



MEMBRANE-BASED WINE CROSSFLOW FILTRATION AND TARTRATE STABILIZATION

Electrodialysis: INRA/ERODIA Patent



Single Pass
XF and
STARS



Wine Just
in Time



100%
Quality

Decrease
Wine
Movement



Zero Wine
Loss



Save Tank
Space



Combined
Crossflow
and Tartrate
Stabilization



STARS^{XF} allows continuous CROSSFLOW MICROFILTRATION and STARS^{Stab} TARTRATE STABILIZATION of wine without requiring an intermediate tank or multiple control functions, facilitating fast and automated processing.

STARS^{XF} is offered exclusively by OENODIA and allows winemakers to continuously filter and stabilize their wines. Its cutting-edge automation requires only one (1) operator to run the two technologies. STARS^{XF} operates best at room temperature. It does not require an additional filtration step and reduces wine loss from approximately 3% to an astonishing minimum of < 0.3% (Crossflow Microfiltration with STARS).



STARS-XF's Configuration Options and Advantages

- **STARS^{XF} – combined Crossflow Microfiltration & STARS for Tartrate Stabilization**
- **Stand-alone Crossflow Microfiltration**
- **Stand-alone STARS for Tartrate Stabilization**

OENODIA's years of Research & Development have provided breakthrough results in minimizing membrane fouling for wine filtration. Crossflow Microfiltration has become the preferred technology for wine, prior to Tartrate stabilization via STARS and bottling. However, none of the existing Crossflow brands had the ability to run in conjunction with STARS, until Oenodia developed the STARS^{XF} system. The R&D results allowed Oenodia to combine, in a single pass, Crossflow Microfiltration and STARS Tartrate stabilization.



KEY BENEFITS OF STARS^{XF} CROSSFLOW FILTRATION & TARTRATE STABILIZATION

By coupling these technologies, STARS^{XF} combines all the well-known advantages of both technologies in a single package:

- Eliminating wine losses by up to 3% of total wine processed
- Improving oenological quality and operational aspects
- Saving time
- Increasing operational flexibility
- Saving water
- Saving energy
- Saving valuable tank space

STARS^{XF}

- Gentle Tangential Filtration, due to low speed in the filtration loop (1 m/s)
- Minimal Heat transfer: (<2°C)
- Minimal Wine loss: (<0.3% of total wine filtrated)
- No oxygen pick-up
- Low energy consumption: (<10 Wh per gallon of wine filtrated) lowest on the market
- Low chemical consumption
- Low water consumption



STARS^{Stab}

- Zero Wine loss: eliminates wine loss, saves you up to 1% of total wine volume stabilized
- Zero Flavor Impact: confirmed by over 200 global customers
- Zero Additives: additive free Tartrate stabilization, no addition of chemicals
- 96% Energy Savings: save energy, install STARS and receive a utility rebate
- 100% Guaranteed: immediate and reliable Tartrate stabilization
- 100% Flexibility: maximum production flexibility and ease of use
- Wine Just In Time – Crossflow, Tartrate Stabilize and Bottle immediately
- Exclusive technology
- No oxygen pick-up





Technical Specifications for the Crossflow Microfilter

Crossflow	STARS ^{Stab}	Gal/Day	Dimensions	Weight
XF90	ED 800	400 to 16,000	2m x 2m x 1.8m	900 kg
XF180	ED 1600	800 to 32,000	2m x 2m x 1.8m	1500 kg
XF270	ED 3200	800 to 32,000	3m x 2m x 1.8m	2100 kg
XF480	ED 4800	1,600 to 62,000	4m x 2m x 1.8m	3600 kg
XF660	ED 6400	3,200 to 128,000	6m x 2m x 1.8m	4200 kg



OENODIA North America
156 Camino Oruga, Suite E
Napa, CA 94558
TEL: +707 666 2049
FAX: +707 666 2979
info@oenodia.us
www.oenodia.us