

## Workshop: SMED – Single-Minute Exchange of Die

*The most effective method of reducing the changeover time of machines and devices in any industry*

### Target group

Employees involved in changeover in a company: setters, mechanics, maintenance department employees, process engineers, technologists, masters, main operators, managers and foremen of production departments and planning officers.

### Get the practical insight into solving problems and responding to challenges including:

- Long changeover time.
- Large batch production.
- High level of production inventory and finished stock.
- Time-consuming adjustments accompanying changeovers.
- Poor quality of products.
- Each employee executes a changeover “his own way”.

### Overview

The SMED methodology (Single Minute Exchange of Die) is a selection of techniques that make it possible to reduce the changeover time of machines, tools, and production processes. The goal of the methodology is to perform each changeover in less than 10 minutes. The goal is achieved thanks to such a division and simplification of the whole process that makes changeovers safe, in accordance with a set standard, with the use of the lowest possible number of tools and the lowest possible labor input.

### Benefits for the company

- **Reduced** changeover time.
- **Reduced** average size of a production batch.
- Lowered level of inventory.
- **Increased** quality of products and work safety.
- **Optimized** costs.

### Benefits for the participant

- **Ability** to identify waste in changeover processes of machines and tools.
- **Ability** to collect materials for SMED analyses appropriately.
- **Ability** to make a changeover sheet, spaghetti diagrams and Yamazumi charts.
- **Ability** to make plans for implementing changes aimed at enhancing changeover.

## AGENDA

## AGENDA

<b>Module 1</b>	<p>9:00 – 10:30</p> <p>(10:30 – 10:45 coffee break)</p>	<ul style="list-style-type: none"> <li>▪ Introduction: what is SMED and what is it not?, how much should a quick changeover really last?, the key features of well-organized changeovers, examples of the industry best practices</li> <li>▪ Subsequent SMED stages, rules and good execution of the zero (preliminary) stage.</li> <li>▪ Analyzing examples of videos showing changeovers in different industries - group exercises</li> <li>▪ How to make a good changeover video and other success factors in SMED.</li> </ul>
<b>Module 2</b>	<p>10:45 – 12:15</p>	<ul style="list-style-type: none"> <li>▪ Preparation for entering the production hall, dividing the participants into subgroups, assigning tasks for making the video and observing changeovers.</li> <li>▪ Gemba – observing changeovers of selected machines and devices in the production hall, making videos, observation, and the participants make notes from their observations.</li> <li>▪ Visiting interesting places in the production hall, focus on Lean solutions.</li> </ul>
<p>12:15 – 13:00 Lunch</p>		
<b>Module 3</b>	<p>13:00 – 14:30</p> <p>(14:30 – 14:45 coffee break)</p>	<ul style="list-style-type: none"> <li>▪ Watching and analyzing a video from the first changeover together, making a spaghetti chart, a yama-zumi chart and a changeover audit sheet</li> <li>▪ Analyzing the second changeover video, group activities focused on developing changeover improvement ideas and plans for further activities</li> <li>▪ How to assess benefits from shorter changeovers and convince the supervisor to get involved (even if he/she is a spend-thrift)</li> </ul>
<b>Module 4</b>	<p>14:45 – 16:30</p>	<ul style="list-style-type: none"> <li>▪ Completing the suggested changeover improvements and presenting the results, videos with examples of good solutions that guarantee reduced changeover time</li> <li>▪ Workshop summary, Q&amp;A session.</li> </ul>