

Whiskey distillery increases production by 25% with Russell Finex mash separator

US craft distillery increase production and reduce costs with the installation of the Russell Liquid Solid Separator™

In recent years, the craft distilling industry has experienced tremendous growth. Less than a decade ago, there were 70 distilleries in the U.S. Now there are over 2000 as of 2022 (according to Erik Owens, president of the American Distilling Institute). Of these 2000 distilleries, one mid-sized producer is constantly trying to find ways to perfect the distilling process for just the right efficiency, taste and quality.

This distillery took an innovative step and turned to Russell Finex for more efficient solutions. Being an older operating whiskey distillery, the company started out the same way many small businesses do - trying to find ways to differentiate themselves.



Figure 1. Whiskey Application

The mid-sized craft distillery, who makes whiskey, bourbon and moonshine, made the decision to make their process as productive, sanitary, and consistent as possible. A company that once used methods such as separating grains and liquid with laundry baskets in a 325 square-foot room, grew to a whiskey production process with traditional copper whiskey stills, wooden fermenters and now the Russell Liquid Solid Separator™.

With their production increasing from 5-8 gallon stills, to now having 1350, 260 gallon, and 180 gallon stills, the distillery was in need of equipment that could not only sustain the quantity of whiskey being produced, but could also improve consistency.

“Quality of distilling comes more from the process than the ingredients,” comments their Co-Founder and Master Distiller. “With the growth of our distillery, having a machine to separate liquid from solid is better for our productivity and batch yields, as well as allowing us to make an American whiskey fermented off-the-grain, a style more typical of scotch whiskeys.”

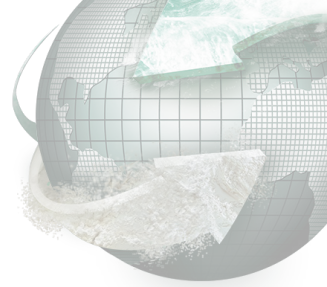
The integration of the Russell separation equipment has played a crucial role in allowing the distillery to put more liquid into their fermenters. This is important because many times, there are left over grains in the liquid before it continues to the fermentation process, causing liquid to be fermented. With the Russell Liquid Solid Separator™ the process called “fermenting off the grain” is much more efficient and generates more whiskey.

Russell Finex’s separation technology gives the group the opportunity to incorporate a unique distilling process. In this industry, the process of distilling holds more weight than the actual ingredients that go into making spirits.

“The Liquid Solid Separator allows us to sustain our flavor, yet adds an efficiency to our production floor that saves us time, money, and allows for some innovation within our category,” explains their co-founder.

This versatile centrifugal separator’s ability to handle high flow rates, as well as its ability to reduce disposal costs of dewatered spent distillate, has significantly increased the distillery’s production. The spent distillate is so dry after exiting the Liquid Solid Separator, it is possible to send this left-over grain to local farms for cattle feed. The distillery was therefore able to cut down on their environmental footprint.

With the amount of liquid the separator extracted from the grains, the weight of the grains sent to the farms was decreased, saving the distillery even more.



“Because we were able to fit more liquid into the fermenter, as well as eliminating an onerous by-hand process, we were able to increase our production by 20%. And more importantly, we reduced waste and costs of transporting waste.”

- Distillery Co-founder

The advantage distillers have with the Russell Liquid Solid Separator™ make the distilling process something that does not have to be strenuous or tedious. The lack of labor and tools needed to operate the machine, paired with its low running cost and quick return, make the Russell Liquid Solid Separator™ an ideal distilling solution for distillers everywhere.

About Russell Finex

For over 85 years Russell Finex have manufactured and supplied filters, sieves and separators to improve product quality, enhance productivity, safeguard worker health, and ensure liquids and powders are contamination-free.

Throughout the world, Russell Finex serve a variety of industries with applications including food, pharmaceuticals, chemicals, adhesives, plastisols, paint, coatings, metal powders and ceramics.



Figure 2. Russell Liquid Solid Separator™