

# Carboy Volume Marking

#### Benefits

- Know how much beer / trub you have.
  - Too much to fit in a keg?
  - How many bottles to prep?
- Know your efficiency for replication and recipe creation.





# Preparing your Carboy

- Clean and dry the outside.
- Weigh the water, don't measure it.
  - Measuring cups are not always accurate.
  - 1 gallon of water weighs 8.345 pounds
- Decide on an increment
  - ½ gallon increments for 3+ gallon



#### Measure and Mark

#### Process

- Use both sides of the carboy
- Draw vertical lines on each side to keep your marks straight.
  - Dry Erase marker or blue tape works good.
- Add ½ gallon water (or whatever increment).
- Wait for it to settle.
- Mark with dry erase marker or tape.
- Repeat until full.
- Empty carboy and dry.
  - Watch the lines!

#### Create your stencils

- Use Numbers and long dashes for whole gallons.
- Short dashes for ½ gallon marks.
- Cameo, Cricut, or similar cut printer works great.
  - Use paper type 651
- Raid your wife's scrapbooking supplies.
- Make your own out of blue tape.



#### Attach to Carboy

- Weed your stencils
- Use a nail point.
- Keep it straight vertically.
- Use the waste on the other side.
- Press on with hard plastic, credit card, spatula.





## Glass Etching

- Can be purchased at a craft store (Michaels)
- Its an acid, use caution.
- Use a small paint brush to apply.
  - Small area at a time.
  - Stay in the lines.
- Wait 5 minutes
  - Re-use on a different area.
- Wipe etching cream off carefully with paper towel
- Rinse with cold water.
- Leave the stencil on until it wears off (if you want to)



### Sanitizing... if you didn't know

- Star san only requires 30 seconds of wet contact.
  - Fill carboy with about 1 gallon of Star san.
  - Or use a spray bottle.
  - Swirl around.
  - Invert on keg to drain.
  - No need to rinse.
- Seal your keg, its sanitized now as well.
  - Push out Star san with CO2
  - Star san can be reused until pH is higher than 3.0



#### Carrying Do's and Don't's

- They are heavy, breakable, and dangerous.
- Do: Use a carboy carrier
- Don't: Carry it by the neck
- Do: Use Gravity
  - This is cold side, replace tubing frequently.
  - Clean immediately after use.
  - Pump or gravity transfer.
  - Helps to oxygenate the wort.



## Using gravity

#### View the Wort Transfer Video







#### Cleaning...PBW and Hot water

- Use a carboy brush.
  - Wet the bristles first
- Buy/build a carboy scrubber for your drill:
  - Long threaded screw
  - Cloth towel



### Carboy Cleaner

- Sump pump, bucket, and PVC attachments
  - More power is not necessarily a good thing.
  - Drill holes in PVC for side wall cleaning.
  - Cap top and drill holes, or leave open.
  - Water needs to get out too.
  - Anything that needs cleaning can be put in the bucket.

View the Carboy Cleaner in action



## What about a keg cleaner?

- Add a T fitting with gas/liquid post
  - Use a cap to force PBW to post cleaner.
  - Drill holes in the cap.
  - Don't use a bucket lid, keg sits on the T.
  - Use hose clamps.



#### What about a growler cleaner?

- Stick the growler handle into the cord outlet on the lid.
- Lots of force, hold it down.

 Lots of water, use a small diameter pvc to get the water out.

#### What about a bottle cleaner?

 My pump would turn that into a bottle rocket, its too powerfull.

#### Dont

- Carboys are NOT meant for pressurized transfer.
  - Its dangerous, any crack or weakened glass could cause it to blow up.