

MICRO- / MACRO-OXYGENATION OXYGEN MANAGEMENT

- THREE CONFIGURATION OPTIONS
 - OXYGEN DIFFUSION OVER BUS-SYSTEM
 - CENTRAL OXYGEN MANAGER
 - MOBILE OXYGEN MANAGER



IN FLOW WITH YOUR PRODUCTION.

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 microoxygenation'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 micro-oxygenation, 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



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

PRODUCTS

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

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.



Stainless steel
oxygen diffuser



Temperature sensor kit for
OxyBoy & Oxyman



Gassing tube for
racking-point / flap valve size 37, with diffuser

VININFO - BE SAUERSTOFF

OXYGEN DIFFUSION OVER BUS-SYSTEM

For permanent installation, the fixed installed, B S compatible version within the VinInfo system is recommended. The Basic Units (BU Oxygen) are installed nearby the tanks, each tank is regulated by its own BU. The BU Oxygen, just like any other component of the VinInfo installation, are operated through a terminal or through a software installed on a server PC.

The BU Oxygen controls very precise addition of oxygen to a tank, dosage quantity and dosage times can be set. Due to the data storage in the VinInfo software dosage amounts and times can be repeated at any time, even after years. All systems controlled by VinInfo software can be distance controlled over the internet (using TeamViewer or PC-Visit or similar). An already existing VinInfo system can be upgraded to include this technology at any later time.

FEATURES

Temperature limits: Temperature measurement function is integrated in the BU Oxygen. It allows the setting of operation within a temperature range (requires the temperature sensor). This allows oxygenation at the most favourable conditions for the most beneficial effect on the wine and beer, and serving as a safety measure of the oxygenation process.

Timer option: The timer option frees the winemaker from having to control the dosing time manually. Micro-oxygenation can be set for three months in advance, releasing the winemaker from the need to remember to switch it off in time. This function is integrated in the BU Oxygen / VinInfo software.

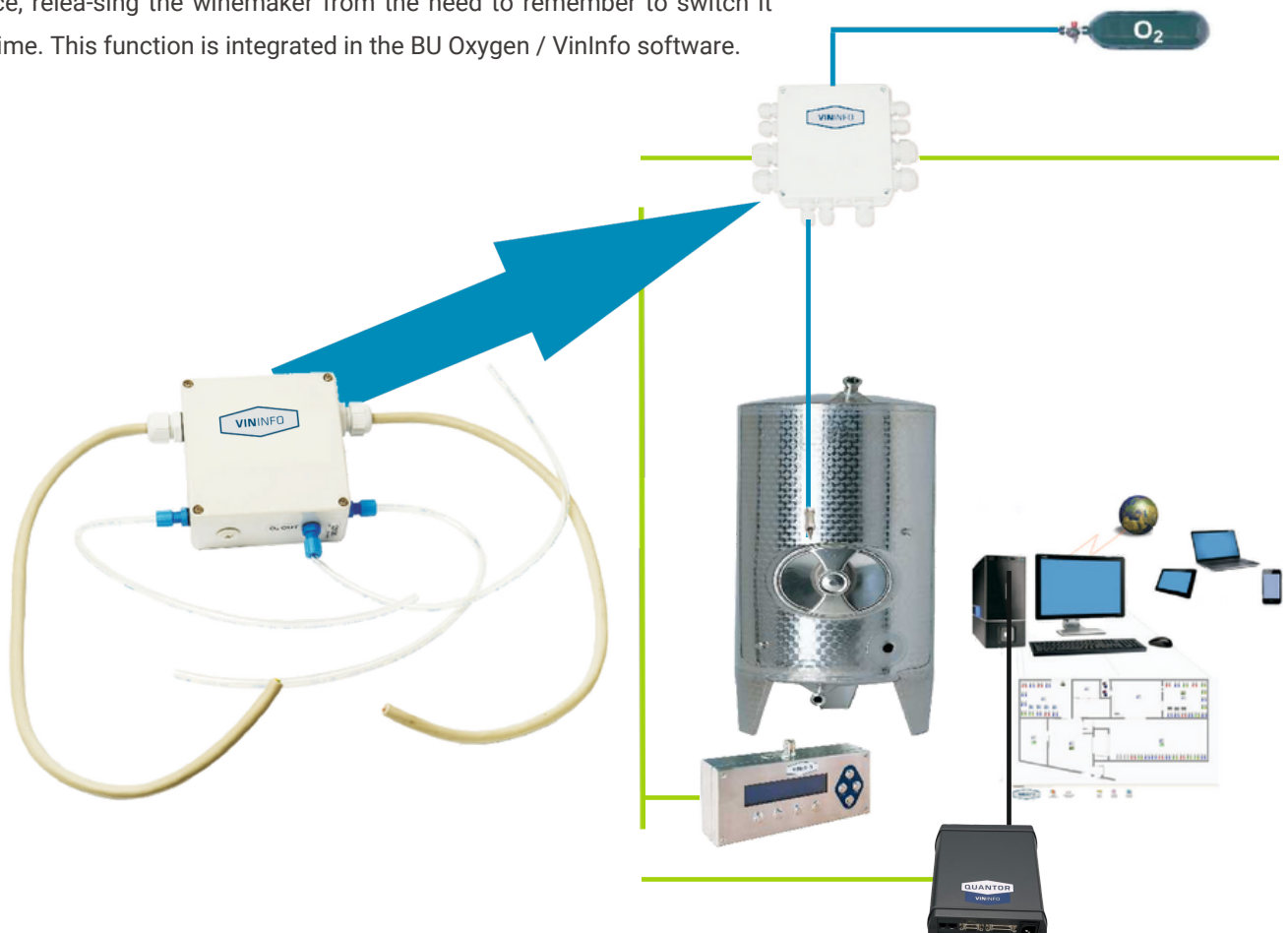
AMBIENT TEMPERATURE RANGE



from 0°C to 50°C

CHARACTERISTICS

- ➔ Fixed installation as part of a VinInfo installation
- ➔ One BU Oxygen per tank - treatment of unlimited number of tanks with software management
- ➔ One pressure reducer needed per installation



OXYBOX

CENTRAL OXYGEN MANAGER

The central oxygen manager OxyBox is conceived for the application of oxygen in gas form to must and wine. The OxyBox can be applied in both micro- and macro-oxygenation.

The OxyBox is to be fitted on the cellar wall. This waterproof cabinet is available in two versions - quality rustfree painted or stainless steel cabinets. It can contain up to 16 individual dosage controllers (oxygen modules), each of which can treat one tank at a time. An unlimited number of cabinets may be installed.

The OxyBox is equipped with sensitive sensors from the medical technology, thanks to which it is free from the influence of entry and exit pressure (height of must or wine). The unit reacts automatically and continuously to changing environmental conditions.

The OxyBox is enabled to be managed by the VinInfo software (option, ServerBasic package is necessary). Using the software distance control over the inter-net is possible (with TeamViewer or PC-Visit or similar).

FEATURES

Timer option: The timer-option frees the winemaker from having to control the dosing time manually. Micro-oxygenation can be set for three months in advance, releasing the winemaker from the need to remember to switch it off in time. Using this feature is possible in combination with VinInfo software (Server-Basic package).

Timer option: It is possible to integrate the OxyBox in a VinInfo BUS installation, and manage it over the existing software.

AMBIENT TEMPERATURE RANGE



from 0°C to 50°C

CHARACTERISTICS

- ➔ Application of oxygen in gas form to mash, must or wine
- ➔ Suited to both micro- and macrooxygenation
- ➔ Central, wall mounted, water-proof cabinet, stainless steel cabine
- ➔ Integrated pressure reducer (from 5 bar to 1,5 bar)
- ➔ Easy operation, LED lit display, user-friendly buttons configuration and software, several operation languages
- ➔ Enabled for management over VinInfo software (optional)



OXYBOY & OXYMAN

MOBILE OXYGEN MANAGER

The OxyBoy and the OxyMan are portable units in a solid and waterproof (IP 65) stainless steel housing, with hanging possibility. They are designed for the application of oxygen in gas form to mash, must or wine and can be applied in both micro- and macro-oxygenation.

The OxyBoy can apply smaller doses of oxygen (max. flow rate 30 nccm / min *), but it is therefore extremely exact. The OxyBoy is optimal for microoxygenation, and for macrooxygenation of smaller tank.

The larger dosage element of the OxyMan allows the application of 6.66 times as much oxygen as the OxyBoy (max. flow rate 200 nccm / min *). The OxyMan is therefore ideal for macro-oxygenation applications, or micro-oxygenation in larger tanks.

OxyBoy and OxyMan are equipped with sensitive sensors from the medical technology, thanks to which they are free from the influence of entry and exit pressure (height of must or wine). The unit reacts automatically and continuously to changing environmental conditions. Both units offer the highest precision and long-term stability in the application of oxygen. This is guaranteed by an independent calibration started each time the units are switched on, by temperature compensation and by microprocessor technology.

FEATURES

OxyBoy only - Most treatment - ‚Cliquage‘: The OxyBoy can be adapted to perform ‚Cliquage‘ - the action of dosing a large amount of oxygen in force into the most during a very short time. This option overrides the internal dosage programmed in the unit to allow the maximal amount of oxygen to be spurted into the must in the largest possible surge of gas. Such a jet of oxygen into the tank at the beginning of the fermentation has a similar effect as the macro-oxygenation.

OxyBoy & OxyMan - Temperature limits: Integrated temperature measurement function allows the setting of operation within a temperature range (requires the temperature-sensor kit - option). This allows oxygenation at the most favourable conditions for the most beneficial effect on the wine and beer, and serving as a safety measure of the oxygenation process.

OxyBoy & OxyMan - Timer option: The timer option frees the winemaker from having to control the dosing time manually. Micro-oxygenation can be set for three months in advance, releasing the winemaker from the need to remember to switch it off in time. OxyBoy / OxyMan contain a quartz based timer (deviation range 1 minute in 100 days) which ensures the accuracy of the oxygen application also after the unit is switched off when set on timer.

* Gas volumes are dependent from pressure and temperature.

The volumes given here in nccm refer to a pressure of 1.013,25 m Bar and to a temperature of 0°C.

Technical specifications are subject to change without prior notice.

AMBIENT TEMPERATURE RANGE



from 0°C to 50°C

CHARACTERISTICS

- ➔ Independent, single tank units, hand-held, can be hung by the tank and then moved to another
- ➔ Solid and waterproof (IP 65) stainless steel housing
- ➔ Integrated pressure reducer (from 5 bar to 1,5 bar)
- ➔ Easy operation, LED lit display, user-friendly buttons configuration and software, several operation languages



WTG-Quantor GmbH

Europa-Allee 53

D-54343 Föhren

 +49 (0)6502 9999 - 50

 info@quantor.technology

