

## Instructions for the Super Spiritworks Still

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Read fully before starting.

This is our very latest still. We have been working on this for over 18 months and are now pleased to be able to bring it to the market.

We would recommend that if you are using a boiler which doesn't have the ability to control the power output, that you consider purchasing separately a power controller, many of which are available on the internet, or better still update your boiler to our current Spiritworks model which has this facility as standard.



Above is the finished assembled still. We recommend you unpack all parts, lay these out and assemble as above. We have also compiled a video which you can look at showing this in more detail and we hope that this will be all you need to assemble. [www.lovebrewing/.....](http://www.lovebrewing/.....)

Unless you have it already, you will need an accessory pack which includes tubing and a rubber tap connection or you can purchase something similar from a local plumbers merchant to connect the cooling water pipework to your cold water supply.

Have a look at our video before you start [www.lovebrewing /.....](http://www.lovebrewing/.....)

The Still can be used as a straight reflux distillation column or can be used in non-reflux mode for stripping or botanical runs (i.e. minimal cooling to reflux condenser). The choice is yours and there is no right or wrong way. We thought it was worthwhile however giving you some ideas we know work well, as below.

To carry out a straight stripping run using up to 25 litres 14-18% abv turbo wash.

Place cleared wash into the boiler, leaving any sediment behind in the fermenter, making sure you have a minimum of 10 litres and no more than 25 litres quantity in the boiler.

Follow your boiler instructions but with the Spiritworks boiler, we'd recommend setting the Power Controller initially to 100% and the temperature to 98°C.

After around 20 mins (dependant on volume in boiler) the temperature will have risen to approx 60°C, which is the point at which you'll need to get the cooling water flowing. The water from the tap needs to be set to run at approx 400mls per minute. This is just a bit more than a very slow flow. The cooling water for the Reflux condenser (this is the tube which is on the right of the column in the photo above just above the sight glass) needs to be opened with one full turn (i.e. minimal cooling) The outlet water (this is the valve which is on the left of the column on the picture just above the outlet where the finished alcohol will drip) needs to be opened with five full turns.

Once the liquid temperature starts to get near to the 90°C and the column becomes hot to the touch, then reduce the power to 75%. The temperature gauge (which is on the vapour part of the column) will start to rise and around the 76-78°C and your first drops of alcohol product will start to appear. Make sure you have placed a collection vessel underneath the product outlet. Best if this is glass and has an open entry point for the pipe. Make sure this is never submerged below the liquid. It must be ensured that this is always dripping above the liquid level in the container.

Discard the first 150mls of "Foreshots". Collect now all the alcohol till this is finished. You will know as the dripping will reduce to very little and the vapour temperature gets above 94°C and the alcohol content is down to 35% ABV you are done.

### Second (Spirit) Run

Make sure you have at least 10 litres of stripped neutral spirit in the still. We would recommend diluting any potential second run spirit down to around 35-40% abv.

Set the power to 100%. Boiler temp to 98°C. Once boiler temperature is near to 60°C, start the cooling water flow. Run the tap water so you are collecting around 400ml per minute. This is not much more than a very slow flow. Open the two waterflow controller valves. The one above the sight glass wants to be approx 2.5 turns open and the one near the outlet wants 5 full turns open. As the vapour temperature rises to near the 76°C, reduce the Power to around 55-65%.

The product will now start to drip. Collect in a Glass container as before. The vapour temperature on the column should be around 76°C. Collect around 350ml of heads. Move this to one side. Now separately collect the "Hearts", the high-quality alcohol, while maintaining a temperature of 76-78°C. Reduce or increase the power and/or reflux cooling to achieve this. Collect until the "Tails" start which will occur when the boiler temperature starts to raise towards 94-95°C. Move your good spirit to one side and continue to separately collect tails for use in your next wash, along with the heads. Conversely you may want to take 'cuts' during the distilling run in order to determine by taste which parts of the run to keep or discard. Either way you should collect approx 3-3.5 litres of 85% + ABV useable good neutral spirit, dependant on the initial volume of the run.

This product should then be carbon filtered for best quality results, again see our Carbon Filter products for doing this on the web site.

At this stage you can then either flavour your spirit with our great range of flavouring essences or if making Gin, run again using your preferred method and recipe with botanicals. See our Guides on Gin Production for this.

### Several things to bear in mind.

The Sight Glass/bubble plate not only improves the distilling efficiency and quality of the product but is also a very useful tool to allow you to see that the power and cooling water settings are correct for best results. You are looking for a gentle flow of bubbling through here. If this is too vigorous then reduce the Power accordingly.

Our suggestions above are only to be used as a guide, so you have the flexibility to adjust these. Try them though first as they should give you good results. There is always room for experimental initiative.

If you find there is no alcohol coming through during distillation it might mean you have the water settings too high or the power setting too low.

### Cleaning

We would recommend pouring hot water/citric acid mix through the column after use. Every say 10 runs its worth stripping it down and doing a full clean. Especially removing the saddles from the condensing column and soaking these in still cleaner. For your first run you might want to experiment with some alcohol and then discard this (a sacrificial run) as it will help to clean the still. This is not absolutely necessary, but some feel better if its done.