



WELDING COMPETITION
2022 State Fair
Updated 9/19/2022

DATE: Tuesday, September 27, 2022

TIME: 10:00 a.m. Registration
10:30 a.m. Contest
3:00 p.m. Awards

PLACE: State Fairgrounds at The Meadows in Doswell, Va., Caroline County

CONTEST CHAIRMEN: Allen Weaver, ARC3 Gases

SKILLSUSA COORDINATORS: Jerry & Courtney Baker

SCOPE OF THE COMPETITION: The time allotted is approx. 2 hours All contestants from the same school will be competing together at the same time. Judges lunch break at approximately 12:00 p.m.

TOOLS AND MATERIALS REQUIRED BY CONTESTANTS:
Refer to SkillsUSA Technical Standards

TOOL DROP OFF: Tools boxes maybe dropped off near the contest site. Walk to will call to pick up and pay for preordered fair tickets.

DEBRIEFING: To take place directly after the conclusion of the contest. Judges at each event station will provide contest information to teams dealing with items including troubleshooting problems, technical tips, advise, concerns and positive feed back.

AWARDS: Awards will be presented at the Contest Area.

- *Participants must have a Student Competition Ticket (\$8.00) to enter the Fairgrounds unless they are already at the Fair for another competition.*
- *Teachers are responsible for ordering tickets online by September 27, 2022 directly from the State Fair Ticket Office using a State Fair Student Competition Ticket Order Form, which can be found on-line at www.skillsusa.org under 'State Fair'*
- *State Fair tickets must be ordered online so everyone can enter near the contest site. (Gate 2) You will be allowed to park in this area with advance tickets. No picking up tickets in site.*

Safety Notice: Each contestant is responsible for bringing the proper PPE to wear while participation in the contest. Also, each contestant must turn in a signed SkillsUSA Safety Form to the competition chairman on the day of the competition.

SkillsUSA Virginia
Safety Form for Tools and Materials
State Fair SkillsUSA Virginia/HVACR Competition



The SkillsUSA Virginia HVACR Competition will involve the use of a power tools, equipment and materials in completing the task within the competition. It is absolutely necessary that complete operating instructions and safety for the use of power tools, equipment and materials have been given to the contestant in his/her training program in the local school division as stated in the National SkillsUSA National Standards before he competes. This includes the proper safety instruction in the use of the tools listed in the scope of the contest and the use of protective equipment while using the tools and materials. Safety glasses are required.

By the affixing of my signature below, I certify that my student, who is entering the HVACR Competition at the State Fair, has had proper operating and safety instruction in the use of the power tools, equipment and materials.

(Signature of Instructor/Advisor)

(SkillsUSA Virginia Chapter)

By the affixing of my signature below, I certify that I have used the power tools, equipment and materials to be used in the State Fair HVACR Competition and that I understand the correct operating procedures and safety precautions for the use of this power tool, equipment and materials.

(Signature of Student)

(Date)

THIS FORM MUST BE SIGNED AND TURNED IN TO THE COMPETITION CHAIRMAN ON THE DAY OF THE COMPETITION. FAILURE TO TURN IN THIS FORM WILL RESULT IN THE STUDENT NOT BEING ALLOWED TO COMPETE.

SkillsUSA State Fair Contest 2022

Posted welding project is to be completed using materials from the school. These welds are to be performed at your labs in a single session and make note that these are not all flat welds. Bring your completed project on the day of the fair. Do not mark with school or student's names but use a number like a student ID or last four numbers of their SSN. At the fair we will then assign a contestant ID to mark their project with. There will be additional welds and cutting assignments to complete for the completion of the contest. Instructors and students should read the entire tool sheet. Hope for sunny weather and we will see you at the fair.

SkillsUSA Tool Sheet

PLEASE READ ENTIRE PAGE FOR ALL REQUIRED ITEMS

All Personal Protective Equipment must be brought for each contestant and cannot be a shared item. Tool kits can be shared but this is not recommended

Hearing and/or ear protection (ear plugs are permitted)

Clear safety glasses.

Welding gloves

Welding helmet with appropriate filter plate/lens and protective cover plate/lens in a flip or slide front. Auto darkening shields are permissible.

Oxy acetylene shade 5 glasses, goggles or face shield.

Welder's hat or beanie

Flame resistant jacket, leather jacket or a cape sleeve and bib combination.

All welders clothing such as jeans, long sleeve cotton or FR shirts must be in good work wear condition with no large holes or frayed edges.

Leather boots (steel toes are recommended)

Spare spatter and filter lenses/plates for arc welding helmet and oxyacetylene goggles

Contestants will bring a set of hand tools in a container or tool box including but not limited to soapstone, pencil, ink pen, tape measure, chipping hammer, hand wire brush, torch striker with flint, mig pliers, side cutters, channel lock pliers, and vise grips. No protractors, angle dividers or compasses will be permitted.

**Electric angle grinders with discs, tip cleaners, torches and tips will be provided by the host school

Other requirements:

Face shields must be worn while grinding

Helmets or oxyacetylene goggles, welding jackets and gloves must be worn while cutting

Welding jackets, welding helmet and gloves must be worn while welding

Safety glasses and hearing protection must be worn at all times in competition area.

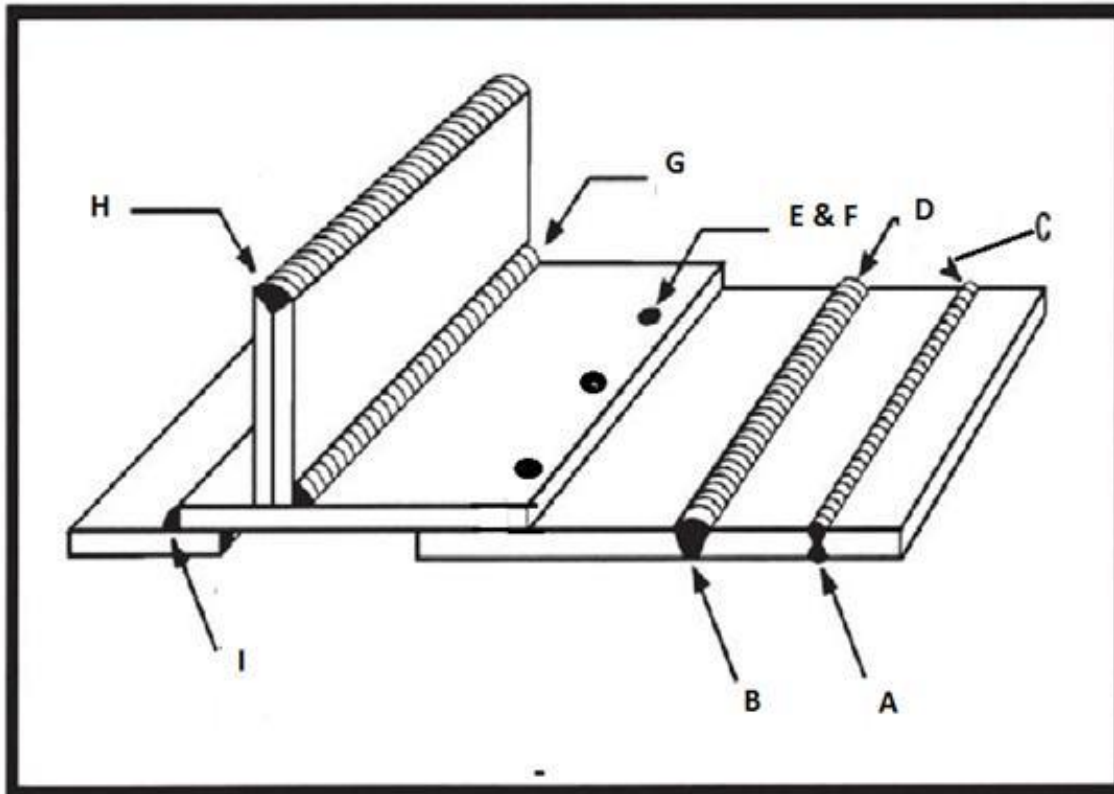
Grinding sparks on the welding equipment and/or other people will result in a deduction in points



Environmental equipment must be used at all times when welding.

Points will be deducted for improper use of equipment, or not using safety gear. Points will be deducted for welding or cutting into stands or tables. Two safety infractions or placing hot coupons on judges table will result in immediate disqualification.

All competitors must create a one-page résumé and submit a hard copy to the technical committee chair at check in.

SkillsUSA State Fair Contest



- A) Oxy-Fuel cut in half then prepare bevel 
- B) Oxy-Fuel double bevel 
- C) 7018 Weld 1G 3/32 Weld Crown 1/8 Gap
- D) 7018 Weld 3G 3/32 Weld Crown 1/8 Gap
- E) Drill 3 holes 3/8" diameter evenly spaced 1.5" OC
- F) Plug Weld 1G Flush 70S6
- G) 70S6 Weld 2F 1/4 Fillet
- H) 70S6 Weld 1G Position
- I) 7018 Weld 3F 1/4 Fillet

Material List:

6pc 3x6x1/4 Flat Bar

2pc 1x7x1/4 Optional Backing Bar

All welds should be cleaned of slag and left unpainted.

Grinding and weld repairs are permitted
Backing bars for groove welds are permitted but not required

Material will need to be repositioned to accomplish all welds

3G and 3F welds are to be welded vertical up.

Finish or cap weld surface cannot be ground off.