



# KannaMill

Proven size reduction for a growing industry

## Case Study: Motif Labs

Industry: Cannabis & Hemp

Application: Full service cannabis & hemp extraction company

Equipment: KannaMill 4

# MOTIF



### Standard Processor increases throughput and improves extraction efficiency with KannaMill

Motif Labs Ltd is a federally Licensed Producer (LP) of cannabis products in Canada. Founded in 2017, Motif is a full service cannabis and hemp extraction company offering toll processing, formulations, wholesale, white-labeling and brand fulfillment. Motif processes material sourced from other producers to produce cannabis oils (crude, winterized and distillate) as well as finished products such as tinctures and vaporizers.

A KannaMill 4 was implemented and immediately allowed Motif to increase extraction throughput. Supercritical CO2 extraction requires a fine particle size with narrow distribution to take full advantage of production efficiency and recovery of product. A small particle size allows for increased surface area exposure between the extraction media and cannabis. An even particle distribution ensures the extraction media can spread evenly throughout the cannabis material. These compounded benefits ultimately maximize the cannabis oil recovered. The small, even particles produced through the KM4 allow Motif to maximize the amount of material that goes into the extractor, allowing for increased oil production.

The KannaMill integrates easily to existing processes, even if custom solutions are needed to bridge steps of the process. Because of the boosted production efficiency and ease of use; Motif chose to add a second production line a year later.

Motif runs approximately 13.5 kg (30lbs) of cannabis in 20-30 minutes through each mill, keeping up with their extraction capacity which minimizes required milling staff and number of mills. Milled cannabis has a packing density that is approximately double that of unmilled which simply translates to double the extraction throughput capacity.

*“Compared to other milling technologies that provide a larger and/or less even particle distribution, I would estimate that this system would provide 25-50% improvement in packing density (therefore higher throughput), as well as improved extraction efficiency (greater amount of product per gram cannabis inputted).”*

- Anna Maveal, P. Eng, Director of Operations, Motif Labs