

## **5S**

A systematic process of workplace organisation.

## **Andon Board**

Visual control device communicating status of production including problems.

## **Balanced Plant**

A plant where capacity of all resources are balanced exactly with market demand.

## **Bottleneck**

Any resource whose capacity is equal to, or less than demand placed on it.

## **Capacity Constraint Resources (CCR)**

Where a series of non-bottlenecks, based on sequence in which they perform their jobs can act as a constraint.

## **Cell**

Arrangement of process steps next to each other - often in a 'U' shape.

## **Chaku-Chaku (Load-Load)**

A method of conducting single-piece flow, where the operator proceeds from machine to machine, taking the part from one machine and loading it into the next. (Same as Load-Load).

## **Constraint**

Anything that limits a system from achieving higher performance, or throughout.

## **Covariance**

The impact of one variable upon others in the same group.

## **Dependent Events**

Events that occur only after a previous event.

## **External Setup (OED)**

Die setup procedures that can be preformed while machine is in motion.

## **Heijunka (Production Smoothing)**

Keeping total manufacturing volume as constant as possible

## **Hoshin Kanri (Policy Deployment)**

The selection of goals, projects to achieve the goals, designation of people and resources for project completion.

## **Inspection**

Comparing product, or component against specifications to determine if such product or component meets requirements.

## **Internal Setup (IED)**

Die setup procedures that must be performed while machine is stopped.

## **Inventory**

The money the system has invested in purchasing things it intends to sell.

## **Jidoka**

Stopping a line automatically when a defective part is detected.

## **Kaikaku (Flow Kaizen)**

Radical improvement, usually applied only once within a value stream.

## **Kaizen**

Continuous improvement through incremental improvements.

## **Kanban (Card in Japanese)**

A shop floor visual method to manage flow from one workstation to the next to a fixed batch size.

## **Kano Analysis**

Understanding the value that your customers place on the attributes of your product.

## **Material Requirements Planning (MRPII)**

A computerised system to determine quantity and timing requirements for production.

## **Muda**

Any human activity which absorbs resources, but creates no real value.

## **Nagara System**

A production system where seemingly unrelated tasks can be produced by the same operator simultaneously.

## **Non-Value Added**

Activities or actions taken that add no real value to the product or service, making such activities or action a form of waste.

## **Overall Equipment Effectiveness (OEE)**

A tool to measure efficiency of production, allowing in depth analysis of machine non-productive time.

## **Poka Yoke (Mistake Proofing)**

A system to prevent out of specification material passing to the next step - sometimes stops the whole line.

## **Quality**

Meeting expectation and requirements, stated and un-stated, of the customer.

## **Quality Function Deployment (QFD)**

Using a cross-functional team to reach consensus that final engineering specification of a product are in accord with the voice of the customer.

## **Quick Changeover**

The ability to change tooling and fixtures rapidly (usually minutes) so multiple products can be run on the same machine.

## **Real Value**

Attributes and features of a product or service that, in the eyes of customers, are worth paying for.

## **Resource Activation**

Using a resource regardless of whether throughput is increased.

## **Resource Utilization**

Using a resource in a way that increases throughput.

## **Right-size**

Matching tooling and equipment to the job and space requirements of lean production.

## **Sensi**

An outside master or teacher that assists in implementing Lean practices.

## **Shusa**

The leader of the team whose job is to design and engineer a new product and put it into production.

## **Single Minute Exchange of Dies (SMED)**

The reduction in die set-up time. Set-up in a single minute is not required, but used as a reference.

## **Six Sigma**

Methodology to improve the Capability of existing processes using a structured approach.

## **Standard Work**

Specifying tasks to the best way to get the job done in the amount of time available whilst ensuring the job is done right the first time, every time.

## **Statistical Fluctuations**

Kinds of information that cannot be precisely predicted.

## **Sub - Optimization**

A condition where gains made in one activity are offset by losses in another activity or activities, created by the same actions creating gains in the first activity.

## **Takt Time**

Daily production number required to meet orders in hand divided into the number of working hours in the day.

## **Theory of Constraints (TOC)**

A lean management philosophy that stresses removal of constraints to increase throughput while decreasing inventory and operating expenses.

## **Throughput**

The rate the system generates money through sales.

## **Total Productive Manufacturing (TPM)**

Systematic approach to improve machine performance using the manufacturing team.

## **Value Added**

Activities or actions taken that add real value to the product or service.

## **Value Analysis**

Analyzing the value stream to identify value added and non value added activities.

## **Value Stream**

The set of specific actions required to bring specific product through three critical management tasks of any business: Problem-solving, Information management and physical transformation.

## **Visual Controls**

Displaying that status of an activity so every employee can see it and take appropriate action.

## **Voice of the Customer (VOC)**

Set of tools to understand what is really important for the customer.

## **Waste**

Anything that uses resources, but does not add real value to the product service.

## **Yield**

Produced product related to scheduled product.