

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>	<p>C-Hall</p>
<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. • Team of 3 (three). • REGIONAL QUALIFIER – ONLY THE TOP 3 (THREE) FROM REGIONAL COMPETITION PROCEED TO STATE CHAMPIONSHIPS
<p>Clothing</p>	<p><u>Work Attire:</u></p> <p>Field specific work clothing required for the work environment or that matches the service conditions for the contest. This may include jeans if they are clean and professional looking and are accepted in the respective field (no holes or overly soiled pants). Work shoes or boots with a hard sole or anti-slip properties (steel toes may be required – refer to Provided by Contestant section below). Clothing should be as such that it will not get caught in moving equipment or power tools. School uniforms may be worn if they meet the above requirements with all identifiers covered.</p>
<p>Testing</p>	<ul style="list-style-type: none"> ▪ Welding knowledge test given; hands-on evaluation of skill and blueprint ability. ▪ Students should also be prepared to take a SkillsUSA Knowledge test. (Required for all contestants prior to contest day)
<p>Provided by Contestant (Tool List)</p>	<p><u>Documentation</u></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>Suitable work clothing (to match service conditions for welding process employed, must be fire resistant)</p>

- Welding grade jacket, cape, sleeves, or apron
- Leather gloves
- 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)
- #5 filter plate/lens
- Clear cover plate/lens
- Noise protection (ear plugs)
- Welding helmet
- Spare batteries for helmet are recommended if you have auto lens
- Welding lenses (to match helmet design)
- Shaded filter plate/lens (#10 or #11)
- Clear cover plate lens

Personal Tools

- Battery Powered Grinder (no post weld grinding)
- Cordless Grinder
- Carbon steel wire brush
- 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

Measuring Devices

- 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><u>Supplied Welding Equipment</u></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><u>Supplied Welding Consumables</u></p> <ul style="list-style-type: none"> ▪ .030 10# spool HB-28 MIG wire consumables supplied by Hobart Brothers
<p style="text-align: center;">Special Notes</p>	<ul style="list-style-type: none"> ▪ Exhibit Halls do not open to observers until 12:00 p.m. ▪ No smart watches, earbuds 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 style="text-align: center;">National Technical Standards</p>	<ul style="list-style-type: none"> ▪ Please refer to the 2022-2023 National Technical Standards for all contests. Any and all standards included may be tested in any competition. ▪ In conjunction with National Standards, violations may result in student loss of contest.
<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. ▪ All SkillsUSA Ohio State Championship Contest will require a short interview component. Students should be prepared with basic job interview skills.

