

Instructional Design Document

FOD Prevention Training for Manufacturing Staff



Rustam Bakhtiyarov



TABLE OF CONTENTS

03

BUSINESS GOAL

04

TRAINING OVERVIEW

05

LEARNING OBJECTIVES

07

LEARNING STRATEGY

08

CONTENT OUTLINE

10

ASSESSMENT &
EVALUATION

BUSINESS GOAL



Foreign Object Debris (FOD) is a serious issue in the manufacturing environment. It's not just about cleanliness. It's about **safety, quality, and avoiding costly damage to equipment**. Even something as small as a loose bolt or scrap of packaging can cause major equipment failures, delays, serious injuries or even loss of life.

We've tried traditional (slide based training) but FOD incidents continue to exist. Many of our team members are new to manufacturing and may not speak English fluently.

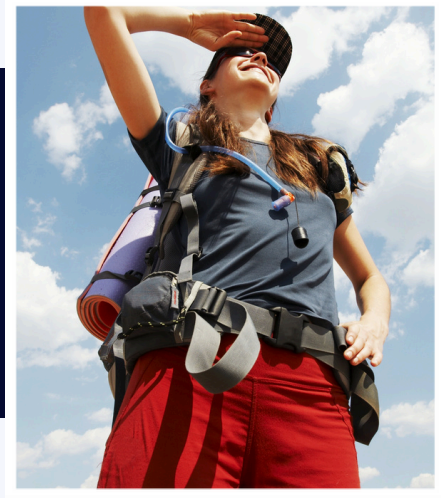
That's why we're taking a new approach. We're redesigning our FOD training to be **hands-on, visual, and problem-based**. Instead of sitting through slides, employees will learn by doing-through real-life scenarios and clear visual guides.

This new training will:

- Cut down on confusing language and focus on what people can see, do and understand right away.
- Help everyone feel confident in spotting and preventing FOD, no matter their background.
- Build a stronger safety culture where FOD prevention is second nature.

Our goal? To see at least a **20% drop in FOD issues within 3 months**, and to give every employee the tools and confidence to help make that happen.

TRAINING OVERVIEW



This FOD prevention training is structured as a **hybrid learning** experience, combining hands-on, instructor-led simulations with self-paced digital learning components. It is specifically designed to be accessible and practical for a diverse, multilingual workforce, many of whom are new to manufacturing or formal safety training.

The program can be delivered in two half-day sessions or one full workday, depending on shift coverage and operational needs. Each module is paced to allow time for practice, peer support, and reflection- ensuring deep learning, not just task completion.

Tools and Resources

To maximize clarity and engagement, the training integrates:

- Interactive video tours with clickable hotspots
- Multilingual checklists and job aids
- Scenario-based simulations (e.g., workstation inspections, role-play)
- Real-time feedback via facilitator observation and peer support

These components help ensure the training is flexible, inclusive, and engaging; supporting learners whether they're reviewing independently or participating in group sessions.

LEARNING OBJECTIVES

Objective	Bloom's Level
Explain what Foreign Object Debris (FOD) is, and describe how it impacts safety, equipment and product quality by referencing damaged parts or past workplace examples.	Understand (grasp the basic concepts)
Identify common FOD items and problem areas on the production floor by reviewing visual scenarios and participating in interactive identification tasks.	Apply (practice seeing it)
Apply the “Clean As You Go” (CAYG) procedure in a simulated work environment, using a checklist and peer feedback to guide performance.	Apply (build safe habits)
Classify different areas of the workplace as FOD Awareness, Control, or Critical zones, and follow the correct behaviors and protocols for each type.	Analyze (think and sort risks)
Conduct a basic FOD inspection of a workstation using a multilingual checklist, and document findings through photo evidence or structured reporting tools.	Evaluate (follow the real steps)
Report a FOD-related issue to a supervisor or team lead using visual prompts demonstrating clarity and accountability.	Apply and Evaluate (follow the real steps)

LEARNING OBJECTIVES

These learning objectives were chosen because they will help learners to understand FOD, recognize it in their own work areas, and know what to do about it. The goal is to move from basic awareness to confident action, one step at a time.

Relevance to Learner Profiles

Given our target audience (diverse, often new to manufacturing with limited English):

- Each objective includes **observable, practical behaviors**.
- Visuals, demonstrations, and checklists **support those with limited language fluency**.
- The progression **builds confidence**, not just competence, as learners practice what they'll be expected to do.

LEARNING STRATEGY

To make sure everyone can take part in the hands-on and interactive parts of the training (especially folks who aren't fluent in English) activities are designed to be super visual and easy to follow.

01

Real photos, not just diagrams, show actual tools and debris they might see on the job.

02

Icons and colors help signal what's safe and what's not (**no heavy reading needed**).

05

Tasks will be done **with a partner** so that more experienced or fluent employees can help support others. This kind of peer learning makes the environment feel more supportive as it gives less confident learners someone to model behavior after. What's more, explaining things helps the "teaching" peer reinforce their own understanding.

03

Audio instructions will be available in **multiple languages**.

04

Demonstrations (live or recorded) will come before each activity so learners know exactly what to do.



This approach helps everyone **stay engaged** and learn by doing- no matter their background or language skills.

Content Outline

Topic & Activity	Learning Objectives	Content & Materials	Modality	Measurement
What is FOD? Visual gallery walk using damaged components and case photos.	Explain what FOD is and describe its impact.	Images of real FOD damage, brief case scenarios, and printed summaries.	Visual walkthrough, facilitator-led discussion.	Verbal explanation and image-based matching task.
Identifying FOD in the workplace. Interactive video tour with hotspot activity.	Identify common FOD items and problem areas.	A video (virtual walkthrough of the production floor). As learners watch, they're prompted to click on hotspots-that may contain examples of FOD.	Interactive video + self-paced scenario.	Hotspot activity score; debrief checklist
Practicing CAYG (Clean as You Go). Paired simulation using job aids and cleaning kits.	Apply the CAYG procedure with peer feedback.	Handout materials, multilingual checklist, role cards.	Peer-based simulation (station rotation)	Checklist completion + peer observation form; instructor spot checks.
Classifying FOD zones. Photo sort and color-coded zone mapping.	Classify different areas of the workplace as FOD Awareness, Control, or Critical zones, and follow the correct behaviors and protocols for each type.	Printed (or digital) photo sets, zone map visuals, zone labels.	Group sort activity.	Correct classification of areas; short group explanation.

Content Outline

Topic & Activity	Learning Objectives	Content & Materials	Modality	Measurement
FOD Inspection Practice. Mock inspection with checklist and camera.	Conduct a workstation inspection and record findings.	Multilingual inspection forms, sample workstation, camera/tablet.	Live simulation.	Completed checklist; photo submission; facilitator review.
Reporting FOD. Role-play scenario with visuals and prompts.	Report FOD clearly to a supervisor.	Visual reporting guide, prompt cards, peer role scripts.	Role-play.	Observed role-play using prompt rubric.

Why it works for this audience.

- Visual-first, low-language design helps overcome literacy and language barriers.
- Interactive, real-world tasks appeal to hands-on learners and make the content feel practical-not theoretical.
- Peer learning and collaboration support social motivation and confidence-building, especially for those hesitant to participate alone.
- Clear, progressive structure lets learners build from understanding → action → communication, mirroring real job responsibilities.

Supporting Learner Motivation.

This model doesn't just deliver content-it builds a sense of ownership and pride. Learners see how their actions directly protect their teammates, equipment, and workflow. That's deeply motivating for people who want to do their jobs well and contribute to a safe, productive environment.

Assessment & Evaluation



Assessment in this training is all about real-world performance - measuring how well participants can actually apply their skills on the job, not just recall facts. The focus is on what people do, how they complete tasks, and how they communicate, using realistic workplace situations.

Formative Assessment

1. Hands-on activities like image tagging, checklist drills, and photo-sorting give instant feedback and keep learners engaged.
2. Paired simulations (like the CAYG task) let peers and facilitators observe, offer tips, and help fine-tune technique in the moment.
2. Reflection prompts and group chats help learners connect the dots and understand why their actions matter.

Summative Assessment

To wrap things up, participants complete a series of practical assessments that show how well they've put their training into action:

- A final FOD inspection simulation, including checklist documentation and photo evidence.
- Scores from digital activities—like quizzes, videos, and hotspot interactions.
- Facilitator or supervisor evaluations based on task accuracy, safety habits, and how clearly participants communicate.

Assessment & Evaluation



How We Measure Success

We're not just checking boxes—we're looking for real impact:

- 80%+ accuracy on inspections and task demos.
- 80% of participants showing clear improvement between pre- and post-training checklists.
- Average survey score of 4 out of 5 or better on clarity and confidence.

A targeted **20% drop** in reported FOD incidents **within three months** of training rollout.

Motivation & Engagement Strategies

To maintain participant motivation and encourage active engagement throughout the training, a variety of team-based, visual, and gamified strategies will be integrated into the delivery.

🏆 Digital Badges: Award micro-credentials like or 'Clean As You Go Champion' for module completion or exceptional performance.

📇 'Caught Being Safe' Cards: Supervisors and peers can recognize real-world application of FOD prevention. Cards go into a weekly raffle for fun prizes.

📸 Before-and-After Photo Contest: Teams submit photos showing cleaning or zone improvements, with fun captioning and recognition.

These strategies build on teamwork, recognition, and visual engagement—making training feel fun, meaningful, and relevant to the day-to-day job



Safety isn't a checklist—it's a mindset. Every tool, every space, every person matters.