# Whisky

Scots have been making whiskey for centuries. It's a tradition refined over the years by generations of skilled master artisans which turns every single cask of whisky into a part of history in its own right. , three ingredients are needed to make Scotch whisky: malted barley yeast and water. This paper focuses on the entire production process of Scotch Whisky.

### Malting

the barley is malted by being soaked in water then spread out to help it sprout and germinate which produces the sugars that will turn to alcohol later on. It is then dried in a thermally insulated chamber called a kiln, by firing peat which gives it the smoky flavors in the final whisky.

### Mashing

Once dry the barley get milled and mixed with hot water in a mash tun to create "wort" the sugary non-alcoholic liquid which builds the foundation for malt whiskey. Afterwards, the "wort" is transferred to the large tubs known as washbacks.

### Fermentation

yeast is then added, which starts a chemical reaction that turns the wort sugars into a low strength alcoholic liquid called wash. From this position, the distillation and

### Pot Stills & Spirit Safe

the wash gets distilled in two sizeable distinctive copper stills which function like giant kettles. They send alcohol vapors through the spout, where cold water cools the moisture down to condensation point. From there, the liquid runs is distilled again and ends into the spirit safe. The spirit safe is kept locked so that the alcohol can be taxed correctly. As tasting is prohibited, even for the creators, it is most important to have the skillset available to separate the high-quality whisky from lower ones. Traditionally, this is done by sight alone.

### Maturation Process

After the distillation process, the fresh spirit is poured into casks, where the maturing process starts. Scotch whisky is always matured in oak casks for at least three years; otherwise the whisky cannot be called a Scottish Whisky legally. There are also different casks which offer various forms of taste such as the Bourbon Casks which originate in the United States while Sherry Oak Casks create in Spain. Traditionally, Scotch is matured often for a decade or more. Over the years, natural flavor, character and color of the whisky change over the years in the warehouse, which is caused by the cask and the atmosphere. By tasting, the Stillman determines whether or not the whisky is ready from the maturing process or if it needs a few more years until the final product is ready to be packed and sold.

### Conclusion

While the necessary distillation process is the same across Scotland, tiny variations in the ingredients and the microclimate, as well as local preferences and technique, lead to countless types of whisky. Throughout the regions of Scotland, each regional whisky has its characteristics. The main areas are Lowland highland, speyside islay Campbelltown and each one of them has unique Scotch Whisky.