

FIRE SAFETY

INSTRUCTOR'S GUIDE

MODULE OVERVIEW

This module provides an overview of fire hazards in a machine shop. It presents information on how to identify hazardous situations that can lead to a fire, and how to prevent them. Students will learn about different types of fire extinguishers what to do in case of emergency. Students will learn how to assess a shop for fire hazards using a checklist.

OBJECTIVES

When students have completed this module, they will be able to:

- Determine which items and situations increase the risk of fire.
- Identify and correct fire safety issues in machine shops.
- Explain the steps in using a fire extinguisher works and how to decide when to fight a fire.
- Identify resources to create an emergency action plan.

CLASSROOM (15 min + 10 min)

PowerPoint presentations:

- **Fire Safety – Part 1 - Fire Hazards and Controls.pptx** - 15 min
- **Fire Safety – Part 2 - Fire Extinguishers and Emergency Planning.pptx** - 10 min

ATTENTION: Part 2, slide 9 contains a video clip. Verify in advance that the video clip runs on your computer. You can access the video clip separately at <https://www.youtube.com/watch?v=CRMgFPzQEn0> (watch entire video ~ 1 minute)

Handouts:

- **Fire Safety – Part 1 - Handout.pdf**
- **Fire Safety – Part 2 – Handout.pdf**

LAB (15 min)

Fire Safety - Lab Activities.pdf – Evaluate the shop for fire hazards using provided checklists. Identify location of evacuation in case of emergency. Demonstrate the use of a spill clean-up kit.

HOMEWORK

- **Fire Safety – Homework.pdf** – Create an Emergency Action Plan for a machine shop. Interview a senior machinist about his/her experience with fire in a shop.
- **Quiz**

ADDITIONAL RESOURCES

“I want to know more” – folder – emergency exits & combustible dust fact sheets, welding area checklist, aluminum dust-related fire report.

