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## [BSHB] Moving to All Grain Beer Brewing

1 meddelelse

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3. sep. 2011 05.27

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# BeerSmith Home Brewing



## How to Move to All Grain Beer Brewing

This week we take a look at instructions for all grain beer brewing using a single step infusion mash setup.

The vast majority of all grain brewers use a one step infusion mash to create outstanding homebrewed beer.

To use a one step infusion mash, you need some basic all grain brewing equipment. This includes a 7-9 gallon brew pot and a 5 gallon or 10 gallon Gott type water cooler with a false bottom. I personally use a Phils false bottom (9" diameter) in my cooler and drain using a hose that runs through the removed tap for the cooler. A properly sized stopper replaces the water tap as shown in the photo.

The infusion mash process is remarkably simple. Crush all of your grains in a mill first. The grain should be finely ground, but the husks of the grain should be relatively intact as the husks act as a filter in the grain bed.



Next, heat a pre-measured amount of water, called an infusion, to a target temperature and mix it with the grains. This infusion step (mashing process) breaks down complex sugars in the crushed grain and converts it to simple sugars that can be fermented by yeast.

You can use a brewing program such as [BeerSmith](#) to calculate the temperature and amount of infusion water needed for the mash. Make sure you use the correct equipment settings and total grain amount in the calculation.

When using BeerSmith, make sure you have your

As you continue to sparge, it is important to keep the flow rate slow to maximize the sugars extracted. Lautering a 5 gallon mash tun should take at least 40-50 minutes to collect 6 gallons of wort. From this point forward, the process used to brew your beer is the same as it was with extract brewing. Add hops, boil the wort for 60-90 minutes, cool it quickly to room temperature and add your yeast to ferment your beer.

Switching to single infusion all grain brewing is a great way to gain more control over your beer, and requires only a little bit of additional equipment (a large cooler, false bottom, and full size brew pot) and time. The single infusion mash provides a great starting point for those transitioning to all grain.

Take the leap, and enjoy brewing your first all grain today!

## Have you Tried the Barley Crusher?

The Barley Crusher is my personal malt mill of choice for crushing grain. It has a dual steel roller, adjustable gap and 7lb or 15lb hopper. We

[equipment set up](#) to include the water cooler as your mash tun and choose a "Single Infusion, Medium Body, No Mash Out" as your mash profile. Use a target step temperature of 154F, which is an excellent mid-range temperature for your first infusion mash. For BeerSmith, the "Preview Brewsheet" button on the toolbar will display step-by-step brewing instructions including the amount of infusion water to add.

Heat the recommended amount of infusion water to the temperature provided by your calculator or brewsheet. Slowly alternate adding water and grain to your mash tun until you have all of the water and grains mixed together. Insert a thermometer so you can track the temperature against your target step temperature. Close the top and let your mash temperature settle for 5-10 minutes.

Slowly mix your mash every 10-15 minutes to keep the temperature even and avoid hotspots. The mash mixture should reach a steady temperature close to 154F. If it is off by a significant amount, you can add a small amount of boiling or cold water to achieve the target temperature. Leave your mash mixture in the cooler for at least 45 minutes to assure that the sugar conversion is complete.

After 45 minutes, sparge the mash with hot water to extract the sweet wort that will be your beer. Sparging is nothing more than rinsing the mash with hot water to extract the sugars and create wort that you will later ferment to make beer.

Heat several gallons of water to 178F and slowly add it to the top of your mash tun while drawing wort from the bottom of the grain tun using your false bottom and collect it in your boiler. The wort coming from the mash tun will start out cloudy with bits of grain and husks, but will soon run clear. Take the first few quarts of wort from the tun (the first runnings) and add them back to the top of your mash tun.



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currently have a sale running on the [Barley Crusher Malt Mill](#) - guaranteed for life!



## A Quick Note from Brad

This week's article on All Grain Brewing is a bit longer than most, but I thought many of you would enjoy learning more about the process.

If you are already an all grain brewer, here's another great [article on the mashing process](#).

## Try My Brewing Podcast

Every other week, I interview top beer brewers from around the country to explore brewing techniques, beer styles and more.

[The BeerSmith Podcast](#)

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