



C.O.S. GIANTS
High School Welding Competition
Saturday November 2, 2024
College of the Sequoias Welding Lab
COS Tulare College Center
4999 E. Bardsley Ave, Tulare CA 92374
Building C



American Welding Society
CENTRAL VALLEY - SECTION 176

Attention High School Welding students!!!

College of the Sequoias Welding and the American Welding Society Central Valley Section invite you to compete for some great prizes, the opportunity to become a certified welder, and the chance to win a **\$1,000 Welding Scholarship!!!** Additionally, there will be robotic welding demonstrations and presentations by Lincoln Electric Company for welding instructors and event attendees.

Details: Four students from each participating high school, with a maximum of 40 total contestants, will compete for prizes, scholarships and of course, bragging rights!

Registration fee is \$20 and will be based on a first come first served basis, lunch included.

Each student will have 1-1/2 hours to perform a Structural Weld Qualification Test on 3/8" plate in their choice of either the 2G or 3G position with the SMAW welding process using 1/8" E7018.

Welds will be judged by American Welding Society Certified Welding Inspectors in accordance with the requirements of AWS D1.1 Structural welding code. The decisions of the judges shall be final and will not be contested.

Any tie will be settled by an "instant death" round of head to head competition involving an undisclosed position and process to be revealed at that time.

Please read the contest rules on page 2 carefully before registering for this event.

Event Agenda:

8:00— 9:00	Sign-in and Orientation
9:00— 12:00	Competition
12:00—1:00	Lunch & Judging
1:00— 2:00	Presentation of Awards



To Register, go to: costrainingcenter.com/product/cos-welding-comp/. Or scan the QR code.

Deadline for registration is Friday October 18th





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Contest Rules



American Welding Society
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Please read the following carefully!

Students will perform a Structural Weld Qualification Test on 3/8" plate In their choice of either the 2G or 3G position with the SMAW welding process using 1/8" E7018 electrodes.

The dimensions of the weld test plates will be as follows: 7" x 3" x 3/8" fit up on a 1/4" thick backing with a 1/4" root opening and a 45 degree included angle.

No grinders or power tools will be allowed for either inter-pass cleaning or post weld cleaning. Inter-pass cleaning may be performed with chipping hammers, files, picks, hand brushes or similar manual method. Contestants may bring their own hand tools if desired.

Contestants must bring their own welding hoods, PPE, gloves and safety glasses.

Welds will be judged according to the AWS D1.1 Structural Welding Code's requirements for the qualification (certification) of welders with inspection occurring throughout the welding process.

At a minimum, all welds will be visually inspected at the following steps: After root pass before proceeding to fill passes, after cover/cap passes are completed. Should the weld pass post weld visual inspection, side bend samples will be prepared and bent according to AWS D1.1. Weld test/ contest submission will be terminated at any point if the weld sample is found to exceed the acceptance criteria listed below.

Visual Inspection Criteria:

1. Any crack shall be unacceptable regardless of size
2. All craters shall be filled to the full cross section of the weld
3. Weld reinforcement shall not exceed 1/8"
4. Undercut shall not exceed 1/32"
5. Root shall be inspected and shall not have any cracks, incomplete fusion or inadequate joint penetration.

Bend Test Acceptance Criteria:

The convex surface of the bend shall have no discontinuities exceeding the following:

1. 1/8" in any direction on the surface
2. 3/8" - the sum of all the dimensions of all the discontinuities exceeding 1/32" but less than or equal to 1/8".
3. 1/4" maximum corner crack

Welds which pass visual inspection will have guided bend samples removed and bent according to AWS D1.1 requirements. Any welder whose bend samples successfully pass will receive their welder qualification (weld cert) regardless of how they place in the competition.

Welds which do not meet the visual inspection requirements above will not proceed to the bend test portion of the competition.

Welds will be judged by American Welding Society Certified Welding Inspectors. The decisions of the judges shall be final and will not be contested.

Any tie will be settled by an "instant death" round of head to head competition Involving an undisclosed position and process to be revealed that that time.

Registration in this event is an acknowledgement of the terms above.