

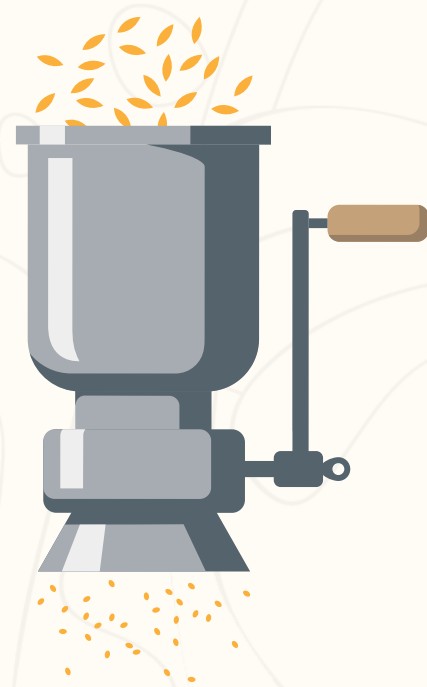
THE BREWING PROCESS



1 crushing



Brewing starts with crushing the grains, mostly malted barley and also wheat, rye and oats for some beers. We crush the grains gently to break open the kernels and get access to the starches inside.



2 mashing

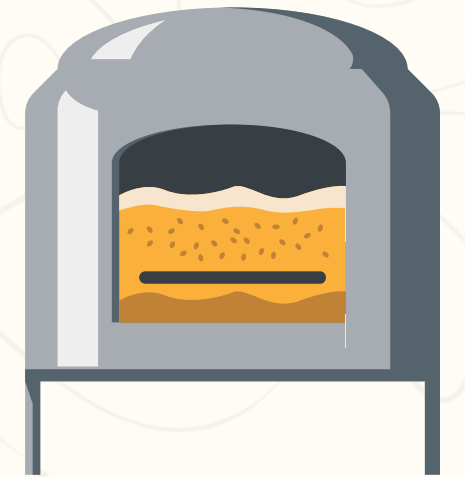


In the mash vessel we combine the crushed grains with warm water. Natural enzymes in the malt convert the starches to sugars that will be fermentable by yeast later in the process. Different mash temperatures produce varying levels of fermentable sugars.



3 lautering

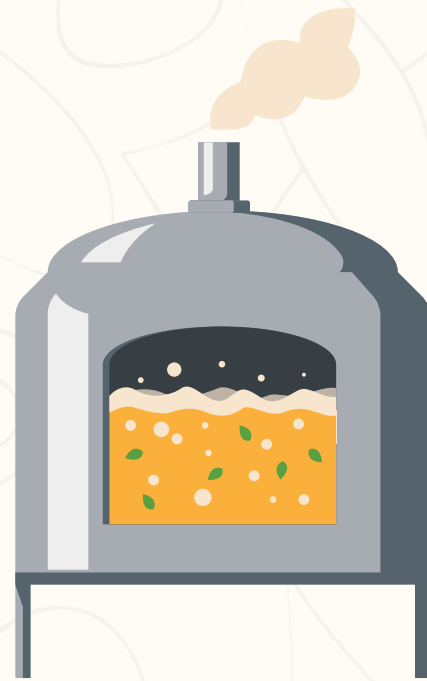
After mashing we transfer all the grains and liquid over to the lautering vessel. During lautering we separate the sweet liquid from the grains, and also rinse the grains to extract all the sugars. This sweet liquid is called wort. The spent grains are then fed by a local farmer to some very happy cows.



4 boiling



After lautering we transfer the wort to the boil kettle and start boiling. The boiling process is usually one hour and in this time we add hops at different intervals. Hops added early in the boil give beer its bitterness, while hops added later primarily give aroma.



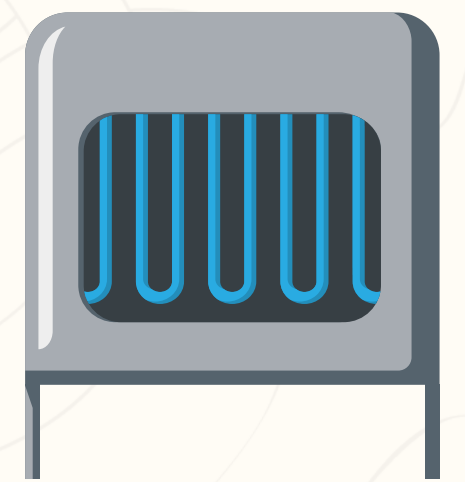
5 whirlpooling

Next we transfer the boiled wort to the whirlpool vessel through a special inlet, causing the liquid to move in a circular fashion. This causes solids (hops and other sediment) to collect in the center. Then we can drain off the wort and leave the sediments behind.



6 cooling

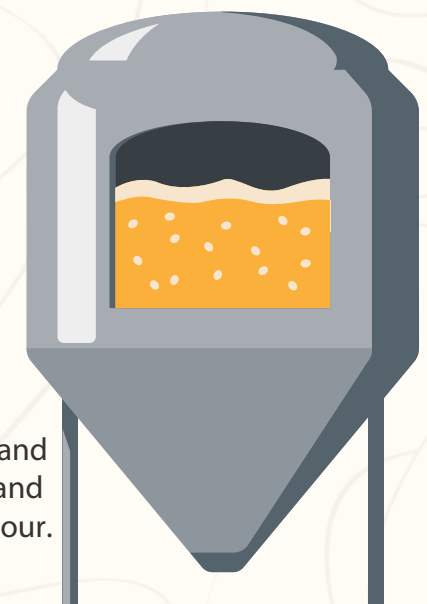
After whirlpooling the wort must be cooled. We pump the wort through a heat exchanger which uses fresh water for cooling. Cooled wort exits the heat exchanger on the way to the fermenter, and we collect heated water to be used for the next brew, saving energy.



7 fermentation

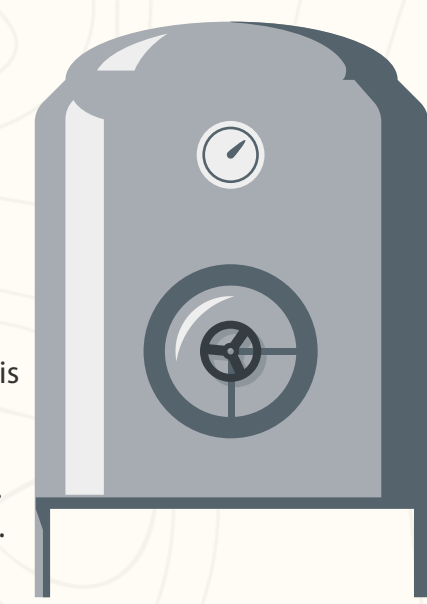


Once the cooled wort is moved to the fermenter we add brewers yeast. The type of yeast depends on what beer is being made. Yeast consumes the natural sugars in the wort and converts these to alcohol and CO2. Yeast type and temperature have a very big impact on the flavour.



8 conditioning

After fermentation the beer needs time at cold temperatures for conditioning. During this time the yeast will sediment and the beer will become clearer. For some beers like IPA's we also add hops in a process called dry hopping. This gives IPA styles their characteristic aroma.



9 packaging

After conditioning the beer is centrifuged to remove yeast and hop particles. This is not a filter, but a gentle way to remove sediments. The beer is then carbonated and we package it in cans, bottles and kegs. The freshly packaged beer is then sent to customers to enjoy. Cheers!

