Gimme Five

Count on the 5S improvement method in the lab

ANYONE WHO has worked for an innovative company in the last 15 years has likely encountered a 5S program. It is sometimes described as good housekeeping, but 5S is much more than a cleaning program. It is a system of creating and sustaining an organized workplace for the purpose of improving efficiency, productivity and employee morale.

Typically, a manufacturing organization applies this method to its production environment as part of a continuous improvement initiative. But, like the manufacturing floor, quality and test labs are susceptible to accumulations of clutter and inefficiencies that 5S is designed to eliminate.

By integrating 5S into the culture of your lab, you will see landmark improvements in the performance of those who work there, while setting an example of excellence for your entire organization to follow.

Sort

A thorough sorting of every item into two categories—keep or discard—is essential to starting an effective 5S program.

Labs notoriously hoard obsolete check gages, documents, mating parts and prototypes. Closets and cabinets house broken gizmos and binders full of dead quality standards. Throw that junk out. Clutter is the enemy of organization and clear thinking. If any item is not essential to the day-to-day quality function, remove it from your lab.

Straighten

The articles that remain after completing the first phase need to be arranged in a logical and accessible manner. For the serious adherents to the 5S principles, this process starts with a floor plan.

After removing the nonessentials from the lab area, many practitioners find they no longer need many of the racks and cabinets that were used to store these items. This step offers the ideal opportunity to rearrange the lab furniture and optimize the flow of people and information.

Once the foundation of an effective layout is in place, add the tools and visual aids to organize your lab's contents. Group the tools and procedures near where they are most commonly used. Clearly label drawers, cabinet doors and binders. Unknot the nest of cables behind your desk. Design a bulletin board for displaying current and relevant information. Apply the old adage: A place for everything, and everything in its place.

Shine

This step is as simple as it sounds. In practice, straighten and shine largely overlap.

While emptying filing cabinets and rearranging furniture, it's a convenient time to wash and wax under and behind them. Clean the shelves and countertops. Repaint the walls. Replace the stained and broken ceiling tiles. Strip and wax the floors. Repair the broken handles and hinges. Make your lab and test area look professional and well groomed.

This phase isn't just a one-time event; it's an ongoing pattern of cleanliness. Each person who works in the lab should be assigned an area to keep neat and organized. As inspectors and technicians maintain their areas, they will develop a sense of ownership and satisfaction. As company executives and prospective clients tour your facility, they will see the same precision and consistency employed in the quality lab built into every product.

Standardize

The first three steps are corrective in nature, while the last two are preventive. The step of standardization moves the cleanliness effort upstream by preventing the disorder from occurring in the first place. There are several situations in which this could prove useful:

- By establishing and following procedures for retrieving and returning hand tools and production documents, the items get misplaced far less often.
- By standardizing best practices for conducting product tests and issuing first-piece approvals, your tools and equipment are used in a consistent manner that prevents damage and minimizes loss.
- By implementing calibration and preventive maintenance programs, your measurement systems remain in a state of readiness. Standardization builds order into your quality-related processes.

Sustain

This final "S" comes from the Japanese *shitsuke*, which means "a commitment that flows naturally from within." Sustaining isn't just the last step of 5S. It's the true goal of continuous improvement, in which efficiency, integrity and diligence are integral to the people who are part of your team.

As people committed to these virtues develop quality systems, inspect material and build measurement tools, the natural outcome of their work is excellence. QP

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