

RULES for the 2025 WORLD CHAMPIONSHIP OF CAD SPEEDMODELING TOURNAMENT (Updated Dec 4th, 2025):

Starting **XXX** and running through to **XXX**, Too Tall Toby and team will be hosting a **an 8-person 1 vs 1 bracket style tournament**, titled: Too Tall Toby's **2026 WINTER FREEZE CAD vs CAD TOURNAMENT**. The winner of this tournament will receive prizes and recognition from the entire Too Tall Toby community.

The Tournament Livestream will be hosted on the Too Tall Toby YouTube Channel each Friday at 1 PM US Eastern Daylight Time (6 PM GMT).

Terminology used in these rules:

- “Runner” – A human competitor in this tournament.
- “Matchup” – A 1 vs 1 pairing of 2 runners. A matchup will conclude when one runner scores 2 points.
- “Battle” – A single attempt to score a point, between 2 runners. Each matchup consists of 2 or more battles, and the match up will end when one runner scores 2 points.
- “Round” – A section of the tournament which features a set number of runners. Examples are: **Round of 8, Round of 4 (aka: The Semi-Finals), Round of 2 (aka: The Finals)**. The models will progressively increase in complexity as the runners advance through the rounds in this tournament.

Format: 1 vs 1 — CAD vs CAD Speedmodeling Tournament:

- A collection of fully dimensioned 2D prints will be created by Too Tall Toby prior to each livestream in the tournament. From this collection, a 2D print will be randomly selected, and this print will be displayed to both of the runners in the matchup, simultaneously, via YouTube livestream. The runners will attempt to create a dimensionally accurate 3D model from the 2D print, while sharing their screens with Toby via WEB MEETING.
- While creating their 3D model, the runners will assign a material density (as specified on the 2D print) and calculate the mass of the completed and dimensionally accurate 3D model. The runners will post this mass in the chat found in the YouTube livestream.
- Too Tall Toby and team will examine the submitted mass, and will award a point to the first runner who calculates the mass correctly. The first runner to score 2 points will be declared the winner of the matchup, and will move on to the next round of the tournament (Round of 8 > Semi-Finals > Finals). The remaining runner will be eliminated from the tournament.
- All matchups will conclude when one runner scores two (2) winning points, including the Semi-Finals and Finals.

Equipment and Software:

- Runners will be responsible for acquiring their own computer equipment, including a computer, mouse, keyboard, and one or more monitors. (We recommend 2 monitors for this competition)
- No webcam or microphone shall be necessary to compete in this tournament.

- Runners will be responsible for acquiring a valid license of 3D CAD Software for use during the tournament.
- Runners will be responsible for establishing a stable and fast internet connection.
- Runners will be responsible for acquiring a username for YouTube chat capabilities.
- Runners will be responsible for ensuring that the ZOOM web meeting software will work on their computers. Runners will need to install the thick client of ZOOM (free of charge), and will need to ensure that their screen can be shared via ZOOM.
- Too Tall Toby will provide all livestream production related software required for ZOOM web meetings, video overlays (OBS software) and YouTube Livestreaming.

Participants Network and Computer Responsibility:

- The participant is responsible for their computer and network stability. If a participant experiences a crash of their software or a disconnect of their internet, the battle will continue, uninterrupted for the remaining participant. It will be the responsibility of each participant to ensure the highest possibility stability of their computer and their network connection.
- A slow or unstable internet connection will be a detriment to participants in this contest. It is up to each participant to mitigate this, as best they can.

PERMISSION TO SHARE:

- **During Tournament events, Runners will be advised to share ONLY their CAD program via the ZOOM web meeting, not their entire computer screen. The meeting host will be broadcasting the ZOOM web meeting on the Too Tall Toby YouTube Channel Livestream. If a runner chooses to share their entire screen, the runner will bare the sole responsibility to NOT share any proprietary or inappropriate content. The runners acknowledge that at any point during the livestream, the runner's screen may be broadcast to the YouTube audience.**
- **Runners grant Too Tall Toby irrevocable permission to use the Runner's shared screen for the purposes of the Livestream Tournament event. Runners grant Too Tall Toby irrevocable permission to use recordings of the shared screen during subsequent Livestreams, videos, or in any future marketing or promotional capacity, without restriction or limitation.**
- **Runners grant Too Tall Toby irrevocable permission to use the Runner's username, avatar image, title, "Fun Facts" and other information gathered from the Runner for the purposes of the Tournament, during the Livestream Tournament event, during subsequent Livestreams, videos or in any future marketing or promotional capacity, without restriction or limitation.**

COMPETITION RULES:

Starting a "New" document every time:

- **Participants will be instructed to "begin a new model" at the start of each round. In SOLIDWORKS this means clicking the "new" icon, and then choosing their template. In**

Onshape, this means either creating a new document or creating a new part studio in the current document. In other 3D CAD packages, participants should follow a similar workflow.

Templates and Pre-created Geometry:

- **Templates are a great way to decrease the amount of time it takes to create a 3D model. However, the spirit of this tournament is one which encourages the participants to create NEW geometry to construct the 3D models during the battles.**
- **Templates may contain pre-created material properties. EXAMPLES: Material, Appearance, Density.**
- **Templates may contain pre-created REFERENCE geometry. EXAMPLES: Planes, Axes, Coordinate Systems.**
- **Templates/user interface may contain tools that help you quickly calculate/view the mass of the model (in SOLIDWORKS this would be a “sensor”, in Onshape this would be the custom Feature script, in Inventor this would be the Mass displaying in the upper left corner).**
- **Templates MAY NOT contain pre-created geometry in the form of 2D Sketches, 3D Sketches, SOLID geometry or SURFACE geometry. We (both the organizers and the audience) want to see the participants creating this type of geometry from scratch.**

- Similarly, participants MAY NOT UTILIZE user created “drag and drop” library features during the tournament. EXAMPLES would include things like user created “Tombstone shapes” and user created “Bolt Circles with multiple counterbored holes already positioned”.
- Again, we (both the organizers and the audience) want to see the participants creating this type of geometry from scratch.

Hole Wizard / Hole Creation Tools:

- “Hole creation tools” such as HOLE WIZARD in SOLIDWORKS may be utilized during the competition. Similar hole creation tools in other 3D CAD programs may be utilized by participants during this tournament.

Customized Tools/Customized Macros:

- This is a bit of a gray area...but the general rule is that if a tool has been custom coded to help in “day to day” engineering activities, you can probably use it in the tournament.
- Example: An Onshape user created a custom tool that does a “double mirror” – meaning it mirrors across 2 planes at the same time, so you can model one quadrant (1/4) of the model and mirror it in both directions, leaving you with a completed model.
- Is this allowed? YES!! Because it has a practical application in the real world.

- However – for any questions regarding customized tools/customized macros the best thing to do is CONTACT TOBY via the contact page on tootalltoby.com.

Correct Mass and “The Ivan Exploit”:

- An answer will be considered correct when the mass has been submitted in the YouTube chat, and this mass is correct, within the specified tolerance listed on the 2D print.
- Since we are looking for mass, there will be opportunities for participants to create features “in the wrong location”, so long as the mass of these features is correct. The most common example of this is a hole passing through 2 parallel faces. When this occurs, the location of the hole is inconsequential on the overall mass of the model.
- This exploit, often referred to as “The Ivan Exploit”, is a known exploit of this competition and using this exploit will not disqualify the participant from the contest. If the overall mass of the model is correct (within tolerance) a win will be granted to the participant.

One Incorrect Answer, Two Incorrect Answers, The Clock, Sudden Death:

- Participants may submit 1 incorrect answer per modeling challenge. If this occurs, Too Tall Toby will declare, on the livestream, that the submitted answer is incorrect. The participant may then examine the 2D Print and their 3D model, to determine the discrepancy.

- Once found, the participant may once again submit their answer. If correct, the participant will win the round.
- However, if incorrect a second time, the participant will be ineligible to earn a point for this model. When this occurs, a 5 minute countdown timer will be initiated, and the other participant will have 5 minutes to calculate the correct mass.
- If the other participants submits 1 incorrect answer, they will have an opportunity to correct their calculations and re-submit their answer. If their second answer is submitted before the 5 minute countdown timer concludes, and this answer is the correct mass, they will be awarded a point.
- If their second answer is incorrect, or if they do not submit their answer before the 5 minute countdown timer concludes, the battle will be considered a “stale mate” and no points will be awarded.
- The 2 participants will continue to compete until one participant has earned 2 points, and the person with 2 points will be declared the winner of the matchup.
- NOTE: The “Clock” rule could be exploited to the advantage of one participant, by quickly submitting 2 incorrect times at the start of the battle (and hoping their opponent will be unable to complete the model within the 5 minute countdown of the clock). If Too Tall Toby and team witness this strategy, the battle will be deemed a forfeit in favor of the participant who did not attempt to exploit this rule.

SUDDEN DEATH:

In an effort to ensure that matchups don't run on "forever" we will institute a "sudden death" rule in the following scenario:

- When a battle concludes with no points awarded, it will be deemed a "push". In a single matchup, if 2 battles result in a "push" all subsequent battles in that matchup will utilize "sudden death" rules.
- "sudden death" rules are identical to the standard rules listed above, with one change – in "sudden death" rules, the first answer submitted will determine the outcome of the battle. If the runner submits a correct answer, they will win 1 point for the battle. If the runner submits an incorrect answer, their opponent will win 1 point for the battle. "sudden death" battles will also feature a 12 minute battle clock. If neither runner submits an answer within this 12 minute clock, Too Tall Toby will "flip a coin" to randomly select a winner of the point.
- NOTE: In a "sudden death" battle, the following "exploit" will not be permitted: a runner could calculate their answer, then wait to submit their answer and watch their opponent's screen to see if they come up with the same mass, then "quickly snipe" their answer in, at the last moment. Attempting to use the exploit will not be permitted, and any runner who attempts this will forfeit their point for the battle.

Too Tall Toby and Team's Discretion:

Any unusual circumstances or situations not described above will be resolved at the discretion of Too Tall Toby and team. Too Tall Toby and team will retain full discretion regarding a resolution. This includes, but is not limited to, the following circumstances:

- – Too Tall Toby experiences a network or computer failure during the live broadcast.
 - – A 2D print used in the tournament contains a mistake (possibly a missing dimension, incorrect density specification, or an incorrect mass on Toby's answer sheet).
 - – A participant is no longer able to compete in future matches, due to a scheduling conflict.
 - – Too Tall Toby makes a mistake by awarding the point incorrectly, possibly by misreading the runner's answer or by misreading the answer key.
- For these and/or any other unforeseen challenges, Too Tall Toby and team will do their best to uphold the integrity and spirit of the tournament, and will be as transparent as possible regarding their decision making process.