

## Skunkworts Brewing Process

Every beer begins with **WATER**. To brew is to play within the nuance of aroma, taste, bitterness, color and mouthfeel, all of which are affected by the water used for brewing.

We purify local water through **FILTRATION** into a **HOT LIQUOR TANK** for preheating. Here we add specific **NATURAL MINERALS** in order to recreate the original water source profile for the particular style of beer we plan on brewing.

For example, our German-style pilsner *Kill Devil Pils* is based on a historic water profile for the Danube River in Germany.

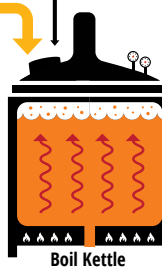
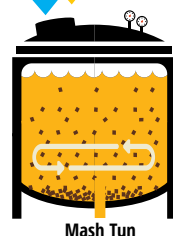
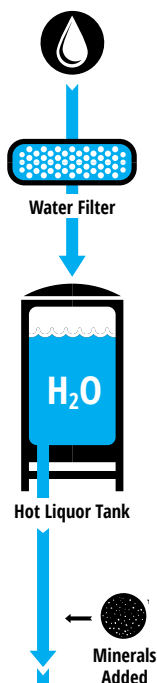
At times we tweak the minerals to selectively enhance the nuance within certain ingredients used to make beer.

**GRAINS** are sourced from North America and Europe. With hundreds of grain varieties to select from, this is the second biggest ingredient in beer.

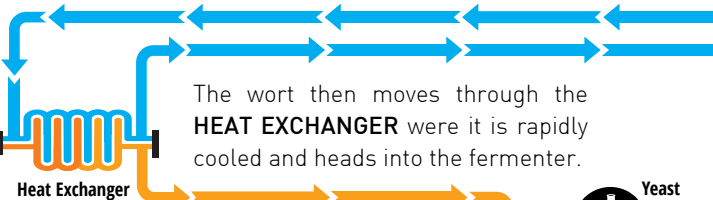
The grains are crushed through the **GRAIN MILL** only minutes before they're combined with hot water, capturing their freshness.

**MASH TUN** - This is where the **GRAINS** meet temperature regulated **WATER**. The grains are steeped until the enzymes within the grains convert starches into sugars.

When this process is complete the grains are strained and a deep golden brown sweet liquid called **WORT** is transferred to the **BOIL KETTLE**.



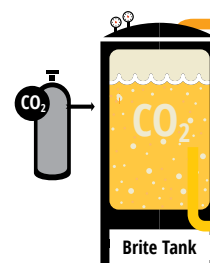
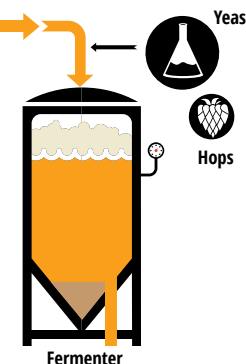
The **BOIL KETTLE** is where we add **HOPS** to enhance bitterness, aroma and taste. The key to utilizing any hop is finding the right time to add it to the boiling wort. Add them early and they make a beer more bitter. In the middle of the boil they influence the flavor and if added for even seconds at the end of the process pungent aromas can be infused.



The wort then moves through the **HEAT EXCHANGER** where it is rapidly cooled and heads into the fermenter.

**FERMENTER** - This is where **WORT** and **YEAST** combine. We pitch active yeast into the sweet liquid and hours later the yeast starts to convert the sugars within the wort into alcohol while producing flavors and esters along the way that can account for up to 70% of a beer's flavor. Manipulation of the yeast cells through precise temperature control has drastic effects on what finds its way onto your taste buds.

Fermentation lasts an average of two to three weeks for ales and up to eight weeks for lagers. For more hoppy selections additional fresh hops are added directly to fermenting wort. At the end of fermentation we lower the temperature to just above freezing to force the yeast and hops floating around in suspension to fall to the bottom of the fermenter which clarifies the beer.



**BRITE TANK** - When fermentation is finally complete the **BEER** comes here to further clarify and be infused with **CO<sub>2</sub> GAS** at various levels appropriate to the style of beer being finished.

**KEGS TO TAPS** - The **BEER** is moved into kegs, refrigerated, and then directly pumped to the taproom or packaged for distribution. Fresh as can be.

