



**TRAINING USA, INC.**  
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# Basics of Welding

## 2-Day Operation & Safety Course

Training includes classwork and hands-on instruction. Classwork includes instructor-moderated presentations, participant discussions, and instructional videos to demonstrate proper equipment use and case studies of welding accidents. Course is designed as an introduction for new employees and as a safety refresher for more experienced employees. In some states, course qualifies for CEU or PDH hours.

### Classroom Summary:

**Introduction to Welding:** Why is operator safety training advisable? What are typical welding hazards? These questions are considered along with a consideration of OSHA Welding Standards.

**Personal Protective Equipment (PPE):** Includes a review of the basic components and features of the PPE worn by operators and its proper fit, usage and maintenance.

**Basic Welding Equipment:** Consideration of the various types of tools and equipment typically used in welding, highlighting importance of daily inspection, regular maintenance and repairs, and lockout/tagout procedures. Course will also review proper use, transport, moving and storing of cylinders used in welding.

**Fundamentals of Welding:** This portion of classwork reviews best management practices (BMPs) for welding, including discussion of common materials and joints, and environmental considerations. Attention will be given to safe and correct procedures for welding and cutting as well.

**Safe Work Environment:** This section highlights the importance of preparing the work area by conducting hazard assessment before work, along with maintaining a safe work area during and after welding. Includes an in-depth review of welding-specific work hazards, proper ventilation and fire prevention, and site assessment and setup for working outdoors in various weather conditions.

**Emergency Response:** Reviewing types of welding emergencies that may occur and how to mitigate and/or respond.



### Hands-On Exercises:

Instructor will ascertain how participants will utilize the training and customize course where possible to their real-life scenarios. Hands-on exercises will be subject to equipment provided by client but may include:

- Conducting jobsite hazard analysis for welding operations
- Setting the work site up for safe operations
- Materials preparation
- Cutting / welding / brazing with oxy acetylene
- Mig welding
- Stick welding
- Cutting with plasma torch

