

## How Scotch is Made

The production of Scotch whisky takes a considerable amount of time. It is a tedious process that can last for years. However, when it is done correctly, the product is one that is worth the wait.

Barley is immersed in deep tanks of water for approximately three days. As the moisture increases it commences the germination process. After the germination process, the barley is then moved to the malting segment of the distillery where it will be placed into drums also known as the malting floor.

The intention of the germination process is to convert the starch in the grains into fermentable sugars. This will feed the yeast in the fermentation phase. Rotating the barley frequently ensures the temperature will remain consistent. Wooden shovels known as sheils are used to turn the grains on a traditional malting floor. The grains will die if the temperature reaches above 22 degrees, and will halt the entire process as the starch will not be converted to sugar.

The grain is then kilned to stop the continuation of sugar consumption because the kiln will absorb any moisture. In general, a traditional kiln is a building standing two stories tall with the top perforated to allow all heat to escape. The ground floor contains peat bricks that are heated. During this process the grain is dried and absorbs that peat's smell. The pagoda style roof on a distillery is the most distinct characteristic. The malt must not be heated above 70 degrees or it will certainly be damaged and unusable.

Today, most of the distilleries buy all their malt from a centralized malting company. However, there remain a select few that continue to be traditional and do it all themselves.

The grain is milled into grist and mixed with water in mash tubs to be heated to sixty degrees. During the mashing period the water is changed at least four times to rid the tubs of sediment. The byproduct of this mashing is known as wort. The wort must be cooled before mixing with yeast in what is called a wash back. This large container is never filled completely as the wort froths a lot due to carbon dioxide. By the time two or three days have passed, all the yeast is killed by the alcohol. The final product of this cycle is called wash. It contains five to eight percent alcohol.

The stills in which the wash is placed are made of copper and are regulated to a particular shape that allows for proper distillation to occur. The still method is usually completed twice, but some companies do it three times or more.

After the entire method is complete the brew is then placed in casks made usually of oak, for a minimum period of eight to twelve years.