

NTMA 6S Excellence Award

Implementation Instructions

The following are instructions that the NTMA Technology Team put together to aid in the implementation of the 6S Program.

It is a good idea to choose a small implementation team. Have this team work on a department or small area and cover all six of the elements first. One team member should be from the department or area. After completing the process, establish similar teams sequentially and attack the other departments or areas. The processes should not take long if everyone gets into the act. Please use the NTMA handout “What is a 6S Class A Shop?” as a guide on what the Technology Team envisions a Class A shop to look like.

SAFETY: Throughout the entire process Safety is number 1

SORT: Get rid of clutter. Separate out what is necessary from the unnecessary and dispose of the unnecessary.

- A. The first task is to have a short training class for your employees.
 - a. One good tool is the 5S Garage video or others found online
- B. Take a small area such as shipping and start the process using the training. The sort process should be completed before moving on to Set-In-Order.
 - a. Take a “before” photo.
 - b. Remove all items that are not being used.
 - i. Sort the items and throw out the trash, red tag unused items for storage.
 - ii. Red tag – use this to identify something you no longer use but might want to keep for future use.
 - 1. Place these items in a Red Tag storage area.
 - c. Sort through all material, fixtures and equipment, keep only what is needed for that area.
 - d. Remove all personal items from areas.
 - i. Some employees like photos of their family hanging in their areas, one or two is acceptable.
 - ii. Keep items like food storage containers, sports items out of sight.
 - e. Remove all un-needed tools. Store away.
- C. Have only the tools, material and equipment needed to perform the task in the area sorted. You will find homes for them in the Set-In-Order element.
- D. Take a few “after” photos to submit with your application.

SET-IN-ORDER: Have a place for everything and is everything in its place.

- A. Go through all tools, materials, fixtures and equipment that are left in the area after the sorting process.
 - a. Take a few “before” photos.
- B. Review the area while the employees are working.
 - a. Make a list of what is needed to store each tool, fixture and material.
 - i. Do you have the supplies to mark and store everything?
 - ii. It is a good idea to purchase a label marking system?
 - iii. Locate or purchase storing aids such as white boards, storage shelves, etc.
 - b. Do any tools, fixtures, etc. need to be added?
 - i. Locate or purchase
- C. Review the layout of equipment, benches and storage systems.
 - a. Can they be moved to make the area more efficient?
 - b. Move them to the desired location?
 - i. Is there adequate room between equipment for easy cleaning and servicing?
 - ii. Are the walkways by the area or department marked and clear of chips and oil?
 - iii. Perform some of the Shine element before relocating the equipment.
- D. After gathering all required storage aids, begin organizing the areas.
 - a. Wait a week or two before labeling white board or storage containers.
 - i. It may take some time to fine tune.
 - b. If using storage boxes or containers mark the container and the front of the shelf on which you will be storing the item.
 - c. Visit the Standardize element.
 - i. Use storage containers throughout.
 - ii. Standardize similar work areas.
- E. Encourage your employees to put items away.
 - a. At the end of the shift/day.
 - b. At the end of each job or process.
- F. Take a few “after” photos to submit with your application.

SHINE: Clean work areas and equipment. The best cleaning is not to need cleaning.

- A. Go through the area or department and perform a good cleaning.
 - a. Take a few “before” photos
- B. Do not forget about other non-manufacturing areas.
 - a. Offices, lunchroom and restrooms.
 - b. It is acceptable to have a closed storage area to hide unsorted items.
- C. Review the area’s lighting.

- a. Is it bright enough? Do you need to add task lighting?
- b. Check with your local utility company, they may have a lighting upgrade program.
- c. Good lighting is better for the employees and can make the plant look larger.
- D. Wipe down the equipment.
 - a. Use oil absorbent mats instead of oil dry.
- E. Suggestions: tape/paint floors and walkways.
- F. Applicants are encouraged to maintain an overall clean building appearance inside and out.
- G. The goal is to design a cleaning schedule as part of Sustain that will keep the area or department clean all the time.
- H. Take a few “after” cleaning photos.

STANDARDIZE: Establish consistent schedules and methods of performing the cleaning and organizing work areas.

- A. When possible, similar areas should be standardized.
 - a. This makes it easier for employees to move from one area to another.
- B. Trash and chip removal.
 - a. Scheduling chip and trash removal is an item that is generally overlooked.
 - i. Set a standardized schedule for this task.
 - ii. Each area should have a method of modifying the schedule during heavy use.
- C. Good scheduling makes sustaining the program much easier.
 - a. Take some photos of standardized areas and chip control areas to submit with your application.

SUSTAIN: Audit and monitor the schedules. Stick to the rules.

- A. After developing schedules for maintaining good and lean housekeeping, you will need to develop a method to audit the process to make sure it works.
 - a. This schedule should include equipment and tool maintenance as well as basic cleaning schedules.
 - b. This schedule should fit to the type of equipment.
 - c. The method should also be specific to the equipment or area.
- B. A simple way to audit the process is to develop a quick audit that can be used to help sustain the program.
 - a. Once each area has been through the 6S process, a simple 5 or 6 step audit performed monthly is all that would be required. For example:
 - i. Are the area machines and nearby walkways clean, neat and free of personal items?
 - ii. Are tools returned after use and only the required tools are out?
 - iii. Are all tools, fixtures and material removed and put away after operation is complete?
 - iv. Is all trash and chips removed as scheduled?

- v. Are the maintenance schedules being performed and are they adequate?
- vi. Are employees wearing personal protective equipment when required and hazards marked?
- b. Use the above audit for each department. Some departments may vary.
- c. It is ideal to use the same number of audit steps for all audits.
- C. Posting the audits.
 - a. If you have more than one area in the department, post a small audit board.
 - i. Each department should have a calculated average overall rating.
 - b. All departments should be listed on an overall chart.
- D. System reinforcements.
 - a. Promote the 6S Award to employees.
 - i. Design a simple award
 - ii. Give the award to the most improved department, or the department who had all 6S's for three (3) months in a row.
 - iii. Create different reasons to pass around the award.
 - iv. Keep in mind that if you provide any monies your employees might have to declare it on their taxes.
 - v. Award presented at a monthly meeting.
- E. An item should be added to your management meetings to review the 6S program.
- F. Take a photo of your audit display board and award to submit with your application.

SAFETY: Are the areas safe?

- A. During the sort, set-in-order and cleaning process, mark any hazards or hazard areas as required by OSHA or your local fire code.
 - a. This should be part of the audit checklist
- B. We encourage all of our applicants to require their employees to use personal protective equipment when required.
 - a. This should be part of your audit checklist.
- C. Your company should look into participating in a Safety Award Program.
 - a. The NTMA has a Safety Award Program which was developed to help members record the required OSHA information.
 - b. Check with your local OSHA office or your workers compensation provider.
- D. Take a photo of some hazard areas and/or any safety awards to submit with your application.

CONCLUSION:

This process is not a quick process. If your company sticks with the implementation and is able to sustain the program it should bring great benefit to you and the metal working industry. Please use the 6S audit worksheet to help define the 6S audit process. For more information, eligibility rules and applications please visit <http://www.ntma.org/resources/documents/6S-excellence-program/>