



# Welding Fabrication



## **Contest Date(s):**

**Wednesday, March 17, 2021**

**(Orientation and setup start at 8am. Project/prints can be opened thereafter. Contest starts at 8:30am, ending at 12:30pm)**

## **Contest Type: IN-SCHOOL PROCTORED**

**(All contest types are listed on the website. YOU NEED TO BE FAMILIAR WITH BOTH THIS DOCUMENT AND THAT DOCUMENT.)**

## **Zoom Contest Link:**

**March 17**

**<https://ohioskillsusa-org.zoom.us/j/93962274479?pwd=MGIqSFI4dGZ0L1FZDc2UVVOb084QT09>**

**Meeting ID: 939 6227 4479**

**Passcode: 212262**

## PURPOSE

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

## TESTING:

Welding knowledge test given; hands-on evaluation of skill and blueprint reading ability.

## ELIGIBILITY

3 contestants per region based on regional competitions, in accordance with the SkillsUSA Ohio Program Guidelines.

## ORIENTATION

1. Orientation and setup start at 8:00am. Project/Prints can be opened thereafter.
2. Contest starts at 8:30am, ending at 12:30pm.

## CLOTHING REQUIREMENTS

Suitable work clothing (to match service conditions for welding process employed, must be fire resistant)

- Leather jacket, cape, sleeves or apron (optional)
- Leather gloves
- High-top leather safety shoes or boots (steel toes recommended)
- Welders hat or skullcap
- Spectacles with side shields (clear lens)
- Burning goggles or face shield (OFC & PAC)
  - 2 ea. #5 filter plate/lens
  - 2 ea. clear cover plate/lens
- Noise protection (ear plugs)
- Welding helmet
  - Spare batteries for helmet are recommended if you have auto lens
- Welding lenses (to match helmet design)
  - 2 ea. shaded filter plate/lens (#10 or #11)
- 2 ea. clear cover plate lens
- Note: No Smart Watches, Cell Phones, or Ear Buds
- Mask (CDC Requirements)

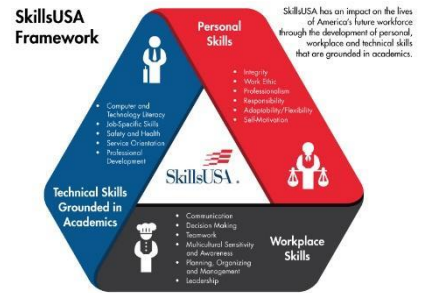
## TOOLS PROVIDED BY CONTESTANTS

### Documentation

- One copy of a 1-page typed personal résumé. Each team member must show to judges before starting fabrication.

### Personal Tools:

- Carbon steel wire brush
- Grinder – attachments (no post weld grinding)
- Ball peen hammer, minimum 16 ounce
- Soapstone



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- Two #2 pencils (sharpened)
- Center punch
- Metal scribe
- Steel dividers (radius maker min. 6") or compass, to mark steel for cutting
- Handheld calculator
- Paint Marker

## Measuring Devices:

- Steel tape measure (minimum 10')
- Combination square set
- English steel bench rule (min. 12")
- Protractor
- Chipping hammer
- Magnetic fixturing tool (optional)
- 10" mill file (half round-bastard cut) (optional)
- Cold chisel (size optional)
- Fillet weld gage
- Pliers, wrenches and clamps
- Vice grips or vice grip type clamp
- Side or diagonal cutting pliers
- Groove or slip joint pliers
- Needle nosed pliers (optional)
- 12" adjustable wrench (optional)

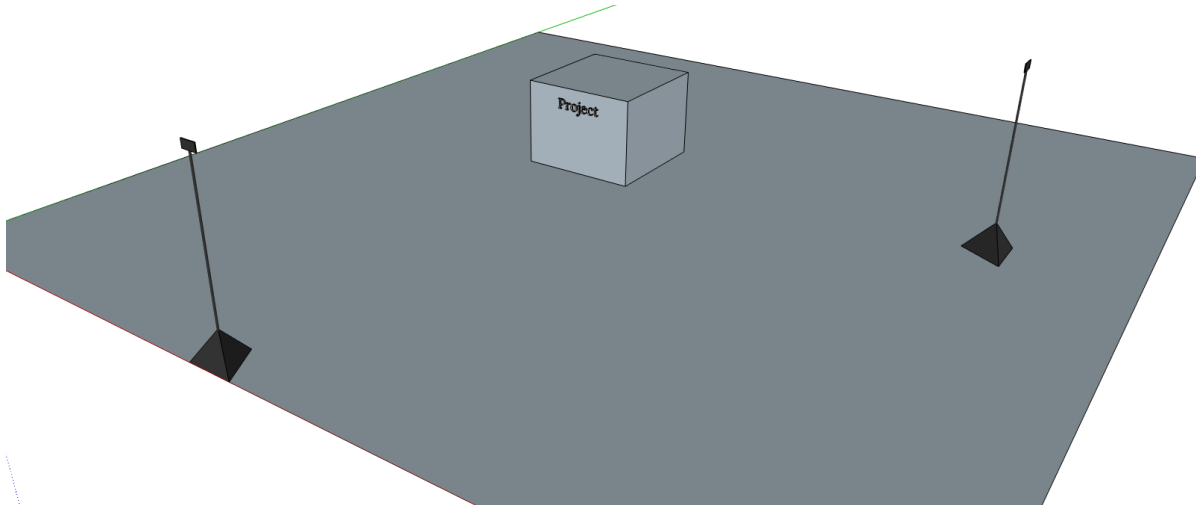
## TOOLS PROVIDED BY TECHNICAL COMMITTEE

### Pallet with project prints will be provided by Miller/Hobart

- The project portion of pallet is to remain sealed until the day of the contest
- Welding & cutting equipment portion of pallet can be opened and setup prior to the contest.
- Prints to remain in envelope/shrink wrap until day of contest
- Pallet/Prints must be opened in front of judges on Zoom call day of contest
- VIOLATION OF THIS WILL RESULT IN DISQUALIFICATION

### Tri-Pods-Qty 2

- Required: camera positioning of the 2 video sources providing optimal views to the virtual judges. (cell phones)
- Goal is to maximize the visibility of fabrication activities for the judges



**Supplied Welding Equipment:**

- Miller Multimatic 220 Welder
- Miller Spectrum 625 Plasma Cutter
- 10 Spare .030 Contact Tips
- 2 Spare Nozzles
- 1 Plasma Spare Parts Kit

**Supplied Welding Consumables:**

.030 10# spool HB-28 MIG wire consumables supplied by Hobart Brothers

**Supplied Metal Miller Logo:**

Weld onto the completed project (on bowl location of team’s discretion) to ensure authenticity of project returned for judging.

Steel materials for each fire pit		
ITEM NO.	Part	QTY.
1	Rim - angle iron 1.5"x1.5"x36"-1/8"	4
2	Leg - angle iron 1.5"x1.5"x18"-1/8"	4
3	N/A	
4	Foot - 3"x3"-3/16"	4
5	1x1 tube - 33.5" long	4
6	2x1 tube - 8.5" long	12
7	Pit - Bottom plate - 3/16" square	1
8	Pit - Side plate - 3/16" trapezoid	4

**SPECIAL INFORMATION**

**Project/Equipment Pick-Up and Return**

1. Pallets will be ready for pick up **Monday March 8<sup>th</sup> – Friday March 12<sup>th</sup>**

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- a. Contact Blaine Guy 937-573-8312 or blaine.guy@hobartbrothers.com
- b. Hours 9am-4pm
2. A pick-up truck or equivalent vehicle is required for project pick-up. Must be able to handle a 4'x4' shipping pallet weighing approximately 300 pounds. (Cannot break the pallet down prior to contest)
3. **Students must inform us if they need an alternative pick up location (Delille Oxygen) by March 1<sup>st</sup>**
4. **Projects and welding equipment must be returned to original pick-up location by March 26<sup>th</sup>.**
5. **Please make sure to write the team number with a permanent paint pen onto the completed project before returning.**

We need to know pick-up location in advance, so we can coordinate shipping of the pallets.

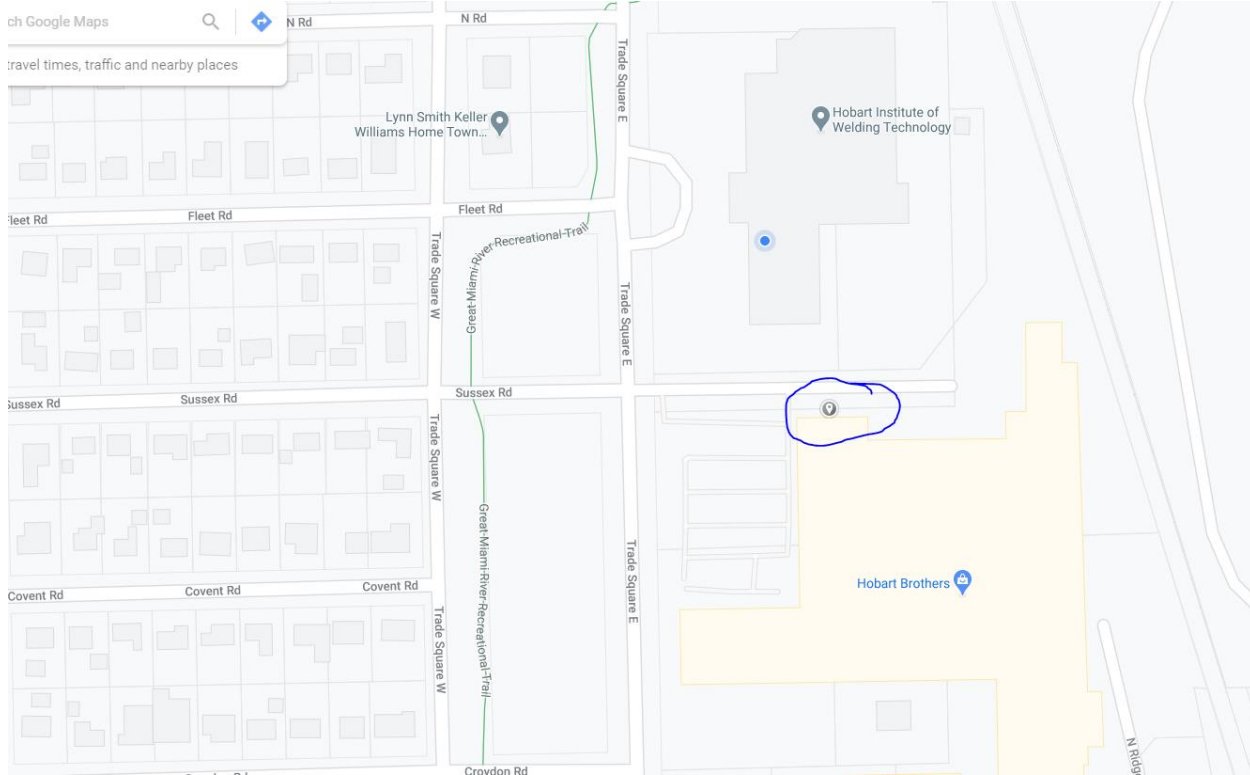
<b>Default Pick up</b>	<b>101 Trade Square East</b>
	<b>Troy, OH 45373</b>
<b>Alternative Pick Up (must be requested March 1<sup>st</sup>)</b>	Delille Oxygen 772 Marion Rd Columbus, OH 43207

## Default Pick-Up Location

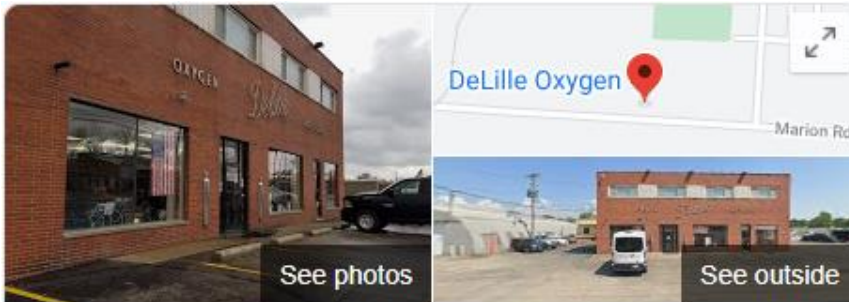
101 Trade Square East

Troy, OH 45373





**Pick-Up Option 2 (Only if communicated prior to March 1<sup>st</sup>)**



## DeLille Oxygen

Website

Directions

Save

Call

3.3 ★★★★★ 7 Google reviews

Welding supply store in Columbus, Ohio

✓ In-store shopping

**Address:** 772 Marion Rd, Columbus, OH 43207



# Welding Fabrication



Equipment, filler metal, projects, and prizes are donated by Miller Electric and Hobart Brothers. Teams placing 1,2,3 will receive a prize from Miller Electric/Hobart Brothers.

For those who wish to send a thank you note sponsor information is below.

Miller Electric  
1635 W Spencer Street  
Appleton, WI 54914  
Attn. Mr. Dave Lambert-President Miller Electric

Hobart Brothers  
101 Trade Sqare East  
Troy, OH 45373  
Attn. Mr. Bob Bilokonsky-Vice President-Hobart Brothers

## **SCOPE OF THE CONTEST**

The contest will be judged based on the criteria established in the current year's National Technical Standards, which are updated annually. National Technical Standards are accessed through your Professional SkillsUSA Membership benefits by logging on to your SkillsUSA account at <https://www.skillsusa-register.org/Login.aspx>.