

5S:

5S's are adapted from 5 Japanese words that start with 's' but have been rewritten as Sort, Set in Order, Shine, Standardize and Sustain. It helps us organize what we need and eliminate what we don't, allowing us to identify problems quickly.

5 Whys:

The 5 whys is a method of solving a problem by asking why the problem occurred, and then why did that cause occur five times until you get to the root cause of the problem.

Andon:

The andon cord is the ability for an operator to pull a cord that triggers a horn and light that tells their team leader or supervisor that they need help or support. Once provided, the team leader can pull the cord to keep production moving.

Cell:

An arrangement of work (machines, people, method and material) so that processing steps are sequentially done in next-door steps one at a time in order to improve efficiency, reduce waste and improve communication.

Error Proofing:

Also known as poka-yoke or mistake proofing, error proofing involves the redesign of equipment or processes to prevent problems from occurring or moving on to the next step.

Hoshin Kanri:

A strategic planning process to establish high agreement and align people in a common direction with agreed upon methods to improve.

Jidoka:

Also referred to as autonomation, it is adding the human element of being able to identify problems and either stop for correction or self-correct before moving onto the next step.

Kanban:

Kanban, often in the form of cards, is a signal that a downstream or customer process can use to request a specific amount of a specific part from the upstream, or supply, process.

Kaizen:

Kaizen is a structured process to engage those closest to the process to improve both the effectiveness and efficiency of the process. Its goals are often to remove waste and add standardization.

One-Piece Flow / Continuous Flow:

The ideal state for any process is to move away from traditional batching of work, whether material or information, and flow work continuously, one element at a time. This reduces many types of waste, particularly inventory.

PDCA:

Plan-Do-Check-Act means that whether solving a problem or building a plan, everyone should follow this process to ensure learning and success towards the goal.

Preventive Maintenance:

Simplifying and structuring maintenance activities to prevent problems rather than react to them can increase capacity and improve continuous flow.

Pull:

In order to improve continuous flow and reduce the waste of overproduction, processes should "pull" what they need from the previous step in the process, and only that triggers new actions.

Scoreboards:

Scoreboards are visual management of safety, quality, delivery and cost metrics, including analysis and action plans, used to help shop floor teams manage their own process.

Setup Reduction:

The time it takes to change over equipment from one product to the next is a major barrier to continuous flow, and setup reduction seeks to reduce or eliminate that time. This is also known as SMED, or Single-Minute Exchange of Dies.

Six Sigma:

Six Sigma is a method and a set of tools to reduce variation in processes, particularly quality, using mostly statistical tools. Its primary method is DMAIC: Define, Measure, Analyze, Improve and Control.

SWIs:

SWIs, or Standard Work Instructions, are a visual method of structuring every job, providing easy access to key information for operators and allowing for continuous improvement.

Value-Added:

Value-added tasks are only those tasks that (1) the customer is willing to pay for, (2) transform the product or service and (3) are done right the first time.

Value Stream Mapping:

This structured process helps managers understand the flow of both material and information through their operation and development plans to move them closer to the ideal state.

Visual Management:

Visual management is simultaneously a tool and a concept. The ideal state is that all employees, operators and management should be able to manage every aspect of the process at-a-glance using visual data, signals and guides.

Waste Elimination:

Eliminating waste from the process is the goal of many lean tools and should be an on-going effort in itself. This comes in the form of the eight types of waste: overproduction, waiting, inventory, overprocessing, motion, transportation, defects and under-utilized talent.