



CONTEST SCOPE

Contest Chair

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Contest Chair E-Mail

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Reading Muhlenberg CTC

2615 Warren Road Reading PA 19606

Contest:

Welding

Purpose:

To evaluate each contestant's preparation for employment and to recognize outstanding students for excellence and professionalism in the field of welding.

Clothing:

Contest appropriate clothing. Standard welding & cutting PPE – Fire resistant clothing with no holes or frays, welding jacket at the minimum, heavy welding gloves, tig welding gloves, leather steel toe work boots (pants must go over boot), safety glasses with side shields (Z87 approved), ear plugs.

Students will not be penalized for clothing unless it is a safety violation.

Equipment and Material:

Equipment/Tools/Materials Provided by Host

School:

1. Equipment: Miller Dynasty 280/210, Miller XMT 350/304, Miller 20 Series Wire Feeder, Oxyfuel Victor cutting torch ST900FC
2. Consumables: ULTRACORE 71A75 .045, 7018, and various filler rods
3. Materials: 2pc. 2"x6"x1/8" Aluminum, 2pc. 2"x6"x1/8" Stainless Steel, 2pc. 2"x6"x1/4" Mild Steel, 2pc. 4"x6"x1/2" Mild Steel, 1pc. 6"x6"x3/8" Mild Steel. Various tungsten
4. #2 Pencil for written test

Equipment/Tools/Materials Provided by the Contestant:

1. Appropriate layout tools
2. Clear safety glasses and cutting shield/goggles
3. Vise grips
4. Welding gloves, SMAW and GTAW
5. Welding helmet with appropriate shade(s)
6. Welding jacket

Scope of Contest

Contestants will demonstrate their ability to perform jobs and skills in related industry standards set forth by a committee of industry representatives.

Knowledge Performance:

The contest will include a multiple-choice written knowledge exam.

Skill Performance:

This is not only a test based off of welding ability and skill, but also time management and background knowledge associated with the content area.

Contest Guidelines:

1. Contestants must correctly use the welding equipment during the contest. The contest chairman and/or any technical committee member may stop a contestant at any section of the contest if they deem a contestant's manner to be hazardous to either themselves or others. Such stoppage shall be documented as a warning if the contestant is warned a second time, he or she will be disqualified for that section of the contest.
2. As soon as the contestants enter the contest area – as defined by the surrounding tables – no communication shall occur between the contestants or between the contestants and anyone else, except as directed by the contest chair, technical committee members or judges. Any such communication will result in the contestant being disqualified from that section of the contest.
3. Final judging of the welded projects will be evaluated according to the difficulty of the assigned task and b 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.
4. Print assembly tolerance will be +/- 1/16" unless otherwise noted
5. 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.

Project:	Criteria:	5 points	3 points	1 point
Oxyfuel:				
SMAW V-Groove 2G:				
FCAW T-Joint 2F:				
Aluminum GTAW T-Joint 2F:				
Stainless Steel GTAW Lap Joint 1F				
Written Test (Tie Breaker) 25 Points				