

Glossary of Key Lean Terms

Cycle Time	The total time a product is in process at a work station. Cycle time reveals how often a product is actually completed by a process step.
Flow	<p>The progressive achievement of tasks along the value stream, so that the product proceeds from raw material to finished product in the hands of the customer with no stoppages or backflow.</p> <p>Flow is characterized by a steady sequence of value-added activities with a continuous, predictable level of work in process.</p> <p>Continuous flow involves producing one piece at a time, non-stop.</p>
Kaizen	<p>Japanese word that translates as “change for the better for all.”</p> <p>Refers to continuous process improvement involving everyone, all the time.</p>
Lead Time	<p>The total production time needed to convert raw materials to a finished product.</p> <p>Lead time reveals how long a customer must wait to receive the product after requesting it.</p> <p>To calculate, add all of the cycle times and inventory queue times together.</p>
PDCA	Plan-Do-Check-Act: a management method made popular by W. Edwards Deming, used to solve problems and promote continuous improvement through data and root cause elimination.
Pull	Creation of a product only when the customer asks for it.
Takt Time	<p>Takt is the German word for rhythm and indicates a pace of production.</p> <p>Takt time is the rate at which product must be made to satisfy customer demand.</p> <p>To calculate, divide the available production time by the rate of customer demand.</p>
Touch Time	The total time an operator spends actually working on the product.
Value	What the customer wants – a met need.
Value-added Work	<p>Steps in a process that:</p> <ul style="list-style-type: none"> • Improve/transform the form, fit, or function of a product. • The customer is willing to pay for (in time, effort, money, etc.), or that directly impact or benefit the customer – the customer cares about it. • Are done right the first time.
Value Stream	All the activities and materials required to create and deliver a product to the customer.
Waste	<p>Any action, process, or product that adds time, cost, or resources without adding value – as perceived by the customer.</p> <p>3 main forms of waste:</p> <ol style="list-style-type: none"> 1. Inconsistency or variation (Mura in Japanese) 2. Overburden (Muri in Japanese) 3. Non-value added activities (Muda in Japanese), of which there are 7 types: Waiting, Over-processing, Overproduction, Defects, Movement, Inventory, Transportation