

# Welding Fabrication

SkillsUSA

State Conference 2025-2026

1. Equipment may be obtained from outside resources, as long as the project work is completed by the high school SkillsUSA competitors that are entered in the Welding Fabrication Competition. **NO CNC EQUIPMENT of any kind may be used to cut/produce the “base project”. (NO water cutting, plasma, or any computer controlled equipment may be used) Any use of CNC equipment, for extra cuts/designs will not be graded as part of the project. However, any use of CNC equipment used for the base project will result in point deductions.**
2. All parts, which need to be welded, must be welded prior to State Conference Open Ceremonies. **This project is NOT completed at the State Conference. Contestants must build the project at the High School they are enrolled in.**
3. All other parts not welded into place may be assembled at the designated time during the SkillsUSA State Conference. Each team is responsible for hardware and tools needed to fasten parts during this time.
4. Parts which are the students own design must be drawn with dimensions and specifications and emailed to the judges **no later than 1 week** after the receiving drawings. Drawings may be neatly drawn by hand if no access to design software, however, an electronic copy scanned pdf is still required.

Please submit drawings in PDF form to the judges listed below ONLY.

Please email to [mwfabricationandrepairllc@gmail.com](mailto:mwfabricationandrepairllc@gmail.com) or [nmcglynn72@yahoo.com](mailto:nmcglynn72@yahoo.com)

5. All fabricated parts must include a detailed drawing with dimensions. These drawings along with the original blueprints must be presented to the Judge(s) upon request, and added to the project portfolio.
6. Each team must present a portfolio showing **work in progress** as the project is designed and fabricated, until completed. (IN THE ORDER OF COMPLETION and time stamped) This must include pictures of proof the “base project” was cut/made without the use of CNC equipment. **Failure to present this proof will result in point deductions from the project.** Pictures must show identity of person working and details of what is being completed and physically cutting of material. (A picture of a torch above a

piece of metal does not show proof of cutting, nor who is holding it)  
Pictures must be a minimum of 4" x 6".

7. Please turn in portfolio with project, when project is dropped off. All contestants must include a resume in the portfolio. Team number must be on the **front cover** of the portfolio. (See below)
8. **Please read carefully...new this year.**  
No material removal from any welds is allowed, welds **MUST** remain as welded. **(No grinding, flap wheeling/sanding, wire brushed/wheeled or finishing of any kind to any welds)**. Welds may be **hand** wired brushed to remove slag only. No sandblasting. No projects may be painted.
9. All contestants must be at the contest briefing to take written exam, or prearrange a time to take the written test. **Written test will be taken electronically.** Each contestant must have access to a **charged** laptop, Chromebook or cell phone with the capability of accessing a google doc. There will **not** be an area for charging items at the time of testing... please come prepared. Test will be limited to 30 minutes. Students will need a QR Reader to scan the access to the written exam. Students will be required to complete an interview. Official dress or competition uniform is required for interview.
10. Please email [ccarmody@rvschools.org](mailto:ccarmody@rvschools.org) to make arrangements prior to contest briefing. Failure to do so results in a zero for written tests.
11. Tolerance allowed will be + or – 1/8", unless the project is completed at half scale. Half scale projects will be subjected to tolerances of + or – 1/16".
12. **Please read carefully....New this year**  
Students have a maximum of **4 hours to complete the entire project build, this includes extra parts that the team may design.**  
**There is no going over time on the project, when time ends, students must stop working. The extra student designed parts, are timed, and there must be documentation included in portfolio showing: time and student/s working on the extra parts.**  
Teams must complete the Proctor sign-off sheet. These forms must be a part of the final portfolio.
11. Proctor sign-off sheets must be signed accordingly and all directions followed. The sign-off sheets must be included in the team's portfolio. Proctors may be a business/industry partner, another faculty member, administration, advisor, etc. No matter who the proctor may be, they may not help the students in any way. After time has started for the competition, the only intervention from anyone, would be for safety

reasons, or time expiration. (Pictures must be taken) Proctor must sign off that all material is in raw form and not already cut to size before the team starts. Students may not recut any parts. Only the amount of material in the Bill of Materials is allowed.

**STUDENTS HAVE A TOTAL OF 4 HOURS TO COMPLETE THE ENTIRE PROJECT!! Paperwork will not be included in any time constraints.**

Each portfolio must contain the following in this order:

1. Title page which must include School Name and Team number (Team number on outside cover of binder)
2. Table of contents
3. Team members' resumes.
4. Proctor Sign-Off sheet documentation sheet signed by Advisor and/or proctor. Additional copies may be needed if students work in shorter time segments. Each new time frame must have a new Proctor Sign-Off sheet, if the students cannot work a total of 3 hours to build the project.
5. Pictures of proof of all cutting processes, welding processes, etc. All photos of work in progress, in order, from start to finish. You are being judged on welds and fabrication, therefore we need proof of who is doing these processes. (All photos must include date and must be time stamped, showing the student completing the work) (Proof of cutting must show the cutting in progress, not a torch held above a piece of material, etc.)
6. Brief description of how processes were completed, including things that went well, things that went wrong or may have been a challenge. (Not to exceed one page)
7. Blueprints for team's own designs with dimensions and time documentation for student designed parts with photos of student(s) completing work.

Failure to complete the above-mentioned items, will result in point deductions.