

DosiOx QX-2

Reliable and precise oxygen-dosing equipment



Measures

300 x 184 x 53 mm

Introduction

Micro-oxygenation is a technique used to add a user-defined quantity of oxygen to wine in a slow and controlled manner.

The aim is to maximize the grapes' colour potential during vinification and ageing, thereby ensuring that colouring is preserved as much as possible.

It is a highly versatile technique and may be applied at any stage of the winemaking process between the start of vinification and bottling:

- **When applied between the end of alcoholic fermentation and the start of malolactic fermentation:**

It favours colour stabilization and polymerization prior to malolactic fermentation, thereby preserving colour levels.

- **When applied after malolactic fermentation:**

Depending on the wine treated and its characteristics, micro-oxygenation can, among other functions:

- Structure and pre-age.
- Stabilize colour.
- Smoothen aggressive tannins.
- Enhance aromatic complexity.
- Re-establish electrochemical potential.
- Enhance herbaceous aromas' quality.
- Remove reduction aromas.

Characteristics

- Two independent dosing outputs. Specifically designed for highly precise oxygen dosing.
- Easy to operate, with full digital control of all parameters.
- Windows programming environment accessed via a full-colour touch-screen.
- Individual programming of macro-oxygenation, micro-oxygenation and “cliqueur” treatments.
- Dosage determined according to oxygen mass (mg of O₂).
- Non-volatile memory. In the event of electrical failure, the equipment will either continue the process from the point of failure (if pre-defined by the user) or await further instructions.
- On-screen display showing remaining oxygen to be added, flow rate necessary to keep dosing constant, and dosing time remaining.
- Diffuser silting detector, with automatic pressure re-programming to ensure the pre-determined dose is administered.
- Automatic pressure control to detect lack of start-up pressure or blockages in oxygen pipes.
- Performance unaffected by apparatus position in relation to the oxygen tank (including tank height).
- Dosing ranges for macro- and/or micro-oxygenation from 16 litres to 15.000 hl.
- Optional PC connection for equipment programming and processing.
- Programming by PC over the Internet (if the equipment is connected to the Internet).
- Independent protection of the main microprocessor. Electrical or mechanical failures are detected by an auxiliary microprocessor, which immobilizes the apparatus and displays the corresponding error on screen, thereby avoiding dosing errors.

Construction details

- High-strength aluminium 300x184x53 case (BOPLA ATPH series) with graphite-coloured ABS body sides.
- Food-grade fittings.
- Sintered steel diffuser.
- Electronic board protected against moisture-derived corrosion.
- Operating voltage: 220 V.
- May be wall-mounted.

Optional equipment

- Retractable extension to insert the diffuser via the treated vat's ball valve.
- Ceramic diffuser.
- Temperature probes to monitor wine temperature and stop treatment if the temperature falls outside the desired range.
- Electrochemical potential probes.

User interface

The user interface comprises a 3.5" NEC LCD touch-screen (320 x 240 resolution) with the following characteristics:

- Small size and high resolution.
- Windows CE 5.0 operating system.
- Easy updating, using Microsoft Active Sync via the USB port.
- CPU: 400-MHz Samsung S3C2440A ARM920T.
- RAM: 64-Mb SDRAM, 32-bit 100-MHz bus.
- Flash: 64-Mb NAND and 2-Mb NOR with BIOS.
- 1-Gb MMC (memory card) to export treatment history to any PC using Active Sync, thereby enabling statistical and traceability analysis.
- 1024-colour backlit LCD.
- 4 internal status LEDs.
- Buzzer.
- 1 x RJ-45 Ethernet 10/100M port.
- 1 x RS-232 serial port.
- 1 x USB port.
- 1 x audio output.
- Internal lithium back-up battery for the RTC and SRAM.
- CPU watchdog timer.
- IP65-compliant front enclosure.

