## 2025 Arkansas Skills USA General Welding Updates

The Arkansas Skills USA General Welding competition in an effort to more closely align with the Nationals competition is making the following changes beginning in 2025.

- Due to increased enrollment number over the past few years, the General Welding Competition will be limited to the first 64 contestants registered.
- All contests will use Welding Procedure Specifications (WPS). The WPS will be provided in each booth along with print. Contestants must set their machines within the provided ranges and keep them within the range throughout the duration of the welding/cutting process.
- A new scoring system, similar to the one used in Nationals Competition, will be used. All parameters will be scored based on rubric. For each Item, the contestant will receive 0 or full points, based on rubric requirements.
  - o Sample welding rubric

1	Has surface slag, spatter, and smoke been removed from all of the joints and surrounding areas?
2	Is the Project Assembled In Accordance to the Drawing?
3	Does the overall workmanship display consistency among all welds?
	(ALL WELDS MUST BE GENERALLY CONSISTENT WITH NO SIGNIFICANT
	DISCONTUNITUIES)
4	Crater Cross Section. All craters should be filled to provide the specified weld size, Are the weld craters completely filled to the weld size?
5	Overall bead width not to exceed 1/16 in. variation in width (from max to min) for any weld face. Does the weld meet this requirement?
6	Porosity. No visible porosity is acceptable, Does the Weld Meet this Requirement?
7	Undercut. Not to exceed 1/32 in depth for a total accumulated length of 1/2in. Does the weld meet this requirement?
8	Weld Size. Weld Size not to be larger by anything greater than 1/16 in. anywhere along the weld length and no smaller than specified on the drawing. Does the weld size meet this requirement?
9	Weld Profiles. Fillet welds can be slightly concave, flat, or slightly convex with the crown not to exceed 3/32 in. above flat. Groove Welds can be flush with an even crown not to exceed 3/32 in. Does this weld meet this requirement?
10	Weld/Base metal Fusion. Complete fusion shall exist between base and weld metal. Does the weld display complete fusion with no cold lap?
11	There shall be no Arc Marks outside the weld area. Does the weld meet this requirement?
12	Undersized Welds. Weld Size not to be larger by anything greater than 1/16 in. anywhere along the weld length and no smaller than specified on the drawing. Do all remaining fillet welds meet this requirement?

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- All cutting competitions will use Go/No Go gauges for cut sizes and the AWS C4.1 roughness scale for cut quality.
  - o Sample cutting rubric.

Which sample does the cut quality most consistently match? (AWS C4.1 GAUGE Surface Roughness Guide for Oxygen Cutting A-Sample One, B-Sample Two, C-Sample Three, D-Sample Four)

Does the cut stay inside the diameter of the Go / no-go gauge for the SQUARE?

## **Contest Reminders**

- An online written test is required for all General Welding contestants. This test will count for 100 points of the total 1000 points that make up your final score.
- There will be an orientation at the beginning of the competition and another, more detailed orientation at the beginning of each flight. All contestants must attend the overall orientation, and the flight orientation to compete.
- Safety glasses are required at all times once the contestant has entered the competition
  area. Safety glasses must be worn under the welding helmet. If cutting glasses cannot be
  worn over safety glasses, contestants must turn to a safe direction and swap glasses
  quickly.
- All contestants must wear long sleeve (rolled down and buttoned) 100% cotton Khaki shirt and pants and leather work boots.
- Resumes are required for all contestants.
- No grinders are allowed.
- TIG torches are NOT flex head. Anyone that breaks the tig torch (or any other equipment) will be disqualified from the competition.