

**SINGLE PIECE FLOW** When parts are moved through operations from step to step without work-in-progress in-between (no waiting).

**SIPOC** Supplier, Input, Process, Output, Customer - a tool used to summarize the outputs and inputs of one or more processes; frames the parameters for a Value Stream Map.

**SMED** Single Minute Exchange of Die - a tool to analyze and minimize the change over process of building one part to a new/different part.

**SPAGHETTI DIAGRAM** A visual representation using a continuous flow line tracking the path an operator or a product through a process.

**SQDCI** A tool used to develop and display an areas KPIs. Often used as columns on a Huddle Board.

**STANDARD WORK** A set of documented best practice steps to perform a repeatable process.

**STANDARD, ACTUAL, GAP** The current standard/target, the actual performance result of a process, the gap between - ripe for continuous improvement efforts!.

**TAKT TIME** The rate at which a process needs to be completed in order to meet customer demand  $Takt = \text{Available time} / \text{Customer demand}$ .

**TPM** Total Productive Maintenance - a holistic approach to equipment management that strives to achieve perfect production (no unplanned downtime).

**TWI** Training Within Industry - a method of hands-on training, learning and coaching for supervisors, leaders and coaches.

**VALUE ADDED** Any step that changes the fit, form or function of a product in line with what the customer is willing to pay for.

**VALUE ADDED/NON-VALUE ADDED** The steps in a process are considered Value Added or Non-Value Added in the view of the customer.

**VALUE GRAPH** A scatter plot graph with Value on the x axis and/or Cost on the y axis. Counter measures are plotted on the graph indicating if they are Quick Hits, Gems, Strategic, or Parked.

**VISUAL MANAGEMENT** A visual snapshot of operations.

**WATER SPIDER** A person responsible for keeping the flow of work uninterrupted (AKA Material Handler)  
**WIP** Work in Progress - work that has started but the process is not complete.

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# LEAN GLOSSARY

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**5S** Lean tool designed to increase flow, facilitate standard work and showcase process discipline; Sort, Set in Order, Shine, Standardize, Sustain.

**5 WHYs** Root Cause Analysis Tool - Ask why 5 times to understand the root cause of the problem. Solve the root cause not a symptom.

**8 WASTES** categories of waste to help see opportunities for improvement; Transportation, Inventory, Motion, Waiting, Over Processing, Over Production, Defects, Skills Under Utilized. Often referred to as TIM WOODS.

**A3** A tool used for problem solving to document the current state and the improvement process, A3 size paper (size of the form).

**ANDON** Indicator (often a light or flag) used to alarm that there is a problem.

**BEST PRACTICE** The current best-known way to complete a process.

**CONSORTIUMS** Likeminded companies on a lean journey that meet regularly to support each other and share best practices.

**CONTINUOUS IMPROVEMENT** A systematic approach to adding value and eliminating waste. Often referred to as Lean.

**CURRENT STATE/FUTURE STATE** The state a current process is today and what it can be once improvements efforts have been made (future state).

**CYCLE TIME** The length of time to complete a process.

**CYCLE TIME REDUCTION** A method used to decrease the amount of time it takes to complete a process by minimizing the non value added activities.

**FACILITATOR DAYS** Bought with consortium membership to get one-on-one time with a lean facilitator to support your company's lean journey.

**FISHBONE DIAGRAM** Cause and Effect Analysis Tool - used for problem solving to consider all the things that can effect the steps to complete a process.

**FLOW** A Lean thinking principle that describes the goal: items, people, information should flow with in a process. Anytime flow stops you are consuming resources that the customer may not be willing to pay for.

**GEMBA** The place where the action is - you must know what something is before you improve it, understand the current state.

**HANSEI** Reflection - lessons best learned are reflected on.

**HOSHIN KANRI** Strategic planning tool designed to align and focus the whole of the organization.

**HOURLY BOARD** A visual management tool that presents a target (often items per hour), displays the current actual, and describes any obstacles that explain the gap between the two numbers.

**HUDDLE** Regular meetings to align a team.

**HUDDLE BOARD** Visual board to display whether a team is winning or losing - Metrics that the team has influence over.

**JIT** Just In Time - inventory system to control inventory levels.

**KAIZEN** Continuous Improvement for the better.

**KAIZEN BLITZ** 2-3 day event to focus on one process and improve it.

**KANBAN** A visual indicator connecting the process to the customer. Often applied to Inventory as a signal for replenishment before the current inventory runs out.

**KATA** A scientific method of problem solving - try one experiment at a time, review the results before moving forward. Using the framework: Goal, Current State, Target, Experiment to remove obstacles preventing you from reaching the target.

**KPI** Key Performance Indicator - a quantifiable measure of performance.

**LEAD TIME** The time from when a customer places an order to when the customer receives the order.

**LEADER STANDARD WORK** Well defined targets for a leader, ensuring leadership and continuous improvements efforts are part of daily work and sustain gains made by continuous improvement projects.

**LEAN** A systematic approach to adding value and eliminating waste. Often referred to as Continuous Improvement.

**LEAN BELTS** Lean Certifications Programs: Lean 101 (Intro to Lean), Yellow Belt (Tools for the Lean Toolbox), Green Belt (Facilitate Kaizen Blitz), Black Belt (Strategic Planning).

**LEAN MANAGEMENT SYSTEM** Standard Work (teams working to common standards), Accountability (working to target, highlighting gaps in an effort to improve), Leader Standard Work (Ensure continuous improvement is part of the culture).

**LEVEL LOADING/LINE BALANCING** Balancing operator and machine time to match production rate.

**OHNO CIRCLE** Stand in a circle and watch a process long enough to understand what gets in the way of value added work - Named after Taichi Ohno.

**POINT OF USE** The place where a product, tool or service is used.

**POKA YOKE** Mistake Proofing - can the process be improved to make it impossible to make a mistake.

**PROJECT CHARTER** A form used to set the scope and purpose of an improvement project.

**PUSH VS PULL** A lean thinking principle that describes building products to inventory vs building product to customer demand.