

Welding Fab. Update.

This year the welding processes will be SMAW (7018 only) and GMAW (ER70S-6), using Millermatic 255 welding machines. There will also be oxy/acetylene cutting.

A few major changes:

- * There will be no grinding! Don't bring one.
- * Bring a cord or cordless drill and center punch (drill bit will be supplied). Bring charged batteries and or a cord.
- * Material is 2x2 square tubing and plate, mild steel. Neither will be thicker than 1/4"
- * Ensure students understand welding prints with weld symbols and positions.

The rest of the tool list and schedule will come out at a later date.

2026 SKILLS USA KANSAS
Welding Fabrication Contest
Contest Chair: Ryan Bugner- Celco

TOOLS/SAFETY LIST

Each Contestant MUST have the following safety equipment:

Eye Protection
Hearing Protection, ear plugs or ear muffs
Welding Helmet with welding lens (quick change hoods are allowed)
Cutting Goggles/ face shield #5 – Welding hood with grind mode is acceptable
Leather work shoes (no tennis shoes)
Leather Gloves
Leather or FR Coat or cape and bib, Welding Sleeves could be used in place

Allowable tools:

Tape Measures (1 per team member)
Spare welding lens
Scribe
Soap Stone with holder or other metal marking pencil
Combo Square set
Framing Square
Slip Joint Pliers (1 per team member)
Ball Peen Hammer
Fillet Weld Gauge
Vice Grip Pliers (no more than 3)
Side Cutter Pliers (welpers, or Needle nose are allowed)
Chipping Hammer
Wire Brush
Stryker for cutting torch
Steel file for dressing cut edges
Compass
Chisel
Adjustable wrench
Center punch
Drill with ½” chuck (corded or cordless is fine) bring battery or extension cord

All tools are to be placed into a bucket for inspection, and only the tools above listed are approved for the contest. No outside copies of the print will be allowed in. Each contestant will be given a new set of Welding/Cutting prints and welding procedures before the start of the competition.

!!!RULES!!!

- STRICT ENFORCEMENT OF PERSONAL PROTECTIVE EQUIPMENT (PPE) WILL BE OBSERVED DURING THE WELDING COMPETITION.
- ALL ISSUES CONCERNING INADEQUATE OR INAPPROPRIATE PPE MUST BE RESOLVED DURING THE ALLOWED CHECK-IN TIME FOR EACH STUDENT
- IF THE ISSUE CANNOT BE RESOLVED DURING THIS TIME PERIOD, THE STUDENT WILL NOT BE ALLOWED TO COMPETE.
- TEAMS REQUIRE 3 PEOPLE TO BE ALLOWED TO COMPETE.
- NO COMMUNICATION OR UNAPPROVED ELECTRONIC DEVICES IN THE COMPETITION AREA
- NO CONTACT WITH ANYONE OUTSIDE OF THE CONTEST AREA SUCH TEACHERS, COACHES, OR PARENTS.
- SAFE WORK HABBITS ARE CRITICAL FOR THE SAFETY OF ALL THE COMPETITORS AND JUDGES. COMPETITORS PERFORMING UNSAFE BEHAVIORS WILL BE STOPPED DURING THE CONTEST.
- CORRECTIVE MEASURES WILL BE DETERMINED BY THE FLOOR JUDGE AND CONTEST CHAIR. THE BEHAVIOR MAY RECEIVE A WARNING, SCORE DEDUCION, OR REMOVED FROM THE CONTEST. THE COMPETITORS WILL NOT RECEIVE ANY ADDITIONAL TIME FOR THE STOPAGE.

EACH TEAM WILL RECEIVE A SPECIFIC CHECK-IN TIME. THIS TIME SLOT WILL BE THE ONLY OPPORTUNITY FOR THE STUDENTS TO ENTER THE COMPETITION. ONCE IN THE CONTEST AREA ALL ABOVE RULES ARE IN PLACE UNTIL RELEASED FROM THE CONTEST AREA.

Welding Equipment and Consumable

Millermatic 255 welding machines

SMAW (7018 only)

GMAW (ER70S-6) with 75/25 shielding gas

Oxy/Acetylene cutting.

2x2 square tubing $\frac{1}{4}$ " or less wall thickness

Mild Steel plate $\frac{1}{4}$ " or less

Welding Fabrication Competition Groups

AM- Competitors

Hutch CTEA

Ellinwood HS

Junction City HS

Paola HS

Olathe Advanced Tech Center

Fort Hays Tech NW 1 team

PM- Competitors

Labette County HS 3

Fort Hays Tech North Central

Fort Scott HS

Shawnee Mission West HS

Horton HS

- Competitors will meet in the HCTEA T-Building Event Center
- No students or advisors are to enter the Welding Shop without being escorted by Judge
- The upstairs area in the welding shop will be off limits to all visitors

Morning Schedule

7:45- Orientation and Tool Check- AM Group only HCTEA T-Building

8:15- Competition begins

11:15- Competition Ends- clean weld area

11:30- Debrief- Lunch Provided in the welding/competition area

11:45- Released from the competition area. No competitors may leave the weld shop area until released by the contest chair. This is to reduce opportunity of the morning group sharing contest information with competitors in the afternoon group.

Afternoon Schedule

Lunches for PM groups will be provided in the check in area prior to 11:45

11:45- Orientation and Tool Check- PM Group only HCTEA T-Building

Teams checking in after the AM group has been released risk being disqualified.

12:15- Competition Begins

3:15- Competition Ends- clean weld area

3:30- Debrief- Competitors released

Project Pick Up

Projects may be picked between 7:30 - 8:30 and again after the award ceremony until 4pm. Any project not picked up or arrangements made will become the property of HCTEA. These projects are reworked and sold to support the HCTEA Welding SkillsUSA Chapter. Please contact Jeremiah Harmon- harmonj@usd308.com for making arrangements outside of the allotted time.

Special Thanks to the Following

HCTEA and USD308: Even Host

Miller Welding: Byron Nield- Equipment and consumable

WifCo: Pete Atha- Material Donation

Airgas- Dana Tobias, Phil Schmitt, & Jacob Denton- Judge, Industrial Gases, and consumables

Lampton- Dana Buschkoetter- Judge and consumables

Hutchinson Community College: Greg Siepert & Luke Ricker , CAD drawings and material prep

Missouri Welding Institute: Wes Winchell & Josh Sauer- Judges

Koch-Glitsch: Kyle Williamson- Judge

