

Making Grain Scotch Whisky



Grain Whisky is made using the continuous Patent Still process from a mixture of malted barley and other unmalted cereals, such as wheat or maize.

Malting and cereal cooking

Barley is malted - steeped in water and allowed to start to germinate - to provide a source of starch which can be converted to soluble sugars which can then be turned into alcohol.

Separately, unmalted cereals are cooked under pressure using steam to soften the grain starch and make it soluble in water.

Mashing

The malted barley is mixed with hot water in a mash tun, to which the cooked unmalted cereals are added. The starch in the cereals is converted into soluble sugars which dissolve to create a sugary liquid known as wort.

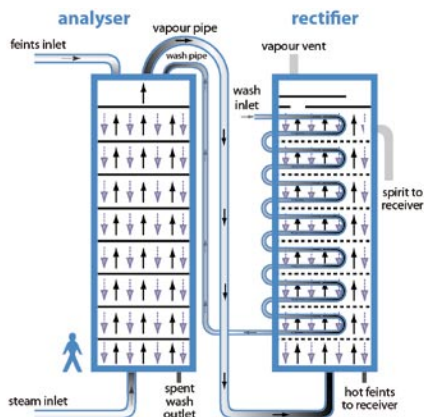


Fermentation

The wort is fermented in large vessels - washbacks - by adding yeast. The yeast attacks the sugar in the wort and converts it to alcohol creating what is known as the wash.

Distillation

Grain spirit is distilled in a Patent or Coffey still, each still made up of an analyser and a rectifier. Unlike malt whisky production in batches, the process is continuous.

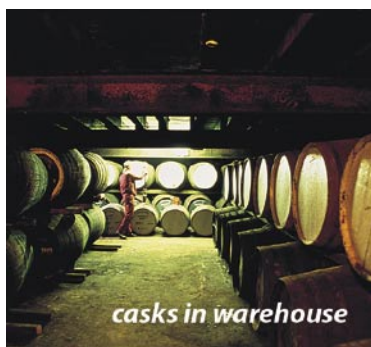


The wash is pumped in at the top of the rectifier where, as it flows down a coil, it is warmed by the heat of vapours rising up the still. Once heated, the wash enters the top of the analyser.

The hot wash then descends the column through perforated plates. As it does so, low pressure steam rises up the analyser extracting alcohol vapours, taking them back to the bottom of the rectifier. These alcohol vapours then start to rise, and are gradually condensed by the cool wash coils, with the grain spirit extracted from the column.

Maturation

The new-make spirit is filled into oak casks. By law, it cannot be Scotch Whisky until it has matured in Scotland for at least 3 years. As the spirit matures in the cask, it will develop further flavour characteristics and its distinctive golden colour.



Grain Whiskies

Grain Whisky tends to be milder in flavour and aroma than Malt Whisky and is traditionally used as the backbone of Blended Scotch Whisky (when it is married with different malt whiskies) but can also be sold as Single Grain Scotch Whisky (product of one distillery) and Blended Grain Scotch Whisky (grain whiskies from more than one distillery blended together).

Further information from: The Scotch Whisky Association