

2023 MICHIGAN SKILLSUSA CHAMPIONSHIPS CONTEST OUTLINE

SKILL OR LEADERSHIP AREA: Welding Fabrication (Secondary + College Post-Secondary)

CONTEST DATE: POST SECONDARY March 17, 2023. (Washtenaw Community College)

CONTEST DATE: SECONDARY April 14th, 2023. (Grand Rapids Community College)

CONTEST ORIENTATION/START TIME:

Post Secondary – March 17th (Washtenaw Community College)

- Arrive: 7:30-8:00am (Washtenaw Community College/Larry Whitworth Occupation Education Building)
- Contest orientation: 8:30am – 9:00am (OE131)
- Contest begins: 9:00am-1:00pm (OE137)

Secondary – April 14th (Grand Rapids Community College)

- Arrive: 8:00am – 8:20 am (MTEC Lobby)
- Lab Tour 8:20am to 8:30am (Welding Lab Tour)
- Orientation 8:30am – 8:55am (Orientation)
- Competition 9:00am – 1:00pm (Competition)

RESUME:

Each student must submit a one-page printed resume upon arrival at the contest site (present to contest coordinator during orientation in specified room). Failure to do so will result in a 10-point penalty.

- **POST SECONDARY – OE131 (Washtenaw Community College)**
- **SECONDARY – MTEC Lobby orientation (Grand Rapids Community College)**

SKILLS LEADERSHIP TEST

- Competitors must take the SkillsUSA Leadership Test between March 28th and April 4th. The testing link will be emailed directly to your competitor so make sure you enter the correct email address during registration. A [sample test](#) can be found here. Email or call Customer Care with any questions or testing problems.

SkillsUSA Customer Care

P: 844-875-4557

Customer Care Hours

Monday/Wednesday/Friday 8 a.m.-5 p.m. ET

Tuesday/Thursday: 11 a.m.-7 p.m. ET

14001 SkillsUSA Way, Leesburg, VA, 20176

CustomerCare@skillsusa.org

TASKS TO BE PERFORMED:

- OFC (oxy/fuel cutting)
- SMAW (shielded metal arc welding)
- GMAW (gas metal arc welding)
- GTAW (gas tungsten arc welding)
- Project assembly: Requires layout, print and weld symbol interpretation and application abilities
- A scoring rubric will be implemented to assess items mentioned above to determine final scores/placement

TECHNICAL COMMITTEE WILL SUPPLY:

- Welding machine, welding gas and filler wire for required weld processes
- Project materials and print
- Extension cord
- Grinder with wire wheel, sanding disc and stone wheel
- Fab table
- Sheet metal hand break
- Cutting torch with cutting tips and tip cleaner
- Welding curtains and grinding shields

COMPETITORS MUST SUPPLY THE FOLLOWING OR WILL NOT BE ALLOWED TO PARTICIPATE IN CONTEST:

- **Personal Protective Equipment (PPE):**

- Welding helmet with appropriate lens shade
- Safety glasses (Z87 rated, if student wears prescription glasses, must have Z87 glass covers)
- Flame resistant welding jacket or welding leather
- All leather, above the ankle work boots (no plastic or synthetic materials allowed on boots)
- Cutting glasses, goggles or face shield (shade #5 required)
- Ear plugs (optional)
- Clear grinding shield (this must be worn with safety glasses while grinding)
- All leather welding gloves
- All cotton or denim clothing

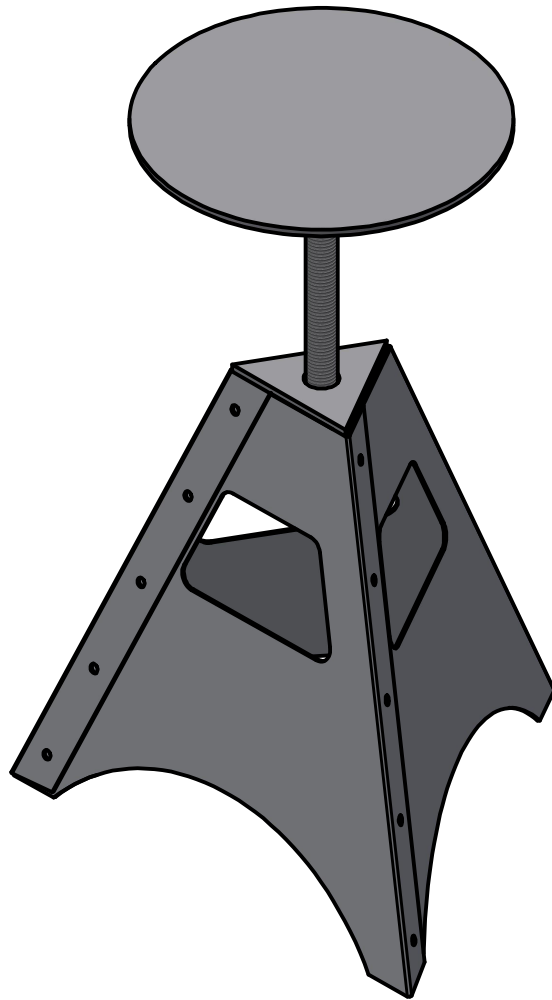
- **Hand tools:**

- Pliers
- Files
- Chisels
- Center punch
- Scribe
- Wire brush
- Protractor
- Compass
- Soapstone
- Tape measure
- Combination square
- Clamps (no fixtures allowed)
- Ball peen hammer
- Chipping hammer

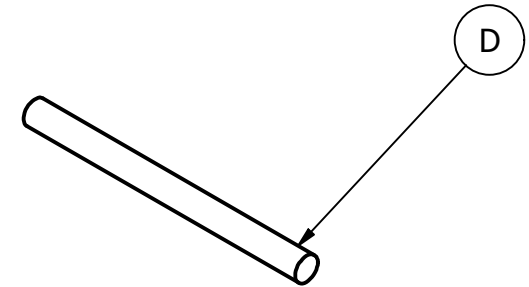
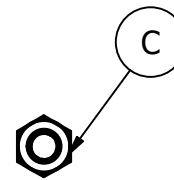
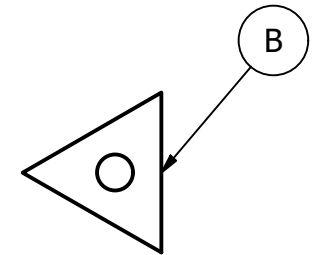
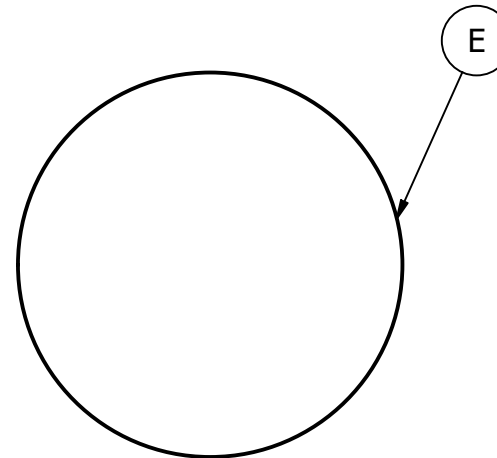
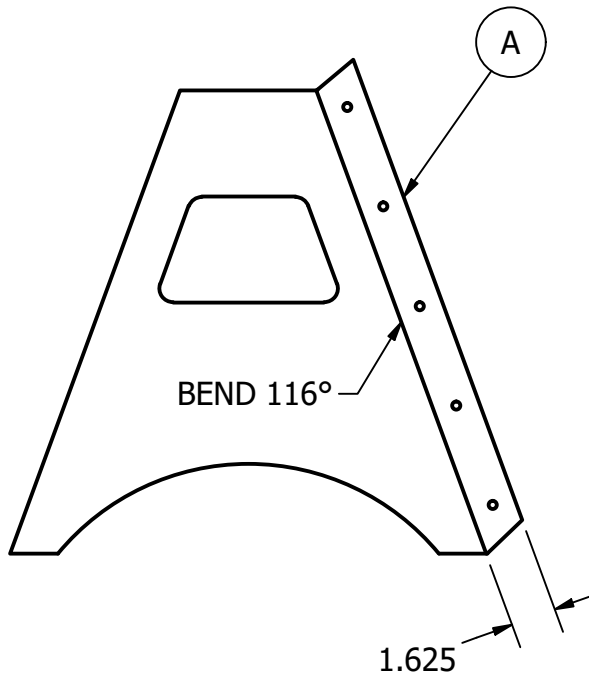
AWARD DETAILS:

- Final contest results will be announced at the State Conference Awards Ceremony on April 16th, 2023 at the DeVos Place in Grand Rapids. Attending the Awards Ceremony is recommended, but not required. Teams that have placed in the top three will be contacted by the State Director, Danielle West prior to the Awards Ceremony so that the team can plan for travel arrangements, should you choose to do so. If you have any further questions on the awards ceremony, please contact Danielle directly at dwest30@emich.edu

SkillsUSA Welding Contest State - Fabrication

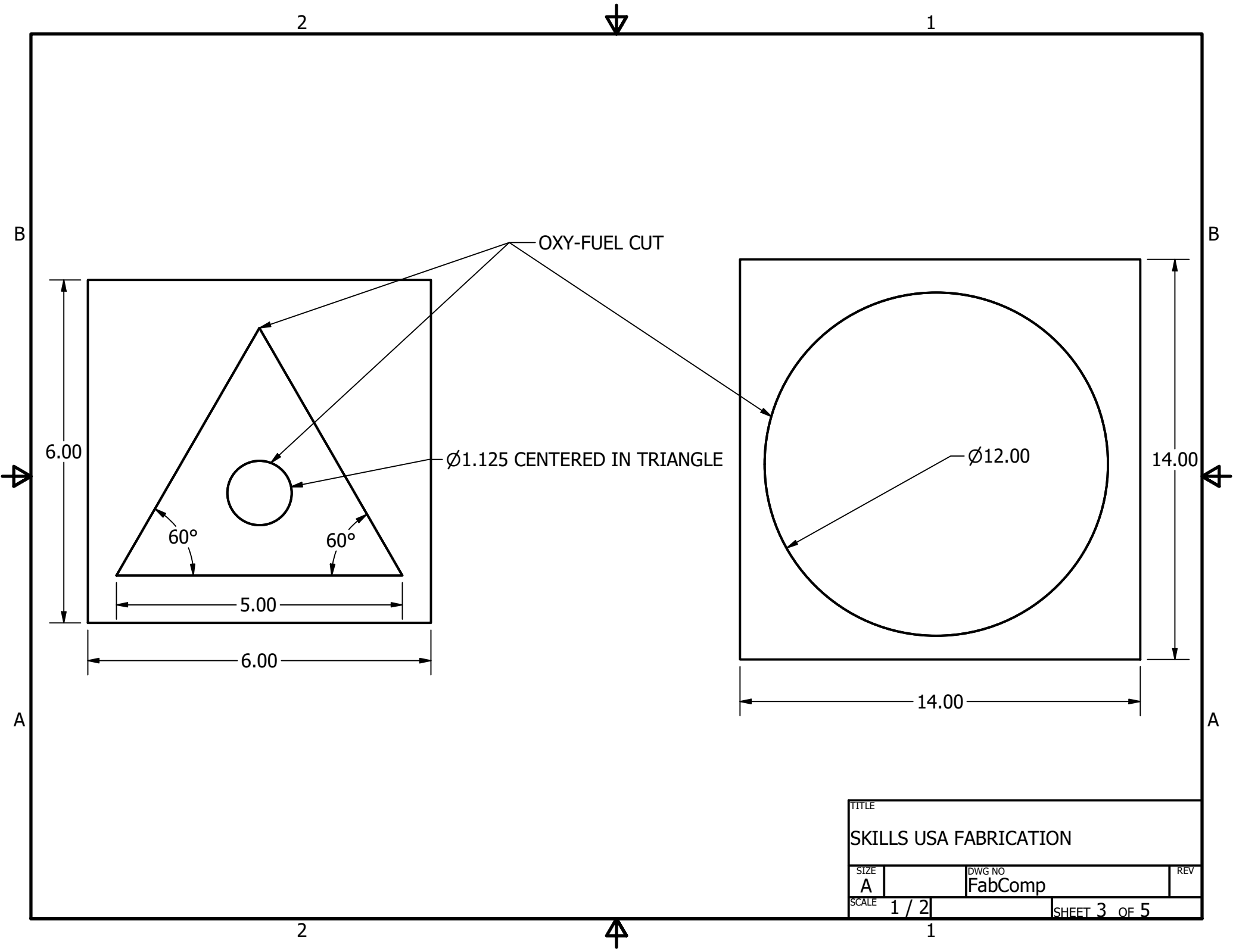


PARTS LIST			
ITEM	QTY	DESCRIPTION	MATERIAL
A	3	Stool Side	14ga Carbon Steel
B	1	Triangle	1/4" Carbon Steel
C	2	ACME Nut	Steel
D	1	ACME Threaded Rod - 12"	Steel
E	1	Stool Seat	1/4" Carbon Steel

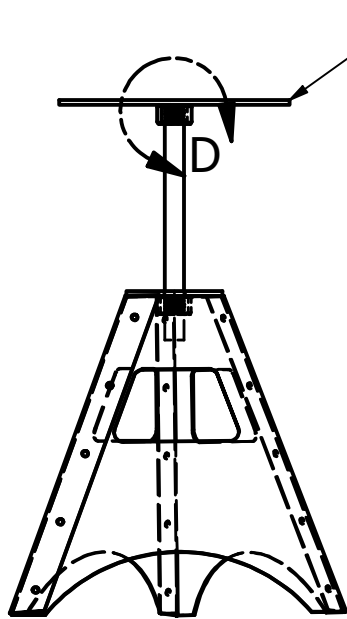


- Notes:
- Teams will have 3½ hours to complete the project
 - The following will be provided:
 - GMAW — ER70S-6 .035
 - SMAW — E7018 3/32 or 1/8
 - GTAW — ER70S-6 1/16 3/32 1/8
 - Oxy-fuel cutting torches

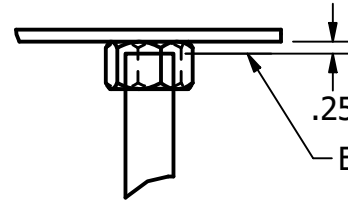
TITLE			
SKILLS USA FABRICATION			
SIZE	DWG NO	REV	
A	FabComp		
SCALE	1/6		SHEET 2 OF 5



TITLE			
SKILLS USA FABRICATION			
SIZE	DWG NO	REV	
A	FabComp		
SCALE	1 / 2		SHEET 3 OF 5

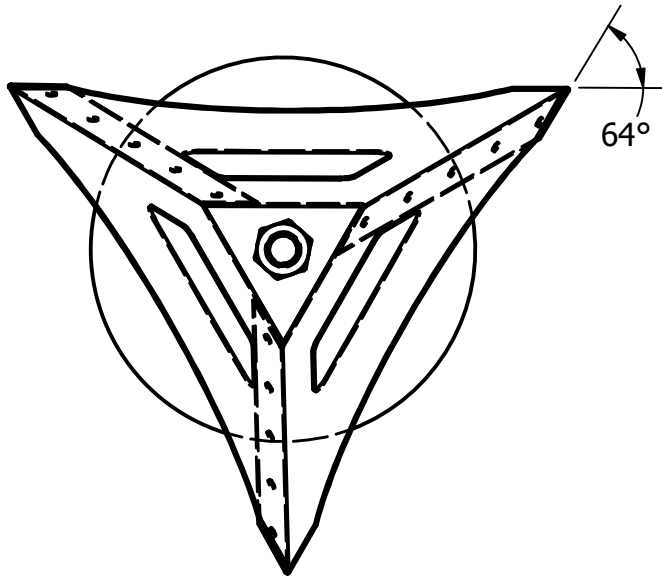


GRIND A RADIUS
ON ALL SEAT EDGES



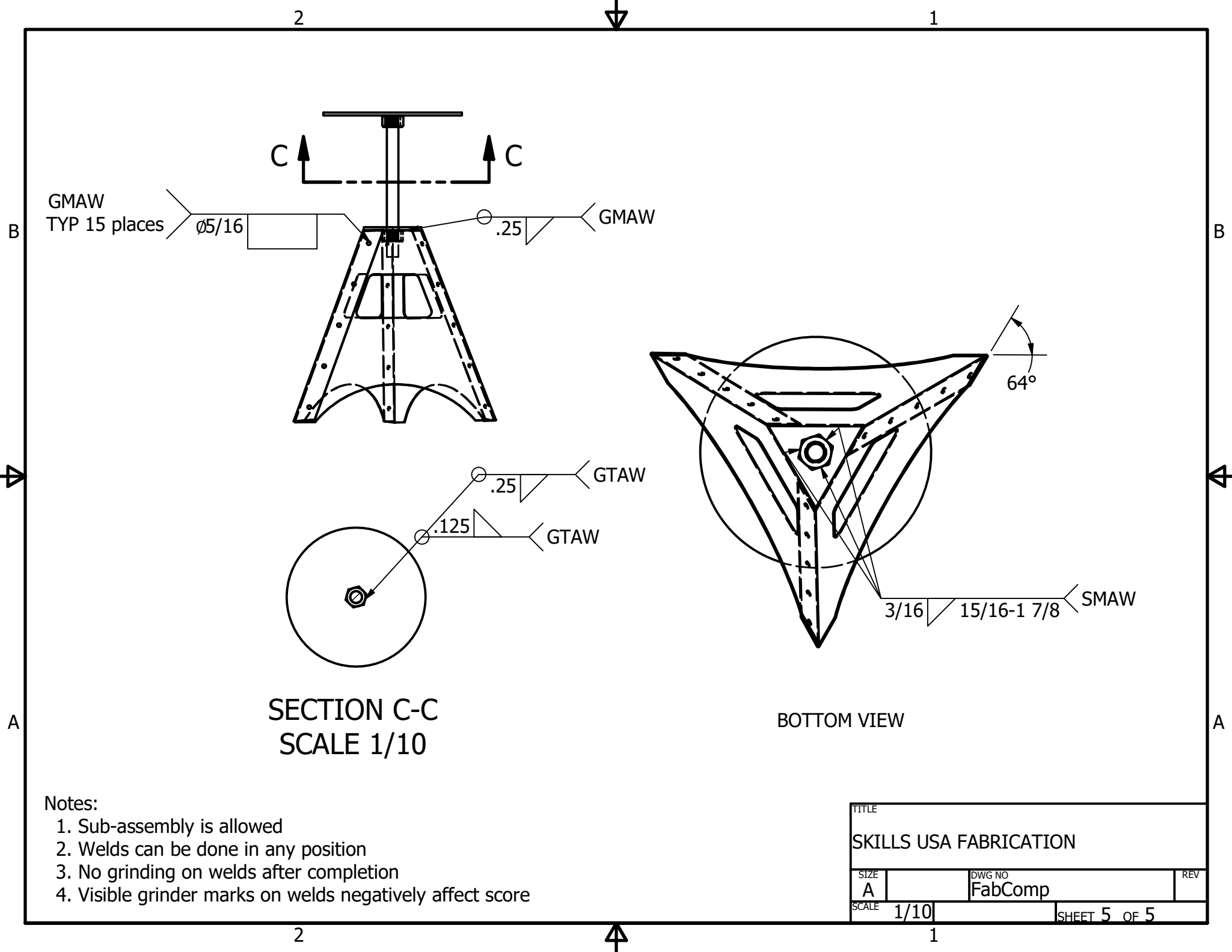
END OF THREADED ROD SET
1/4" FROM TOP OF NUT

DETAIL D
SCALE 1/4



BOTTOM VIEW

TITLE			
SKILLS USA FABRICATION			
SIZE	DWG NO	REV	
A	FabComp		
SCALE	1/10	SHEET 4 OF 5	



GMAW
TYP 15 places

$\varnothing 5/16$

.25

GMAW

64°

.125

.25

GTAW

GTAW

3/16

15/16-1 7/8

SMAW

SECTION C-C
SCALE 1/10

BOTTOM VIEW

Notes:

1. Sub-assembly is allowed
2. Welds can be done in any position
3. No grinding on welds after completion
4. Visible grinder marks on welds negatively affect score

TITLE			
SKILLS USA FABRICATION			
SIZE	DWG NO	REV	
A	FabComp		
SCALE	SHEET		OF
1/10	5		5

SkillsUSA Michigan State Welding Competition Registration for Early Contests

Welding Advisors,

Similar to last year, after competitions have been scored and tests have been taken, all early welding advisors will find out which competitors medaled without revealing their places. The medaling competitors and advisors should plan to come to the Award Ceremony at our State Leadership and Skills Conference (SLSC) to receive their awards and find out their places. All competitors are invited to attend regardless of whether they medal.

Full details regarding our State Leadership and Skills Conference can be found on our [Conference webpage](#). Below you will find a timeline to help you plan for participating in an early contest at SLSC.

- Register your competitors for their welding competition by March 10th. Registration can be found by following this link to our [Conference webpage](#) and opens March 1st.
- Book Hotel March 1-22. Registration can be found by following this link to our [Conference webpage](#) and opens March 1st.
- Compete March 17th.
- Competitors must take the SkillsUSA Leadership Test between March 28th and April 4th. The testing link will be emailed directly to your competitor so make sure you enter the correct email address during registration. A [sample test](#) can be found here. Email or call Customer Care with any questions or testing problems.
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14001 SkillsUSA Way, Leesburg, VA, 20176
CustomerCare@skillsusa.org
- We plan to announce welding medalists to advisors via email on April 6th.
- If your competitor did not medal and you will not be traveling to the SLSC event, you must cancel your hotel by April 10th to receive a refund. We encourage all competitors to come regardless of whether they medal.