How to Sustain Success with the Practice of 5S

IMPLEMENTING A PRACTICE INSTEAD OF A PROGRAM





Businesses managed by savvy senior leadership are always looking to:

- reduce safety hazards
- squeeze costs out of work processes and inventory
- establish or strengthen the worksite culture of safe behaviors and attitudes
- find and eliminate potential combustible dust risks on site
- improve communications with the workforce
- reduce defects; improve quality; improve maintenance; increase teamwork, morale, and productivity; gain better customer impressions; and speed up delivery times.

A broad strategy to accomplish these goals is to implement the Japanese 5S methodology. 5S is used at worksites large and small to gain competitive advantages in terms of: safety; efficiency; visual communications; a clean, well-organized work environment; production gains; and strong, positive cultural values and beliefs. 5S also aims to eliminate the "seven deadly wastes": overproduction, unnecessary transportation, excess inventory, defects, over-processing, time wasted while waiting, and wasted employee motions and movement.

5S rests on five "pillars": 1) seiri, or sort; 2) seiton, or set in order or systematize; 3) seiso, or sweep or shine; 4) seiketsu, or standardize; and 5) shitsuke, or self-discipline or sustain.

Before you decide to implement 5S

The many positives of 5S are well-documented. But before you roll out a 5S initiative, first give thought to the philosophy of 5S—what it is and what it is not; the challenges you'll face and the commitments you'll need to make; and why 5S implementations succeed or fail.

To start, it's wise not to call 5S a "program." Programs have beginnings and endings. Employees have seen many programs come and go, and they can be perceived as "flavors of the month" or fads. 5S is anything but a fad. It also should not be presented to your workforce as simply an amped-up housekeeping effort. 5S is not reserved for janitors and cleaning crews. It's not about pushing brooms. It's also not a list of rules handed down by top management with no input from the workforce. And it's not a subject that can be taught to your employees in a single classroom training session.

If your employees perceive 5S as "just the latest program" launched by management, with: 1) little training; 2) lots of rules and lists of action items; 3) layers of inspections; 4) no opportunity for employees to develop and customize planning and execution; 5) a lack of communication; and 6) no indication that the organization is committed to 5S for "the long run," 5S will likely die due to backsliding, lack of traction, negligence, apathy and cynicism.

The importance of culture

5S has the potential to change your work culture in many positive ways. But to turn that potential into a sustainable reality will require the active involvement—buy-in—of everyone in your organization. The Japanese go so far as to call 5S a way of life. It is a daily practice. It requires concentration, discipline, dedication, commitment, even deep-rooted devotion. Longtime work habits, shortcuts, improvisations will need to change.

This won't happen without a change in work behaviors and mindsets. And the behaviors and attitudes necessary to support 5S won't be developed without a work culture that values and believes in 5S as "the way things are done around here." This will take time, patience, education, much communication, senior leadership support and active involvement, and sustained worker engagement. Bad habits die hard. Many supervisors and employees will question if 5S will "stick." Without constant encouragement and communication, your early champions of 5S will tire of selling the benefits, explaining the step-by-step processes, and modeling the right behaviors and mindset. Eventually they will pull back, fatigued and overwhelmed.

Start with a pilot project

As with many new organizational initiatives, 5S can be rolled out by starting small and building on early success. Target an "island of excellence"—one department, one work process, one location in your facility. Form an implementation team made up of laborers, operators, supervisors and managers. The team will conduct a needs assessment for the pilot target; evaluate the work environment, work conditions and work flow; observe current work behaviors, and survey workers about their attitudes and beliefs regarding their jobs.

This homework and research will determine: 1) what kind of and how much employee education is needed; 2) how best to



communicate the introduction of 5S through signage, posters, shadowboards, newsletters, internal emails, and social media; 3) goals for 5S improvements (waste reduction, defects reduction, safety improvements, etc.); 4) how to track progress

and give feedback toward attaining those goals through visual communications—scoreboards, messaging, signage, shadowboards; and 5) how to celebrate—recognize and reward—5S achievements.

For 5S to succeed, everyone in your organization must own 5S. They must believe that housekeeping, accident prevention, waste reduction, optimized productivity and consistent operational results are within their control—and not the responsibility of someone else. They must actively care about their work environment and go beyond the call of duty to clean up clutter, and spot ergonomic problems and equipment deterioration. Employees must think and take actions beyond their own work station or work cell. They become their coworker brothers' and sisters' keepers. They look at their work space as their homes. It can't be stressed enough—5S is not a housekeeping program; it's a culture of planning, organization, communication, efficiency, safety, ownership and accountability.

Realizing the benefits of 5S won't happen overnight. Your employees must be sold that 5S daily practices are not drudgery, but in the end will save them time (less waiting aroundw), hassles, energy (less "get up and go to get something somewhere"); it will help them avoid injuries—ergonomic-related sprains and strains as well as slips, trips and falls; and it will make the job easier to do. 5S can save your organization time and money and improve quality and production, but you need to be able to answer an employee's bottom line question about 5S: "What's in it for me?"

5S is a five-step process. Each step must be completed before moving on to the next step. Keep in mind that these steps can be implemented on a factory floor, in an office, on a loading dock, in a warehouse—5S is not limited to manufacturing operations.



STEP 1 - SORT

After your 5S pilot team has done its homework, audited, conducted training, etc., for the first targeted location, Step 1 is Sort. Criteria are set for removing—by red-tagging—all tools, materials,

equipment, etc. not needed to get a job done. How frequently a tool or any other item is used for a job determines where it will be placed or located. When red-tagging, ask:

- Is this item needed?
- If it is needed, is it needed in this quantity?
- If it is needed, how frequently is it used?
- If it is needed, where should it be located?

Items used hour by hour or day by day should be kept within arm's reach of the point of use. Items or equipment used once a week or once a month should be kept within the work area. Less frequently used items should be stored in a more distant location. Unneeded or obsolete items should be stored in a designated holding area. All of these storage locations, near and far, must be clearly identified by signage for visual control of items. Holding areas can be outlined using floor marking tape and other forms of boundary lines. Take photographs and/or videos of the work space before and after Step 1 – Sort, and display these visuals to encourage continued employee engagement.

STEP 2 -SYSTEMATIZE. OR SET IN ORDER

Workers at this point conduct an honest needs assessment. What do I need to do my job? Where should I locate each item I need? How many of each item do I really need? Shadow boards can be set up within easy reach of work stations, with the silhouette or "shadow"



of the shape of each frequently used item outlined for organized placement and easy, quick access. List and prominently post for the information of every employee where items are to be found. Employees must know where to quickly find every item. Label storage lockers, cabinets, drawers, cupboards, etc. so employees know what content is contained within. This visual marking saves time when looking for what you need. Locate needed items so they can be retrieved in 30 to 60 seconds with minimum steps.

Map out the work flow and floor plan of the area showing where everything is "set in order." Divider lines mark aisle-ways and work station boundaries. Marker lines show the position of equipment. Range lines indicate the operating scope or sweep of doors and moving equipment. Limit lines show the height limits of items to be stored or stockpiled to prevent tip-overs. Tiger marks indicate highhazard safety zones. Arrows point directions for work flow. Again, take before and after photos / videos for the Step 2 process and display prominently.

STEP 3 - SWEEP, OR SHINE

This is the point in the 5S process where daily cleaning becomes a habit. The work space is cleaned before starting the job and before



closing down the job. Ten or 15 minutes should be set aside daily for sweep and shine activity. Use this daily cleaning routine to inspect the work space and equipment for defects. Check each and every part and location.

This visual and hands-on inspection will prevent dirt and contamination. It is especially critical for finding any combustible dust accumulations that have the potential for

devastating fires and explosions. Every item causing contamination should be red-tagged. Employees and 5S teams should conduct root-cause analyses to uncover why any contamination is occurring, and how to correct it. A log should be maintained for each work space area where spillage, leakage, dust and other contamination has been found. The log should record the location of the problem, the nature of the problem, who is responsible for taking action to correct the problem, the time/date when a solution will be implemented, and exactly how the solution will be implemented. Again, this logging documentation is especially important to prevent combustible dust disasters.

Logs should be displayed prominently to build the 5S essentials of employee ownership and accountability for sweeping, shining, and finding and fixing problems. Also to be prominently displayed are owner check sheets positioned near where each employee works. These check sheets list job tasks that require daily or weekly maintenance and cleaning, with "owners" of the tasks checking off each item as it is completed every day or week.

STEP 4 - STANDARDIZE

This step is essential to create and sustain your work culture values and beliefs associated with good housekeeping, safety, quality, communication,

teamwork, and production efficiency. Cultural values and beliefs—"the way things are done around here"—are the bedrock of 5S norms of behavior. To standardize 5S and embed it for long-term sustainability, you need to verify as completed the first three steps of 5S. Signage should be use to communicate to employees progress and achievements in



these first three steps. Visual communication is essential for 5S to gain traction and acceptance in your workforce and maintain momentum.

Routines and standard operating procedures need to be established and communicated in order for the first three steps of 5S to be regularly repeated. Also to be standardized at this time are all red-tagging procedures, shadow boards, position lines, and the labeling of all items and storage containers and holding areas. Cleaning schedules are standardized using the 5S owner check sheets. Single-point instructions are posted and visibly prominent to document and communicate 5S procedures for steps 1, 2 and 3 for each work station or work space. The individuals responsible for following and carrying out these instructions are identified for accountability.

5S inspection teams, consisting of employees, supervisors, upper management, plant engineers, safety managers, and maintenance personnel regularly audit and evaluate the execution of the first three steps of 5S. As with behavior-based safety observation and feedback processes designed to change at-risk work behaviors into safe behaviors, 5S inspection teams should accentuate positive 5S behaviors, practices, and good performers with encouraging, immediate feedback. Lapses in 5S practices should be immediately addressed, not with shame and blame, but with conversational corrective feedback, probing and listening, and coaching.

STEP 5 -SELF-DISCIPLINE OR SUSTAIN

It takes self-discipline on the part of everyone in your organization to sustain 5S and achieve its many benefits. Visual communications—message boards, storytelling boards, scoreboards, signs, banners, poster, etc.—are critical to sustaining self-discipline. Your employees must be



aware of—and recognized for—5S accomplishments such as targeted decreases in defect rates and injury and illness rates, and improvements in inventory management, lead times, delivery times and productivity measures.

5S implementation never reaches an end point—a point where you can say, "OK, we're done with 5S." Once you cycle through the five steps, go back and repeatedly check on activities relating to each of the steps. In this way, 5S is an ongoing process, an organic culture, not a program with start and finish dates. 5S sustainability is necessary to meet the challenges of employee turnover, supervisor turnover, new management, new equipment, new product lines, continuous maintenance and housekeeping, and the inevitable changes to work environments and work flows.

Accuform Signs is prepared to assist with implementing a successful 5S practice.

Contact your Regional Sales Manager, visit www.Accuform.com or call 1-800-237-1001.