The 5S-Method

Clean up and nothing else?

... or a step further on the ladder of continuous improvement?
What is 5S?

5S is:

- A **discipline** for creating and maintaining a clutter-free, clean, organized, safe and high-performance workplace in 5 steps

- A **system** that enables us to understand our workplace at a glance

- A foundation for **reducing waste** within processes and therefore part of the continuous improvement process

- A **process** which is anchored **sustainably** in the company culture and lived visible by all employees across the hierarchy
What is 5S?

5S is not:

- A (one-time) cosmetic clean-up exercise

5S:

- improves process *repeatability*
- promotes a *safe* workplace
- drives *productivity*
- supports *quality* by detecting abnormality in processes and increased quality awareness of employees
- boosts employee *motivation* by improving the direct work environment
The five steps 5S-Method ladder

1. **Sort** - Remove all unneeded items from the work area
2. **Set In Order** - Organize the entire work area
3. **Shine** - Clean the workplace thoroughly
4. **Standardize** - Set best practices as a standard to maintain the first three S’s
5. **Sustain** - Make 5S a part of our daily life
Sort (Seiri (整理))

The first “S”: SORT

- Remove all items from the work area that are not needed for current production or clerical operations
- (Red) Tag unnecessary items and take them to a “quarantine area” for auction or disposition
- The „inventory“ of unneeded items in the quarantine area is visible on the Red Tag Board
Sort (Example)

The first “S”: SORT

Before

Drawer content (Not opened for four years)

After

The complete content was unnecessary!!!!
Sort (Example)

The first “S”: SORT

**Before**

Cupboard with camping equipment, empty bottles and product samples (date unknown, maybe last century)

+  

**After**

Both the cupboard and the content were not needed any longer, the jacket found a grateful recipient

Flavoring ingredients together with cable straps
Sort (Example)

The first “S”: SORT

Before

Yellow boxes full of unnecessary items stored in a rack

After

Rack dismantled, unnecessary items “in quarantine”, boxes back to stock room
Set in Order (Seiton (整頓))

The second “S”: SET IN ORDER

-> Create a place for everything and put everything in its place
-> Arrange needed items so that they are easy to use
-> Label them so that “anyone” can find them and put them away
-> Use visual aids to support understanding and minimize complexity
  • Shadow Boards
  • Labels (“Return addresses”)
  • Clearly marked places for items that are movable
  • Area Identification signs
  • Lines on the floor

When something is out of place, it is obvious….
Standard tools are used to make waste in processes visible

The second “S”: SET IN ORDER

→ In this 5S phase a “5S Map” comes to use. Simply with pencil and paper movements of people and material is tracked

→ 5S Maps are drawn for the current state and the future state
The work area consists of 2 workstations and a press located a few meters apart on the right side. Tools are laying unsorted in a drawer below the workbench. Material for the pressing operation is stored on the backside of workstation 2 and has to be moved to the press.

Now the work area consists of only 1 workstation with the press integrated on the left. Tools are neatly stored on a shadow board within reach. Material is stored in grip height directly next to the press.
Shine (Seisō (清掃))

The third “S”: SHINE

→ Clean the work area so it “shines” constantly
→ Monitor if everything is in its place
→ Cleaning means inspection either
→ A Standard tool in this 5S Phase is the 5S Layout, a visualization of areas of responsibility for single employees
→ Another tool here is a cleaning schedule with all cleaning activities for a work area with the individual frequencies
Shine (Example)

The third “S”: SHINE

Before

This workstation gets a new coating, the work environment is newly organized

After

Materials which are placed handy and the new coating let the sun “SHINE”….
Standardize (Seiketsu (清潔))

The forth “S”: STANDARDIZE

- Development of standards for the first „3“ S
  - „Red-Tag Process“ etc.
- Development and implementation of 5S-Rules
  - 5S-Audit Process etc.
- Documentation of improvement steps in the workflow as the new standard
- Standardization ensures, that the success of „Sort“, „Set in order“ and “Shine” can be maintained without reverting back to „the old way“
- It is critical that managers and supervisors constantly reinforce the standard practices and take immediate corrective action when non-conformance to standard practices are observed
Sustain (Shitsuke (躾))

The fifth “S”: SUSTAIN

- Embedding 5S in corporate culture
  - 5S company board
  - 5S team board
  - 5S delegates
  - 5S promotion
  - etc.

- Maintaining the achieved results with audits

- Visualization of 5S results in the work area

- Continuous improvement of the 5S program inside the company by dialog with all participants

- Leading by example
5S Summary

SORT
Remove all non-essential items from around the work area. Any essential items that do not fit or work, or are broken, are tagged for action.

SET IN ORDER
A place for everything and everything in its place. Arrange items so they can be found, retrieved and returned easily.

SHINE
Remove dust, dirt & debris. Cleaning will also highlight any previously unforeseen problems. Prioritize safety, quality and reliability issues.

STANDARDIZE
Spread through the work place. Checklists are showing exactly where and when regular maintenance should take place.

SUSTAIN
Everyone who uses the work area is encouraged to adopt the new system. Eventually the new arrangements will become the culture.

The 5S Phases on a „backside of a stamp“
5S Implementation companywide

- The 5S implementation should be in accordance with the evolution of your company
- 5S is often implemented as a first step to a lean production
- The management must have the required maturity to support and encourage the 5S process otherwise success will be out of question
- The 5S implementation as a program starts often in a pilot area, from there it is extended to other areas
- **Sigma Process Consulting** supports the 5S implementation with:
  - 5S Training
  - 5S Individual workshops
  - 5S Consulting and implementation