What is the “5S” Methodology?

“5S” is a reference to a list of five Japanese words which, transliterated and translated into English, start with the letter S and are the name of a methodology. This list is a mnemonic for a methodology that is often incorrectly characterized as "standardized cleanup", however it is much more than cleanup. 5S is a philosophy and a way of organizing and managing the workspace and work flow with the intent to improve efficiency by eliminating waste, improving flow and reducing process unevenness. Many manufacturing companies in the United States and around the world have adopted the Japanese methodology as a way to eliminate waste, reduce costs, organize their factories, and follow the philosophy required by world class standards.

What is 5S?

5S is a method for organizing a workplace, especially a shared workplace (like a shop floor or an office space), and keeping it organized. It's sometimes referred to as a housekeeping methodology; however this characterization can be misleading, as workplace organization goes beyond housekeeping (see discussion of "Seiton" below).

The key targets of 5S are workplace morale, safety and efficiency. The assertion of 5S is, by assigning everything a location, time is not wasted by looking for things. Additionally, it is quickly obvious when something is missing from its designated location. Advocates of 5S believe the benefits of this methodology come from deciding what should be kept, where it should be kept, and how it should be stored. This decision making process usually comes from a dialog about standardization which builds a clear understanding, between employees, of how work should be done. It also instills ownership of the process in each employee.

In addition to the above, another key distinction between 5S and "standardized cleanup" is Seiton. Seiton is often misunderstood, perhaps due to efforts to translate into an English word beginning with "S" (such as "sort" or "straighten"). The key concept here is to order items or activities in a manner to promote work flow. For example, tools should be kept at the point of use, workers should not have to repetitively bend to access materials, flow paths can be altered to improve efficiency, etc.

The 5S's are:

Phase 1 - Seiri (整理) Sorting: Going through all the tools, materials, etc., in the plant and work area and keeping only essential items. Everything else is stored or discarded.

Phase 2 - Seiton (整頓) Straighten or Set in Order: Focuses on efficiency. When we translate this to "Straighten or Set in Order", it sounds like more sorting or sweeping, but the intent is to arrange the tools, equipment and parts in a manner that promotes work flow. For example, tools and equipment should be kept where they will be used (i.e. straighten the flow path), and the process should be set in an order that maximizes efficiency. For every thing there should be place and every thing should be in its place. (Demarcation and labeling of place)

Phase 3 - Seisō (清掃) Sweeping or Shining or Cleanliness: Systematic Cleaning or the need to keep the workplace clean as well as neat. At the end of each shift, the work area is cleaned up and everything is restored to its place. This makes it easy to know what goes where and have confidence that everything is where it should be. The key point is that maintaining cleanliness should be part of the daily work - not an occasional activity initiated when things get too messy.

Phase 4 - Seiketsu (清潔) Standardizing: Standardized work practices or operating in a consistent and standardized fashion. Everyone knows exactly what his or her responsibilities are to keep above 3S's.

Phase 5 - Shitsuke (躾) Sustaining the discipline: Refers to maintaining and reviewing standards. Once the previous 4S's have been established, they become the new way to operate. Maintain the focus on this new way of operating, and do not allow a gradual decline back to the old ways of operating. However, when an issue arises such as a suggested improvement, a new way of working, a new tool or a new output requirement, then a review of the first 4S's is appropriate.

A sixth phase "Safety" is sometimes added and referred to as the “6S” Methodology. Purists, however, argue that adding it is unnecessary since following 5S correctly will result in a safe work environment.
There will have to be continuous education about maintaining standards. When there are changes that will affect the 5S program — such as new equipment, new products or new work rules — it is essential to make changes in the standards and provide training. A good way to continue educating employees and maintaining standards is to use 5S posters and signs.