



WELDER

ADVICE  
FROM  
INDUSTRY  
EXPERTS

WELDER  
CERTIFICATION  
101

# **FREE GUIDE**

## **WELDER CERTIFICATION 101**

### **ADVICE FROM INDUSTRY EXPERTS**

**5 Step Overview of the Certification Process**  
**In Depth Look at Each Step**  
**Career Opportunities**  
**Why Become a Certified Welder?**

**Brought to you by Urban Workshop**  
An AWS Accredited Test Facility and LA City Approved Testing Agency  
Offering Welder Training and Certification Testing Since 2024

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# OVERVIEW

The demand for skilled and certified welders is rising rapidly as the welding industry continues to grow. One of the best ways to stand out in this competitive field is by earning a welder certification from the American Welding Society (AWS). This guide will take you through a five-step process to help you become an AWS Certified Welder, provide expert advice from industry professionals, and explain the various certifications available and how they can benefit your career.

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## 5 Step Overview of the Certification Process

### Step 1: Enroll in a Welding Program

Before you can become a certified welder, it's essential to receive the proper training. Enrolling in a welding program ensures that you gain the foundational knowledge and skills necessary for certification. These programs are available through various training centers, including community colleges, technical schools, apprenticeships, and makerspaces.

### Step 2: Learn Welding Techniques

In this step, you'll acquire the skills needed for different welding processes, such as MIG (GMAW), TIG (GTAW), Stick (SMAW), and Flux-Cored Arc Welding (FCAW). A thorough understanding of each welding technique, material types, and welding positions is crucial for the certification exam.

### Step 3: Practice Welding Skills

Once you've learned the basics, it's time to hone your craft. Practice is key to becoming proficient in welding. Practice welding on various materials and positions to build your skills and prepare for the certification test.

### Step 4: Prepare for the Certification Test

As you approach the test date, ensure you are well-prepared. Review all the necessary materials, codes, and procedures relevant to the test you'll take. Consider taking a practice test, which will help you simulate the actual testing conditions and refine your technique.

### Step 5: Take the Certification Test

The final step is to take your welding certification test at an AWS Accredited Test Facility (ATF). After passing the practical exam, you'll receive your certification and join the ranks of skilled professionals who are recognized throughout the industry.

## IN DEPTH LOOK AT EACH STEP

### Step 1: Enroll in a Welding Program

Before beginning the certification process, you must enroll in a welding program to learn the basics of welding, safety practices, and essential welding techniques. There are multiple options for training, including:

- **Makerspaces:** These often offer short, intense programs (as little as 4 weeks) that teach basic welding skills and include certification testing.
- **Technical Schools:** These programs typically last 3-18 months and offer comprehensive training, including a certificate or diploma in welding.
- **Community Colleges:** Many community colleges offer welding certification as part of an associate's degree program.
- **Apprenticeships:** These are longer programs (usually 3-4 years) that combine work and training and often lead to a Journeyman's card.

Look for a program that is accredited by the AWS to ensure your certification is recognized across the industry.

### Step 2: Learn Welding Techniques

Welding involves different processes, each suitable for various applications. The primary techniques you'll learn include:

- **Shielded Metal Arc Welding (SMAW)** – Commonly referred to as Stick Welding, this method is used for heavy steel work.
- **Gas Metal Arc Welding (GMAW)** – Also known as MIG welding, it's often used for sheet metal and thin materials.
- **Gas Tungsten Arc Welding (GTAW)** – Also known as TIG welding, this process is used for high-precision work like aerospace applications.
- **Flux-Cored Arc Welding (FCAW)** – Similar to MIG, but uses a flux-cored wire that provides shielding.

Each welding technique comes with its own set of materials, settings, and safety requirements. Understanding these nuances will help you make sound decisions during the certification test.

## Step 3: Practice Welding Skills

Welding requires a lot of hands-on practice. The more you practice, the more proficient you will become. Set up practice sessions where you focus on different welding positions and materials. Common positions include flat, horizontal, vertical, and overhead, each requiring different techniques. Practicing on a variety of materials—such as steel, aluminum, and stainless steel—will prepare you for any certification exam.

Also, consider practicing the specific test requirements, such as fillet welds or groove welds, which are part of the AWS certification process. Practicing with consistent speed and precision will help you meet the test's expectations.

## Step 4: Prepare for the Certification Test

Preparation is essential for passing the certification exam. AWS offers more than 240 different certification options, depending on your skill level and the type of welding you do. Each test will be based on specific codes, such as:

- **AWS D9.1** – A good starting point for new welders working with sheet metal and thinner materials.
- **AWS D1.1** – Often required for structural welding in construction, commercial projects, and aerospace.
- **ASME Section IX** – Ideal for pipe welding, often required for high-pressure lines in industries like oil and gas.

**Make sure you're familiar with the certification code you're testing for, as well as the welding positions and materials involved.**

## Step 5: Take the Certification Test

The certification exam is a practical test where you'll demonstrate your ability to weld according to specific parameters set by AWS. It typically involves a hands-on component where you'll perform various welds under the watch of an AWS-certified inspector. Here's what to expect:

- **Visual inspection:** Welds are often visually inspected to ensure proper technique and strength.
- **Bend testing:** Some certifications require welds to undergo bend tests to ensure they meet strength standards.

Upon passing, you'll receive an AWS Certified Welder certificate, which is valid across the U.S. and recognized by most employers.

## Career Opportunities for Certified Welders

Becoming an AWS Certified Welder opens up career opportunities in industries such as:

- **Construction:** Structural steel welding, including beams, columns, and bridges.
- **Manufacturing:** Sheet metal fabrication, automotive, and aerospace industries.
- **Oil and Gas:** High-pressure pipeline welding, often requiring specialized certifications.
- **Shipbuilding:** Marine welders who specialize in welding for ships and submarines.

Certified welders are in high demand, especially with an aging workforce and the shortage of skilled labor. In addition, certification typically translates into better pay and more job security, as certified welders command higher wages than non-certified professionals.

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## Why Become an AWS Certified Welder?

Becoming an AWS Certified Welder offers several advantages:

- **Higher Pay:** Certified welders can earn up to 60% more than non-certified welders.
- **Job Security:** Certified welders are less likely to be laid off during job cuts due to their specialized skills.
- **Increased Job Opportunities:** Many employers prefer to hire certified welders for projects that require precision and safety.
- **Industry Recognition:** Certification signals to employers that you possess the skills, knowledge, and experience required to excel in the field.

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## CONCLUSION

Becoming an AWS Certified Welder is a proven way to advance your career in the growing welding industry. With the right training, practice, and preparation, you can achieve certification and take advantage of the many career opportunities that come with it. Start today by enrolling in a welding program and begin your journey toward becoming a certified professional welder.

## Ready to start your journey?

Set up your FREE 60 minute Welder Skills Evaluation at Urban Workshop to meet with an industry expert and receive a personalized education plan based on your personal career goals.

Visit [www.meetings.hubspot.com/welding/eval](http://www.meetings.hubspot.com/welding/eval) to get started or contact our Welding Program Advisor for more information. Laura Costelloe (949) 669-1037 | [lcostelloe@urbanworkshop.net](mailto:lcostelloe@urbanworkshop.net)