



# Arc Welding and Fire Safety



***If properly inspected and used, the arc welder is very safe. If used improperly, it can expose welders to fire, explosion, and retinal burns.***

### **Ben's Story**

Ben was working from an aerial lift, welding angle iron supports to a steel joist. The area directly below him contained magnesium shavings and cuttings. Welding sparks and slag from the welding landed in the shavings, causing a violent fire that engulfed Ben. He died from severe burns, fire and smoke inhalation, and asphyxia.

- ✘ Why did this incident happen?**
- ✘ Have you known or heard of anyone who was injured or killed while welding? If so, what happened?**

### **Remember This**

- Inspect the arc welder before starting any operation.
- Read all warning labels and instruction manuals for the welder.
- Insulate your body from the metal you are welding.
- Wear dry gloves in good condition and other appropriate clothing (long sleeves, pants and footwear) to protect you from hot sparks, molten metal, and slag. Don't strike an arc without proper eye protection.
- Ground the welder case.
- Avoid fire hazards such as oil, grease, and flammables.
- Remove all fire hazards from the welding area for at least 35 feet.
- Have the proper class of fire extinguisher (employer provided) ready for immediate use. For *most* welding, a combination extinguisher (Class A, B, C) is best.
- For magnesium fires, it is best to use a Class D fire extinguisher or to cover the fire with sand or magnesium foundry flux.

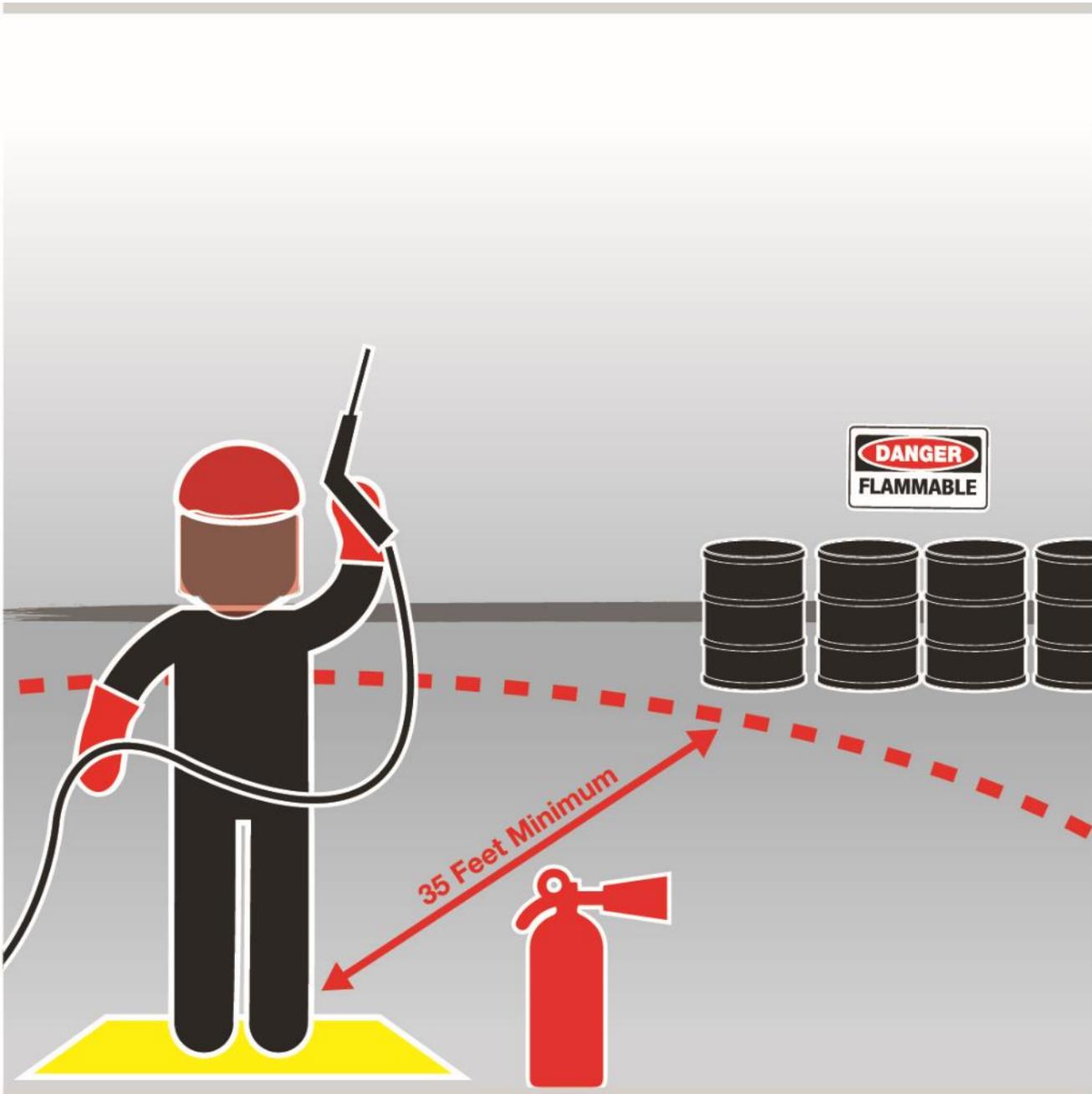
### **How can we stay safe today?**

What will we do at the worksite to prevent injuries from arc welding and fire hazards?

1. \_\_\_\_\_  
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2. \_\_\_\_\_  
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OSHA Regulation: 1926.351 and 1926.352



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- ✘ For magnesium fires, it is best to use a Class D fire extinguisher or to cover the fire with sand or magnesium foundry flux.