WELDING
CAREER DEVELOPMENT EVENT
(Revised 2025)

Welding Career Development Event

Purpose: The Welding Career Development Event provides an opportunity for students to develop skills in metal cutting and arc welding. It is a follow-up of instruction given to students in the Agriscience/agribusiness program. This event is not designed for national competition. It is designed for Louisiana only.

Objectives:

1. To develop students' interests in the welding industry.

2. To develop students' skills in performing jobs using cutting and arc welding techniques.

3. To encourage the development of safety attitudes in performing welding jobs.

Contest Format:

Phase I: Each student will perform a selected job using metal cutting techniques.

Phase II: Each student will perform a selected job using arc welding.

Rules and Regulations:

1) All general rules will apply except as indicated in the specific rules for this contest.

2) A team will consist of two FFA members enrolled in an Agriscience/Agribusiness course.

3) Both students will compete in both the cutting and the arc welding phases of the event.

4) The score of the two students will be combined for the team score.

5) The top eight teams will advance from district to the next level of competition. Only the top four teams at each area event are eligible to compete in the state contest. (*Revised 2014*)

6) The welding procedures to be performed will be announced by the judges at the time of the event.

7) Each participant will complete one weld (with a maximum of 2 welds according to time constraints or the judge's discretion), with at least one of the participants performing a weld which shows penetration, for sub-district, district, and Area levels. At the State level, each contestant will complete two procedures, one of which must show penetration. *(Revised 2005)*

8) Teachers may judge at local and district levels. All judges at Area should be Certified Welding Inspectors; however teachers may be substituted when judges are not available. A minimum of three judges will be used at the State Event, all of which will be certified Welding

Inspectors.

9) Team members will be responsible for providing proper safety equipment, dress, and welding gear. (Chipping hammer, gloves, cutting goggles, welding shield, approved grinding/chipping eye and face protective device, tip cleaner, striker, ear plugs, shirt tails tucked in while grinding, approved welding cap, jackets zipped/buttoned, leather shoes[no tennis shoes], etc. *(Revised 2005)*

10) The criteria listed on the score card will be used in judging and scoring the event.

11) There will be 60 minutes of welding time. Cut off time will be 60 minutes if applicable, or the students will be penalized 1 point per minute over 60 minutes. The determination of the time/penalty method will be made before the start of the competition by the contest superintendent. *(Revised 2005, 2019)*

12) Grinders or files may be used in base metal preparation and grinding out the root pass and feathering the top of their tacks only. Safe grinding areas should be provided. *(Revised 2014)*

13) Jigs may be used to tack the metal and to set gaps.

14) All vertical welds must be done up hill.

15) All caps will be decided by the judge using American Welding Society standards. Use www.aws.org as a reference.

16) Rods to be used will be 1/8" E6010-5P+++ and 3/32" E7018. *(Revised 2014)*

17) Participants must clean work area after turning in plates. Failure to do so will result in disqualification. *(Revised 2005)*

18) The event coordinator will determine the type of fuel gas to be used. Participants should be notified as to type at least one week before contest if possible.

19) No Pancake Welding Helmets will be allowed in the Louisiana FFA Welding Contests. (2023)

20) Files and grinders cannot be used to dress a coupon after the student has cut their metal. Chipping hammers and hand wire brushes are the only items that can be used to clean the welder's cut. (2023)

21. At the Area Welding Contest, 2 teachers from the Area will be allowed into the judging area to ensure that the contest is being judged correctly. The teachers should check each scorecard to ensure the calculations are correctly done. The calculations on each sheet should be calculated twice to make sure that each card is scored correctly. These individuals should be very familiar with how the scoring should be done. In no way should these teachers try to influence the judging of the welds. (Revised 2024)

At the State Welding Contest, 1 teacher from each Area should be allowed into the judging area to ensure that the contest is being judged correctly. The teachers should check each scorecard to ensure the calculations are correctly done. The calculations on each sheet should be calculated twice to make sure each card is scored correctly. These individuals should be very familiar with how the scoring should be done. In no way should these teachers try to influence the judging of the welds. (Revised 2024)

22. Metal Description:

A) 3/8” x 6" x 8" plate with a 33 degree bevel on both 6" sides.
B) Students will be given two 6" x 8" pieces of plate
C) Students will measure and cut the plates into two 4" x 6" pieces
D) Students will perform any of the following welding procedures as indicated by the contest judges:

23. Joints and Procedures:

T-Joint

(a) Students will make a 6" T joint weld from the flat, horizontal, or vertical position.
(b) Judges will determine position, rod type, and number of passes for the root and cap.
(c) Welds are to be performed on the non beveled edges.

Butt Joint

(d) Students will complete a 6" butt joint weld from the flat, horizontal, or vertical position.
(e) Judges will determine position, rod type, and number for the root, filler, and cap.
(f) Welds are to be performed on the beveled edges.
(g) A jig may be used for spacing.

2) Tie breakers:

A. Comparison of welds *(Revised 2005)*
B. Cutting Score

3) Vertical Welds
A) All vertical welds should be done vertical uphill with a 5° (degree) or less on the metal. Anything more than a 5° angle is a reason for disqualification. *(Revised 2008)*

Judging Procedure:
Cutting will be judged before any welding has taken place and each job will be given a score of 1 - 10. So, if two jobs are assigned then each welder would have 2 cutting scores. If a student fails to have their cut judged they will receive a 0.

Each weld job will be judged individually. Lay out each weld per job based on what is deemed the best to the worst. So, Job 1 will be grouped together and Job 2 will be grouped together.

The best plate from each job will be given a score of 100 and each subsequent plate will decrease by 2 points. (Ex. 2nd place plate will be given a 98, 3rd place a 96, etc.)

Both rank scores from each contestant will be added together along with their cut scores for an overall score. The overall scores from each welder will be combined for a team score with the total of each score not exceeding 110pts for each job or 440 pts for the team score.

SCORE SHEET CRITERIA
FOR WELDING CAREER DEVELOPMENT EVENT

CONTESTANT NO._____

Contestant Name: _____ School: _____

Possible Score/ Per Job	Criteria			Score	
				Job 1	Job 2
1-10 Pts Per Job	A. **Cutting Score** - flame settings, quality of cut, slag, accuracy, uniformity				
100 Pts Per Job	B. **Welding Score -** obtained from comparison of the welds. (Ex. 1st Place Plate = 100pts, 2nd = 98pts, 3rd = 96pts, 4th = 94pts)				
	C.				
	D.				
	E.				
	F.				
	G. **Safety –** Demonstration of safe attitude while in competition				
	Violation 1: 25 point deduction	**Violation 2: Disqualification**			
Total 110/ Job	**Reasons for Disqualification:**		**TOTAL SCORE**		
				110 pts.	**110 pts.**
			GRAND TOTAL		
				220 pts.	

Note: All judge's decisions are final. Revised *(2005)*

Reasons for Disqualification: Back welding, out of position welding, failure to clean up work area, excessive safety violations*. *Revised (2005, 2019)*

***Note**: All excessive safety violations will be documented and signed by the judge. 1st warning = 25 point deduction. 2nd warning = Disqualification *(Revised 2005)*

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