



## **ASME Certified Pipe Welding Training & Certification**

### **80-hour training**

**Instructor: Dana Johnson or Coy Rosenlieb**

**Total cost: \$7450.00 per person**

**Breakdown:** Welding training: \$6000.00 per person (minimum 2 trainees)  
ASME Pipe Welding certification: \$1450.00 per person

#### **Credentials and Certifications**

Washington County Career Center Certificate of Completion  
ASME Boiler Pressure Code Certification, QW163.1(e), QW-194 (2" pipe, 5/8" wall, 6G position)

#### **Training Outline**

1. Shielded Metal Arc (Stick) plate welding
  - a. Practice welding T-joints with 7018 rod in flat position
  - b. Practice welding T-joints with 7018 rod in vertical position
  - c. Practice welding T-joints with 7018 rod in overhead position
  
2. Tungsten Inert Gas (TIG) plate welding
  - a. Practice welding T-joints in flat position
  - b. Practice welding T-joints in vertical position
  - c. Practice welding T-joints in overhead position
  
3. Open Root plate welding
  - a. Weld open root with TIG root and 7018 cover in flat position
  - b. Weld open root with TIG root and 7018 cover in vertical position
  - c. Weld open root with TIG root and 7018 cover in overhead position
  
4. Pipe Welding
  - a. Using a pipe positioner and rolling the pipe, weld TIG root and hot pass and cover rest of the way out with 7018 Stick
  - b. Position pipe in 6G position and weld TIG root and hot pass and cover rest of the way out with 7018 Stick

5. Practice proper welding techniques
  - a. Trainees are observed while welding plates and pipe to ensure they are working the filler rod properly the correct amperage is used to heat the joint and allow for the proper joining of the metal.
  - b. Each joint is cut and inspected for defects.
  - c. Trainees will continue to practice making joints until they can successfully make repeated good joints.
  - d. Once Instructor approves, the trainee will proceed on to the next procedure.
  - e. Once Instructor approves, a certification Pipe Coupon will be welded to be sent to the AWS Certified Welding Inspector for certification.
  
6. ASME Welding Certification: Pass/Fail
  - a. QW-163 Acceptance Criteria -Bend Tests  
The weld and heat-affected zone of a transverse weld- bend specimen shall be completely within the bent portion of the specimen after testing. The guided-bend specimens shall have no open discontinuity in the weld or heat-affected zone exceeding in. 3 mm), measured in any direction on the convex surface of the specimen after bending. Open discontinuities occurring on the corners of the specimen during testing shall not be considered unless there is definite evidence that they result from lack of fusion, slag inclusions, or other internal discontinuities. For corrosion-resistant weld overlay cladding, no open discontinuity exceeding 6 in. (1.5 mm), measured in any direction, shall be permitted in the cladding, and no open discontinuity exceeding % in. (3 mm) shall be permitted along the approximate weld interface.
  
  - b. QW-194 Visual Examination- Performance 4 UNC 23.0 (312)  
Performance test coupons shall show complete joint penetration with complete fusion of weld metal and base metal
  
7. Provide review for those who did not pass
  - a. The certification sample is returned from the CWI with defects marked.
  - b. Defects are discussed with the trainee to determine the cause of the defect and how to prevent.
  - c. Trainee is given additional time to practice before retesting.

Washington County Career Center, Adult Technical Training is Accredited by Accrediting Commission for Career Schools and Colleges (ACCSC). ACCSC holds accreditation with US Dept. of Educ. ACCSC sets multiple Standards of Accreditation by which WCCC must comply to ensure quality programs, experienced instructors, optimal graduation rates, and preferred job placement rates.