

# UA WELDER CERTIFICATION PROGRAM

Local 539 training center is certified as a United Association Authorized Testing Facility, and is authorized to administer the UA weld program certification tests. Prior to the certification test the welder is required to perform a “Welding Proficiency Demonstration” to determine if they are ready for the certification test.

There are a variety of weld certification tests available and are categorized according to material, processes and procedures. The weld certification tests offered for a given test session will be determined by the needs of the industry, some tests may not be available for every test session.

Listed below are tests that may be available, and include important information that should be taken into consideration. Once you determine which weld certification test meets your needs, call the training center to get your name on the test list. The test dates will be scheduled when the minimum number of applicants is met.

## Things to remember when determining which test meets your needs

1. Type of base metals to be welded together.
2. Diameter and wall thickness of base metal. The qualification range is usually  $\frac{1}{2}$  the diameter, and twice the wall thickness of the test coupon.
3. When different weld processes are used, there is a deposited weld material thickness for each process.
4. Use the test procedure that qualifies you to weld on the widest range of pipe diameter, wall thickness.

## UA-21

Pipe coupon material SA106, pipe size NPS2”, XXS, 0.436 wall thickness. 6G position maintained without rotation or change in height. 6010 root pass, 7018 fill and cover. Pipe size ranges qualified for, 1” O.D. and over, up to 0.872 wall thickness. Basic hire on test for most jobs require weld certs for SMAW process only. State of MN has accepted these certs for welding on High pressure piping and code work, providing the contractor has adopted the UA weld cert program through the Weld Bureau.

## UA-22

Similar test as the UA-21, except it calls for a GTAW root pass and hot pass depending on amount of deposited filler material required. This qualifies you for the same range of pipe diameters as a UA-21.

## UA-60

Same test as UA-21 except the coupon is 2.75" O.D. with a 0.625 wall thickness (sometimes referred to as a "Super" or "Monster" coupon), 6010 root and 7018 fill and cover. This qualifies you for the same range in diameter, 1" and over, but unlimited wall thickness. Usually this test is given on-site at powerhouse, nuclear facilities, and refineries.

## UA-61

Same test as UA22 except you use the same size coupon as the UA-60. TIG root using a purge, a hot pass using ER 309 solid wire, with E309-16 stick rod for fill and cover. This qualifies you for the same range in pipe diameter, 1" and over, but unlimited wall thickness. Usually this test given on-site at powerhouse, nuclear facilities, and refineries. This weld cert may be a requirement to be referred out as a welder to another local.

## UA-41

Pipe coupon material SA106, pipe size NPS 2, Sch. 80 Thickness: 0.218". 6G position maintained without rotation or change in height. – ER 309 or ER 308 3/32" or 1/8" Diameter. Weld must be made using argon as a backing gas. Pipe size ranges qualified for, 1" O.D. and over, up to 0.436 wall thickness. This is a TIG test using a purge, allowing you to weld on stainless steel using TIG only.

## UA-50 (Brazing)

Type L copper tube, size 3/4" OD, two joints in the Horizontal and Vertical-Up flow positions. Filler metal BCuP-2 through BCuP-7 round, square or rectangular rod. Fuel gas is acetylene. The brazed joint must be purged with nitrogen.

## UA-51 (Brazing)

Type L copper tube, pipe size 1 1/2' OD, two joints in the Horizontal and Vertical-Up flow positions. Filler metal BCuP-2 through BCuP-7 round, square or rectangular rod. Fuel gas is acetylene. The brazed joint must be purged with nitrogen.