

MICRO-/MACRO-OXYGENATION

The influence of oxygen on wine has been well known for many years. Absorption of oxygen takes place in red wines as a result of an open must-fermentation-process or, through storage of wine in traditional wooden barrels which allows oxygen to be diffused little by little into the fermenting wine.

Nowadays there is an increasing use of gas-tight containers or tanks, made of stainless steel, or plastic which rob the wine of natural oxygen absorption. Oxygen must therefore be added artificially to reach the beneficial effects of yeasts activation, increased ripeness, tannin binding, and aroma enhancement by means of artificial addition of oxygen. Micro- / macro-oxygenation is defined as the continuous addition of oxygen during various steps of the wine production.

Micro-Oxygenation

In the micro-oxygenation the fermenting wine receives over a long period of time (several months) a constant and very small amount of oxygen (0,5–6,0 mg per liter per month). The micro-oxygenation is mainly used in red wine, after the malolactic fermentation. The amounts of oxygen added correspond as much as possible the equivalent amount of oxygen that the wine would have absorbed had it been stored in a wooden barrel. The micro-oxygenation's objectives are colour stabilization and forcing the pace of tannin polymerization (= refining of tanning agent). Red wines become thereby creamier and rounder.

Macro-Oxygenation

The directed oxygen dosage before and during the fermentation process, but before the malolactic fermentation, is called macro-oxygenation. Unlike microoxygenation, in the macro-oxygenation, a larger amount of oxygen (approx. 2,0 up to 6,0 mg oxygen per litre per day) over a shorter period of time, is added. This procedure is used on red as well as white wine in order to reduce the Phenols.

Macro-oxygenation used during the beginning of the fermentation also contributes to the development of strong yeast that can carry the fermentation well to a complete ending - not only for wine but also for beer!

SUITABLE FOR INDUSTRIES

PRODUCTS

Three configuration options are available in our product range to suit any cellar, all conceived for both - micro- and macro-oxygenation:

- **BUS version - VinInfo BU Oxygen**
Fixed installation as part of a VinInfo installation. One BU Oxygen per tank - treatment of unlimited number of tanks with software management.
- **OxyBox**
Central, wall mounted, water-proof cabinet, available in quality rust-free painted or stainless steel cabinets. Each cabinet can treat up to 16 tanks. Unlimited number of cabinets may be installed. Software management is optional.
→ **Independent operation:**
Each BU Oxygen and each of the (up to) 16 modules of the OxyBox can treat a single tank, independently from the other tanks in micro or macro-oxygenation.
- **OxyBoy & OxyMan**
Independent, single tank units, hand-held, can be hung by the tank and then moved to another.



ACCESSORIES

- Temperature-sensor kit - for OxyBoy / OxyMan
- Stainless steel diffusers for precise oxygen diffusion
- Gassing tube for oxygen treatment in larger tanks
- Plastic tube for Oxygen
- Pressure reducer for BUS installation