SkillsUSA Events for

Metal Fabrication

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*FOR FULL CONTEST OUTLINES, PLEASE REFER TO THE STATE OR NATIONAL STANDARDS.

*NATIONAL STANDARDS CAN ONLY BE ACCESSED BY INSTRUCTORS WHO HAVE A CURRENT PROFESSIONAL MEMBERSHIP.

Contest Name: Sheet Metal

Shop Alignment: Metal Fabrication

Eligibility: All Students

Contest Type: Individual

In-House Competition: YES

District Event: YES—written test

State Event: YES—skill based

National Event: YES—written, interview, and skill components

FOR FULL CONTEST OUTLINES, PLEASE SEE YOUR SHOP INSTRUCTOR OR SKILLS ADVISOR.

Official Contest Description:

"Contestants are tested on their ability to perform such jobs as connecting sheet metal pieces with drive cleats, spot welding and riveting. Skills tested may include, but are not limited to, straight duct, transition fitting and 45-degree entry tap fitting. Professional sheet metal workers judge contestants on the use of hand tools, correctness of layout and shop safety procedures. Contestants will be judged on accuracy, completeness, and craftsmanship" (Contest Descriptions).

Source: "Contest Descriptions." SkillsUSA, www.skillsusa.org/competitions/skillsusa-championships/contest-descriptions/.

Contest Name: Welding

Shop Alignment: Metal Fabrication

Eligibility: All Students

Contest Type: Individual

In-House Competition: YES

District Event: YES—written test

State Event: YES—skill based

National Event: YES—written, interview, and skill components

FOR FULL CONTEST OUTLINES, PLEASE SEE YOUR SHOP INSTRUCTOR OR SKILLS ADVISOR.

Official Contest Description:

"Competitors receive contest drawings and a set of welding procedure specifications. All drawings, welding symbols, and welding terms conform to the latest edition of the American Welding Society standards. Through a series of stations, contestants are tested on various aspects of welding: measuring weld replicas, using weld measuring gauges; laying out a plate and using oxy-acetylene equipment to cut several holes that are checked for accuracy and quality; Gas Metal Arc Welding (GMAW) on steel making welds in various positions using short circuiting transfers; Flux Cored Arc Welding (FCAW) using a shielding gas, making welds in various positions and, using a combination machine capable of providing the correct welding current for shielded metal arc (SMAW) and gas tungsten arc welding (GTAW). Competitors complete the steel project and weld an aluminum project in various positions using a variety of filler metals" (Contest Descriptions).

Source: "Contest Descriptions." SkillsUSA, www.skillsusa.org/competitions/skillsusa-championships/contest-descriptions/.

Contest Name: Welding Art/ Sculpture

Shop Alignment: Metal Fabrication

Eligibility: All Students

Contest Type: Individual

In-House Competition: YES

District Event: YES—written test

State Event: YES—presentation and display

National Event: YES—written, interview, and skill components

FOR FULL CONTEST OUTLINES, PLEASE SEE YOUR SHOP INSTRUCTOR OR SKILLS ADVISOR.

Official Contest Description:

"Contestants demonstrate their ability to design and produce a sculpture of that design, as well as give a presentation regarding all aspects of his/her creation of the design. Previously welded sculptures created for regional and state competitions will be displayed for the national competition. A notebook is required displaying evidence of original work. Each participant is interviewed regarding aspects of design and creation of the piece. There will be no live welding on site" (Contest Descriptions).

Source: "Contest Descriptions." SkillsUSA, www.skillsusa.org/competitions/skillsusa-championships/contest-descriptions/.