Mistake-Proofing Training Course Outline

UNIT 1 MISTAKE-PROOFING PRIMER

Lesson 1 | What is Mistake-Proofing?

- Rewriting Murphy's Laws.
- Exploring the source of mistakes.
- The mindset necessary for mistake-proofing.

Lesson 2 | Mistake-Proofing in Everyday Life

- Common examples of mistake-proofing all around us.
- Using these examples to trigger ideas at work.

Lesson 3 | Why Errors Are Made

- How process inputs create process outputs.
- Why the root causes of errors must be identified.

Lesson 4 | Inspecting vs. Mistake-Proofing

- The limitations of inspection.
- Why prevention is always more powerful than detection.

Lesson 5 | How Mistake-Proofing Works

- The language of mistake-proofing.
- The role of teams in mistake-proofing efforts.

Unit 1 Challenge

- An assessment of the learner's progress in this unit.

UNIT 2 EFFECTS OF MISTAKE-PROOFING

Lesson 1 | Approaches to Mistake-Proofing

- Exploring the 8 forms of mistake-proofing solutions.
- Guidelines for selecting a mistake-proofing approach.

Lesson 2 | Forced Control Devices

- Delving into the four families of devices and methods used to achieve a forced control effect.

Lesson 3 | Shutdown Devices

- Examining 10 common families of sensors used to achieve a shutdown effect.

Lesson 4 | Warning Devices

- Investigating 4 families of audible alarms and 4 families of visual alarms used to achieve a warning effect.

Lesson 5 | Sensory Alert Devices

- A look at the use of color-coding, missing-in-action clues, and other aids to achieve a sensory alert effect.

Unit 2 Challenge

- An assessment of the learner's progress in this unit.

UNIT 3 IMPLEMENTING MISTAKE-PROOFING SOLUTIONS

Lesson 1 | Integrating Mistake-Proofing and Problem Solving

- How to incorporate mistake-proofing solutions into common problem-solving processes.

Lesson 2 | Practical, Feasible, and Cost Effective Solutions

- Assessment techniques for determining the practicality, feasibility, and cost-effectiveness of your mistake-proofing solutions.

Lesson 3 | How to Keep Solutions from Being Overridden

- Tips for keeping your mistake-proofing solution from being ignored or disabled.

Lesson 4 | How Robust is Your Solution?

- Assessment techniques for determining how robust your mistake-proofing solutions are.

Lesson 5 | Complementary Tools

- How to use ten continuous improvement tools to complement mistake-proofing efforts.

Unit 3 Challenge

An assessment of the learner's progress in this unit.

UNIT 4 MISTAKE-PROOFING IN ACTION

Lesson 1 | Mistake-Proofing in High Volume Manufacturing

- Nowhere are the benefits of mistake-proofing more evident than in high volume operations.
- 8 real-life examples of mistake-proofing solutions in a high volume environment.

Lesson 2 | Mistake-Proofing in Assembly Operations

- Mistake-proofing is a perfect tool to prevent assembly errors.
- 8 real-life examples of mistake-proofing solutions in assembly operations.

Lesson 3 | Mistake-Proofing in a Job Shop Environment

- Mistake-proofing in short-run job shops can make the difference between profitability and bankruptcy.
- 8 real-life examples of mistake-proofing solutions in a job shop environment.

Lesson 4 | Mistake-Proofing in Process Industries

- Mistake-proofing is at the core of complex chemical operations.
- 8 real-life examples of common sense mistake-proofing solutions from the process industry that can trigger ideas to simplify your operation.

Lesson 5 | Mistake-Proofing in Equipment Set-up

- Mistake-proofing is an important element of set-up reduction.
- 8 real-life examples of mistake-proofing solutions to aid equipment set-up and speed product change-overs.

Lesson 6 | Mistake-Proofing in the Office

- Mistake-proofing is not just for plant operations.

- 8 real-life examples of mistake-proofing solutions in the office.