CASE STUDY - ESSENTIAL OIL PURIFICATION

Need:
Customer needed to isolate high value compounds (essential oils) out of resins from natural products.

Process:
TMC uses a combination of centrifugal molecular distillation (CMS) followed by fractionation in a glass column still.

Centrifugal Molecular Distillation
Rate: 20 lbs. / hr. (pilot stills) to 200 lbs. / hr. (production stills)
Temp: Processed under vacuum between 100° - 250° C
Duration: 1-2 seconds

Fractional Distillation
Rate: up to 30 lbs. / hr.
Temp: 25° - 300° C
Theoretical Plates: 20 - 50

Benefits:
- Isolation of high valued compounds
- Purity levels > 90% – Improved aroma
- No capital outlay – Removed color
- Rapid turnaround – Better clarity

Our Centrifugal Molecular Distillation selectively concentrates the desired compounds while removing the unwanted impurities. Through our process, we gently accomplish decolorization, purification and/or concentration of your products without 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:

TMC Industries Inc. | 1423 Mill Lane | Waconia, MN 55387 | 800-772-8179 or 952-442-1140 | www.tmcindustries.com