



Welding Competition

2021 State Fair

Updated 7/30/2021

DATE: Tuesday, September 28, 2021

TIME: 10:30 a.m. Registration
11:00 a.m. Contest
1:30 p.m. Awards

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

CONTEST CHAIRMAN: Alan Weaver

SCOPE OF THE COMPETITION:

Each participant shall have welding tools as outlined in the SkillsUSA Virginia *Technical Standards*.

TOOLS and MATERIALS REQUIRED BY CONTESTANTS:

- One-page résumé
- OSHA-approved eye and ear protection
- Leather work shoes
- Welding helmet with appropriate filter plate/lens and protective cover plate/lens in a flip or slide front. Automatically darkening shields are permissible.
- Welding helmet with appropriate filter plate/lens and protective cover plate/lens in a flip or slide front for OFC, PAC. Automatically darkening shields are permissible.
- Spare spatter and filter lenses/plates for arc welding helmet and oxyacetylene goggles
- Pocket calculator
- No. 2 pencils
- Pens
- Soapstone with holder
- Scribe with magnet
- Combination square set
- 10' (3.1 meters) steel tape measure
- Fillet weld gauge
- 16-ounce (.45 kilogram) ball peen hammer
- Center punch
- 10" (254 millimeters) vise grips
- 6" (152 millimeters) side-cutting pliers or diagonal-cutting pliers
- 6" (152 millimeters) needle-nose pliers
- Chipping hammer with or without wire brush

- Carbon steel brush

JUDGING CRITERIA: see attachments

PROJECT: See Page 4

SAFETY STATEMENT:

All entries must present at registration, the attached Safety Statement signed by students and advisors. Safety glasses required.

NUMBER OF CONTESTANTS:

Six students each from the first SkillsUSA Virginia chapters (30 maximum number of participants) to return the official registration form will be allowed to participate.

AWARDS: Awards will be presented at the contest area.

ENTRY FEE: \$20.00 per student entering the competition. Please register on-line at www.skillsusava.org, go to Event, State Fair and then to Competitions.

DEADLINE: Schools must register the number of teams by September 20, 2021. Substitutions may be made the day of the competition.

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

Safety Form for Tools and Materials

State Fair SkillsUSA Virginia Welding Competition

The SkillsUSA Virginia Welding Competition will involve the use of power tools, equipment and materials in completing the task within the contest. 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 their training program in the local school division as stated in the National SkillsUSA Standards before he competes. This includes the proper safety instruction in the use of the tools listed in the scope of the competition 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 Welding Competition at the State Fair, has had proper operating and safety instruction in the use of the power tools, equipment and materials.

(Instructor/Advisor Signature)

(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 Welding Competition and that I understand the correct operating procedures and safety precautions for the use of this power tool, equipment and materials.

(Student Signature)

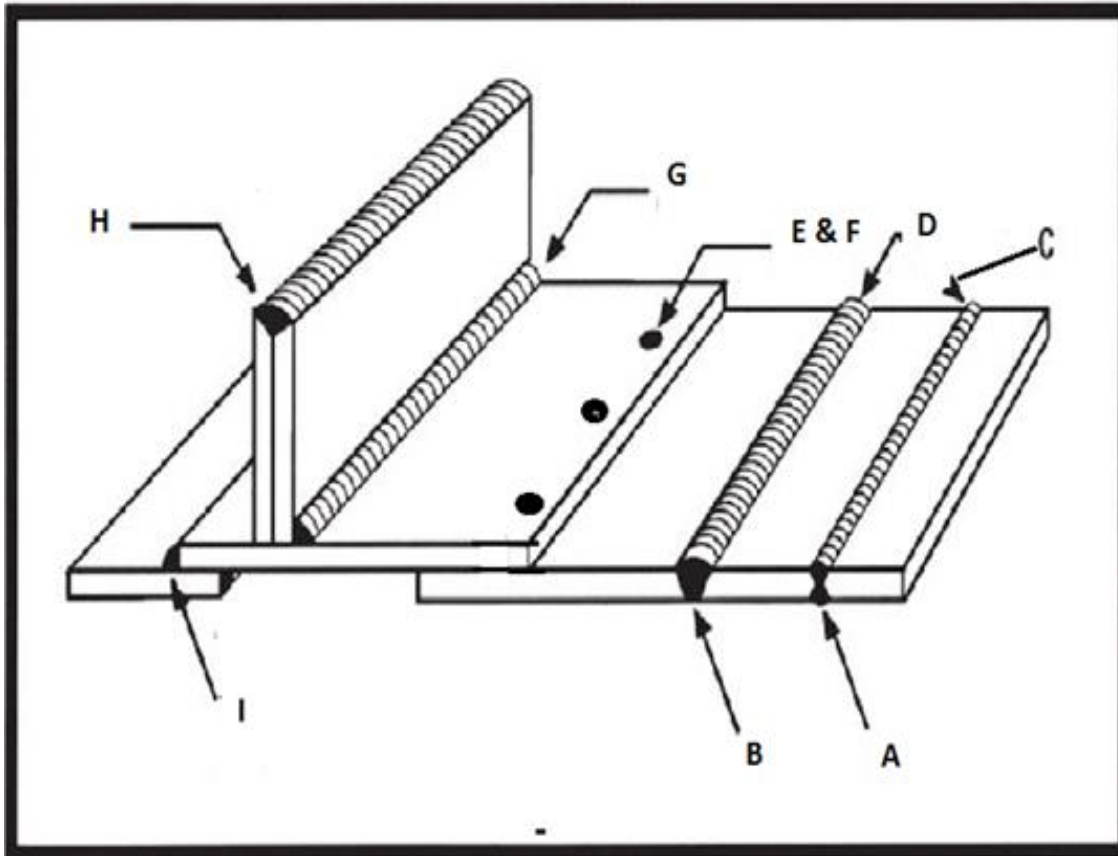
(Date)



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 2021 Welding Contest Instructions

All welds are to be performed at the participants school under the supervision of their instructor. Pay attention to the instructions for weld position and electrode/process to be used. Weld repairs are allowed but the final weld surface is what is judged so do not sand, grind or paint the cap portion of the weld. Additional welds will be performed at the State Fair Grounds so please arrive on time, with proper safety gear and be ready to work. Please see page 5 for project drawing.

See Page 5



- 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.