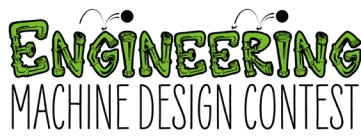


# Virtual Competition Guidelines

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## Machine Build Options

To accommodate for the various constraints of social distancing and distance/virtual education, two options for building a machine are available.

It is up to a Regional Contest Organizer to determine which types of machines are permitted in their virtual contest and if each type is scored as a separate division or in the same division. For example, a contest could have a Junior One Location Machine Division and a Junior Multiple Location Machine Division, or a contest could decide to have a single Junior Division where all machines compete against one another regardless of machine type.

### One Location Machine

A One Location Machine is a single structure chain reaction machine. It is the same machine that would be exhibited at an in-person competition.

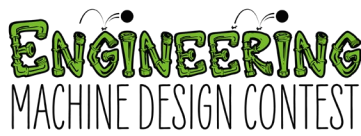
### Multiple Location Machine with Virtual Chain Reactions

A Multiple Location Machine with Virtual Chain Reactions includes multiple structures built in different locations. Each structure should give the appearance it could initiate the chain reaction in the next structure. However, each structure is built independent to accommodate for distance education settings.

For example, in a three person team:

- Team Member A would build a structure with the first five steps of the chain reaction machine. Team Member B would build a structure with steps six through 10 and Team Member C would build a structure with steps 11 through 15.
- Team Members A and B would coordinate their builds so that Step 5 and Step 6 could potentially be connected and Team Members B and C would do the same with Step 10 and Step 11. An example would be if Step 5 ends with a ball moving a lever, then Step 6 would initiate with a lever moving.

For the Submission Requirements, the team would capture a video of each structure and edit the video clips into one video, being considerate of the Run Time requirements per the Handbook.



## Submission Requirements

Regional Contest Organizers can determine the option that is best for them to gathering submission documents from teams. It could be done through email, a Google Form or Files, Qualtrics, or other platforms. Primary considerations are ease of submission process and process for organizing and giving judges access to submission documents.

Contest organizers will also want to determine a reasonable deadline for submissions taking into consideration the time it will take to organize submission documents/files, distribute them to judges, and allow judges sufficient time to review and score the documents/files before the scheduled live judging.

### Documents

1. Team Journal (PDF). Reference Handbook Section 3.8 (1 Upload)

### Images (To be included in Team Journal)

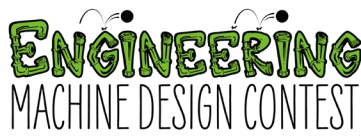
1. Image of each step. Ref. Handbook Section 3.4

### Videos

1. Video of full, uncut run. This video will be scored per Handbook including Penalty Deductions. Entire machine must be in full view at all times and should be recorded from a stationary point. For Multiple Location Machines with Virtual Chain Reactions, each location should record from a stationary point with that locations entire portion of the machine in full view at all times. (1 Upload)
2. Video clips of individual steps, series of steps, or components that team determines important to machine and/or is difficult to see in full, uncut run. (1 Upload; Video can be no more than 2 minutes)
  - a. These videos are to help Judges better assess aspects of the machine.
  - b. Be creative and try different angles and distances from machine to allow for the best view of that step.
  - c. Slow motion video is permitted.
  - d. These video clips should be taken separate from the full, uncut run video; in other words, these clips can be from different machine runs to best capture that step, series of steps, or components.
3. Video clips of each Advanced Component (Senior Division requires; Junior Division encouraged). Ref. Handbook Section 3.5 (1 Upload; Video can be no more than 2 minutes)
4. Video of Team Presentation. Ref. Handbook Section 3.9. (1 Upload)

### Video Notes.

- Only team members may be in video submission. (Registration paperwork should include image/video release waivers for all team members.)
- Teams may choose to recruit a team member to assist with video recording and/or editing needs.
- Teams may also want to look into [free video editing software](#) or even tablet/smartphone applications. [YouTube Creator Academy Learning Toolkit – Production](#) might be a good starting point for learning more about video recording and editing tips.



## Judging Process

Judging will take place in two phases. First, judges will score the submission documents/files. Then they will score the final Team Presentations during scheduled live judging sessions. Judging sessions can take place on a single day or over a course of days.

It is up to the discretion of the Regional Contest Organizer if the live judging sessions are open to other teams or the public to view and appropriate permissions should be gathered from student parents/guardians. If the judging sessions are not private, teams and coaches must be given sufficient notice and be allowed to request a private judging session if student safety or other considerations are a concern.

If judging sessions are being viewed by other teams or the public, it is encouraged to have the machine submission videos either available for viewing or play them at the start or end of the teams judging session.

## Judging Modification for Virtual Setting

1. Only one “round” of judging to determine placings and award. No preliminary and finals rounds. Modified from Handbook Sections 3.10 and 3.11 to accommodate virtual setting.
2. Only one machine run will be scored (i.e. Full, Uncut Run Video). Modified from Handbook Section 3.12 to accommodate virtual setting.
3. Live Team Presentation judging sessions will be scheduled and Team Presentations will be judged collectively based on the video submission and live presentation. Modified from Handbook Section 3.5 to accommodate virtual setting.
4. Judges score submitted material using Score Sheets as outlined in Handbook with the following exception or modifications:
  - a. Score Sheet 2: Team Presentation will be initially scored based on Team Presentation Video Submission. Final scores will be marked after live Team Presentation.
  - b. Score Sheet 3: Machine Specifications and Run Penalties will be scored based on Full, Uncut Run Video Submission. Machine Dimensions will not be considered.
  - c. Score Sheet 4: Machine Design and Operation will be scored based on Full Uncut Run Video, Video Clips, and Advanced Component Video Clip Submissions.