

# Have Kaizen activities been carried out smoothly at your company's production site?

- ☒ Your factory leaders and staff have basic understanding of Kaizen, but don't know where and how to start your Kaizen activities?
- ☒ The result of waste elimination activities does not meet your company's expectation?
- ☒ You have little opportunities to take part in courses focusing on useful and effective tools for Kaizen?

## 7 IE Tools

**Target: Middle and junior factory managers (Chief, Foreman, Supervisor etc.) in the production management department or in charge of Kaizen activities.**

**Training venue: At client's company as required (3 days)**

### Objectives

- Have a basic knowledge of 7 Industrial Engineering (IE) tools and their applications.
- Be able to apply 7 IE tools to production site.
- Be able to conduct Kaizen activities by using 7 IE tools.

### Content

#### Part 1: Basic principles of Kaizen (Improvement) and IE

- The definition of IE (Industrial Engineering)
- The 7 wastes in manufacturing activities
- ECRS Principle

#### Part 2: Productivity improvement with 7 IE tools

##### ① Process analysis

~ Analyze whole production process from raw materials to final product, in order to eliminate wastes and carry out Kaizen activities ~

##### ② Motion analysis

~ Analyze motions to eliminate wasted movements and to re-arrange the movements' order and co-ordination with less labor-consuming and higher economic effectiveness ~

##### ③ Time Study

~ Analyze movements from work time perspective to eliminate wastes and improve productivity ~

##### ④ Operation analysis

~ Analyze the movements of man and machines to calculate the time-consuming ratio of each activities to the entire process ~

##### ⑤ Combination work analysis

~ Analyze the time-consuming relationships between combined movements (between Man and Machines or among Men) to re-arrange the process with higher productivity ~

##### ⑥ Line balancing analysis

~ Design a harmonious production flow which could remove the differences of necessary time-consuming between each stages ~

##### ⑦ Material handling

~ Analyze the product transfer flow process to reduce time-consuming and wastes ~

#### Part 3: 7 IE tools applications and action plan for Kaizen activities

- IE tools applications to PDCA cycle (Plan – Do – Check – Act)
- 7 steps to conduct improvement activities

#### Part 4: Action plan

※ The above content is subject to change without prior notices.