



5S

WORKING ENVIRONMENT IMPROVEMENT

WHAT IS 5S?



The 5S system is a lean manufacturing tool that improves workplace efficiency and eliminates waste. There are five steps in the system, each starting with the letter S:



By providing a systematic framework for organization and cleanliness, 5S helps facilities avoid lost productivity from delayed work or unplanned downtime.

THE STEPS OF 5S

5S was created in Japan, and the original “S” terms were in Japanese, so English translations for each of the five steps may vary. The basic ideas and the connections between them are easy to understand, though.

Step Name	Japanese term	Explanation
1. Sort	Seiri (tidiness)	Remove unnecessary items from each area
2. Set In Order	Seiton (orderliness)	Organize and identify storage for efficient use
3. Shine	Seiso (cleanliness)	Clean and inspect each area regularly
4. Standardize	Seiketsu (standardization)	Incorporate 5S into standard operating procedures
5. Sustain	Shitsuke (discipline)	Assign responsibility, track progress, and continue the cycle

THE STEPS OF 5S

These steps feed into each other, so the sequence is important.

- Clearing out unnecessary materials in step 1 (Sort) will provide the space needed to organize the important items in step 2 (Set In Order).
- Then, once the work space is de-cluttered and organized, dirt and grime can be removed in step 3 (Shine).
- These changes to workers' job duties and work environment should be reflected in updated procedures through step 4 (Standardize).
- Finally, those new procedures won't amount to much unless responsibility is assigned and progress is tracked — as required for step 5 (Sustain). And with responsibility and tracking, workers will continue to apply the steps, returning to step 1.

1**SORT | SEIRI**

STEP 1: SORT

The first step in the 5S process is Sort, or “seiri”, which translates to “tidiness”. The goal of the Sort step is to eliminate clutter and clear up space by removing things that don’t belong in the area.

✓ Clearing the Work Area

- For this step, take a close look at the items, tools, and materials in a work area. Items that are necessary or useful for the work being done in that space should be kept there. Everything else should be removed.

1

SORT | SEIRI



STEP 1: SORT

✓ Red-Tagging Unknown Items

- If you find an item that you can't identify, or that has uncertain ownership, it's time to use a red tag. "Red-Tagging" temporarily attaches a highly-visible tag to the item, which notes where it was found and when. Then, red-tagged items from all work areas are collected in a single location: a "lost and found" for tools, materials, and equipment.



1

SORT | SEIRI



STEP 1: SORT

✓ Reassigning Tagged Items

- Items may wait in the red tag collection area for a long time. In that case, the original work area (where that item came from) doesn't seem to need it anymore. It may be useful elsewhere, though.



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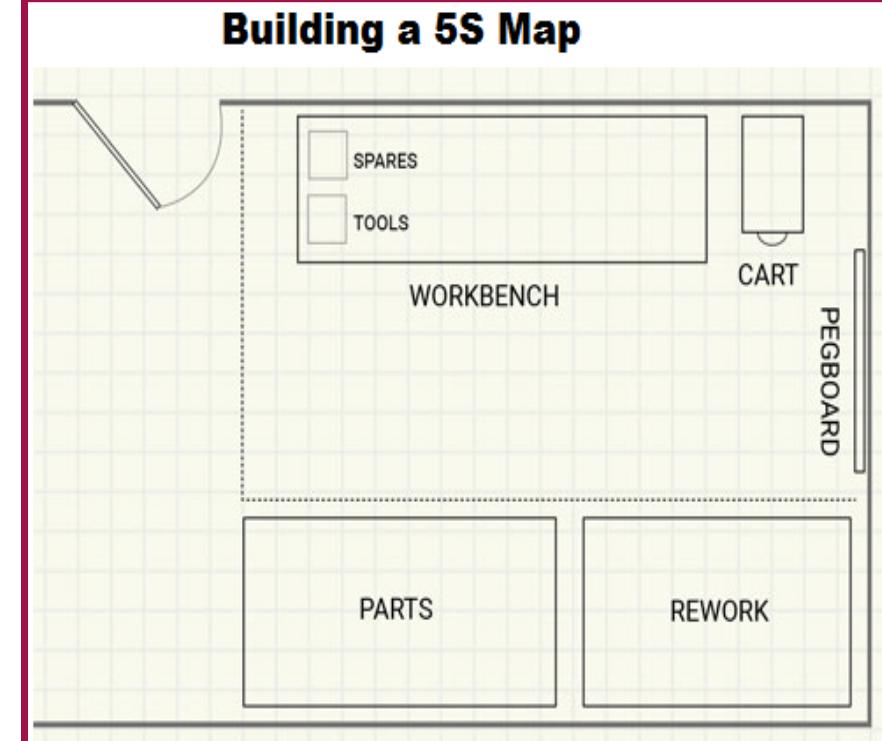
SET IN ORDER | SEITON



STEP 2: SET IN ORDER

The second step, Set In Order, was originally called “seiton”, which translates to “orderliness”. A variety of names have been used in English: “Systematic Organization”, “Straightening Out”, and “Simplify”, for example. No matter what it’s called, the goal of this step is to organize the work area. Each item should be easy to find, use, and return: a place for everything, and everything in its place.

Building a 5S Map

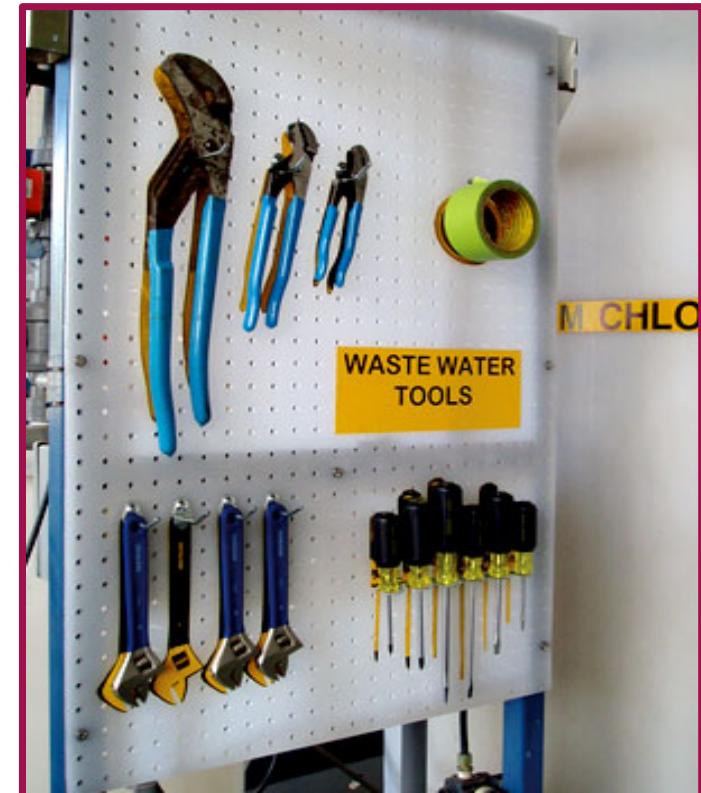




STEP 2: SET IN ORDER

Depending on your facility's needs, you may find one approach easier than another:

- Draw up a map, and then implement it
- Physically arrange the workplace first, and then map it out
- Map as you go, testing ideas and writing down what works well



2

SET IN ORDER | SEITON



STEP 2: SET IN ORDER

Communicating the Plan

Once storage locations are assigned, each storage area should be labelled. Label the outside of cabinet doors to help workers quickly identify what's inside each one.

Organization can extend to the floor, too. Work areas, movement lanes, and storage for supplies and finished products can all be marked with floor marking tape.



3 SHINE | SEISO

STEP 3: SHINE

The third step of 5S is Shine, or “seiso”, which means “cleanliness”. While the first and second steps cleared up space and arranged the area for efficiency, this step attacks the dirt and grime that inevitably builds up underneath the clutter, and works to keep it from coming back.



3 SHINE | SEISO



STEP 3: SHINE

Routine Cleaning

- Importantly, it is not meant to be a job for the maintenance or janitorial staff. Each worker should clean their own work area, and the equipment they use. This approach has several benefits:
- Workers who are familiar with the area will quickly notice any problems that arise
- Hazards or difficult situations will be understood and accounted for
- Items that are out of place or missing will be recognized
- Workers will tend to keep their own workspaces cleaner



3 SHINE | SEISO



STEP 3: SHINE

Shine as Preventative Maintenance

Keeping work areas clean will have many advantages. One important advantage is that it's easy to spot leaks, cracks, or misalignments. If the people keeping the area clean are the same people who work there regularly, they will be quick to recognize any of these problems.



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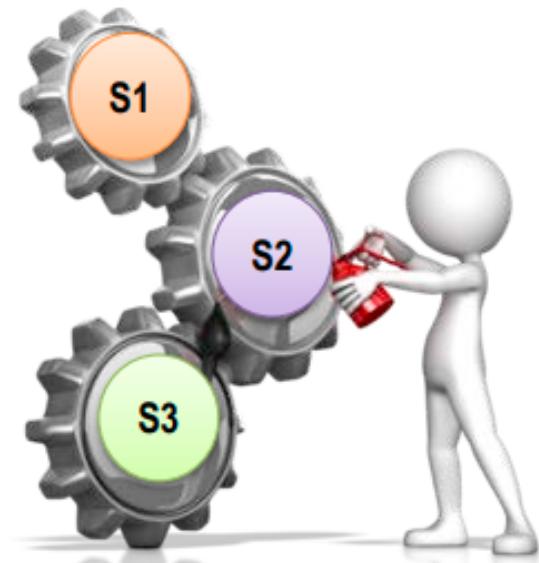
STANDARDIZE | SEIKETSU



STEP 4: STANDARDIZE

The fourth step is Standardize, or “seiketsu”, which simply means standardization. By writing down what is being done, where, and by whom, you can incorporate the new practices into normal work procedure. This paves the way for long-term change.

Develop mechanism to standardize S1-S3 implementation for continuation



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STANDARDIZE | SEIKETSU



STEP 4: STANDARDIZE

The Power of Writing Things Down

It's been said that "If it isn't written down, it didn't happen." Writing down the decisions that you make in your 5S program will help ensure that your work doesn't just disappear. If you made a 5S map in the Set In Order step, that map can be part of your new standard for the area. In the same way, the process that you use for red-tagging items can be written down and included in the standards.



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STANDARDIZE | SEIKETSU



STEP 4: STANDARDIZE

Tools for Standardizing

Once you've made decisions on how to change your work practices, those decisions need to be communicated to workers. This communication is a key part of the Standardize step. Common tools for this process include:

- **5S checklists**
- **Job cycle charts**
- **Procedure labels and signs**



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SUSTAIN | SHITSUKE



STEP 5: SUSTAIN

The fifth step of a 5S program is Sustain, or “shitsuke”, which literally means “discipline”. The idea here is continuing commitment. It’s important to follow through on the decisions that you’ve made — and continually return to the earlier steps of 5S, in an ongoing cycle.

Measure improvement with proper periodical monitoring



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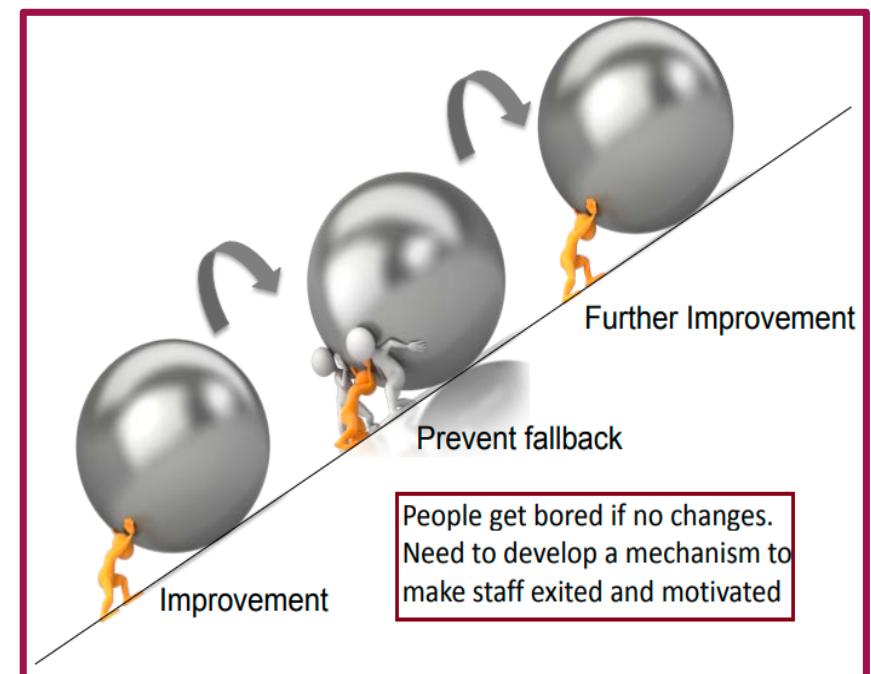
SUSTAIN | SHITSUKE



STEP 5: SUSTAIN

Never “Once and Done”

The 5S approach was never meant to be a one-time event, but an ongoing cycle. This is key, because early successes in 5S can open the way for problems. If open space becomes available in the Sort step, but afterward, tools and materials are allowed to gradually fill in that space without any organization, the end result can be an even bigger mess.



People get bored if no changes.
Need to develop a mechanism to
make staff exited and motivated

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SUSTAIN | SHITSUKE



STEP 5: SUSTAIN

Sustaining a 5S program can mean different things in different workplaces, but there are some elements that are common in successful programs.

- **Management support** – Without visible commitment from managers, the 5S processes won't stick around. Supervisors and managers should be involved in auditing the 5S work processes, and getting feedback from workers.



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SUSTAIN | SHITSUKE



STEP 5: SUSTAIN

- **Department tours** – Bringing teams from one department to visit other departments will help familiarize the entire workforce with the processes of your facility. This type of “cross pollination” helps to spread good ideas, and inspires people to come up with new ways to improve the 5S implementation.



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SUSTAIN | SHITSUKE



STEP 5: SUSTAIN

- **Updated training** – As time passes, there may be changes in your workplace, such as new equipment, new products, or new work rules. When this happens, revise your 5S work standards to accommodate those changes, and provide training on the new standards.



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SUSTAIN | SHITSUKE



STEP 5: SUSTAIN

- **Progress audits** – The standards that are created in the 5S program should provide specific and measurable goals. Checking on those goals with a periodic audit can provide important information and guidance. Where is 5S working well? Where are teams falling behind?



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SUSTAIN | SHITSUKE



STEP 5: SUSTAIN

- **Performance evaluations** – Once you know your goals are reasonable, make performance part of each employee evaluation. When teams and individuals perform well, celebrate it, and post overall results so each team can see how they compare to the rest of the facility.



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SUSTAIN | SHITSUKE



STEP 5: SUSTAIN

Sustain Is Not the End of 5S

BONUS SAFETY

BONUS: SAFETY

A Sixth “S” for Safety

When it comes to lean manufacturing and workplace improvement, 5S is one of the most widely known and used lean tools. It's no surprise: 5S can increase workplace efficiency, reduce costs, and improve quality. But with many lean programs, it's easy to focus only on those goals, and lose sight of the human factor. Worker safety is critical. That's why many facilities add another step to the 5S cycle, calling the result “6S” — with Safety.

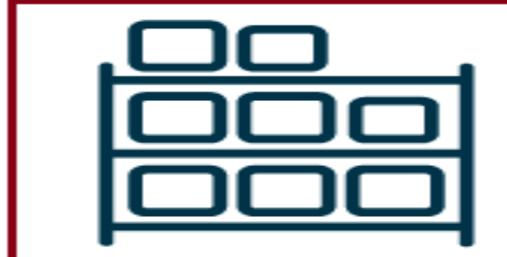


BONUS SAFETY

BENEFITS OF A 5S PROGRAM



Better time usage



Less wasted space



Reduced injury rates



Reduced equipment downtime



Improved consistency
and quality



Heightened employee
morale

THANKS FOR LISTENING!

