

WELDING

CLUSTER: Construction

PARTICIPATION TYPE: Individual

LEVEL: National Contest

CONTEST TYPE: Skilled and Technical Contest

CONTESTANT LIMIT: 1 per Advisor

CONTESTANT TYPE: High School and Post-Secondary

ELIGIBILITY Open to active SkillsUSA members enrolled in programs with welding as the occupational objective.

WELDING

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.



The SkillsUSA South Carolina Championships follow the current edition of the SkillsUSA National Technical Standards. These are available to professional members (advisors and teachers) following membership registration. Please check the State Updates that will be posted as received by the Technical Chairs related to changes to the competition related to state level competition.