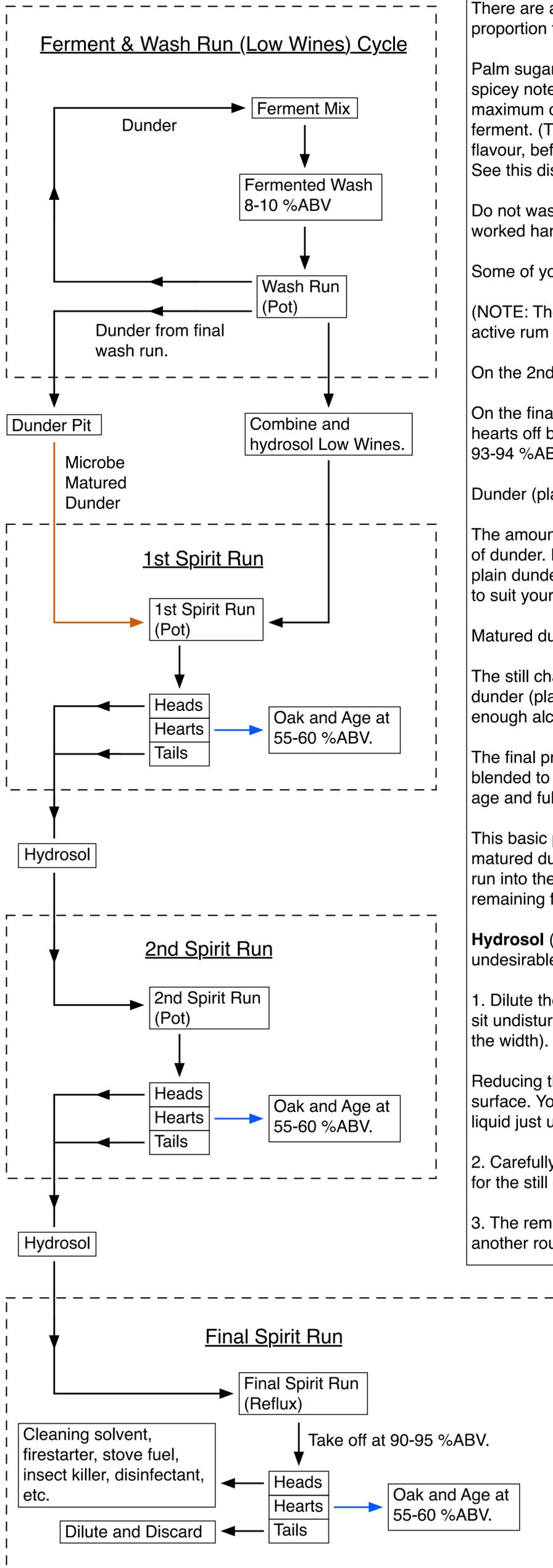


Rum Production Flow Chart

by Hook
Version 1.1 (Jan 2015)



Dunder is the specific name used in rum making for the stillage (or backset), which is the contents left behind in the boiler after the wash (or stripping or low wines) run. Dunder is one of the two main flavour ingredients in making rum, the other being molasses. Molasses provides the basic flavour of rum, and dunder is what gives rum its full richness and complexity.

There are a range of sugar cane based products that can substitute for molasses in any proportion to modify the flavour profile, including fresh cane juice and treacle.

Palm sugar (coconut or other) is an interesting possibility for a rum like spirit, with a distinct spicy note. But it typically has a high salt content and needs to be used with care. Limit it to a maximum of 35% of total fermentables, and don't recycle backset into another palm sugar ferment. (The backset can be used for a plain sugar ferment to extract remaining palm sugar flavour, before discarding.) Watch out for strong tails on the spirit run. See this discussion: <http://homedistiller.org/forum/viewtopic.php?f=11&t=22289>

Do not waste either dunder, or feints (heads and tails), they contain a lot of the flavour that you worked hard to create. Squeeze out every last drop of that flavour.

Some of your best spirits will come from the 2nd and final spirit runs.

(NOTE: The term 'dunder' is also sometimes used to refer to the yeast rich foam on the top of an active rum ferment; and feints can refer to either tails only, or heads and tails combined.)

On the 2nd (pot) spirit run, go a little slower, and make tighter cuts.

On the final (reflux) spirit run make heads cuts as for a standard neutral spirit run, then take the hearts off between 90-95 %ABV, according to your taste. Higher %ABV = lighter flavour. Try 93-94 %ABV, and adjust from there.

Dunder (plain or microbe matured) can be added to a still charge at any point in the process.

The amount of dunder to add to a still charge depends on your personal preference, and the type of dunder. More plain dunder = stronger flavour. Matured dunder = much stronger flavour than plain dunder. For plain dunder try 10-20%. For matured dunder try 5-10%. Then adjust from there to suit your taste.

Matured dunder can also be added to the ferment mix.

The still charge for a spirit run can be any combination of fresh wash, low wines, feints, and dunder (plain or matured). Besides not overdoing the dunder, the only 'rule' is that there is enough alcohol and flavour in there to make it worthwhile.

The final product from the three spirit runs will be distinctly different, and can be kept separate, or blended to taste. The spirits from the three different runs often take different amounts of time to age and fully mature, so it is probably better to only blend when all the spirits have finished aging.

This basic process can be easily adapted to other flavoured spirits (except gin). Just ignore the matured dunder component of the flow chart. Instead of feeding the backset from the final wash run into the dunder pit, either add plain sugar to it and run another ferment or two to extract the remaining flavour; or freeze it and use it the next time you ferment that recipe.

Hydrosol (or hydroseseparation) is a simple and easy process that removes much of the undesirable fusel oils in low wines or the tails component of feints.

1. Dilute the still charge to below 30 %ABV (27-28 % is a good target). Then cover well and leave sit undisturbed for at least 24 hours. A relatively tall container is best (height about 1.5-2 times the width).

Reducing the ABV allows the fusel oils to come out of solution and float separately on the surface. You will often see a thin slick of oils on the surface, and maybe a slight haziness in the liquid just under the surface.

2. Carefully drain off the liquid below the top 50-100 mm (2-4") layer and use that drained portion for the still charge.

3. The remaining liquid can be placed in a much smaller container and again allowed to settle, for another round of hydrosol, to reclaim as much of the good stuff as possible.