

# Case Study: Chalice Farms



## KannaMill

Proven size reduction for a growing industry



Industry: Cannabis

Application: Cannabis products: trimmed flowers, pre-rolls, oils and edibles

Equipment: Schutte-Buffalo KannaMill

“With the Schutte-Buffalo KannaMill, the time to grind has dropped significantly, and our dust in the end products is greatly reduced.”

– Kyle Robinson,  
Laboratory Director,  
Chalice Farms

### Cannabis producer improves efficiency and end product with KannaMill

#### The Challenge

The core team at Chalice Farms of Portland, Oregon has over 100-years combined experience in the cannabis industry. The members of the Chalice Farms team continually research and test emerging technology with the goal of maintaining the highest industry standards in all phases of their enterprise. Chalice Farms is a vertically integrated producer, processor and retailer, currently serving medical patients and recreational users. In 2016, Chalice Farms came to Schutte-Buffalo for help solving some of their cannabis processing challenges.

**Pre-Rolls:** With their previous grinding technique, Chalice Farms faced challenges with inconsistent particle size and waste through lost product. Re-work was also a problem, as stems in the processed materials would puncture rolling papers and therefore required manually de-stemming after processing. The KannaMill eliminates stems before they can damage papers, avoiding costly re-work and allowing for more efficient pre-roll production. Further, the KannaMill has allowed Chalice Farms to fine-tune their mass:volume ratio, allowing for fuller, more uniform and more appealing looking pre-rolled products. Additionally, the time to grind has been significantly reduced, and there is much less dust in the finished product.

**Extraction:** The uniformity of particle sizes produced by the KannaMill also improves profitability for cannabis extractions. After implementing the Schutte-Buffalo KannaMill, Chalice Farms can process 30% more material per run through their extractor, plus the consistency of the grind material has improved end product and improved extractor reliability/downtime.

#### The Solution

Following the installation of the Schutte-Buffalo KannaMill, Chalice Farms has reduced their grinding time by 50-75% (depending on volume and material). The KannaMill is capable of processing up to 2 lbs per minute of the easiest to process cannabis material, and over 1.5 lbs per minute of more difficult to process cannabis material. The grind consistency has also created more evenly burning pre-rolled product. The better-quality ground material burns evenly, causing minimal running.

The Schutte-Buffalo KannaMill offers the same operational capabilities of larger size reduction equipment at a fraction of the price, it's completely portable, and has the unique convenience of plugging into a standard 110-120V wall outlet.

KannaMill has been designed in concert with industry experts specifically to produce uniform particle size distribution, perfect for downstream extraction, pre-rolls, and edibles. KannaMill can produce perfectly sized materials at rates over 100 lbs/hour when continuously fed. It has a rotor assembly with fixed hammers designed to pulverize without over-fiberization, eliminating the need to manually de-stem pre-roll material.

KannaMill comes standard with an Air-Assist package and Anti-Resin System for improved size reduction, product flow, and throughput. The Anti-Resin system deals specifically with the unique challenge of running material with the notoriously high-resin content of cannabis. Available in three different trim levels to meet any regulatory requirements, including NSF/ANSI Std. 51 food grade construction.

#### The Result

Chalice Farms has been able to increase their production of pre-rolls from 800 to upwards of 1,400 per day, and increased production out of their extractor by about 100g, simply by utilizing KannaMill technology.

