

The Hochkurz Two Step Mash Method

This is a simple two stage mashing system which is widely used in Germany for brewing many different styles of beer. The first stage is known as a “Maltose Rest” and the second stage is called a “Dextrin Rest.” The temperature steps necessary for this mash schedule can be achieved by either infusing boiling liquor, direct heat or a combination of both.

The Boiling Liquor Method; When planning out the mash steps you need to decide in advance which method you prefer to heat the mash. If the decision is to rely on boiling liquor alone then try mashing in with a ratio of 2.5 – 2.7L of liquor per kilo of grist. You should aim for an initial mash temperature of between 62 – 64C to carry out the the maltose rest whilst the length of time the mash is held at is used to control the fermentability of the wort. It’s important that the mash tun should be insulated as best you can manage to avoid the temperature falling during the holding stages. Around 35 minutes for the maltose rest is a good starting point for an average beer, you can extend this time to increase attenuation or reduce the time which will lead to less attenuation. Near the end of your chosen rest time bring to the boil around 1.0 – 2.0L of brewing liquor, the actual amount used being determined by the mash volume, then when it’s time to raise the temperature stir in the boiling liquor gradually and thoroughly before replacing the cover. The mash can be checked after say a further ten minutes after the temperature has stabilised and hopefully should be between 68 – 72C to perform the dextrin rest. The mash then can be held at this temperature for 45 to 70 minutes, however all the starch should have been converted well before this length of time. If required, a second addition of boiling liquor can be added to increase the mash temperature to around 75C in preparation for mash-out / sparging.

The Direct Heating Method; Here a more dilute mash is used with a liquor to grist ratio of 3.5 – 4.5L per kilo of grist, and whether using a heating element or stove / burner the mash should be stirred to prevent scorching during heating. The temperature steps are the same as the above method and should be easy to achieve.

It should be mentioned that some brewers prefer to combine both of these methods, by using boiling liquor to achieve the first raise in temperature then using direct heat for the second step.

Claimed advantages when using the Hochkurz Mash System;

- **Better control of wort fermentability**
- **Improved efficiency compared to a single-stage mash**
- **Improved mouthfeel, malt character and head retention**
- **Less time needed for sparging**