

Welding Fabrication



PURPOSE

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

<p>Contest Location</p>	<ul style="list-style-type: none"> ▪ C-Hall <p>** Contest in A, B, C or D Hall will not be able to leave for lunch, please select "Contestant Plus" when registering or having contestant prepared to purchase lunch with credit card at vendors in the Exhibit Hall.</p>
<p>Special Notes</p>	<ul style="list-style-type: none"> ▪ Exhibit Halls do not open to observers until 12:00 p.m. ▪ No smart watches and/or phones are permitted during the contest and/or in the contest. ▪ No contact with anyone outside of the contest area once the contest begins. ▪ No inappropriate communication between contestants such as verbally degrading another contestant. ▪ No cheating on any portion of the contest such as informing another contestant of the skills/test prior to competing.
<p>Testing</p>	<ul style="list-style-type: none"> ▪ Welding knowledge test given; hands-on evaluation of skill and blueprint ability.
<p>Eligibility</p>	<ul style="list-style-type: none"> ▪ Please refer to the National Technical Standards for this contest. <ul style="list-style-type: none"> ○ Schools may send one competitor or team for every 50 paid SkillsUSA members based on local competition enrolled in a program where the scope of the contest described in the SkillsUSA Technical Content Standards reflects a major component of the program. ○ Leadership and Occupationally Related Contest Specifications <ul style="list-style-type: none"> - The following competitions are open to all members of SkillsUSA Schools may send one competitor or team for every 500 SkillsUSA members based on local competition.
<p>Clothing</p>	<p>Suitable work clothing (to match service conditions for welding process employed, must be fire resistant)</p> <ul style="list-style-type: none"> ▪ Welding grade jacket, cape, sleeves, or apron (optional) ▪ Leather gloves

	<ul style="list-style-type: none"> ▪ High-top leather safety shoes or boots (steel toes recommended) ▪ Welder’s hat or skullcap ▪ Spectacles with side shields (clear lens) ▪ Burning goggles or face shield (PAC) <ul style="list-style-type: none"> ○ #5 filter plate/lens ○ Clear cover plate/lens ▪ Noise protection (ear plugs) ▪ Welding helmet <ul style="list-style-type: none"> ○ Spare batteries for helmet are recommended if you have auto lens ▪ Welding lenses (to match helmet design) <ul style="list-style-type: none"> ○ Shaded filter plate/lens (#10 or #11) ▪ Clear cover plate lens ▪ No smart watches, cell phones or ear buds.
<p style="text-align: center;">Provided by Contestant (Tool List)</p>	<p>Documentation:</p> <ul style="list-style-type: none"> ▪ One copy of a 1-page typed personal resume. Each team member must show to judges before starting fabrication. <p>Personal Tools:</p> <ul style="list-style-type: none"> ▪ Carbon steel wire brush ▪ Grinder – attachments (no post weld grinding) ▪ Ball peen hammer, minimum 16 ounce ▪ Soapstone ▪ Two #2 pencils (sharpened) ▪ Center punch ▪ Metal Scribe ▪ Steel dividers (radius maker min. 6”) or compass, to mark steel for cutting ▪ Handheld calculator ▪ Paint Marker <p>Measuring Devices:</p> <ul style="list-style-type: none"> ▪ Steel tape measure (minimum 10’) ▪ Combination square set ▪ English steel bench rule (min. 12”) ▪ Protractor ▪ Chipping Hammer ▪ Magnetic fixturing tool (optional) ▪ 10” mill file (half round-bastard cut) (optional) ▪ Cold chisel (size optional)

	<ul style="list-style-type: none"> ▪ Fillet weld gage ▪ Pliers, wrenches, and clamps ▪ Vice grips or vice grip type clamp ▪ Side or diagonal cutting pliers ▪ Groove or slip joint pliers ▪ Needle nosed pliers (optional) ▪ 12" adjustable wrench (optional) <p>Supplied Welding Equipment</p> <ul style="list-style-type: none"> ▪ Miller Multimatic 220 Welder ▪ Plasma Cutter ▪ 10 Spare .030 Contact Tips ▪ 2 Spare Nozzles ▪ 1 Plasma Spare Parts Kit <p>Supplied Welding Consumables</p> <ul style="list-style-type: none"> ▪ .030 10# spool HB-28 MIG wire consumables supplied by Hobart Brothers
<p style="text-align: center;">Competition Standards (Not all will be tested but contestant should be knowledge of all)</p>	<ul style="list-style-type: none"> ▪ WF 1.0 — Identify safety standards on a test in accordance to ANSI Z49. ▪ WF 2.0 — Demonstrate an understanding of practical measurement. ▪ WF 3.0 — Read and interpret blueprints. ▪ WF 4.0 — Produce welds using a Shielded Metal Arc Welding (SMAW) process to AWS QC10 standards. ▪ WF 5.0 — Produce welds using a Gas Metal Arc Welding (GMAW) process to AWS QC10 standards. ▪ WF 9.0 — Produce cut materials using a Plasma Arc Cutting (PAC) process to AWS QC10 standards.
<p style="text-align: center;">Resume</p>	<ul style="list-style-type: none"> ▪ One hard copy of a 1-page typed personal resume. Each team member must show to judges before starting fabrication. ▪ In conjunction with National Standards, violations may result in student loss of contest. ▪ All SkillsUSA Ohio State Championship Contest will require a short interview component. Students should be prepared with basic job interview skills.