



1. Milling

Beer begins with grain—most often barley, but wheat, rice, oats, rye, and others are sometimes used. The grain is first malted: It is soaked in water, and when it begins to germinate, it is dried in a kiln. The resulting roasted grain is called **malt**. The dry malt is then milled to crush the kernels and release the starches.

2. Mashing

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The malt is combined with hot water. As it soaks (in a vessel called a **mash tun**), the starches break down and convert to sugars, which will feed the yeast in step 6.

3. Lautering

Lautering is the process of separating the sugary liquid, called **wort**, and the spent remains of the grain. This step takes place in the **lauter tun**.

4. Boiling

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The wort is boiled with bittering hops (added at the start), and aromatic hops (added at the end).

The basics of BEER

THE MAIN STEPS IN THE BREWING PROCESS

While ingredients and scope may vary, the beer-making process is fairly standard. Smaller-scale equipment can often do multiple steps in one vessel, but each of these steps is necessary to deliver that heavenly delight we like to call **BEER**.

5. Chill Out

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After about 90 minutes, the boiling wort sits for half an hour or so, allowing the hops and sediment to fall to the bottom of the kettle. From there it is pumped through a **heat exchanger**, which cools it to about 60°F.

6. Fermentation

The chilled wort, yeast, and oxygen are left to ferment and become **beer**. Ales are fermented warm, with yeast on top, for as few as seven days; lagers are fermented cold, with yeast on the bottom, for up to three months.

7. Aging

The beer stays in the **conditioning tank** for anywhere from several days to several months, depending on the type of beer being produced. Some carbonation takes place during the fermentation stage, but the finished beer can be further carbonated, as required, before leaving the conditioning tank.