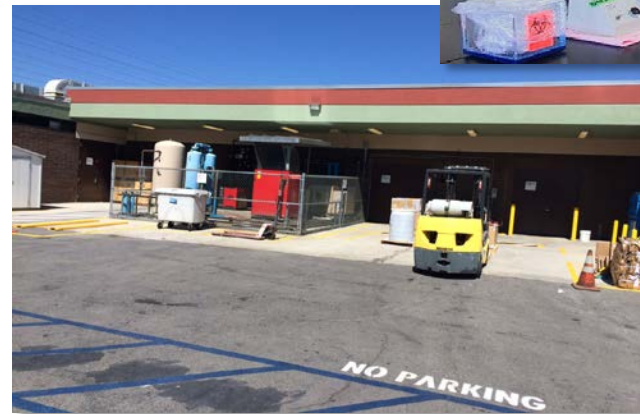
*It's Not a Program – It's a Way of Life*



Before



After



## HOW WE DO 5S?

- a) Take “before” picture
- b) Organize space around role
  - i. Standard work dictates what is necessary or not
  - ii. List of items needed for the role
  - iii. Daily/Weekly inventory levels for those items
- c) Categorize what is needed and not needed
  - i. Segregate and discard
- d) Red Tag not needed items

**When in doubt, Red Tag it out**
- e) Determine Red Tag Area
  - i. Determine location of Red Tag Area
  - ii. Define who is responsible for the area
  - iii. How long will items be kept in the Red Tag Area?

# #1 Sort

**Identify and eliminate what is not needed.**



- a) Arrange the necessary items
  - i. Support the standard work
- b) Label the locations of the items
- c) Ergonomically correct locations
- d) Target improvement opportunities
- e) Items in reference to location

## #2 Set in Place

**Keep needed items in the correct place to allow for easy and immediate retrieval**

*Shadow Board*



*Visual Scan Sheet*

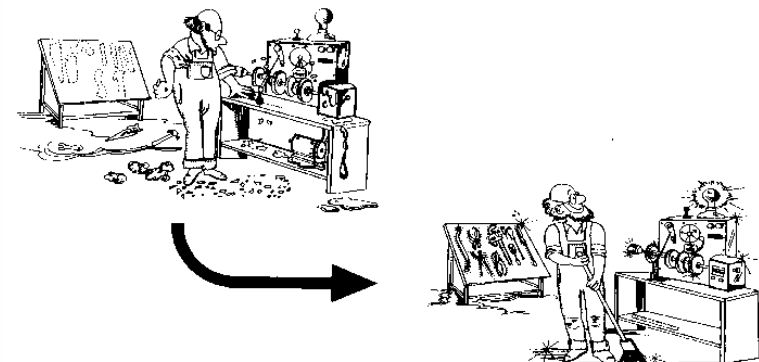
Area	Task	Standard	Resp	Time	Freq	Complete
Floor	Sweep, pick up trash	No trash or debris on floor	1st shift	5 min	Daily	N T W T F
Floor	Vacuum	Vacuum Office Floors per GMP Monday, Wednesday, or Friday (Day Designated)	Cleaning Crew	5 min	Weekly	N T W T F
Desk, Cabinets & Shelves	Clean, straighten, organize. Make sure all paperwork is in the proper place.	Neat, orderly, nothing out of place, no papers or clutter on desk.	1st shift	5 min	Daily	N T W T F
Inside Desk & Cabinets	Clean, straighten, organize. Make sure shadow boards have all items in place.	No buildup in Desk.	1st shift	5 min	Daily	N T W T F
Blinds & Window	Dust and inspect exposed surfaces	No dirt allowing	Cleaning	5 min	Weekly	N T W T F
Windows & Wood Surfaces	Polish Wood and Wash Windows	No dirt allowing	Cleaning	10 min	Monthly	N T W T F
General Office, Trash Bins (2)	Turn Off Lights, Power down Computer Power Down Printer Lock Desk & Cabinets, empty Trash Bins (2)	All Equipment is secured. Trash Bins are empty and clean.	3rd shift	5 min	Daily	N T W T F
Safety Inspection	Perform daily safety inspection and report any unsafe conditions.	Safe work area. Deficient items reported for correction. Review ergonomic conditions.	1st shift	5 min	Daily	N T W T F

- a) Determine shine targets and assignments
  - i. Equipment, space (work area), tools
- b) Prepare for the shining process
  - i. Specify supplies and equipment
  - ii. Store cleaning tools where they are: easy to find and easy to return
- c) Establish a cleanliness standard
  - i. Acceptance criteria must be understood
  - ii. 5 minutes of shine time should be adequate
- d) Visual process
  - i. Identify customer & suppliers
  - ii. Identify value as defined by stakeholders
  - iii. Define primary measurements of value
  - iv. Post the metrics
  - v. Determine trigger points
  - vi. Define Response for trigger points
    - a. Who
    - b. What

## #3 Shine

**Once the clutter that has been clogging the work areas is eliminated and remaining items are organized, the next step is to thoroughly clean the work area.**

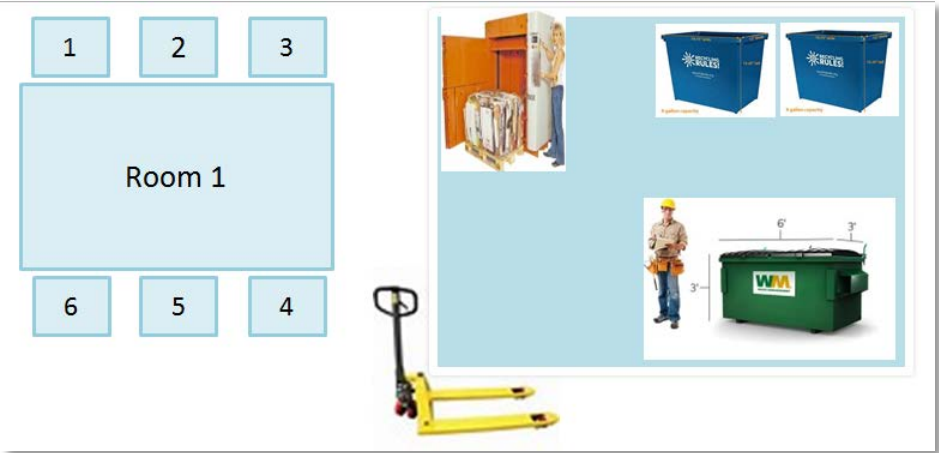
*A Clean Workplace Enhances Quality, Safety, and Pride*



- e) Define the current process
  - a. Standard work
    - i. Work area layout
    - ii. Cleaning checklist
- f) Define “better way” for task to be performed
  - a. Standard work
    - i. Assembly Process
    - ii. Work combination sheet
    - iii. Work Balance sheet
    - iv. Flow of materials
- g) Make it visual – Communicate
  - a. Every territory should have a communication board
    - i. 5S Vision
    - ii. 5S Campaign material
    - iii. 5S Targets
    - iv. Area Layout
    - v. Team
    - vi. Before & after photos
    - vii. Current status
    - viii. Red Tag status
    - ix. Improvement Ideas

# #4 Standardize

**Create a consistent approach with which tasks and procedures are done.**



- a) Commitment
  - i. Everyone has to be involved
- b) Leadership
  - i. Lead by example
- c) Continuous communication/ improvement
  - i. Tools for sustaining 5S include signs and posters, newsletters, pocket manuals, team and management check-ins, performance reviews, and department tours.
  - ii. Changing entrenched behaviors can be difficult, and the tendency is often to return to the status quo and the comfort zone of the "old way" of doing things. Sustain focuses on defining a new status quo and standard of work place organization.
- d) Visual display of results
  - i. Post trends and results on each area.
- e) Checklist / Peer Review /Rewards System
  - i. Way to measure levels of success
    1. For each of the S's
    2. Transactional or execution areas
    3. Single or multiple areas

# #5 Sustain

**Making a habit of properly maintaining correct procedures.**

Area: Warehouse 5S Level of Excellence Dec 25, 2012

Circle level for each S	5S Level of Excellence	
	Recycling Area	External Dock area
Sort	0 1 2 3 4 5 Need to better define how the plastics will be segregated	0 1 2 3 4 5 This room needs some work, many unneeded items
Set in PLACE	0 1 2 3 4 5 Shadow boards are in place for tools used in the area, all tools there	0 1 2 3 4 5 Shadow board ready, just need to remove the unnecessary
Shine	0 1 2 3 4 5 Daily cleaning is performed but no clear visual to go to level 3	0 1 2 3 4 5 Area needs kick start cleanup
Standardize	0 1 2 3 4 5 Standard work in place, all shifts performing SOP same way	0 1 2 3 4 5 SOP is in effect, no standard work though
Sustain	0 1 2 3 4 5 6S gap plan being worked	0 1 2 3 4 5 Trying to kick start it, 6S gap plan addresses items that need fixing

Area Responsibility: R. Montano Auditor: Materials Mgt. Guy

General Comments: Area looks much improved, few items away from level 3 in recycling area, good gap plan to address some items that need fixing.

# Attachments

Attachment A – Visual Scan Template

Attachment B – Audit Sheet Template



# Attachment A

Visual Scan Template

# Visual Scan for Training Room



Area	Task	Standard	Resp	Time	Freq
Floor	Keep clear, dispose of anything on floor	No trash or debris on floor	Meeting Leader	1 min	When room is in use
Posters	Replace any posters used by meeting participants.	All posters on wall blank and ready for next meeting	Meeting Leader	5 min	When room is in use
Cabinet	Items in cabinet are organized	Items are replaced in appropriate bins and bins are in assigned spaces on shelves	Meeting Leader	5 min	When room is in use
Counter	Counter is clear except for standard items (Forms, Stapler, Tape, Data Box)	No food, paperwork or miscellaneous items are left on the counter. Forms, Stapler, Tape, Data Box, etc. are placed in their standard location	Meeting Leader	5 min	When room is in use
Safety inspection	Perform safety inspection when room is in use	All cords are out of main foot traffic path and taped to floor whenever possible	Meeting Leader	10 min	When room is in use

# Attachment B

Audit Sheet Template

# Beltsville 5S Level of Excellence Audit Sheet

Owner: \_\_\_\_\_

Area: \_\_\_\_\_

Safety	Level	<b>SORT</b>	<b>Identify and eliminate what is not needed</b>	
	0	There are un-safe items in the work area (chaffed wires, broken items, expired extinguishers, etc.). ANY unsafe condition = 0 in Sort		
	1	Necessary & unnecessary items are randomly together in the same location. ANY items randomly mixed together = 1 in Sort		
	2	Necessary & unnecessary items are separated & are not together in the same location = 2 in Sort		
	3	No unnecessary items are present, a red tag area has been created and identified. Red tag area = 3 in Sort		
	4	A VS posted that shows the area at end of day/shift/etc, it identifies necessary items with an action plan to get rid of unnecessary items = 4 in Sort		
	5	Unnecessary items cannot enter the area. Empty areas are removed or labeled "Empty" = 5 in Sort		
	Level	<b>SET IN PLACE</b>	<b>A place for everything and everything in its place</b>	
	0	ANY unsafe condition due to the location (blocked exits/panels/extinguishers, falling/trip hazards, no safety markings) of items = 0 in Set-in-Place		
	1	Items do not have a standard location and are put back in random locations = 1 in Set-in-Place		
	2	A standard location has been created for items, but no visual markings have been put in place = 2 in Set-in-Place		
	3	Visuals/markings are in place to identify the standard location of an item (color/outlines/labels/#'s/shadowboards/pictures/etc) = 3 in Set-in-Place		
	4	A VS is posted to show what the area looks like at the end of day, shift, week. A posted VS = 4 in Set-in-Place		
	5	Must identify and document how to improve your score 5S and remove waste = 5 in Set-in-Place		
	Level	<b>SHINE</b>	<b>An effective, organized environment</b>	
	0	Any unsafe conditions due to poor cleaning or visuals or markings not addressed by 'Sort' & 'Set-in-Place' = 0 in Shine		
	1	No visuals are in place. The work area is dirty and/or disorganized = 1 in Shine		
	2	No labels/markings from Set-in-Place, no metrics displayed, and there isn't routine clean-up of the area = 2 in Shine		
	3	VS and Metrics posted with triggers to alert you action needs to be taken (5S Tracker/Metrics with triggers), daily clean-up of the area = 3 in Shine		
	4	VS is up-to-date, real-time metrics are posted (5S Tracker/Metrics are routinely updated) = 4 in Shine		
	5	Documented action/improvement plan to evaluate the 5S Score when it falls below the target score of 15 = 5 in Shine		
	Level	<b>STANDARDIZE</b>	<b>Develop standards and stick to them</b>	
	0	Any unsafe condition due to not following safety procedures, safety procedures are not documented or identified = 0 in Standardize		
	1	No attempt is being made to improve current 5S process (items are not put back in the same location), no time on 5S = 1 in Standardize		
	2	There is a VS but it isn't being followed, or there isn't a VS and items are put back in the same standard location = 2 in Standardize		
3	The VS is posted & being followed the same way by all (repeatable process), items are put back according to the VS = 3 in Standardize			
4	Future process is documented and Performance Metrics are linked toward monitoring and improvement of the process = 4 in Standardize			
5	Improvements are based on data and tracked for actual results toward achieving the future process = 5 in Standardize			
Level	<b>SUSTAIN</b>	<b>5S is a way of life</b>		
0	Un-safe conditions are routinely unrecognized or not corrected. Repeat unsafe conditions = 0 in Sustain			
1	First Audit and/or no time is being spent on 5S = 1 in Sustain			
2	5S is a scheduled activity, routine clean up, routine 5S Audits take place = 2 in Sustain			
3	5S is a daily activity. Each day you put items back according to the VS. All items are put back everyday according to the VS = 3 in Sustain			
4	Required 5S Documents in place and posted (VS, 5S Audit Sheet, Set in Place labels/markings, 5S Tracker) = 4 in Sustain			
5	Sustain a 4 in all of the 5 S's for 1 full Quarter (check date of last audit to verify a full quarter = 3 months) = 5 in Sustain			

	<b>Sort</b>	
0		
1		
2		
3		
4		
5		

	<b>Set</b>	
0		
1		
2		
3		
4		
5		

	<b>Shine</b>	
0		
1		
2		
3		
4		
5		

	<b>Std.</b>	
0		
1		
2		
3		
4		
5		

	<b>Sustain</b>	
0		
1		
2		
3		
4		
5		

**OBSERVATIONS:**

**TOTAL 5S LEVEL:** \_\_\_\_\_

**Audit Completion Date:** \_\_\_\_\_

**Auditor:** \_\_\_\_\_

**COMMENTS:**

Circle level for each S	Room / Area	Room /Area	Room/Cube
	<u>Recycling Area</u>	<u>External Dock Area</u>	_____
<b>Sort</b>	0	0	0
	1	1	1
	2	2	2
	3	3	3
	4	4	4
<b>Set in PLACE</b>	0	0	0
	1	1	1
	2	2	2
	3	3	3
	4	4	4
<b>Shine</b>	0	0	0
	1	1	1
	2	2	2
	3	3	3
	4	4	4
<b>Standardize</b>	0	0	0
	1	1	1
	2	2	2
	3	3	3
	4	4	4
<b>Sustain</b>	0	0	0
	1	1	1
	2	2	2
	3	3	3
	4	4	4

Safety

5S Score: 3

5S Score: 2

5S Score: \_\_\_\_\_

Area Responsibility: A. Smith

Auditor: Materials Guy

General Comments: Area looks more improved, few items away from level 3 in recycling area. Good gap plan to address some items that need fixing in External Dock Area.

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

