

THREE METHODS OF BREWING BEER

Brewing beer at home can be as easy or involved as you wish. There are three main ways of making up a wort – each method more advanced than the last.

METHOD 1 – USING A KIT

Brewing using a kit (see pp52–53 for step-by-step techniques) is the simplest way to make beer at home. A wort is prepared in advance by a malt producer, who then removes most of the water to create a small volume of concentrated, treacle-like liquid. This is re-hydrated by the home brewer to make up the volume for a full batch of beer. It takes only 20–30 minutes and requires no prior knowledge. The quality of home-brew kits has improved greatly in recent years, with professional breweries developing kits that closely replicate their commercial beers.

ADVANTAGES

- Quick to prepare
- Simple to use and requires no prior knowledge
- Requires only basic equipment

DISADVANTAGES

- Offers little scope to customize a recipe
- Any hop aroma is likely to have been lost during the production process



METHOD 2 – USING MALT EXTRACT

Brewing with malt extract (see pp54–55 for step-by-step techniques) involves adding unhopped malt extract – either in liquid or dried form – to water and boiling it with hops, which are added at various intervals. The wort is then cooled to produce a fermentable wort. This method is more involved than using a kit and requires additional equipment (see pp46–51), but you will be rewarded for the effort as malt-extract brewing is highly regarded in brewing circles and can produce award-winning beers.

ADVANTAGES

- A variety of beers and styles can be produced
- Speciality grains can be used for flavour
- You are more involved in the process so will gain confidence and knowledge

DISADVANTAGES

- Not all malts are available in extract form
- It is the most expensive method, due to the high cost of malt extract
- Requires additional time and equipment



METHOD 3 – FULL-MASH BREWING

The full-mash method, also known as all-grain brewing, is the technique used in professional breweries. It consists of three key processes – the mash, sparge, and boil (see pp56–59 for step-by-step techniques). Full-mash brewing offers maximum flexibility and allows you to replicate any style of beer. It does, however, require the most knowledge, equipment, time, and effort, and so is not suitable for everyone. Typically, a home brewer advances through the first two methods, gaining experience and confidence, before moving on to full-mash brewing.

ADVANTAGES

- No limit to the number of styles that can be produced
- Uses the cheapest ingredients
- Offers complete control over ingredients used
- Produces the highest quality beer

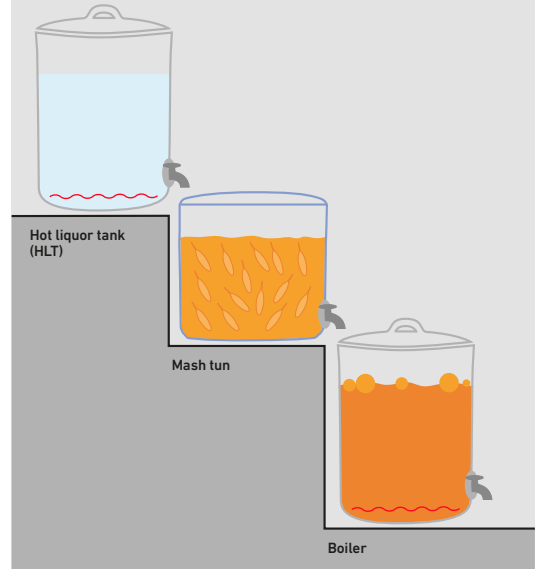
DISADVANTAGES

- Requires the most amount of equipment
- Brewing can take several hours
- Can generate a lot of mess
- More things can go wrong!



Three-tiered full-mash brewing set-up

Full-mash brewers typically use three separate vessels – a hot liquor tank or HLT for heating and storing all the water (known as liquor by brewers), a mash tun for mixing malted grain with hot water to produce a sweet wort, and a boiler for boiling the wort with hops to sterilize it and add flavour and aroma. In a home environment, the flow of water and wort is usually achieved via gravity using a tiered set-up. Side-by-side systems can also be used, but a pump would be required.



Brew-in-a-bag full-mash method

Full-mash brews can also be produced in a single boiling vessel, known as the brew in a bag (BIAB) method. All the water is heated to mash temperature in a boiler, grains are added in a bag for the mash, and then the bag is removed before the boil. The set-up costs are cheaper and the process quicker and tidier than a typical full-mash brew, but you need a very large boiling vessel and the mashing process is less efficient.

There are now many all-in-one brewing systems that operate on this basis. Although relatively expensive, they reduce the difficulty of full-mash brewing by automating much of the process. Another advantage is that you only need to clean and store a single piece of equipment.

