

# WELDING SCULPTURE



## PURPOSE

To evaluate each contestant's preparation for employment and to recognize outstanding students for excellence and professionalism in the field of welding or metal trades.

First, download and review the General Regulations at: [updates.skillsusa.org](http://updates.skillsusa.org).

## ELIGIBILITY

Open to active SkillsUSA members enrolled in career and technical programs with welding or metal trades as the occupational objective.

## CLOTHING REQUIREMENT

**For men:** Official SkillsUSA white polo shirt with black dress slacks, black socks and black leather shoes.

**For women:** Official SkillsUSA white polo shirt with black dress slacks or knee-length skirt, black socks or black or skin-tone seamless hose and black leather work shoes.

These regulations refer to clothing items that are pictured and described at: [www.skillsusastore.org](http://www.skillsusastore.org). If you have questions about clothing or other logo items, call 800-401-1560 or 703-956-3723.

**Note:** Contestants must wear their official contest clothing to the contest orientation meeting and interview.

## EQUIPMENT AND MATERIALS

- Supplied by the technical committee:
  - All necessary information for the judges and technical committee
  - One 4-foot table
- Supplied by the contestant:
  - All competitors must create a one-page résumé and submit the résumé at the contest orientation.

**Note:** Your contest may also require a hard copy of your résumé as part of the actual contest. Check the Contest Guidelines and/or the updates page on the SkillsUSA website at [updates.skillsusa.org](http://updates.skillsusa.org).

- Student-designed and produced sculpture

## SCOPE OF THE CONTEST

The contest consists of three parts:

- Evaluation of the sculpture
- Notebook
- Interview (All contestants will be asked the same questions, determined by the judges, before the start of the contest.)

## Knowledge Performance

There will be a skill-related written test to evaluate student knowledge of basic welding and cutting processes. General questions about GMAW, GTAW, SMAW, PAC and OFC will be included on this test.

## Skill Performance

The contest is designed to assess the ability of the competitor to design and produce a sculpture of that design, as well as answer questions in a brief interview related to all aspects of his or her creation of the design.

## Contest Guidelines

### Sculpture Design and Workmanship

- Materials used must be ferrous or nonferrous metals. The sculpture must be an original and creative work of the student.
- Sculptures may be welded, brazed or soldered, depending on the material used.
- Projects are to be left unpainted, including primers and other coatings. (Exception: sculptures may be clear coated.)
- All copyright laws must be followed in the creation of the design.
- The sculpture must be one continual piece, not multiple pieces unconnected.
- The sculpture cannot exceed the maximum size of 18" height x 12" width x 18" length and cannot exceed a weight of 150 lbs.

## Notebook

1. A notebook must be placed with the sculpture prior to judging. It must contain pictures and supporting evidence (e.g., receipts). It must include a brief description of the project and processes used to develop the sculpture.
2. The first page of the notebook must be the table of contents. The notebook must include a letter certifying that the sculpture was designed and constructed by the student. The letter must contain an itemized list of all expenses. The letter must identify the school, city, state and local advisor. The letter must identify the student to be interviewed, division (high school or college/postsecondary), and the letter must be signed by the local administrator.
3. Any welds that are hidden or ground must be documented through photographs with captions in the notebook.
4. A photograph of the student with his or her sculpture at regional and state competitions must be provided to ensure the same sculpture has been used throughout SkillsUSA contests.

## Interview

The student will participate in a three- to five-minute interview. Questions from the judges will be related (but not limited) to sculpture, creation, inspiration, materials, processes and workmanship.

## Items Evaluated Possible Points

### Sculpture (450 points)

- |  |     |
|--|-----|
| A. Metal Working (Fitting and Techniques)                  | 100 |
| B. Welding (100 points total)                              |     |
| • Fit-up   | 25  |
| • Function of welds  | 25  |
| • Amount of welds  | 25  |
| • Quality of welds   | 25  |
| C. Cutting (50 points total)                               |     |
| • Function of cuts   | 25  |
| • Quality of cuts  | 25  |
| <b>Note:</b> No extra credit or deductions for CNC cutting |     |
| D. Design/Creativity (200 points total)                    |     |
| • Level of difficulty                                      | 50  |
| • Creative use material/process                            | 50  |
| • Creativity   | 100 |

## Notebook (2–3" tabbed binder) (400 points total)

- |   |    |
|---|----|
| A. Table of contents  | 25 |
| B. Verification letter (150 points total)   |    |
| • School letterhead   | 25 |
| • Verification student made   | 25 |
| • Itemized list of expenses   | 25 |
| • ID school, city, state, advisor   | 25 |
| • Approximate time in each process  | 25 |
| • Letter signed by administrator  | 25 |
| C. Photographs with captions (minimum 5)  | 50 |
| <b>Note:</b> If welds are ground or removed, photo documentation of original welds must be provided.  |    |
| D. Photographs: Regional and state contests (Student with sculpture to verify same sculpture used for all contests)                           | 50 |
| E. Receipts for materials   | 50 |
| F. Drawings (50 points total)   |    |
| • Concept drawing(s)  | 25 |
| • Drawings — approximate dimensions   | 25 |
| G. Supporting documents (e.g., additional photos of process, design, cutting, welding, forming, explanation of creative use of process, etc.) | 50 |

## Interview (100 points total)

- |                                    |    |
|------------------------------------|----|
| A. Greeting and closing            | 25 |
| B. Knowledge of project            | 25 |
| C. Self-confidence                 | 25 |
| D. Q&A (sample questions provided) | 25 |

## Written Test (50 points total)

50

## Penalties

- |                                     |     |
|-------------------------------------|-----|
| A. Workmanship: exceeds size limits | -50 |
| B. Workmanship: exceeds 150 lbs.    | -50 |
| C. Workmanship: paint/finish        | -50 |
| D. Résumé                           | -10 |
| E. Clothing                         | -10 |

## Total Possible Points

1,000