

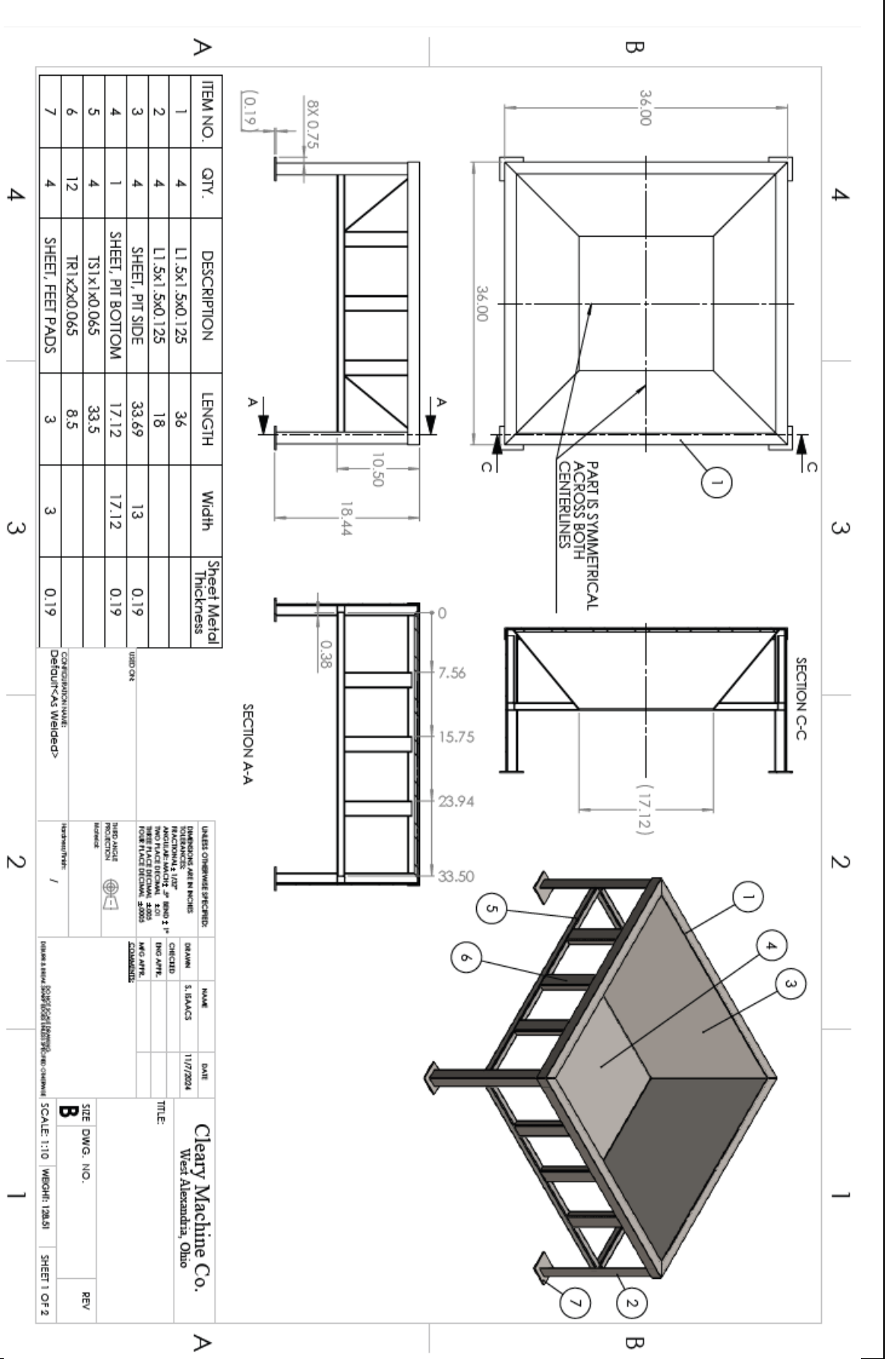


Welding Fabrication

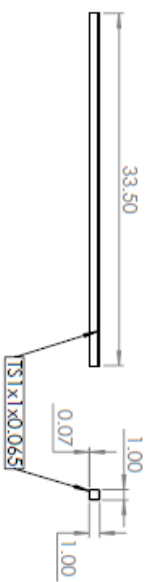
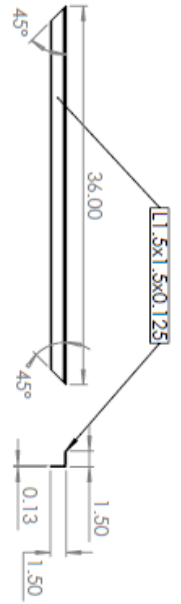
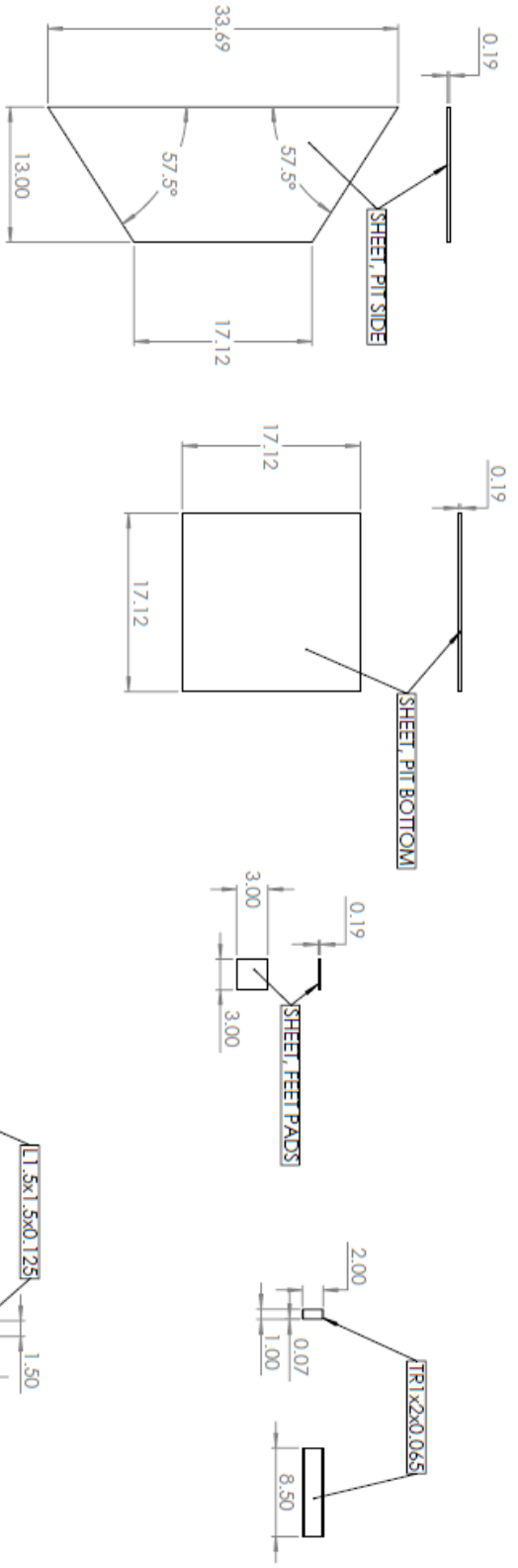


Date	Friday, January 31 st 2025	Orientation Time	8:00 a.m. (Closed to instructors)
Location	Mahoning County Career & Tech Center 7300 N. Palmyra Rd Canfield Ohio 55506	Contest Time	Immediately following orientation (OPEN contest)
Scope of Contest	<p>The skill performance assessment includes the completion of a metal project according to a provided technical drawing. Please see Exhibits A and B below.</p> <p>Procedures for building the project:</p> <ul style="list-style-type: none">• Only the three students participating in the competition are to work on the project.• Students should complete a portfolio of their planning and production of the project with photos of work along the way.• The finished project is to be brought to the location of the Regional Welding Competition.• All three team members must be present at the Regional Welding Competition and be prepared to display their finished project and participate in an interview with the judges.• The projects will be graded based on their accuracy and quality in relation to the blueprints.• The portfolio will be used to validate the process and work completed in the project.• Schools will be able to keep the projects. <p>Rules and Requirements for Project:</p> <ul style="list-style-type: none">• Project is to be assembled/welded as show in the drawings.• NO post-weld grinding. Points will be deducted for any post-weld grinding.• Students may cut materials with any cutting process desired (I.e. Metal shear, plasma, oxy-fuel, CNC etc.)• SMAW/FCAW/GMAW/GTAW are the only processes to be used in fabrication and assembly of the project.• Project can be welded with just one or any combination of the processes listed above.• No paint or clearcoat is to be used on the project.• Student will decide type/size/location of welds on fabricated parts and be able to explain those decisions during the interview.• Student will add weld symbols to drawing that were used during fabrication of the project and the weld symbols may be drawn in ink. <p>At the regional contest your team will need to:</p> <ul style="list-style-type: none">• Provide the completed project.• Provide a portfolio with elements listed on scoring rubric.• Participate in an interview presentation.		
Testing	NO		
Eligibility	1 team for every 50 members enrolled in program		
Clothing	Clothing Classification Guide: CLASS D		

Provided by Contestant	Professional Resumé – typed hardcopy Emergency Medical Form (Contestants must have this to compete) All elements listed in Scope of Contest	
Contest Standards	<p>Contest Skilled Performance Standards</p> <p>WF 3.0 – Read and interpret blueprints</p> <p>WF 4.0 - Produce welds using a Shielded Metal Arc Welding (SMAW) process to AWS QC10 standards.</p> <p>WF 5.0 - Produce welds using a Gas Metal Arc Welding (GMAW) process to AWS QC10 standards.</p> <p>WF 6.0 - Produce welds using a Fluxed Cored Arc Welding (FCAW) process to AWS QC10 standards.</p> <p>WF 7.0 - Produce welds using a Gas Tungsten Arc Welding (GTAW) process to AWS QC10 standards.</p> <p>WF 8.0 - Produce cut materials using an Oxygen Fuel Cutting (OFC) process to AWS QC10 standards.</p>	<p>Aligned ODEW Manufacturing Career Field Technical Content Standard Outcomes</p> <p>Outcome 6.1 Measurement and Interpretation Outcome 6.2 Layout and Planning</p> <p>Outcome 4.3 Arc Welding Process</p> <p>Outcome 4.3 Arc Welding Process</p> <p>Outcome 4.3 Arc Welding Process</p> <p>Outcome 4.3 Arc Welding Process</p> <p>Outcome 4.3 Arc Welding Process</p> <p>Outcome 4.6 Cutting Processes</p> <p>Above Outcomes can be found in the following ODEW courses: 176000 Gas Metal Arc Welding 176001 Shielded Metal Arc Welding 176002 Flux Cored Arc Welding 176003 Gas Tungsten Arc Welding 176015 Welding Fabrication</p>



4 3 2 1



4 3 2 1

UNLESS OTHERWISE SPECIFIED:		NAME	DATE
DIMENSIONS ARE IN INCHES		S. SMACS	11/17/2004
TOLERANCES:		DRAWN	
FRACTIONS: ± 1/32"		CHECKED	
DECIMALS: ± 0.005"		ENG. APPR.	
HOLE DIMENSIONS: ± 0.002"		APPR.	
TAP DIMENSIONS: ± 0.005"		DATE	
WELDING SYMBOLS: AS SHOWN		REV	
MATERIALS: AS SHOWN		SIZE	
FINISHES: AS SHOWN		DWG. NO.	
TITLES:		SCALE	
CONSTRUCTION NAME: Default~As Welded~>		WEIGHT	
SHEET NUMBER: 2 OF 2			

Cleary Machine Co.
West Alexandria, Ohio

SCALE: 1:10

SHEET 2 OF 2

Category Evaluated 3 team members present	<input type="checkbox"/> Yes <input type="checkbox"/> No (Cannot medal if less than 3)	Possible Points	Point Breakdown	Points Awarded
Portfolio Folder Portfolio must contain the following items: 1. Cover sheet with a blank to write the contestant number (Number will be provided the day of the event) 2. Provide at least 3 photos <ol style="list-style-type: none"> a. Initial material mark-ups and how you will cut it. b. Materials once cut into proper dimensions. Include waste in your photo. c. Fully assembled project. 3. A copy of the plans for the project including weld symbols used (can be added by hand).	200 pts.	<ul style="list-style-type: none"> • Cover page – 30 • Layout photo – 30 • Material photo – 30 • Fully Assembled photo – 30 • Welding plans – 40 • Neatness - 40 		
Interview Presentation: <ul style="list-style-type: none"> • Throughout Interview and Presentation all three students need to take a part in the presentation and demonstrate they were actively engaged in the project. • Students should have a professional presentation and appearance. • Students should use the portfolio as a reference and be able to show correlation of welds on the project to the welds on the plans. • Students should explain how they constructed the project as a team • Students should explain any challenges faced and how they worked through. 	200 pts	<ul style="list-style-type: none"> • All 3 team members participate in presentation – 40 • Eye Contact and Professionalism – 40 • Use of Portfolio in Presentation - 40 • Decision-Making Process and weld selection - 40 • Challenges – 40 		
Welds and Measurements <ul style="list-style-type: none"> • Correct materials (any materials not on original Bill of Materials equals 0 points) • Weld process selection • Weld quality 	200 pts	<ul style="list-style-type: none"> • Materials – 50 • Weld selection – 50 • Weld quality – 100 		
Assembly Inspection <ul style="list-style-type: none"> • Demonstrate ability to use the project as intended. • Project is level and safe to handle. • Project is stable when loads are applied. 	200 pts	<ul style="list-style-type: none"> • Ability to use the project as intended - 50 • Level and safe to handle - 50 • Stability – 100 		
Quality and Craftsmanship <ul style="list-style-type: none"> • Final product meets minimum specifications of the customer. • Quality of work and pride demonstrated in this product. • This is a saleable item to a customer, excluding post weld grinds required (customer-ready) • Individuals demonstrated pride and craftsmanship in their work and presentation 	200 pts	<ul style="list-style-type: none"> • Meets Specifications – 50 • Quality – 50 • Customer Ready – 50 • Personal craftsmanship - 50 		
TOTAL Score	1000	Record Total Here →		

**Exhibit B:
Contest Scoring Rubric**