

Welding

Event Rules

All members participating in this Career Development Event must meet the eligibility requirements and adhere to the rules of the Kentucky FFA Association as outlined in the Rules Governing FFA Activities document.

Number of members on a team: Four (All four scores will count toward the team score.)

Official Dress Appropriate: No

Regional Event: Held by region or at University Field Day

State Event: Kentucky State Fair

One team from each region will be eligible for the state event. The region must conduct a regional event to be eligible to send a regional representative to the state event. The region may hold the regional event at one of the universities provided an official FFA event is conducted and the regional teachers' organization is responsible for the regional event.

Participants cannot participate in the Agricultural Mechanics CDE or Small Power Equipment CDE in the same year they participate in the Welding CDE.

EQUIPMENT

Equipment provided by student:

- Safety Glasses
- Proper Welding Attire (including helmet, gloves, jacket, clothing free of frays)
- Hand wire brush
- Chipping hammer
- Welding Clamps/Pliers

Equipment provided at the event site:

- Three (3) pieces of 3/16"x2"x6 mild carbon steel. One of the pieces will be used to test the machine with.
- (1) 3/16"x2"x7" mild carbon steel that will be used as a backing strip.
- Five (5) 3/32" Lincoln Electric 7018 Excalibur rods for each participant
- DC Welder
- Grinder

Welding

Technique (30 Points)

Participant's technique will be scored on:

- Dress, safety habits, and welding position (10 points)
- Striking arc, arc length, angle of electrode, and speed of electrode travel (10 points)
- Work Setup (10 points)

All event participants must wear safety glasses (for eye protection) underneath their welding helmets during all regional and state welding events.

Contestants will have 20 minutes to tack, weld and clean their work.

- Root pass all the way up the full length of the 6 inch plate vertical up.
- Two bead caps. One will be 4" in length and the other will be 3" in length all vertical up.

An image of the layout of the three completed welds is posted on www.kyffa.org.

FINISHED PRODUCT (70 POINTS)

The Finished Product point breakdown for each weld is:

- Root (35 points)
- Two Bead Caps (35 points)

Welds should be free from the following weld deformities: •

- Cracks
- Undercutting
- Splatter
- Porosity
- Inclusion
- Incomplete Joint Penetration
- Incomplete Fusion
- Arc Strikes
- Unacceptable Weld Profiles

Welding

Scoring

Three qualified persons, preferably provided by Lincoln Electric Company, will judge the state event.

Possible score for each participant is 100 points, with a possible team score of 400 points.

Teams will be ranked in numerical order on the basis of the final team score.

Individuals will be ranked in numerical order on the basis of the final individual score.

The welding scorecard is posted on www.kyffa.org.

TIEBREAKER

The high scoring individual on a team will be used to break team ties. If the high individual on tied teams should be tied, the second high scorer will be used to break the ties.

Individual ties will be broken by finished product score.