

Winemakers Weigh in on the Benefits of OENODIA's STARS

Oenodia is one of the world's leading specialists in membrane-based treatments with their STARS^{STAB} technology for fast, efficient Tartrate stabilization and pH Adjustment. Their newest addition to their STARS Line, STARS^{XF}, provides an additional solution combining both Crossflow Microfiltration along with Tartrate stabilization in one single pass.

The STARS^{STAB} technology utilizes Electrodialysis to safely stabilize wine with no additives improving wine quality and its sensory characteristics. It is based on controlled extraction of potassium, calcium, and tartrates through a charged membrane. STARS^{XF} which pairs the STARS^{STAB} technology with Crossflow Microfiltration combines the best of both technologies into one single package to deliver a 100% stabilized, quality wine with minimal wine loss since no buffer tanks are required.

"This technology is economical, ecologically friendly, and preserves the natural characteristics of the wine by not using any additives," says Domingo Rodriguez, Oenodia's Wine Business Manager for North America.

"Oenodia North America just sold the largest STARS^{XF} system, globally speaking, which sports two Crossflow filters, combined with a STARS^{STAB} unit, with a throughput capacity of 4,800gal/hour, expandable to 6,400gal/hour. STARS^{XF} allows small, mid and large size wineries to better equip their production facilities to process and turn over product at a quicker rate with a known and guaranteed operating cost, while also saving on energy and labor costs and eliminating wine loss" says Domingo Rodriguez.

Small and medium sized wineries can also benefit from STARS^{STAB} and STARS^{XF} since, in addition to the stationary equipment, Oenodia North America also provides STARS Mobile Service. Delivery of their newest mobile unit, featuring STARS^{XF} is expected in late February.

Winemakers who use this technology like it for a variety of reasons from the time and energy savings to reduced tank space as well as the quality of the final product.

We asked a number of winemakers who had utilized this technology in the past, to offer some insight into their experience...

"We initially used the technology to preserve the acidity of

our white wines," says Nicholas Quille who is the General Manager and Head Winemaker at Vin Motion Wines. "STARS allowed us to remove potassium and calcium salts from our white wines without losing tartaric acid. This creates a tartrate stable high acid wine that is a staple of our white wine profile. The quality of the final product is also much better than traditional stabilization methods."

Another added benefit of the STARS system is the ability to manipulate the pH and TA of the wine without using additives. Nicholas found a good use for this feature, "It really helped out with making wine from organic grapes which require low sulfite threshold. The lowering of the pH in the wine granted not only more molecular protection, but allowed for higher molecular sulfites without going over the required limit for biodynamic wines."

Director of Winemaking for Rack & Riddle, Penelope Gadd-Coster echoed the testament to quality. "The reliability of making a quality finished product that keeps its stability is amazing," says Penny, "Oxygen pickup is minimized, there are no additives, and wine loss is almost negligible compared to alternative methods. Quality increases because this technology doesn't beat the wine up, doesn't add more materials to the wine, and doesn't use as much energy as chilling systems."

A more overlooked benefit of the STARS system is touched on by Winemaker Wayne Donaldson of Donaldson Wines. "Process flow is one of the best benefits of the STARS technology," remarks Wayne, "The amount of time and energy that is saved by using this technology is incredible. You don't have to worry about chilling and shuffling tanks around while losing product at every movement. It allows wineries to process fruit into a quality finished product that can make it to the market quicker. Days, if not weeks, are shaved off the berry to bottle timeframe. The turnaround is worth the investment alone."

In 2018, Oenodia North America rolled out the STARS^{XF} mobile service to California wineries.

Visit us online at oenodia.us to find out how you can eliminate wine loss, save on time, energy, and labor costs while making your winery more efficient and delivering a high-quality product to the market.