



By the "Brut" Squad

BRUTAL BREWING

WHO IS THE BRUT SQUAD?

- ✘ Drew Beechum, Kent Fletcher and random assorted Falcons.
- ✘ One important thing you should know about us

WE HATE BOTTLING

WHAT'S THE PLAN

- × Explore Champagne Beer
- × Talk Recipe Design
 - + Taste a few
- × Talk the Methodology
- × Demonstrate the works
 - + Includes bonus mad science and possible bottle explosions

WHAT IS CHAMPAGNE BEER?

- × Premium Belgian style that marries a Belgian Strong Ale with the prestige of Champagne
- × Patents and Licensing Agreements restrict brewing to Brouwerij de Landtsheer and Brouwerij Bosteels
- × And boy howdy is it “premium” running \$20-35 retail.

THINK THIS



NOT THIS



WHEN THINKING CHAMPAGNE BEER:

A LITTLE CHAMPAGNE HISTORY

- × Champagne region grows less ripe, more acidic grapes.
- × Sugar was added to boost the ABV
- × First mention of “méthode champenoise” was by Christopher Merret (1662)
- × Everyone credits Dom Pierre Pérignon (40 years after Merret)
 - + He did create the wire cage and grape blends
- × Modern méthode champenoise not used until the late 1800's



DOM PERIGNON – THE INFAMOUS DEVIL'S WINE FRIAR

Epernay France – the caption honors Dom Perignon as the cellar master of the Abbey whose vineyards and buildings are now the property of Moët & Chandon

METHODE CHAMPEN-WHAT?

- ✘ Process that creates a highly effervescent beverage (3.5-9 volumes)
- ✘ Retains the character of bottle conditioning with increased clarity.
- ✘ Beverage is primed and capped as usual
- ✘ After a period of aging and settling, the yeast is removed and the bottle topped up

SOME FANCY PANTS TERMS (AKA FRENCH)

- × Brut - “Dry” (as opposed to Sec or Demi-sec)
- × Remuage - “Riddling”
- × Dégorgement - Disgorgement
- × Dosage - Topping up liquid

SO WHY CHAMPAGNE BEER?

- × Prolonged aging produces a complex ‘yeast bite’ and other melded flavors
- × Profound carbonation pushes big flavor, aroma and a fluffy mouth feel
- × Ages beautifully
- × Get to play with a ‘new’ technique
- × Shocks everyone

WHY NOT CHAMPAGNE BEER

- × Bottles can really vary.
- × The 1.5L+ bottles are a tough find
- × It's an intimidating and involved process. (At First)
- × It takes a long amount of aging (maybe)

A LONG TIME?

- × In reality, most of your time is spent waiting.
- × You have to bottle the beer (see slide 2)
- × It bottle conditions for months
- × You have to riddle the bottles every 2 days
- × You need 3 hours to disgorge and cork the bottles
- × At day's end, it's one extra step to make something unique.



BRUT RECIPE DESIGN

RECIPE DESIGN FOR BRUT

- × Dry
- × Starting OG - 1.085ish
- × Lots of Pils and sugar
- × Bottle ABV - ~10%
- × Pitch vast quantities of yeast
- × Go Big (Volume) - At least 10 gallons.

BRUT DU FAUCON

Our DeuS mimic. Heavily spiced with allspice, cinnamon, ginger and lavender. Both dry and sweet at the same time.

For 5.5 gallons @ 1.085 OG, ~1.010fg, 23 IBUs, 5 SRM

Amount	Malt / Sugar
13 lbs	Belgian Pilsner Malt (84%)
0.25 lbs	Caramel Pils (C8) (1.5%)
0.25 lbs	Aromatic Malt (1.5%)
2.00 lbs	Pale Sugar (13%)

Amount	Hops	Boil
1.0 oz	Styrian Goldings (5.25%)	60 min
0.5 oz	Saaz (3.5%)	20

BRUT BRUNE

A 'mistake' – Meant to be a Rouge, became our Vanilla Malt Brut via priming dose of homemade organic Vanilla Extract

For 20 gallons @ 1.084 OG, ~1.010fg, 25 IBUs, 15 SRM

Amount	Malt / Sugar
42 lbs	Belgian Pilsner Malt (76%)
3.0 lbs	Caramunich Malt (5%)
1.0 lbs	Special B Malt (2%)
0.5 lbs	Carafa Malt (1%)
9.0 lbs	Cane Sugar (16%)

Amount	Hops	Boil
1.0 oz	Styrian Goldings (5.25%)	60 min
0.5 oz	Saaz (3.5%)	20

BRUT DU CONFERENCE (AKA "SEX")

Just for you guys, we made big hoppy Brut Sex. Pushed the gravity envelope and no spices! (Used Saison yeast instead) Think Houblon Chouffe

For 20 gallons @ 1.092 OG, 1.008 FG, 47 IBUs, 5 SRM

Amount	Malt / Sugar
50 lbs	Belgian Pilsner Malt (80%)
6.0 lbs	Weyermann Wheat Malt (9.5%)
1.0 lbs	Munich Malt (1.5%)
4.0 lbs	Cane Sugar (6.5%)
1.5 lbs	Turbinado Sugar (2.5)

BRUT DU CONFERENCE (AKA "SEX")

Ran out of room for the hops!

Amount	Hops	Boil
2.0 oz	Magnum (14%)	60 minutes
4.8 oz	Styrian Goldings (5.25%)	30 minutes
4.0 oz	Styrian Goldings (5.25%)	15 minutes
1.6 oz	Styrian Goldings (5.25%)	0 minutes
1.6 oz	Saaz (3.5%)	0 minutes



BRUT BREWING

THE BREW DAY

- × Mash low
 - + We typical mash at 148F for 60 minutes
- × Restrain your hop/spice hand
 - + The carbonation accentuates everything
- × Lots of yeast and O2
 - + Use a slug from a previous batch

BOTTLE TIME

- × Bigger bottles are a challenge to find.
 - + Cal-Glass / Pacific Coast Container
 - + Raid your local Belgian specialty bar
- × Don't worry about re-pitching
- × Prime the keg not the bottle
- × Sugar – Use 7oz – 14oz (by weight!)
- × Save some beer for topping up

THE SPICE IS LIFE?

- × Best use of spices is in the priming syrup.
 - + More consistent and it doesn't blow away
- × Less is more.
- × We've used: Allspice, Black Pepper, Cardamom, Cinnamon, Clove, Ginger, Lavender, Mace, Mint, Vanilla, etc.
- × Most of these are heavy eugenol spices.

- Proper Riddling Rack
- Every day (or 2), a twist to shake loose the sediment.
- After each twist, the bottle goes more vertical
- At the end, the yeast is against the cap
- Use a case box if you don't have \$600 for a rack.



RIDDLING – THE PROPER WAY

RIDDLING – THE BUSY BREWER'S WAY

- × Fletch's way of riddling.
- × Put the bottles upside down to start.
- × Pick each bottle up and give it a little drop to shake things up.
- × Yes, it's cheating



DISGORGEMENT DAY

WHEN'S D-DAY?

- × Ideally, wait several months (to develop flavors)
- × When the beer is clear and you have a solid sediment plug, go for it

GETTING READY FOR DISGORGEMENT

- × Get everything laid out ahead of time in stations.
- × Keep extra sanitizer on hand
- × Start slow – once you find the rhythm, you'll fly through the bottles.
- × Definitely a two person job

- × If you're truly coordinated – check out “Flying Disgorgement”

OTHER GEAR (HARD AND SOFTWARE)

- × Dosage liquid
- × Reliable digital thermometer (-40F range)
- × Narrow pot
- × Acetone
- × Dry Ice
- × De-crowner
- × Corks (We use the plastic corks)
- × Cages
- × Cage Wrench
- × Foils



LAST PIECES OF GEAR
A CHANGE OF CLOTHES AND SAFETY
GLASSES!

- Insist on glasses.
- Bottles do sometimes break thanks to shock.
- Over 6 batches we've lost a handful of bottles.
- The worst was a 3L with glass ½" thick



SAFETY

STEP 1 – GETTING CHILLY

- × We use acetone and dry ice (~-40F)
- × You can use grain alcohol and dry ice (~20F)
- × Potassium Chloride and Ice was traditional.
- × Hold the bottles steady in the bath for ~1 minute.
- × Don't let the beer freeze beyond the neck.
- × Add dry ice periodically when the temp climbs

STEP 2 – LOSING YOUR CROWN

- × A decrowner is ideal and a backyard for flying yeast plugs
- × Take the bottle, rest it on your leg and decrown it.
- × If the plug doesn't fly immediately, use your hand to warm the neck.
- × And don't point it at anyone (or small dogs or children)



OHH.. SPRAY!

STEP 3 – DROPPING A DOSE

- × Have a filling station ready for the newly opened bottles.
- × We used to use wide bore syringes.
- × Now we use a BeerGun to dispense into the bottle
- × The beer will foam up, keep filling!

TEST THE DOSAGE

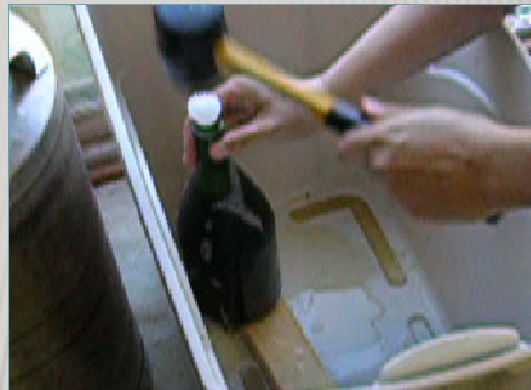


THE ACTUAL DOSAGE



STEP 4 – PUT A CORK IN IT

- × Keep the corks floating in sanitizer.
- × If you're using real corks, get the machine set before disgorging.
- × For fake corks use a wooden or rubber mallet
- × Quickly seat the cork, set a wire cage and twist with pliers or cage wrench (about 3-4 turns max)
- × Steps 2-4 take less than a minute.



A CORK TO REMEMBER

AND NOW.. A DEMONSTRATION

STEP 5 – DRINK!

- × Serve well chilled. The beer is way too gassy warm.
- × Champagne flutes are great, but a nice open Belgian Goblet works fine. Concentrate
- × Our favorite game – how far can you shoot a cork. (~50 feet)

THE BRUT CHEAT SHEET

- × Keep your OG in the 1.080s
- × Mash low to boost fermentability
- × Drive the yeast to finish ≤ 1.010
- × Prime with 7-14 ounces sugar
- × Rest the bottles for 4+ months
- × Riddle for at least a month
- × Disgorge while cold

Questions? Contact drew@maltosefalcons.com