

CASE STUDY - FRACTIONATION OF HOPS OIL

Need:

- Isolation and concentration of the high value compounds from Hops Oil.
- Eliminate the pesticides without affecting its flavor profile.

TMC Industries' Proprietary Process:

Hops oil is distilled the using a continuous-feed, Centrifugal Molecular Still (CMS) into several fractions. The CMS uses high vacuum and just the right amount of heat to applied a very thin film of material is applied with an ultra-short residence time of < 1 second to achieve this seperation.

These fractions were subsequently distilled using fractional distillation (20 theoretical plates) to isolate the high-valued compounds.



Benefits:

- Minimal thermal degradation of the hops oil occurs while producing fractions rich in myrcene, caryophyllene and humulene using the combined CMS and fractional distillation process.
- Our custom distillation service, using Centrifugal Molecular Stills (CMS), selectively concentrates the oil while removing the unwanted impurities such as herbicides and pesticides. Subsequent fractionation isolates and increases the purity of valuable natural products found in hops oils.

Through our GMP and Kosher process, we gently accomplish deodorization, purification and concentration of valuable components from your products without the danger of oxidation, decomposition or thermal degradation.

For more information on how TMC Industries Inc. can benefit your company as a tolling partner, please contact: