



# Single Minute Exchange of Die (SMED) Documentation & Review Checklist

## Introduction & Scope

Defines the purpose of the checklist and the scope of the SMED process being reviewed. Confirms alignment with overall manufacturing goals.

**Project Name/Die Change Process Identifier**

**Brief Description of the Die Change Process Being Reviewed**

**Current Average Die Change Time (Minutes)**

**Date of Last SMED Implementation/Review**

### SME Category (e.g., Production, Maintenance, Engineering)

- ☐ Production
- ☐ Maintenance
- ☐ Engineering
- ☐ Other


### Scope of Review (e.g., Full Process, Specific Area)

- ☐ Full Process
- ☐ Specific Area
- ☐ Equipment Specific

### List of Personnel Involved in SMED Review (Name & Role)

Write something...

### Upload of Current Die Change Process Flowchart (Optional)

 Upload File

## Process Mapping & Analysis

Covers the documentation and analysis of the current die change process, identifying all steps and associated times.

### Describe the Current Die Change Process (Step-by-Step)

Write something...

### Current Average Die Change Time (Minutes)

Enter a number...

### Upload Process Flow Diagram (Current State)

 Upload File

### Number of Steps Identified in Current Process

Enter a number...

### List the Types of Dies Involved in This SMED Review (e.g., stamping, molding)

Write something...

### Which categories of waste were observed in the current process? (Select all that apply)

- ☐ Transportation
- ☐ Inventory
- ☐ Motion
- ☐ Waiting
- ☐ Over-processing
- ☐ Over-production
- ☐ Defects
- ☐ Unused Talent

**Describe any challenges or bottlenecks observed during the current die change process.**

Write something...

**Number of operators typically involved in the die change.**

Enter a number...

**Date the current process map was last updated.**

Enter date...

## **SME Identification & Involvement**

Addresses the identification and engagement of Subject Matter Experts (SMEs) crucial for the SMED process.

**Describe the process used to identify potential Subject Matter Experts (SMEs) for the die change process.**

Write something...

**Which departments/roles were involved in identifying and selecting SMEs?**

- ☐ Manufacturing Engineering
- ☐ Production
- ☐ Maintenance
- ☐ Quality
- ☐ Tooling
- ☐ Other (Specify in LONG\_TEXT)

**Number of SMEs initially identified.**

Write something...

**Briefly describe the criteria used to select SMEs (e.g., experience, knowledge, communication skills).**

Write something...

**Were SMEs from different shift teams included?**

- ☐ Yes
- ☐ No
- ☐ Not Applicable

**Upload a list of identified SMEs with their roles and contact information (if available).**

 Upload File

**Describe the initial onboarding or briefing provided to the SMEs regarding the SMED project and their responsibilities.**

Write something...


## Standardized Work Documentation

Focuses on the documentation of standardized work instructions for the die change process, including illustrations and visual aids.

**Describe the overall structure of the Standardized Work Instruction (SWI) for die change. (e.g., numbered steps, visual aids, etc.)**

Write something...

**Upload a copy of the complete, current Standardized Work Instruction (SWI) document.**

 Upload File

**Number of visual aids (pictures, diagrams, videos) included in the SWI.**

Enter a number...

### Which elements are included in the SWI?

- ☐ Step-by-step instructions
- ☐ Sequence of operations
- ☐ Time standards for each step
- ☐ Required tools and equipment
- ☐ Safety precautions
- ☐ Potential hazards
- ☐ Contact information for assistance

### Are the time standards for each step clearly defined and documented?

- ☐ Yes
- ☐ No
- ☐ Partially

### Describe the methods used to ensure clarity and understandability for operators (e.g., clear language, diagrams, color coding).

Write something...

### Date of last SWI review and update.

Enter date...

### Does the SWI include a section on potential problems and troubleshooting?

- ☐ Yes
- ☐ No

## Die Change Sequence Optimization

Reviews the optimization steps taken to reduce die change time, covering techniques like parallel operations, trial runs, and process simplification.

**Original Die Change Time (minutes)**

Enter a number...

**Current Die Change Time (minutes)**

Enter a number...

**Describe the key steps taken to optimize the die change sequence.**

Write something...

**Which optimization techniques were implemented? (Select all that apply)**

- ☐ Parallel Operations
- ☐ Trial Runs
- ☐ Process Simplification
- ☐ Equipment Modification
- ☐ Tooling Improvement
- ☐ Material Preparation Changes
- ☐ Other (Specify in Long Text)

**If 'Other' was selected in the previous question, please specify:**

Write something...



### Number of Parallel Operations Introduced:

Enter a number...

### Were any die change steps eliminated? (Yes/No)


☐ Yes

☐ No

### If 'Yes' to the previous question, please detail the eliminated steps and rationale:

Write something...

### Upload 'Before' and 'After' Process Flow Diagrams (if available)

 Upload File

## Equipment & Tooling Standardization

Evaluates the standardization of equipment and tooling used for die changes to ensure consistency and reduce variability.

### Number of standardized quick-change clamping points per die.

Enter a number...


### Which tooling is standardized for die alignment?

- ☐ Dial Indicators
- ☐ Feeler Gauges
- ☐ Laser Alignment Tools
- ☐ Shims
- ☐ None - all custom

### Describe the process for managing and maintaining standardized tooling (calibration, replacement, storage).

Write something...

### Upload a list/inventory of standardized tooling used for die changes.

 Upload File

### How is tooling version control managed?

- ☐ Serial Numbering
- ☐ Color Coding
- ☐ Electronic Tracking System
- ☐ No version control implemented

### Number of different types of quick-change adapters used.

Enter a number...

**Describe any modifications made to existing equipment to facilitate standardized tooling. (if applicable)**

Write something...

## Material & Parts Preparation

Addresses the preparation of materials and parts needed for the die change process to minimize downtime.

**Describe the current method for preparing dies and associated parts before the die change.**

Write something...

**Which of the following materials/parts are routinely prepared in advance?**

- ☐ Dies (Upper)
- ☐ Dies (Lower)
- ☐ Guide Pins
- ☐ Slide Blocks
- ☐ Springs
- ☐ Other (Specify in LONG\_TEXT)

**How much time (in minutes) is currently spent preparing each die (Upper & Lower)?**

Enter a number...

**Detail any specific tooling or equipment used for die/part preparation.**

Write something...

**Are pre-staging areas used for die/part preparation? If so, describe.**

☐ Yes (Describe in LONG\_TEXT)

☐ No

**Date of last die/part preparation process review**

Enter date...

## Safety & Ergonomics

Covers safety considerations and ergonomic improvements incorporated into the SMED process.

**Describe any identified hazards related to the die change process.**

Write something...

**Which Personal Protective Equipment (PPE) is required for die changes?**

☐ Safety Glasses

☐ Gloves

☐ Safety Shoes

☐ Hearing Protection

☐ High-Visibility Vest

☐ Other (Specify in LONG\_TEXT)

**Detail any ergonomic improvements implemented during SMED to reduce operator strain. (e.g., new lifting aids, adjusted work heights).**

Write something...

**What is the maximum weight an operator is allowed to lift during a die change?**

Enter a number...

**Describe the lockout/tagout procedures used during die changes. Include specific steps.**

Write something...

**How are potential pinch points addressed during the die change?**

- ☐ Guards are in place
- ☐ Ramps and slopes used
- ☐ Operator training and awareness
- ☐ Other (Specify in LONG\_TEXT)

**Upload images or videos demonstrating safe die change procedures and ergonomic improvements.**

 Upload File

## Training & Communication

Focuses on the training provided to operators and the communication plan for the SMED process.

**Describe the initial training program for operators performing the SMED die change.**

Write something...

**Which training methods were utilized? (Select all that apply)**

- ☐ Classroom Instruction
- ☐ On-the-Job Training (OJT)
- ☐ Video Tutorials
- ☐ Simulations
- ☐ Interactive Workshops

**What is the average time allocated per operator for initial SMED training (in hours)?**

Enter a number...

**Date of the last SMED training for all operators involved.**

Enter date...


**Communication channels used to inform operators about updates to the SMED process. (Select one)**

- ☐ Team Meetings
- ☐ Email Notifications
- ☐ Posters/Visual Aids
- ☐ Internal Communication Platform
- ☐ Other

**Describe the process for documenting operator competency in performing the SMED die change.**

Write something...

**Upload training material examples (e.g., checklists, visual aids).**

 Upload File

**Is refresher training conducted? (Select one)**

☐ Yes

☐ No

**If refresher training is conducted, approximately how often (in months)?**

Enter a number...

## Performance Metrics & Monitoring

Evaluates the metrics used to track the performance of the SMED process and the monitoring system in place.

**Average Die Change Time (Before SMED)**

Enter a number...

**Average Die Change Time (After SMED)**

Enter a number...

### Reduction in Die Change Time (%)

Enter a number...

### Number of Die Changes per Month

Enter a number...

### Data Collection Frequency

- ☐ Daily
- ☐ Weekly
- ☐ Monthly
- ☐ Quarterly

### Description of Data Collection Method

Write something...

### Are Data Trends Being Analyzed?

- ☐ Yes
- ☐ No

### Summarize Key Findings from Data Analysis (If applicable)

Write something...



### Date of Last Performance Review

Enter date...

## Continuous Improvement & Documentation Updates

Addresses the process for ongoing improvement and the plan for keeping SMED documentation up-to-date.

### Frequency of SMED Process Review (Months)

Enter a number...

### Date of Last SMED Process Review

Enter date...

### Summary of Changes/Improvements Made Since Last Review

Write something...

### Areas Targeted for Improvement in Next Review Cycle (Select all that apply)

- ☐ Equipment Standardization
- ☐ Operator Training
- ☐ Material Preparation
- ☐ Process Visualization
- ☐ Parallel Operations
- ☐ Other (Specify in Long Text)


**Specific Actions Planned for Improvement (related to selections above)**

Write something...

**Document Version Control Status**

- ☐ Current Version
- ☐ Outdated - Requires Update
- ☐ Under Review

**Attach Updated Documentation (if applicable)**

 Upload File

**Person Responsible for Document Updates**

Write something...

**Date of Next Scheduled Review**

Enter date...