

NTC Virtual Welding Contest - 2021

ENTRY DIVISIONS

Prizes will be awarded in two separate divisions – Utilitarian entries and Artistic entries.

Both types of entry must conform to the project parameters listed below.

Utilitarian projects serve a specific function. (can crusher, bench vise, grill, etc.)

Artistic projects have a purely aesthetic value. (abstract or representational sculpture, scale models, etc.)

PROJECT PARAMETERS

TEAMS

Participating teams may have a 1 - 6 members. Schools can have multiple teams.

FABRICATION

Your project must include fillet welds and at least one groove weld.

Welding, cutting and forming processes may be manual, semi-automatic, or CNC.

SIZE

Your *assembled* project's overall footprint must be 20 cubic feet or smaller.

Your project may fit in 2' x 2' x 5' space, or a 1' x 2' x 10' space, or some other 20 cubic foot space.*

** See SIZE LIMITATION illustration.*

FINISHING

Do not grind your finished welds or paint your project. Your welds must be visible so that the judges can evaluate them.

REGISTERING

Your instructor will receive a link to our online registration form. Include your school, team name, project title and the division you're entering (artistic or utilitarian). Submit the form by the deadline listed in "Dates and Deadlines".

DOCUMENTING YOUR PROJECT

Document your project to show the steps you took from beginning to end. Steps might include: the original design idea, material order, actual work steps, problems encountered and your solutions, and finish work. Your documentation should include photos, video, drawings, and/or written descriptions, in an electronic portfolio format.

Photos/Video/Drawings/Documents in your electronic portfolio must include the following:

Your school, team name, team members, instructor, and the division you're entering.

The inspiration and intent behind your project

The function of your project (Utilitarian Entries)

Conformance of your project to the size requirement

Your project timeline and the steps you took

The processes, tools, and techniques you used in your project

Your fit up before welding, and the methods you used to preserve critical dimensions and geometric features such as squareness, straightness, flatness, perpendicularity, etc.

Your weld processes, quality and size

The challenges you encountered and solutions you employed

PRESENTING YOUR PROJECT

You will present your project virtually (via Zoom Meeting) to the judges. Plan to give a 2 to 3 minute presentation about your project. Presentation points may include the specific purpose or function of your project, the steps your team took to complete the project, the challenges your team encountered, and what you learned or accomplished in the process. The contest judges will likely have questions about your project following your presentation. The presentations will be recorded.

JUDGING

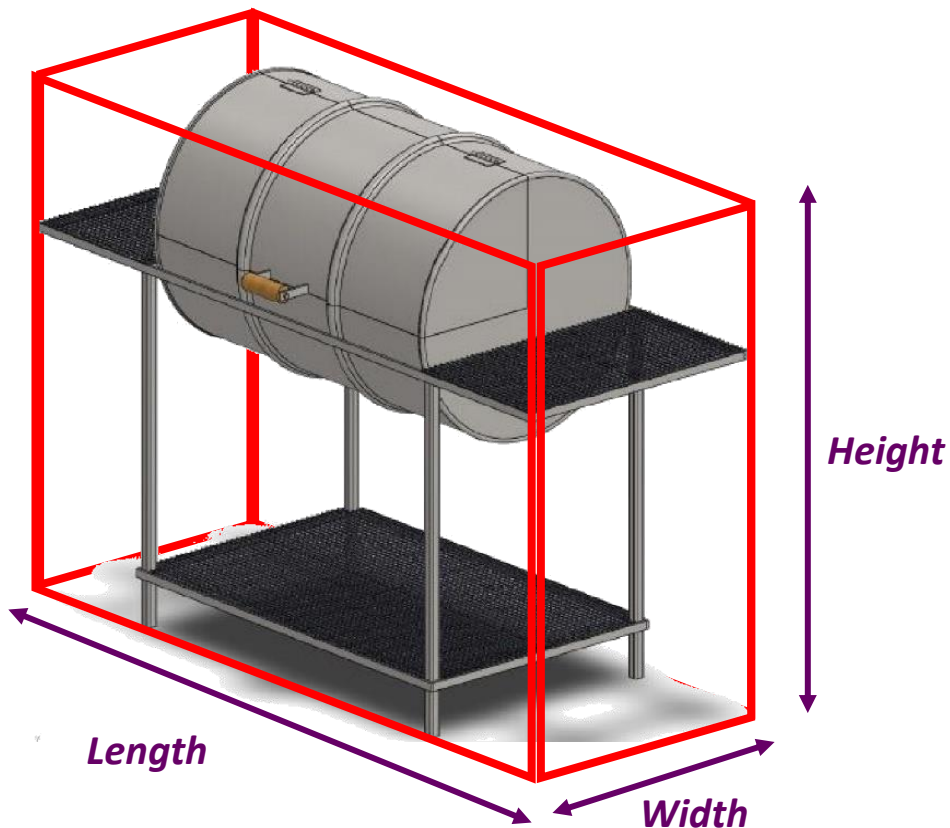
Your project will be rated in the four categories below. See “Judging Criteria” for more details.

Category	Possible Points
Design	35
Portfolio	20
Presentation	10
Craftsmanship	35
<i>total</i>	100

SIZE LIMITATION

Entries will be measured in their *fully assembled* state. The *overall footprint* must be 20 ft³ or less. (*L x W x H*)
Here is an example

$$L \times W \times H \leq 20 \text{ ft}^3$$



Dates and Deadlines

Registration **March 26**

Complete the online form at www.ntc.edu/k12events

Include your school name, instructor name, team members, and the division your project belongs in (artistic or utilitarian).

Portfolio Submission **April 30**

Submit your portfolio online ... details and a sample to come.

Presentations (with judges) **Week of May 3**

Presentation time slots will be available during the week of May 3. Presentations will be made via Zoom Meetings.

Celebration **May 13**

All teams and their instructors will be invited to attend a group virtual meeting to recognize the effort, creativity, and craftsmanship in your projects. Prizes will be awarded in both the artistic category and the utilitarian category.

JUDGING CRITERIA

	Minimal	Basic	Accomplished	Exemplary
	Significant portion of criterion missing	Needs additional work, clarification	Effective, detailed, consistent	High level of insight, depth, quality, originality
DESIGN	0 - 23 points	24 - 28 points	28 - 30 points	31 - 35 points
Your design lends to the efficient function of your project (Utilitarian Entries) - or - Your design lends to the aesthetic impact of your project (Artistic Entries)				
Your process/tool choices are innovative and support your design intent				
Your material/technique choices are innovative and support your design intent				
PORTFOLIO	0 - 8 points	9 - 12 points	13 - 16 points	17 - 20 points
Your portfolio shows the evolution of your project, from conception to finish				
Your portfolio details the processes, tool, and techniques used in your project				
Your portfolio shows the function of your project				
PRESENTATION	0 - 4 points	5 - 6 points	7 - 8 points	9 - 10 points
You clearly explain the inspiration and intent behind your project				
You clearly describe the processes, tools, and techniques used in your project				
You reflect on challenges and lessons learned throughout the project				
CRAFTSMANSHIP	0 - 23 points	24 - 28 points	28 - 30 points	31 - 35 points
Your weld processes serve your design intent and welds are free of defects				
Your cut processes serve your design intent and are well executed				
Your fit up preserves critical dimensions and geometric features				
<i>totals</i>				