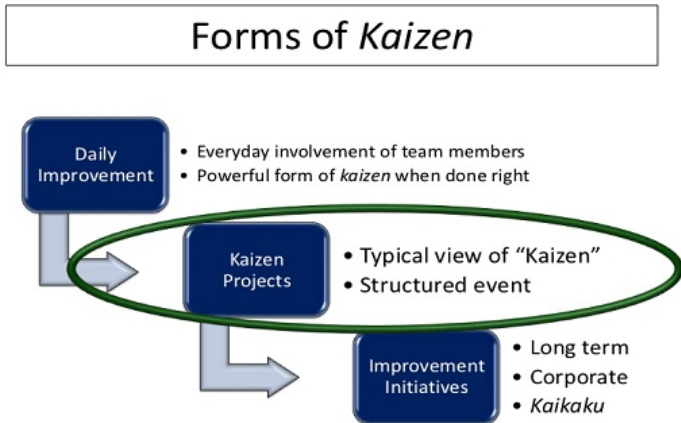


# KAIZEN



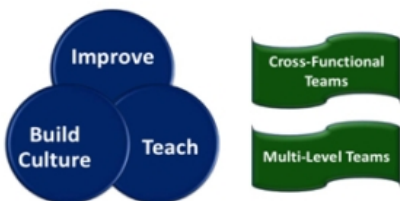
## KAIZEN Abstract

'Kaizen' is a third pillar of Total Productive maintenance {TPM}. 'Kaizen' is a Japanese word which means 'change for the good'. It is a process through which the defects and losses are removed and the good quality services are made possible for the better growth of the company. Hence it is continuous process of improvement.

## KAIZEN Video

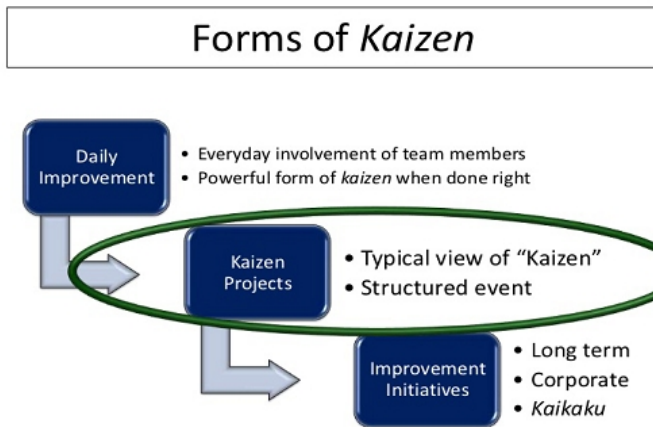
what is kaizen?

	
<i>Kai</i>	<i>Zen</i>
Change	Good



"Kai" means change, and "Zen" means good ( for the better ). Basically kaizen is for small improvements, but carried out on a

continual basis and involve all people in the organization. Kaizen is opposite to big spectacular innovations. Kaizen requires no or little investment. The principle behind is that "a very large number of small improvements are more effective in an organizational environment than a few improvements of large value. This pillar is aimed at reducing losses in the workplace that affect our efficiencies. By using a detailed and thorough procedure we eliminate losses in a systematic method using various Kaizen tools. These activities are not limited to production areas and can be implemented in administrative areas as well.



#### Kaizen Policy]

- Practice concepts of zero losses in every sphere of activity.
- relentless pursuit to achieve cost reduction targets in all resources
- Relentless pursuit to improve over all plant equipment effectiveness.
- Extensive use of PM analysis as a tool for eliminating losses.
- Focus of easy handling of operators.

#### Kaizen Target:

Achieve and sustain zero losses with respect to minor stops, measurement and adjustments, defects and unavoidable downtimes. It also aims to achieve 30% manufacturing cost reduction.

#### Tools used in Kaizen :]

- PM analysis
- Why - Why analysis
- Summary of losses
- Kaizen register
- Kaizen summary sheet.

The objective of TPM is maximization of equipment effectiveness. TPM aims at maximization of machine utilization and not merely machine availability maximization. As one of the pillars of TPM activities, Kaizen pursues efficient equipment, operator and material and energy utilization, that is extremes of productivity and aims at achieving substantial effects. Kaizen activities try to thoroughly eliminate 16 major losses.

16 Major losses in a organization:

## Loss

### Category

1. Failure losses - Breakdown loss
  2. Setup / adjustment losses
  3. Cutting blade loss
  4. Start up loss
  5. Minor stoppage / Idling loss.
  6. Speed loss - operating at low speeds.
  7. Defect / rework loss
  8. Scheduled downtime loss
- Losses that impede equipment efficiency

9. Management loss
10. Operating motion loss
11. Line organization loss
12. Logistic loss

13. Measurement and adjustment loss
- Losses that impede human work efficiency

14. Energy loss

15. Die, jig and tool breakage loss

16. Yield loss.

Losses that impede effective use of production resources

Classification of losses :

## Aspect

### Sporadic Loss

### Chronic Loss

#### Causation

Causes for this failure can be easily traced. Cause-effect relationship is simple to trace.

This loss cannot be easily identified and solved. Even if various counter measures are applied

#### Remedy

Easy to establish a remedial measure

This type of losses are caused because of hidden defects in machine, equipment and methods.

#### Impact / Loss

A single loss can be costly

A single cause is rare - a combination of causes trends to be a rule

#### Frequency of occurrence

The frequency of occurrence is low and occasional.

The frequency of loss is more.

#### Corrective action

Usually the line personnel in the production can attend to this problem.

Specialists in process engineering, quality assurance and maintenance people are required.

#### Advantages and Scope of Kaizen:

- Driven by motivation to do well.
- One can adjust goal as needed, if it doesn't keep one from meeting critical goal.
- It is helpful for the better and good quality production in a company.
- Make the job easy and interesting for the employees in a company

- It is must for the good and long lasting reputation of the company in a market.



### Limitations and remedies of Kaizen:]

#### Poor team selection



The team members on the kaizen are the brain power and manpower behind the improvement. Therefore picking the team members should be an important part of planning the kaizen. You need to consider people's skill sets, expertise or knowledge, individuals within and outside the process, and who will provide the learning

#### Lack of charter

A charter is used to establish the framework of the kaizen.

It determines what the problem statement is, relevant background information, time frame, team members, and some estimation of the resources involve. One must determine how you will measure the success of this kaizen so you know if one's countermeasures are effective.

#### Win-Lose Scenarios

Don't create resistance by letting one group come out ahead of other groups. Doesn't have to be equal every time, but must balance eventually. One disgruntled person can wipe out massive gains.

#### Striving for Perfection



Perfection is elusive, If one try to achieve perfection you may well be at the kaizen a very long time. If one can accomplish 80% of what you set out to and meet the goals of the charter then call it complete. One shall be back to improve from this new state again. Failure to follow through on theses can undermine the team's efforts.

### **Uncommitted Leaders/ champion**



Conflict often confused with lack of commitment. Discover real conflict tread carefully!!!

### **Scrounging for Materials / Tools:**



No scavenger hunts! Build a resource area i.e. uses kanban for reorder, address accounting issues. And predict what you might need (one can return unneeded items later)