

All-Grain Tutorial

This tutorial assumes you have done full-boil extract brewing before. We suggest making a beer of modest (1.035-1.050) gravity for your first all-grain batch.

We will show a single-infusion mash with a batch sparge. Step infusion and decoction mashes are not recommended for beginners.

Step 1:

Fill the brew-pot with 1.33 quarts of water per pound of grain, heat to 170°F*. Example: 9 lbs grain x 1.33 quarts/lb = 12 quarts (3 gallons)

*This temperature is dependent on several factors including grain temperature, target mash temperature, water/grain ratio, and the type of mash-tun used in your particular system. We suggest using 170°F for your first batch, then adjusting up or down in future batches.



Step 2:

Pour the water into the mash-tun, add the grains, and stir thoroughly.

The mash-tun should already have a false bottom, stainless braid, or other straining device.









Step 3:

Cover the mash-tun, wait 5 minutes, then stir and check temperature.

The temperature should be 148-154°F. If it's below 148°F, stir in a small amount of boiling water. If it's above 154°F, leave the lid open and stir until it drops.

Make a note of the temperature. For future batches, heat the strike water higher or lower to achieve proper mash temperature.



Step 4: Cover and wait 45-60 minutes.

Enzymes from the base grain are converting complex starches to simple sugars.



Step 5: Heat your sparge water to 185°F.

Use the same amount of water as in step 1. This water will need to be ready for Step 7.



Step 6:

Vorlauf.

<u>Slowly</u> start draining the wort into a pitcher. It will be filled with grain particles at first, but will slowly clarify, typically after 2-3 quarts.

Once the wort runs clear of grain particles, empty the pitcher back into the mash-tun, and allow the rest to run into a bucket. Close the valve when flow slows to a trickle.



Step 7:

Sparge.

Add the sparge water to the mash-tun, stir thoroughly, cover, then wait 10 minutes.

Once mixed, the grains and water should be approximately 170°F. Exact temperature is not critical.

Tip: Now that the brewpot is available, begin heating the wort that's already been collected.



Step 8:

Vorlauf and strain the grains again. Use all collected liquid as wort.





Step 9:

Add Water?

Depending on the OG of your recipe (which determined strike and sparge water volumes), there could be less water in the brewpot than you normally start with. Add more water to raise the volume to your normal brewing volume.

After doing a few all-grain batches, you'll be able to better predict temperatures and water volumes. Always take notes.

Step 10:

Heat the wort to boiling and follow your brew schedule.

At this point, there is no difference between all-grain and extract. You can brew as you normally would.