

## The 25 Litre Turbo 500 Still and the Air Still: The Benefits

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### 25 Litre Turbo 500 or Air Still the Benefits

We are often asked “what are the main benefits of each of the two stills” we sell.

Fermentation time will be the same for both although the Reflux will allow you a greater choice of alcohol strength in your wash (see below).

### 25 Litre T500

The main benefit is the shorter amount of time that this takes. Normally for a 25 litre wash it will take approximately one hour twenty minutes to heat the wash before Alcohol will start to be extracted (although this will vary slightly on the temperature of the liquid). To then distil and collect between 3 and 5 litres of alcohol will take a further 3 hours or so. The whole process is less than 5 hours.

The other big benefit is the quality and strength of the alcohol. The alcohol quality is really superb and being at 90% + ABV plus it's much easier to redistill if you are doing fuel ethanol where you need the higher levels of alcohol. If it's for drinking then there will be much more purity, producing a much cleaner taste.

Filtration through carbon is also very easy as the Z Filter system allows you to run through as much as 20 litres of alcohol (which must be diluted to less than 50% ABV for maximum efficiency) at a time. This can take 6 hours or slightly longer depending on the amount but once it is set up it can be left and requires absolutely no attention.

The T500 when distilling requires a constant flow of cold water. This is the way that it keeps a constant temperature between 78 and 82°C which is necessary to produce good quality alcohol. If you don't have access to water then don't think about this model. It does have a tap fitting which screws onto a 20mm BSP thread, or you can buy a separate tap fitting that will go onto most household taps. However the machine needs a careful flow of water so using the supplied adapter is the best way to go if you can. The amount of water used each time is about a bath full so whilst it's not a lot it is necessary to have access to this amount.

The T500 still allows you to choose which yeast you can use for your wash. If you want to produce a really clean pure spirit you can use the Triple Distilled yeast which will produce 14% ABV in the wash and when distilled about 3 to 3.5 litres of 90% ABV. This is perfect for any White Spirit like Vodka, Gin or White Rum.

If you want to perhaps produce more alcoholic strength in your wash then you can either use Classic or Power yeast. These will ferment up to 21% ABV and this will naturally give you more 90% ABV in the distillation (between 3.5 and 4.5 litres). Obviously this is done by adding more sugar at the start. One word of caution; the more strength the less quality you will have to work with. We have also found that the Classic yeast is also the best for producing Brown Spirit (Whisky, Dark Rum and Brandy) as the taste is not as clean as the Triple Distilled yeast but the “off flavours” actually enhance the end product, but again don't over do the strength of the wash as many of these flavours will work against the quality taste you are trying to produce. You can also use the Express yeast which does a really quick fermentation as the name suggests so if you run short and you need some alcohol quickly then you have the answer. Again quality is not the best. Finally if you are in an area where the temperature is too warm you can use the Heatwave. This is also good if you have a large fermenter and you want to stack it (a term used when you are doing up to 4 fermentations in one container). This is because the yeast will generate heat when fermenting and the more you do at once the more this happens and this will restrict or kill the yeast from fermenting to the full.

With all these yeasts you should use Turbo Carbon and Turbo Clear which enhance the quality of the alcohol in all cases.

## Air Still

The best thing about the Air still is the sheer convenience of the machine. It's compact and fits nicely on a work top in a kitchen and looks very much like a large coffee percolator. The other benefit is there is no need for any separate water supply as it comes with a very efficient fan which cools the alcoholic vapour as it comes through the condenser and turns it back to alcoholic liquid. The filtration system with these machines is also convenient as you can run the alcohol through the carbon as it comes through the machine or for better quality it can be diluted with water and then run through as a separate operation.

The main disadvantage is the machine will only hold 4 litres of wash at a time and this takes approximately 2 hours to run through. So for a 25 litre wash you're looking at a total distillation time of 12 hours. Having said that once the machine is set up it can be comfortably left for this time without the need to check it. Most people seem to do it either on a time clock or set an alarm to remind them when it's done.

You will find that the quality is not as good as the reflux still but it's quite acceptable and if you wish you can purchase addition carbon treatment systems which will improve the quality. We also find that a lot of people have started with this machine and with hind sight wished they just gone for it and bought one of the Reflux still. As they have now upgraded.

With the Air still you should only ever use the Triple Distilled yeast, carbon and it should be cleared with Turbo Clear. These products have to be used to produce the cleanest wash on the market which is needed with this machine (it's a pot still after all). Without this the Air still will not produce acceptable drinking alcohol.

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