

## Welding



Location  Hobart Institute of Welding Technology 400 Trade Square East Troy, OH 45373  Contest Time Orientation (CLOSED contest)  The skill performance assessment may include steel project(s), in various positions using a variety of filler metals. Competitors will be involved in a series	Date	February 7, 2026	Orientation Time	8:00 a.m. (CLOSED to instructors)
	Location	Technology 400 Trade Square East	Contest Time	orientation
of stations testing various aspects of welding.  Competitors must correctly use the welding equipment during the competition. The contest coordinator or any judge may stop a competitor at any section of the competition if they deem a competitor's manner to be hazardous to either themselves or others. Such a stoppage shall be documented as a warning. If the competitor is warned a second time, he or she may be disqualified for that section of the competition.  As soon as the competitors enter the competition area, no communication shall occur between the competitors or between the competitors and anyone else, except as directed by the contest coordinator or judges. Any such communication may result in the competitor being disqualified from that section of the competition.  Time limits will be established during the competition orientation.  Evaluation of the completed project will be judged visually. Nondestructive and/or destructive tests may be used to complete the project evaluation.  Welding and cutting instructions will be provided to the competitors and specified on the Welding Procedure Specifications (WPS) and prints provided in the welding booths and near cutting stations.  Welding equipment used in the competition may be obtained from a variety of manufacturers and may include transformers, rectifiers and/or inverters.  Filler metals will be detailed on the Welding Procedure Specification (WPS) and/or prints.  Welds will be evaluated visually using a scoring system as established by the contest coordinator. Nondestructive and/or destructive tests may be used to complete the project evaluation.  Print assembly tolerance will be +/- 1/16" unless otherwise noted.  If no print assembly dimensions are given to orient any project part, the part is to be approximately located based on the print's isometric view.	Scope of Contest	<ul> <li>positions using a variety of filler of stations testing various aspect</li> <li>Competitors must correctly use competition. The contest cool any section of the competition hazardous to either themselved documented as a warning. If it is she may be disqualified for the she may be disqualified for the she may be disqualified for the shall occur between the competitors ensured in the competition.</li> <li>Time limits will be established and/or destructive tests may</li> <li>Welding and cutting instructions specified on the Welding Production in the welding booths and new welding equipment used in the of manufacturers and may incompleted in the completed shall be detailed on the welding booths.</li> <li>Welds will be evaluated visual contest coordinator. Nondest complete the project evaluation in the print assembly tolerance will</li> <li>If no print assembly dimensions.</li> </ul>	metals. Competitors was of welding. see the welding equipmendinator or any judge on if they deem a competer or others. Such a state competitor is warrant section of the competitors or between the contest coordinator the competitor being during the competition appetitors or between the competitor being during the competition be used to complete the competitions will be provided to cedure Specifications (ar cutting stations. The competition may be clude transformers, reson the Welding Procedully using a scoring systatructive and/or destruction.  be +/- 1/16" unless others are given to orient	nent during the may stop a competitor at petitor's manner to be oppage shall be ned a second time, he or petition.  The competitors and anyone or judges. Any such disqualified from that  The competitors and wyone or judges. Any such disqualified from that  The competitors and wyone or judges and second time.  The competitors and such disqualified from that  The competitors and wyone or judges. Any such disqualified from that  The competitors and wyone or judges. Any such disqualified from that  The competitors and wyone or judges. Any such disqualified from that  The competitors and wyone or judges. Any such disqualified from that  The competitors and wyone or judges. Any such disqualified from that  The competitors and wyone or judges. Any such disqualified from that  The competitors and wyone or judges. Any such disqualified from that  The competitors and wyone or judges. Any such disqualified from that
Testing No				
Eligibility1 contestant for every 50 paid members enrolled in programClothingClothing Classification Guide: CLASS D	-		•	ogram
Clothing Classification Guide: CLASS D  Provided by Professional Resume – typed hardcopy				
Contestant Emergency Medical Form (Contestants must have this to compete)	•		• •	to compete)
Leather welding jacket	Someone		Localito mast nave tillo	to compete <sub>j</sub>
Fireproof face mask				
Hearing and/or ear protection				

Welding helmet with appropriate filter plate/lens and protective cover plate/lens in a flip or slide front. Auto darkening shields are permissible Spare spatter and filter lenses/plates for arc welding helmet and oxyacetylene goggles

Pocket calculator

Lead pencil and/or ballpoint pen

Soap stone with holder

Scribe with magnet

Combination square set

10-foot (3.1 meters) steel tape measure

Fillet weld gauge

16-ounce (.45 kilogram) ball peen hammer

Center punch

10-inch (254 millimeters) vise grips

6-inch (152 millimeters) side cutting pliers or diagonal cutting pliers

6-inch (152 millimeters) needle nose pliers

Chipping hammer with or without wire brush

Stainless steel wire brush

## The following WILL NOT be tolerated and are grounds for disqualification from the competition:

- No smart watches, cellphones and/or other electronic devices in the contest area unless specifically stated in this document. These devices cannot be used as a calculator.
- o No contact with anyone outside of the contest area once the contest begins.
- No inappropriate communication between contestants such as verbally degrading another contestant or informing another contestant of the skills/test prior to or during the competition.
- No cheating on any portion of the contest.
- The use of AI is strictly prohibited and will result in an automatic disqualification of the contestant.

Contest	
<b>Standards</b>	

## Contest Skilled Performance Standards

**WF 3.0** – Read and interpret blueprints

**W 4.0** - Produce welds using a Shielded Metal Arc Welding (SMAW) process to AWS QC10 standards.

**W 5.0** - Produce welds using a Gas Metal Arc Welding (GMAW) process to AWS QC10 standards.

**W 6.0** - Produce welds using a Fluxed Cored Arc Welding (FCAW) process to AWS QC10 standards.

## Aligned ODEW Manufacturing Career Field Technical Content Standard Outcomes

**Outcome 6.1** Measurement and Interpretation

Outcome 4.3 Arc Welding Process

<b>W 7.0 -</b> Produce welds using a Gas Tungsten Arc Welding (GTAW)	Outcome 4.6 Cutting Processes
process to AWS QC10 standards.	Above Outcomes can be found in the
	following ODEW courses:
<b>W 8.0</b> - Produce cut materials using an Oxygen Fuel Cutting (OFC) process to AWS QC10 standards.	176000 Gas Metal Arc Welding 176001 Shielded Metal Arc Welding 176002 Flux Cored Arc Welding 176003 Gas Tungsten Arc Welding