

2017 DEFCON 25 Beverage Chilling Contest Rules

The 2017 BCC contest returns again to find a better way to CHILL MY BEVERAGE! As we all know the Nevada sun is hot and the only solution is a nice cold drink.

The rules this year are much like every other year, get the test fluid to the target temperature in the shortest time WITHOUT ADULTERATING THE BEVERAGE.

Notable changes to the rules this year are the addition of the Joules per Second measure and the In to Out volume ratio.

Parameters

Build and Setup Period : 2 hours

Qualification Period : 30 minutes

Start Temperature : 95 degrees (F)

Target Temperature : 38 degrees (F)

General Rules

- All contestants must have DEFCON badges.
- Teams may have no more than 3 people at the table during qualification runs. Build teams may be larger but only three operators can be present when qualification runs are being performed.
- The contest will provide test fluid but it will be up to the team to dispose of this in a clean and responsible way.
- NO COMMERCIAL APPLIANCES. Your contraption may include a commercial appliance as a component but it may not be the majority of the device nor may the appliance's primary function be to chill beverages. This will be the to the judge's discretion.
- Power will be available.
- Beverage purity is TOP IMPORTANT! The device may not alter, mix, or dilute the beverage in any way. Cooling fluids may not be mixed with the beverage.
- There are two classes of devices, unlimited and hacked. An unlimited device may not compete in the hacked class but a hacked device may compete in the unlimited.
- The judges may disqualify a team if they consider a device or the operation of a device an extreme health and safety hazard. To put this in perspective, we have fielded multiple contraptions using liquid nitrogen, compressed gases, and flammable substances. Getting called

on this means we literally, no joking, think someone is going to get seriously injured. To this point we have never had to call anyone on this, don't be that person! We do not want to get banned by the venue.

- If you are using compressed gasses or possibly explosive contraptions please make sure you have a way to render the device safe. This may be a vent valve or the like. USE COMMON SENSE!

Classes

There will be two device classes available to contestants. Teams may only compete in one of the two classes. No device or team may enter both.

The unlimited class has no restrictions on entries and may be entered by any team with any kind of device and may be entered by teams which qualify for the hacked class should they choose to do so.

The hacked class is limited to teams which build their device during the contest build period at the convention with items found locally. You will need to perform this build in the build area during the build period. All items are subject to the judge's desecration. If you show up with a fridge we will not allow you to use it unless you can provide you got it locally or at the convention.

Supply Store

A supply store will be provided for all teams to access during the build period. Various goods will have "prices" in seconds added (or subtracted) from total time. For example including the rubber chicken in a functional way may subtract a few seconds from the scoring time. Below is a partial list of items we will stock. Additional items may be added and the full list will be available before the contest starts. (I gotta hit the store and see what I can afford). I will also bring a small number of useful tools available for checkout to aid in construction which will not have a time price. It should be obvious but tool hoarding is prohibited.

- Dry Ice by the pound
- 91% rubbing alcohol
- Regular ice
- "Beer Bong" AKA Funnel with some tubing
- DUCT TAPE
- A rubber chicken

Scoring

- Devices will be scored on the following parameters.
 - Reaching the target temperature plus time modifying items.

- Joules per Second of energy transferred. This means if you take 3 times as long as the next team but chill three times as much beverage it will be the same score.
- In to Out volume ratio. IE How much beverage is lost during cooling.
- A time penalty of 1 second will be added for every degree off of target temperature.
- Each team will have three qualifying runs and the run time will be the total of the three.
- A time bonus will be subtracted from the total time for each additional standard beverage chilled and transferred into a cup.
- In addition to the chill score additional prizes will be available for the form and finish of the device. So make that device look sweet as shit and easy to use.

Qualifying Runs

Qualifying runs will be performed during the qualifying stage of the contest. Each team will have three standard qualifying beverages on the contest table. When a team picks up a beverage the clock starts and does not stop until the beverage is returned to the table. Try not to spill any when running.

Temperature will be measured once the beverage is on the table.

All three runs must be performed during the qualification period.

Prizes

YOU DO THIS FOR FAME AND THE LOVE AND ADORATION OF YOUR PEERS!

As always we will try and come up with something nice that we think everyone will enjoy.

We promise that almost no prizes will be a lump of coal. Each class will have its own prizes with the unlimited having the better rewards. The hacked class is intended to garner interest and participation in the contest but will have nice rewards.