

MICRO-OXYGENATORS WINERY CONTROL SYSTEM PARSEC

Precision & Flexibility

A revolutionary concept
for winery automation

Field bus communication system: one cable for the serial connection of the remote units placed on the tanks (easy installation and expansion).

Micro-oxygenation: oxygen measured by weight in mg/l for total accuracy. A probe measures the temperature of the wine to ensure correct dosing.

Vinification and fining process management: integrated control of temperature, oxygenation, pump over, etc...



distributed by:
KYM Commodities (PTY) Ltd.
P.O. Box 5708
Helderberg 7135 - South Africa
Tel. +27 (21) 851 3462 - Fax +27 (21) 851 5914
E-mail: info@euroberry.co.za

www.parsec-enologia.com

focus on refrigeration

Dynamic fermentation CO₂ emission control system

ADCF is an innovative Parsec control system that allows on-line control of fermentation by monitoring the CO₂ produced during the fermentation process for a precise and real time assessment of the fermentation kinetics of the mass.

Together with the integrated Parsec SAEn5000 cellar control system (which achieved a 3rd place at Oenovation 2007 Vinitech awards), it is possible to get accurate control of the production process by the implementation of the ADCF system together with other automated systems such as temperature control, oxygenation and pump-over control.

The control of fermentation by CO₂ monitoring delivers an average report of the entire fermenting mass, impossible to be measured with any other density measurement technology available on the market today. The resulting fermentation curve can be used to trace the vinification process as it is measured continuously, preventing errors due to sample variances. No instrumentation inputs are necessary.

The fermentation control by CO₂ measurement has been largely discussed over time, and to date, it was feasible only with complex experimental systems. Now, with the Parsec ADCF solution, it becomes a viable and systematic methodology which can be used during the normal winemaking process. Adding the ADCF meter to tank makes it easy to quantify CO₂ across time due to a combination of valves and sensors managed by a microprocessor control board and a dedicated software algorithm which has been developed and proven by Parsec SRL.

The ADCF-Parsec features are:

- The CO₂ produced represents an index of the fermentation process of the entire mass, overcoming the typical sampling issues of density measurements.
- The fermentation mass can be kept close to atmospheric pressure or to a preset pressure value
- It can be done with any closed tank and on any fermenting tank which uses self generated pressure.
- The measurement is taken automatically.
- The system can be integrated with the ordinary oenological practices such as temperature control, micro-oxygenation, and pumping over control.
- **Easy to install:** changing the tank top inspection hatch with a custom-built one.
- **Flexibility:** possible to be used with any type of tank and with any winemaking procedure.
- Integrating the Parsec ADCF with the Parsec SAEn5000, it is possible to drive the fermentative kinetic and fermentation speed of a red or white wine according to specific needs.