



2020 State Contest

WELDING OXY-ACETYLENE (OFW)

Description

Each region's advancing students will demonstrate their preparation for employment and skill levels in the welding industry. The guidelines and requirements in the state contest are agreed to by Business and Industry.

Knowledge Performance

The contest includes a written knowledge exam that assesses welding and associated topics including safety, math for welders and print reading.

Skill Performance

The skill performance assessment includes the completion of a metal project and a demonstration of the ability to weld carbon steel, aluminum or stainless steel project in various positions using a variety of filler metals. Contestants will be involved in the completion of a metal project that involves various manufacturing methods. The skill performance assessment may include steel project(s), aluminum project(s), stainless steel project(s) in various positions using a variety of filler metals.

Mandatory Project

2020 Blueprint TBD

Clothing Requirement

- Official SkillsUSA khaki work shirt (long-sleeved) and pants (both the pants and shirt must be 100-percent cotton)
- Black, brown or tan leather work shoes
- Note: Safety glasses must have side shields or goggles (prescription glasses may be used only if they are equipped with side shields. If not, they must be covered with goggles).

Note: Please check the SkillsUSA National website for the Technical Standards

<http://updates.skillsusa.org>

All SkillsUSA California contest projects are subject to change due to any unforeseen facility, staffing or site-related issues. Please use these materials as a reference to prepare students for the potential contest project. SkillsUSA California regional and state contest projects are developed by state technical committee members to align with the national technical standards.



Contest Guidelines

1. Contestants must correctly use the welding equipment during the contest. The contest chairman and contest coordinator may stop contestants at any section of the contest if they deem a contestant's manner to be hazardous to contestants or others. Such a stoppage may result in the disqualification of the participant.

2. While the contest is in progress, there shall be no communication between the contestants or between other teams or anyone else, except as directed by a judge, contest coordinator or contest chair. It is expected that team members will communicate with each other.

3. Time limits will be established on the contest procedure sheets for all segments of the test.

4. Evaluation of the completed project and welds will be judged visually using a rating system as established by the SkillsUSA Technical Committee.

5. Welding and cutting operation instructions will be specified in drawings and procedure sheets provided to the contestants.

6. Welding equipment used in the contest may be obtained from a variety of manufacturers and may include transformers, rectifiers and/or inverters.

7. Filler metals will be compatible with the metals being welded and will be detailed on the contest procedure sheet. Instructions to the contestants will define more specifically the filler metals that may be used.

8. Final judging of the welded projects will be evaluated according to the difficulty of the assigned task and by using the following visual inspection criteria: dimensional accuracy, including distortion; conformity to drawing requirements, including determination of whether all welds have been completed and whether the finished welds conform to the required size and contour; and visual examination of the welds for cracks, undercut, overlap, crater fill, spatter, arc strikes, porosity, convexity, and reinforcement.

Equipment and Materials Provided by each Contestant:

- All PPEs required by OSHA
- Welding Helmet
- Chipping Hammer
- Wire Brush

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- Pliers
- Soapstone/Marker
- Measuring Device

Material and Equipment Provided by SkillsUSA California:

All equipment and consumables needed to successfully complete the competition.

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